UNIVERSITY OF GHANA
COLLEGE OF HUMANITIES
UG BUSINESS SCHOOL

ENTREPRENEURIAL CAPABILITY, INSTITUTIONAL FACTORS AND
SME PERFORMANCE IN GHANA

BY

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THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA,
LEGON, DEPARTMENT OF MARKETING AND ENTREPRENEURSHIP
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
AWARD OF PHD MARKETING DEGREE

MARCH 2019
DECLARATION

I do, hereby, certify that this thesis, which I now submit for examination for the award of Doctor of Philosophy, is entirely the result of my own work and has not been presented by anyone for any academic award in this or any other university. All references used in the work have been fully acknowledged.

This thesis has been prepared according to the regulations for postgraduate study by the University of Ghana. I bear sole responsibility for any shortcomings.

.......................................................... ..........................................................
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CERTIFICATION

I do hereby certify that this thesis was supervised in accordance with procedures laid down by the University of Ghana.

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Dr. George Acheampong
(Co-Supervisor)
DEDICATION

I dedicate this thesis to my mother, Afiyoh Akpabli, and my uncle, Kwabla Borbor, for teaching me that nothing great can be achieved without hard work and pain; with faith and humility, plus the favour of men, multiplied by the grace of God I can achieve my heart desire. I also dedicate this study to my loving wife, Kate, and my lovely children, Derek Prince, Gershon, Deborah and Elolo Arthur-Akpabli.
ACKNOWLEDGEMENT

I would never have completed this work without the favour of God and the favour of men, whom I am so indebted to that I would like to express my sincere and immense gratitude to.

I give special thanks to the Almighty God for giving me the much-needed strength, health and ability that helped make this thesis a reality. I am indebted to my professional team of supervisors, led by Professor Bedman Narteh, Dr. Daniel Quaye and Dr. George Acheampong. I am immensely appreciative of their indispensable, insightful and intellectual assistance and contributions they provided to enrich this work. Many of the ideas expressed in this work encapsulate the collective wisdom of these talented intellectuals, who, over the years, contributed greatly to the quality of my doctoral programme and to my own intellectual growth and development.

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My greatest debt is to my son, Bernard, and to my wife, Kate, who gives me the love and confidence to leave and “base camp in a separate room” for the solitary and mental aptitude I needed for this doctoral programme.
ABSTRACT

Success and survival in today’s dynamic institutional environments and competitive markets require Small and Medium-Sized Enterprises (SMEs) to develop and build entrepreneurial capability (EC) to continuously explore and exploit opportunities to generate value by creating and/or expanding entrepreneurial activities. Given the significant contributions of SMEs to the growth of Ghana’s economy, successive Ghanaian governments have sought to regulate, promote, and facilitate SME growth and performance through institutional framework and policy interventions. Despite the existence of these institutional framework and policy interventions, there is rather a high persistent failure of SMEs and entrepreneurship in general across Ghana. Studies assessing the failure of SMEs have not reached a consensus regarding the perspective from which the high persistent SME failure could be comprehensively investigated and understood. Process-view perspective of investigating SME failure has not been given much needed research attention. Thus, this thesis seeks to develop a theory-driven and process-oriented model to examine and predict the impact of EC and institutional factors on SME performance in Ghana. To achieve this purpose, three research objectives were put forth as follows: to examine and validate the theoretical linkages between opportunity exploration and exploitation as the proposed dimensions of EC; to assess the direct impact of EC on SME performance in Ghana; and to determine the moderating effect of institutional factors (IFs) on the relationship between EC and SME performance in Ghana.

The resource-based theory, dynamic capabilities theory and institutional theory were employed as theoretical underpinnings of the study. Drawing on these theories, a conceptual framework was developed to examine the differential roles resources and capabilities played in capturing the dynamics in the entrepreneurial process. Based on the positivistic worldview, a quantitative research strategy was designed in a single stage
cross-sectional survey. Five hundred and fifty (550) questionnaires were sent out to respondents who were conveniently sampled from the sampling frame of all registered SMEs in the Greater Accra region, drawn from the Integrated Business Establishment Survey database. Out of the 512 complete responses retrieved, 488 of them were found usable. Data was analysed using descriptive statistics and partial least square structured equation modelling (PLS-SEM).

The findings validate EC as a process-oriented concept consisting of explorative and exploitative capabilities, where opportunity exploration precedes opportunity exploitation. The findings further show that EC positively and significantly impacts SME performance in Ghana. Regarding the moderating role of institutional functions on the relationship between EC and SME performance, the study found that the moderating effect is negative and significant for the regulatory functions; positive and significant for the promotional functions and positive but not significant for the facilitatory functions. In consequence, therefore, SME growth and sustainability requires continuous exploration and exploitation of opportunities, while taking into consideration the institutional constraints or enablement. The study, recommends that future studies should replicate this study in the informal sector to investigate how the sector builds EC and is affected by institutional functions.
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<th>Description</th>
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<tbody>
<tr>
<td>ACO</td>
<td>The Aliens Compliance Order</td>
</tr>
<tr>
<td>AGI</td>
<td>Association of Ghana Industries</td>
</tr>
<tr>
<td>AVE</td>
<td>Average Variance Extracted</td>
</tr>
<tr>
<td>CB-SEM</td>
<td>Component Based Structural Equations Modelling</td>
</tr>
<tr>
<td>DC</td>
<td>Dynamic Capabilities</td>
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<tr>
<td>EC</td>
<td>Entrepreneurial Capability</td>
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<tr>
<td>ECF</td>
<td>Extended Credit Facility</td>
</tr>
<tr>
<td>EDIF</td>
<td>Export Development and Investment Fund</td>
</tr>
<tr>
<td>ERP</td>
<td>Economic Recovery Program</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GECD</td>
<td>Ghanaian Enterprises Development Commission</td>
</tr>
<tr>
<td>GEPC</td>
<td>Ghana Export Promotion Council</td>
</tr>
<tr>
<td>GFZB</td>
<td>Ghana Free Zones Board</td>
</tr>
<tr>
<td>GIPC</td>
<td>Ghana Investment Promotion Centre</td>
</tr>
<tr>
<td>GSA</td>
<td>Ghana Standards Board (GSA)</td>
</tr>
<tr>
<td>GSS</td>
<td>Ghana Statistical Service</td>
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<tr>
<td>HIPC</td>
<td>Highly Indebted Country</td>
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<tr>
<td>IBES</td>
<td>Integrated Business Establishment Survey (IBES)</td>
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<tr>
<td>IFs</td>
<td>Institutional Factors</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>ISSER</td>
<td>Institute of Statistical, Social and Economic Research</td>
</tr>
<tr>
<td>MMDA</td>
<td>Metropolitan, Municipal and District Assembly</td>
</tr>
<tr>
<td>MoFEP</td>
<td>Ministry of Finance and Economic Planning</td>
</tr>
<tr>
<td>MoTI</td>
<td>Ministry of Trade and Industry (MoTI)</td>
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<tr>
<td>MSME</td>
<td>Micro, Small and Medium Enterprises (MSMEs)</td>
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NBSSI – National Board for Small Scale Industries
NEIP – National Entrepreneurship Education programme
NLC – National Liberation Council
OECD – Organization for Economic Co-Operation and Development
OFI – Operation Feed your Industries
OFY – Operation Feed Yourself
PEF – Private Enterprise Foundation
PLS-SEM – Partial Least Squares Structural Equations Modelling
PNDC – Provisional National Defence Council
PSI – President’s Special Initiative
REDP – Rural Enterprise Development Programme
REP – Rural Enterprise Project (REP),
RGD – Registrar General’s Department (RGD)
RPEDG – Regional Project on Enterprise Development Ghana
SADA – Savana Accelerated Development Agency (SADA)
SAP – Structural Adjustment Program
SBCS – Small Business Credit Scheme (SBCS)
SME – Small and Medium-sized Enterprise
SSA – sub-Saharan Africa
UGBS – University of Ghana Business School
UNCTAD – United Nations Conference on Trade and Development
VCTF – Venture Capital Trust Fund
YES – Youth Enterprise Support
CHAPTER ONE

INTRODUCTION

1.0 Introduction

This is the introduction to the study. The chapter begins with a review of the importance of entrepreneurial capability and institutional factors for superior performance in small and medium-scale enterprises (SMEs) to present the background of the study. The research problem and gaps, outline of the objectives and research questions formulated to guide the study as well as the significance and scope of the study are also discussed. The outline of the thesis is also provided and the chapter concludes with a chapter summary.

1.1 Research Background

The entrepreneurial landscape in Sub-Saharan Africa (SSA) is multi-faceted (White, 2011). It includes informal and formal sector, traditional and modern, as well as local and foreign-owned enterprises, all of which are geographically dispersed across rural and urban areas. It ranges from small enterprises (providing employment for a single individual) to large corporations (employing hundreds). Small and Medium-sized Enterprises (SMEs), however, are the dominant form of entrepreneurial activity in sub-Saharan Africa (White, 2011).

Globally, SMEs have been instrumental in accelerating economic growth, social development and stability (OECD, 2016). According to White (2011), SMEs constitute around 90% of sub-Saharan African business operations and create over 50% of employment and GDP. According to Abor and Quartey (2010), SMEs constitute the largest proportion of business establishments in both developed and developing countries, accounting for about 92% of active businesses in Ghana, generating some 85% of employment and contributing about 70% to the country’s Gross Domestic Product. Indeed,
entrepreneurial activity through SMEs played an important role in the economic growth of SSA (White, 2011). Entrepreneurship has become a major concern to both scholars and policymakers because of its significant role in economic and social transformation of the SSA (Ibrahim & Mas’ud, 2016). It is increasingly important in today’s dynamic institutional environment and competitive market that Small and Medium-sized Enterprises (SMEs) develop and build entrepreneurial capability (henceforth, EC) to continuously explore and exploit opportunities (Abdelgawad, Zahra, Svejenova & Sapienza, 2013). SMEs have emerged as highly vibrant and important enterprises contributing immensely to the economies of several countries.

Due to their immense contributions to employment generation, poverty alleviation, improvements in standards of living and gross domestic product in many developing countries, SMEs are regarded as the engine of growth and economic development (Davidson, Delmar & Wiklund, 2006; Abor & Quartey, 2010; Obschonka, Silbereisen, & Schmitt-Rodermund, 2011; Aceleanu, Trasca & Serban, 2014; Odoom, Narteh, & Boateng, 2017). Given the significant contribution and impact of SMEs on economic growth and development (Andoh, Quaye, & Akomea-Frimpong, 2018; Maksimov, Wang, & Luo, 2017; Odoom et al., 2017), governments globally have provided support for SMEs through institutional framework and policy interventions. In Ghana, the institutional environment comprises both public (i.e. government and quasi-governmental agencies) and private institutions (Kuada & Sorensen, 2000; Buame, 2012). Examples are the National Board for Small Scale Industries (NBSSI) established in 1981; the Private Enterprise Foundation (PEF) established in 1994 to provide a conducive environment that improves the development and success of SMEs in Ghana; the Venture Capital Trust Fund (VCTF) established to ease access to long-term funding by SMEs, on the account that many SMEs have difficulties accessing credit among others (Abor, Agbloyor, & Kuipo,
These initiatives are evidence of the prodigious contributions of SMEs to the economic development of Ghana, and the need to regulate, promote and facilitate their growth, development and sustainability.

The business landscape and institutional environment in many countries have become increasingly dynamic and competitive. As a result, it is imperative for SMEs to develop the capability to proactively sense, shape and seize entrepreneurial opportunities to generate value for organizational success (Teece, 2007; Abdelgawad et al., 2013). Entrepreneurship research linking entrepreneurs’ capability with successful business outcomes has been recognized by scholars across the globe. Extant studies in this direction began by linking the characteristics and functions of individual entrepreneurs with business success (Buame, 2012). Although several characteristics and functions of successful entrepreneurs were identified, they produced inconsistent and weak results. In consequence, therefore, recent research in this direction has shifted the attention from personal characteristics and abilities of the individual entrepreneur and focused on firm level capability, termed entrepreneurial capability (EC) as a predictor of organizational success (Doran, McCarthy, & O’Connor, 2018; Guo & Bielefeld, 2014).

A firm’s EC is tacit, as the knowledge or capability resides in the firm’s people, processes and systems that enable them to perform tasks in more effective and efficient ways than competitors (Thompson, Peteraf, Gamble, & Strickland 2013). EC enables firms to explore (recognize, discover and create) opportunities and to strategically develop resource combinations as well as harmonize internal and external capabilities to exploit such opportunities for optimum gains (Abdelgawad et al., 2013; Arthurs & Busenitz, 2006; Kuckertz, Kollmann, Krell & Stockmann, 2017). For example, firms such as Ceragem Ghana Limited, Emmajets Forex Bureau Limited, and His Presence Hotel in Ghana are highly praised and rewarded for their enterprising ability to generate value through
continuous innovative exploration and exploitation of opportunities that open new markets and alter existing ones. What sets this firms ahead of their competitors is their EC which facilitates a cycle of opportunity exploration and exploitation to generate value. Unlike other forms of dynamic capabilities, EC empowers a firm to develop new capabilities, rather than just upgrading existing ones and allows a firm to diversify into other business areas (Zahra, 2008; Helfat & Peteraf, 2009; Schilke, Hu & Helfat, 2018; Teece, 2018; Laaksonen & Peltoniemi, 2018) to sustain and improve overall firm performance. Hence, the emerging consensus is that EC is a process-oriented concept that captures the dynamics of the entrepreneurial process (Russell, 1999) which explains how lucrative business opportunities are recognized or created, and how disruptive innovation-supporting behaviours underpin effective entrepreneurial activity and by extension, the performance of SMEs.

Whereas SMEs must develop EC to continuously explore and exploit opportunities to improve organizational performance, scholars argue that there are continuous changes in political and legal conditions, as well as in social and cultural norms that have constraining and enabling impact on entrepreneurial activities. Entrepreneurial activities are embedded in the institutional environment; thus, they cannot be divorced from the institutional dynamics in which they are embedded (Bradley & Klein, 2016; Kitching et al., 2013). From institutional theory perspective, North (1990) likened institutions to the “rule of the game”. These rules govern market exchange, and significantly shape the choices and performance of firms in an institutional setting (Young, Welter & Conger, 2018; Bjornskov & Foss, 2016). According to Scott (1995), such rules can be regulative, normative and cognitive. Accordingly, such rules dictate what entrepreneurial actions are legally permitted, what forms of entrepreneurial behaviour are morally or ethically justified, and how entrepreneurs should think about opportunities and resources.
Therefore, SMEs must conform to gain the 'much-needed support and legitimacy’ (Ahlstrom & Bruton, 2002; Cornelissen & Clarke, 2010; Bradley & Klein, 2016). In consequence, therefore, basic access to market opportunities and resources required to undertake the discovery, evaluation and exploitation of opportunities is subject to institutional constraints or enablement. To this end, the performance gains achieved in terms of profitability and the ultimate survival of SMEs are contingent upon the dynamic institutional matrix to some extent (Bradley & Klein, 2016; Young et al, 2018). Therefore, the aggregate impact of the interaction between EC and IFs on SME performance deserves critical attention.

Thus, empirical research investigating the conceptual and theoretical linkages between EC and institutional factors (IFs) will provide a process-oriented understanding of the antecedents and outcomes of EC on SME performance in the dynamic institutional environment. This research aligns the entrepreneurial capability and institutional factors nexus in a single study to explain the performance of SMEs in the Ghanaian context. The outcome is expected to provide valuable benefits to both entrepreneurship theory and practice. The next section presents the problem statement.

1.2 Statement of Research Problem

Results of research on SMEs in Ghana will be enough to convince the analyst that SMEs are facing problems. Despite the existence of institutional framework and policy interventions to support entrepreneurial activity and enhance the growth and performance of SMEs, there is a rather high persistent failure of SMEs and entrepreneurship in general across Ghana. Acheampong, Narteh and Rand (2017) posit that more SMEs die prematurely in Ghana. Ropega (2011) reports that only 50% of small businesses set up still operate after three years of existence. Kusi, Narh and Narh (2015) have also confirmed
that an average of 60% micro and small businesses fail within the first five years of
establishment. This implies that only forty enterprises survive beyond the fifth year of
operation in Ghana. Anecdotally, an estimated 75% of businesses in Ghana fail within the
first three years (Citi FM, 2017; Business and Financial Times, 2018). This high and
persistent failure of SMEs is a widespread phenomenon across developing economies
(World Bank, 2016) and has been a major concern not only for practitioners and
governments, but also for the scholarly community.

Studies have been conducted globally to probe the reasons why start-up businesses
fail (Abor & Quartey, 2010; Franco & Hasse, 2010; Kusi et al., 2015; Acheampong et al.,
2017; Mendy & Hock-Polay, 2018) to predict SMEs failure (Gupta et al., 2014) and to
describe the abysmal performance of SMEs (Quaye & Acheampong, 2013; Ropega, 2011;
Abor & Quartey, 2010). Nevertheless, there seems to be no consensus among researchers
concerning the perspective from which this high persistent failure of SMEs could be
comprehensively researched and understood. Some academics (Franco & Hasse, 2010)
have focused on factors external and internal to the SMEs. Externally, inadequate financial
capital, poor market conditions, limited access to credit, lack of institutional support and
poor social networks were commonly cited (Abor & Quartey, 2010). These researchers
note that internal factors such as inexperienced human capital and lack of corporate
governance, obsolete technology and lack of innovation, poor management strategy and
vision, lack of entrepreneurial orientation, and inadequate social capital were imminent
but not satisfactorily recognized. Continuing this path, Franco and Hasse (2010) describe
the situation where the owner-managers of SMEs blamed the abysmal performance and
failure of their enterprises on external factors but attribute their successes to their own
internal capabilities as an attribution error.
Contrary to analysing SME performance from internal and external perspectives, scholars like Ropega (2011) recommend that studies assessing the performance of SMEs should be underpinned by financial as well as non-financial performance indicators. On their part, Mendy and Hock-Polay (2018) believe that researching into SME performance from cultural perspective would offer a nuanced understanding and appreciation of challenges SME operators face. There is yet another set of scholars who assert that the poor performance of SMEs, which has led to the high persistent failure rate, is the lack of financial capital (Onuaguluchi, 2015), lack of requisite human resources and lack of technological resources (Ugheoke, Isa & Noor, 2015). Their studies are focused on the resource perspective of studying SME performance. These differences in perspective from which SME performance has been researched result in different and divergent outcomes. Even though Ropega (2011) admitted that business failure is not a sudden event but a dynamic process, meaning the business failure could occur at any stage (opportunity exploration stage or opportunity exploitation stage) of the entrepreneurial process, it appears this process view perspective of investigating business failure has not been given much research attention. It appears there is no known study that has been sighted to have explored the performance of SMEs focusing on EC – the ability to generate value through the exploration and exploitation of entrepreneurial opportunities to create or expand business activity. It is argued also that entrepreneurial activities do not take place in a vacuum, but within institutional environment (North, 2005). According to Kuada and Sorensen (2000), institutions are established to perform specific functions which may influence entrepreneurial activities and performance outcomes. However, the moderating impact of institutional factors on the relationship between EC and SME performance in a unified framework is highly limited. These create important research gaps worthy of exploring, hence the current study.
1.3 Research Gaps

Firstly, studies on the nature and dimensions of EC are still nascent in the entrepreneurship literature. These studies have also been situated mainly in the domain of strategic management, emphasizing the resource-based view of the firm (Arthurs & Busenitz, 2006), international entrepreneurship (Karra, Philips & Tracy, 2008; Zhang et al., 2009), competitive advantage, projecting the relevance of intrapreneurship (Zahra & Wright, 2011), and dynamic capabilities, elaborating the importance of sensing, shaping and seizing opportunities (Abdelgawad et al., 2013). However, the foundation of successful entrepreneurial activity is the capacity of an entrepreneur or enterprise to identify, discover or create the right opportunities in the business environment and to commit resources to pursue such perceived opportunities for profit (Shane & Venkatraman, 2000; Alvarez & Busenitz, 2001; Ardchvili et al., 2003; Alvarez & Barney, 2010; Alvarez, Barney & Anderson, 2013). EC is a process-oriented concept that captures the dynamics of the entrepreneurial process, and explains how innovative opportunities are recognized or created and how innovation-supporting behaviours are generated and directed within the entrepreneurial process (Russell, 1999). EC, thus, comprises both opportunity exploration and exploitation aspects (see Abdelgawad et al., 2013; Roudini & Osman, 2011; Woldensebet & Ram, 2012). However, the process-oriented development of opportunities (Dimov, 2011; McMullen & Dimov, 2013) has compounded the difficulty in operationalizing opportunity exploration and exploitation as dimensions of EC. As a result, O’Reilly and Tushman (2008, p. 188), for example, have called for “a clear articulation” of the exploration and exploitation aspects of EC. These concerns warrant further research regarding the nature and dimensions of EC from the entrepreneurial process perspective in the context of SMEs.
Secondly, there is a dearth of empirical evidence regarding the impact of EC on the performance of SMEs in the entrepreneurship literature, particularly in the context of Ghana. The study considers EC as the overall capability of an enterprise to generate value by continuously exploring and exploiting new products, processes or markets that create or expand entrepreneurial activity. According to Abdelgawad et al. (2013), EC is a special type of dynamic capability that enables a firm to “sense, select, shape and synchronize internal and external conditions for the exploration and exploitation of opportunities” (p. 549). Woldensenbet and Ram (2012) conceive of EC as micro-foundation of dynamic capabilities, interacting in subtle ways with the environment. From their study of 18 small firms in the UK, Woldensenbet and Ram (2012) found that EC enables firms to quickly identify gaps in customer needs and to proactively recognise and address problems associated with a product, service or process in the marketplace. While these studies are useful, they provide insight into only some aspects of EC, and not necessarily explore the direct relationship and impact of EC on firm performance in SMEs. This gap resulting from the lack of empirical evidence regarding the impact of EC on the performance of SMEs requires further study to explain for example, how SMEs attain superior performance from their capability to effectively identify and act on entrepreneurial opportunities.

Thirdly, there is a lack of theorisation about the interaction between EC and institutional factors (IFs) and the resultant impact of SME performance in Ghana. The institutional environment has the tendency to “alter the motives, process and outcomes of opportunities, business initiatives and growth” (Bradley & Klein, 2016, p. 212) due to the embeddedness of SMEs. In other words, the performance of SMEs is influenced by the incentives or constraints exerted by institutional factors (Roxas et al, 2007; Roxas & Coetzer, 2012; Yang & Konrad, 2010; Young, Welter & Conger, 2018). In fact, many
business owners and entrepreneurs consider regulation as the foremost challenge to effective entrepreneurial activity (Dunkelberg & Wade, 2015). To this end, the performance gains achieved in terms of profitability and the ultimate survival of SMEs is contingent upon the dynamic institutional matrix to some extent (Bradley & Klein, 2016, p. 212; Young et al., 2018). The debate about the role and impact of government intervention and institutional framework on entrepreneurship is largely inconclusive (see Kim, Kim & Yang, 2012; Ruger & Sorens, 2013; Aidis et al., 2008). It is argued that the institutional challenges faced by SMEs, particularly in developing countries must be addressed in order to facilitate growth and performance. Scholars (Zahra & Wright, 2011; Zahra et al., 2014) have therefore called for further studies to ascertain the collective effects of institutional factors on entrepreneurship. Yet, studies have often examined institutional environment in isolation (see Adomako et al., 2015; Yamoah et al., 2014) without recognising the interaction with EC. This lack of theorisation between EC, IFs and SME performance warrants further research.

Thus, this study seeks to develop a theory-driven and process-oriented framework to explain and validate the theoretical and conceptual linkages in the entrepreneurial process. Specifically, it seeks to examine the impact of EC on the performance of SMEs and to ascertain the moderating impact of institutional factors on the relationship between EC and SME performance in Ghana.

1.4 Research Objectives

To achieve the purpose, the study sets out the following specific objectives:

i. To examine and validate the theoretical linkages in the proposed dimensions (i.e. exploration and exploitation) of Entrepreneurial Capability in Ghana.
ii. To determine the impact of Entrepreneurial Capability on performance of SMEs in Ghana.

iii. To ascertain the moderating impact of Institutional Factors on the relationship between Entrepreneurial Capability and SME performance in Ghana.

### 1.5 Research Questions

To address the objectives, the study formulates the following research questions:

i. What is the link between exploration and exploitation of opportunities as dimensions of Entrepreneurial Capability in Ghanaian SMEs?

ii. What is the impact of Entrepreneurial Capability on SME Performance in Ghana?

iii. What is the impact of Regulatory Functions on the relationship between Entrepreneurial Capability and SME Performance in Ghana?

iv. What is the impact of Promotional Functions on the relationship between Entrepreneurial Capability and SME Performance in Ghana?

v. What is the impact of Facilitatory Functions on the relationship between Entrepreneurial Capability and SME Performance in Ghana?

### 1.6 Significance of the Study

The study extends the theory of capabilities to conceptualize EC as a function of both exploration and exploitation to argue that what makes EC unique from other forms of dynamic capabilities is the continuous and complementary undertaking of exploration and exploitation activities, not their simultaneous execution (O’Reilly & Tushman, 2008). Many scholars have argued that EC comprises activities aimed at exploring and subsequently exploiting opportunities (see Abdelgawad et al., 2013), but these activities yield differing outcomes and often require performance trade-offs (March, 1991; He &
Wong, 2004; Lavie et al, 2010). Hence, by conceiving of EC as a continuous process of exploration and exploitation, it will enable SMEs to manage these activities as complementary rather than contradictory. This facilitates, for example, the use of short-term productivity gains from exploitation activities to initiate and support exploration activities to discover and create long term opportunities and innovation. In so doing, the firm continuously re-invents itself to stay relevant in its industry and not become obsolete by losing out on emerging opportunities.

The poor performance and eventual entrepreneurial exit or persistent failure of SMEs particularly in Ghana is worrisome. An emerging concept in the entrepreneurship literature, EC, seeks to explain the resources and capabilities required for sustainable entrepreneurial activity and value (Arthurs & Busenitz, 2006; Abdelgawad et al., 2013). The study contends that EC is the major predictor of SME performance. Hence, the study’s assessment of EC encompasses the ability of SMEs to explore and subsequently exploit perceived opportunities and the extent to which this capability contributes to the attainment of superior performance in the dynamic institutional environment. This study of EC provides significant insights into the ability of SMEs to generate value and maintain sustainable performance and to explain the persistent failure of SMEs in Ghana. More so, the study empirically examines the linkage between EC and SME performance to enable SMEs identify what leads to greater performance to help address and avert persistent failure.

The outcome of the moderating effects of IFs on EC and SME performance is important for many reasons. In Ghana, successive governments, and private institutions exist to regulate, promote and facilitate the growth and success of SMEs. Several studies (see Adomako et al., 2015; Yamoah et al., 2014) have assessed the impacts of the institutional factors on the performance of SMEs from the perspectives of North’s (1990)
formal and informal institutions as well as Scott’s (1995) regulative, cognitive and normative pillars of institutions perspective. This study operationalizes Kuada and Sorensen’s (2000) regulatory, promotional and facilitatory dimensions of institutional factors. In so doing, the study reflects the institutional environment in the Ghanaian context and helps to vividly provide insights into the constraining or enabling impact of institutional factors on entrepreneurial activity and performance in Ghana. This would provide valuable insights for SMEs on how to navigate the institutional landscape and to effectively leverage their EC to induce change in the external environment to their advantage, and to react appropriately to the jolts and opportunities in the business environment.

These contributions are important and relevant to multiple stakeholders, including entrepreneurs, government institutions and non-governmental organizations in the areas of entrepreneurial support and promotion programmes that are initiated towards the enhancement of the performance of SMEs in Ghana. Entrepreneurs will find this work much beneficial as it seeks to provide valuable insights into their capabilities in terms of effectively exploring and exploiting opportunities to generate value vis-a-vis institutional incentives and constraints on entrepreneurial activity and SME performance. To policy makers, the need to support entrepreneurs to grow and perform is an absolute necessity in Ghana due to their various contributions. The study will offer some insights into the impact that interventions proffered by government has on SME performance. The study, by aligning EC, IFs and SME performance in a single comprehensive study, makes it possible to simultaneously ascertain the moderating effects of institutional factors on EC and the performance of SMEs in Ghana.
1.7 Scope of the Study

Overall, the purpose of the study is to develop a theoretical and process-oriented understanding of the antecedents and outcomes of EC on SME performance in the dynamic institutional environment of Ghana. Hence, the study proposes and validates measures and dimensions of EC and examines their collective impact on SME performance. In so doing, the study only focuses on the ability of SMEs to continuously generate value by exploring and exploiting entrepreneurial opportunities rather than the explorative and exploitative activities themselves. The study also assesses the moderating effect of institutional factors on EC and SME performance. Unlike previous studies, the study departs from operationalising institutional factors from the perspective of North’s (1990) formal and informal institutions or Scott’s (1995) three pillars of institutions. Rather, it adopts Kuada and Sorenson’s (2000) categorization of the functions of institutions as regulatory, promotional and facilitatory in the Ghanaian context.

More so, to effectively assess the influence of IFs on EC and SME performance, it is imperative that the enterprises surveyed are beneficiaries or targets of institutional incentives or constraints. As a result, the study encompassed only registered (formal) SMEs in Ghana. The study contends that formal and registered enterprises are more appropriate to provide a more representative data to peruse the development of EC and the effect of IFs on SME performance in Ghana. The population of the study consisted of all SMEs across Ghana, however, the sample for the study was drawn from a sample frame of enterprises in Greater Accra region. The Integrated Business Establishment Survey (IBES) report (GSS, 2016) indicates that the Greater Accra region is home to the largest number of business establishments in Ghana, particularly small and medium enterprises. The region is therefore, representative of the nature and context of SMEs in Ghana.
1.8 Organisation of the Thesis

The thesis is organized into nine chapters as illustrated in Figure 1. Chapter 1 provides the background of the study, research problem and gaps, objectives and research questions, significance of the study, scope of the study and organisation of the thesis. Chapter 2 presents the context of the study. Chapters 3 and 4 are devoted to the theoretical foundation and literature review on entrepreneurial capability, institutional and SME performance respectively. This leads to the development of the conceptual framework and hypotheses that guide the subsequent empirical analysis in Chapter 5. The research methodology is presented in Chapter 6. It details the philosophical underpinning; the research approach and the methods used to collect and analyse data in the study. The analysis and results of the hypotheses tests are presented in Chapter 7. The discussion of findings is presented in Chapter 8. Finally, Chapter 9 presents a summary of findings, contributions of the study, conclusions, recommendations and directions for future studies.
Figure 1.1: Outline of Thesis

1. Introduction
   Background; Problem Statement; Research Gaps; Objectives; Research Questions; Contribution of Study

2. Context of Study
   The SME & Entrepreneurship Landscape in Ghana

3. Theoretical Foundation of the Study

4.1 Entrepreneurial Capability
4.2 Institutional Factors
4.3 SME Performance

5. Conceptual Framework and Hypotheses Development

6. Research Paradigm and Methodology
   Questionnaire Design and Data Collection

7. Data Analysis and Results

8. Discussion of Study Findings

9. Conclusions
   Summary, Contributions, Limitations; Recommendations for Future Research; Conclusion
1.9 Chapter Summary

This chapter has provided a general overview of the study. It has traced the relevance and contributions of SMEs to both developing and developed economies. Entrepreneurial capability is then introduced as underpinning effective entrepreneurial activity and by extension, performance of SMEs. The role of the institutional environment has also been briefly highlighted. This leads to the problem statement and subsequent identification of research gaps. The Chapter has argued that EC is both a function of exploration and exploitation activities and these require somewhat different resource configuration and capabilities to be effective. However, previous studies have failed to explicitly delineate the exploration and exploitation aspects of EC and to set out how a firm could effectively manage the often-divergent outcomes of both activities and the trade-offs in resource allocations for performance gains. Rather, studies have often combined the exploration and exploitation in EC definitions and have presumed they require similar resource configurations and yield comparable outcomes. This shortfall in the entrepreneurship literature requires a [re]conceptualization of EC, rooted in the explorative-exploitative capability framework to clearly understand the antecedents and implications of EC for performance of SMEs as well as determine how the institutional factors moderate this relationship. The objectives, research questions and contributions of the study are also provided together with an outline of the thesis.
CHAPTER TWO
CONTEXT OF THE STUDY

2.0 Introduction

Chapter two presents the context of Small and Medium-sized Enterprises (SMEs) in Ghana. This comprises the political and economic history of Ghana as well as well as the development, contributions and challenges of SMEs in Ghana. The Chapter also provides an operational definition of SMEs to guide the study and concludes with a chapter summary.

2.1 Ghana Country Profile

Ghana was formerly called the Gold Coast due to its significant supply of gold traded by Europeans across the Sahara. In 1957, the country gained independence from the British and adopted the new name Ghana under the first Prime Minister, Dr. Kwame Nkrumah. Geographically, Ghana is in sub-Sahara Africa and shares borders with Burkina Faso, Togo, Ivory Coast and Gulf of Guinea (see Figure 2.1). The capital city of Ghana is Accra, located in the Greater Accra region, one of the ten (10) administrative regions in Ghana. The country is rich in mineral resources like gold, diamond, bauxite and manganese ore. The services sector is the largest of Ghana’s economy and contributes about 52.24% to the country’s Gross Domestic Product (GDP). In Table 2.1, selected indicators to depict the profile of Ghana are shown.
Table 2.1: Ghana Country Profile

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1990</th>
<th>2000</th>
<th>2010</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (total in millions)</td>
<td>14.60</td>
<td>18.94</td>
<td>24.51</td>
<td>30.21</td>
</tr>
<tr>
<td>Gross Domestic Product (current $, in billions)</td>
<td>402.59</td>
<td>263.11</td>
<td>1,312.61</td>
<td>42,689.78</td>
</tr>
<tr>
<td>Gross Domestic Product (% annual growth)</td>
<td>3.33</td>
<td>3.70</td>
<td>7.90</td>
<td>3.58</td>
</tr>
<tr>
<td>Inflation (annual %)</td>
<td>31.17</td>
<td>27.23</td>
<td>16.60</td>
<td>17.42</td>
</tr>
<tr>
<td>Contribution of sectors to GDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture (% of GDP)</td>
<td>45.07</td>
<td>39.41</td>
<td>30.83</td>
<td>19.60</td>
</tr>
<tr>
<td>Services (% of GDP)</td>
<td>38.08</td>
<td>32.20</td>
<td>49.36</td>
<td>52.24</td>
</tr>
<tr>
<td>Industry (% of GDP)</td>
<td>16.86</td>
<td>28.39</td>
<td>19.81</td>
<td>28.16</td>
</tr>
<tr>
<td>Exports (% of GDP)</td>
<td>16.88</td>
<td>48.80</td>
<td>29.48</td>
<td>40.74</td>
</tr>
<tr>
<td>Imports (% of GDP)</td>
<td>25.85</td>
<td>67.25</td>
<td>45.90</td>
<td>47.86</td>
</tr>
<tr>
<td>Foreign Direct Investments ($ in millions)</td>
<td>14.80</td>
<td>165.90</td>
<td>2,527.35</td>
<td>3,485.33</td>
</tr>
</tbody>
</table>

Source: World Bank, 2018

Figure 2.1: Map of Ghana
By the 1980s, the country had plunged into economic recession due to widespread corruption, poor governance and mismanagement of resources which characterized the military regimes and civilian administrations after independence. Ghana turned to the International Monetary Fund (IMF) for support to recover from the economic recession. The relative success of the IMF’s economic recovery programme (ERP) and the structural adjustment programme (SAP) in Ghana at the time made the country a model of economic reforms across Africa. Ghana pursued liberal economic policies under the ERP and SAP to attain steady economic growth over the past three decades. In 2011, the country commenced the production of crude oil in commercial quantities. The revenues that accrued in that year catapulted Ghana to the global list of fastest growing economies. The World Bank ranked Ghana’s economy 2nd in West Africa and 85th in the world among the world’s largest economies with a USD40.7 billion GDP in 2012 (World Bank, 2013). Generally, Ghana’s political and economic development after independence has been difficult, thereby, significantly impacting the survival, growth and sustainability of private enterprises and SMEs in the country. However, the political stability in the past decades has brought a return to steady economic growth and renewed interest in private enterprise.

2.2 The Economy of Ghana

This section presents an overview of Ghana’s economy to help situate the operations of SMEs. It discusses the historical perspective of Ghana’s economy, recent economic developments and the performance of the various sectors of the economy.
2.2.1 The Historical Perspective of Ghana’s Economy

The British granted independence to Ghana in 1957 and left behind a stable and prosperous economy. The Prime Minister, Dr. Kwame Nkrumah, charted an ambitious agenda of economic diversification and expansion of the country’s industrial sector. In pursuance of this agenda, the Akosombo Dam and the Volta Aluminium Company (VALCO) were built with support from development partners such as the World Bank, the United Kingdom and the United States. However, the drastic fall in cocoa prices in the 1960s put a strain on Ghana’s foreign exchange reserves and subsequently on Nkrumah’s industrialization agenda. The country turned to borrowing to complete the several projects underway at the time but defaulted on repayment schedules (Alagidede, Baa-Boateng & Nketiah-Amponsah, 2013).

Ghana’s political environment was plunged into a period of intense instability and subjected to external shocks following independence. This culminated first in Nkrumah’s overthrow in 1966 and other military interventions in 1972, 1979 and 1981-1982. Hence, Ghana’s economic situation worsened through the years under successive military and civilian administrations. For example, the economy consistently declined from 6.2% in 1961 to negative 3.0% in 1967 and negative 2.5% in 1972 after a short period of economic stability. Moreover, the drought experienced in the early 1980s and the return of millions of Ghanaians living in Nigeria only exacerbated the strain in the already weak economy (Alagidede et al., 2013). Ghana’s economy only showed signs of stabilization by 1984 when the country embarked on economic reforms under the IMF’s ERP and SAP (see Figure 2.2).

The ERP represented a fundamental shift in policies that stressed fiscal discipline and export promotion to eradicate budget deficits and help the country service its foreign loans. The quasi-military PNDC regime under Flt. Lt. Jerry John Rawlings at the time
devotedly implemented the ERP and, in the process, earned the support and assistance of other international financial institutions. Under the ERP, Ghana moved from a state-controlled economy to a liberalized economy with minimal state interference. In 1984, following the implementation of the ERP, Ghana recorded a growth of 8.6% considered to be very high. Subsequently, the SAP was introduced to help consolidate the gains of the ERP, stimulate growth and ensure fiscal stability. Aryeetey and Tarp (2000) assert that the liberal economic regime under the ERP and SAP brought increased aid inflows that facilitated Ghana’s economic recovery and stability. In 2001, Ghana subscribed to the Highly Indebted Poor Country (HIPC) initiative and benefited from debt relief from donors. This contributed immensely to the rapid growth in Ghana’s economy and by 2010, the country had attained a lower middle-income status. The recent improvements in the economy, political stability, and conducive business environment as well as untapped natural resource reserves have increased foreign investments and economic growth over the recent past decades. Yet, the positive performance of the Ghanaian economy is not without challenges.

![Real GDP Growth (annual %) from 1962 - 2016](source: World Development Indicators, World Bank (2018), IMF, 2017)
2.2.2 Recent Economic Developments

Several economies around the world suffered from the economic recession in 2008 and, to date, their recovery has been slow. The sub-Saharan Africa (SSA) region is considered to have recovered well from the 2008 recession, compared to other regions of the world (Fosu, 2013). However, the region experienced a drastic decline in growth from 3.4% in 2015 to 1.4 in 2016 which is reportedly the lowest growth in more than two decades (IMF, 2017). The fall in growth in SSA is attributed to factors such as the “less-supportive global economic environment” (IMF, 2017), the result of historically low commodity prices, with oil prices being lower on average in 2016 than in 2015 (ISSER, 2017).

Ghana discovered and started the commercial production of crude oil in 2011. This drastically altered the base of the economy and accounted for 30% in export earnings (Fosu, 2013). Ghana recorded a phenomenal growth of 14% in 2011, the highest in the country’s economic history following the petroleum production and commercial oil exports. However, this has not been sustained when in 2012, real GDP growth plummeted to 9.3%, dropped to 7.3% in 2013 and declined further to 4.0% in 2014 (See Figure 2.3). Similarly, Ghana’s GDP only grew at 3.7% in 2016, again, witnessing a fall from the 3.8% rate in 2015. This steady decline in Ghana’s economic growth is attributable to plummeting oil exports and revenues, since real non-oil GDP growth picked up to 4.0% in 2015 and 5.0% in 2016. The growth trends are shown in Figure 2.3 below.

Yet, Ghana has recorded high levels of borrowing in recent years and has therefore raised its domestic debt stock. By 2016, Ghana had accrued a domestic debt of GH₵37,673.58 million, tripling the country’s debt stock of GH₵11,841.10 million in 2011. The country again resorted to the IMF for assistance, signing up to an extended credit facility (EFC) of US$918 million for three (3) years “anchored on Ghana’s Shared Growth and Development Agenda, aims at strengthening reforms to restore
macroeconomic stability and sustain higher growth” (IMF, 2015, p. 1). Fortunately, the debt stock has been controlled through increased earnings from oil, gold, and cocoa; reduction in imports; stringent fiscal consolidation efforts such as expenditure cuts and improvement in revenue mobilization. Following this, Ghana’s debt in 2017 was 69.2% of GDP, dropping from 73.4% recorded in the previous year (World Bank, 2018).

Figure 2.3: Trends in Ghana’s Real, Non-oil and Per Capita GDP

Ghana’s economic performance in terms of inflation as well as exchange and interest rates has also been worrisome. Although the end-of-year inflation rate improved from 17.7% in 2015 to 15.4% in 2016, for instance, this actual realization far exceeds the 2016 target rate of 10.1%. Meanwhile, the average annual inflation rose slightly from 17.1% in 2015 to 17.5% in 2016. The cedi depreciated against the dollar and euro at 9.6% and 5.3% respectively, and appreciated against the pounds sterling at a rate of 10% in the interbank market in 2016. This is an improvement compared to depreciation rates in 2015 against the three major trading currencies; 15.7% against the dollar, 6.2% against the euro and 11.5% against the pounds (Bank of Ghana, BoG, 2017). For the same period between 2015 and 2016, interest rates for depositors went up (except for 91-day end-period T-bill rate); and so, did lending rates.
2.2.3 Sectoral Performance

The services sector, the largest of Ghana’s economy, recorded the highest growth rate of 5.9% in 2016, an improvement of the rate of 5.2% in 2015. The agriculture sector recorded a 3.6% growth rate in 2016, an increase from 2.5% in 2015. The steady growth of the agricultural sector is sustained by the tremendous rise in the cocoa and crop production sub-sectors. The cocoa sub-sector for example grew by 2.5%, a significant improvement over the -2.3% growth in 2015. Crop production also grew by 3.3% in 2016 from 2.0% in 2015. The second largest sector, industry, rather witnessed a -1.2% growth rate in 2016, down from 1.0% in 2015. This abysmal performance of the industrial sector, which comprises the manufacturing, mining and quarrying, caused mostly by erratic power supply is “worrisome given the country’s quest for industrialization” (ISSER, 2017). The ranking of sectoral growth has followed similar patterns in recent years, where the services sector records the highest growth, followed by agriculture and then industry. See Figure 2.4 below for more details.

Figure 2.4: Sectoral Growth Rates for Services, Industry and Agriculture

Source: MoFEP, 2017; ISSER, 2016, ISSER, 2017
Consequently, the sectoral contribution to GDP also follows the pattern observed in recent years, with the services sector being the dominant contributor. In 2015, the services sector accounted for 53.3%, but increased to 54.3% in 2016. Industry, the second largest sector declined marginally from 26.6% in 2015 to 25.6% of GDP in 2016. Agriculture also decreased from 20.2% in 2015 to 20.1% in 2016. Whilst primary commodity exports, particularly of cocoa and gold, continue to dominate the composition of Ghana’s trade, the advent of oil production seems to be altering the pattern. In fact, expansions in the oil and services sectors continue to shrink the once dominant contribution of agriculture to GDP (ISSER, 2017). See Figure 2.5 below for more details.

![Figure 2.5: Sectoral Growth Rates for Services, Industry and Agriculture](source: MoFEP, 2017; ISSER, 2016, ISSER, 2017)

### 2.2.4 The Business Environment in Ghana

Ghana practices the multi-party democratic system of governance with presidential and parliamentary elections conducted every four years, as stipulated in the 1992 Constitution. Ghana ranks 61 out of 162 countries on the Global Peace Index and is considered a model of political stability and democracy in Africa, particularly in the SSA region where there are conflicts and political unrests. The Global Competitive Index is used to determine the level of productivity in a country based on a collection of institutions, factors and policies. Over the years, Ghana’s performance has improved consistently to a score of 3.71 out of...
7 to rank 111 out of 144 countries in 2014/2015, an improvement from the previous 3.69 score.

However, corruption and government bureaucracy greatly obstruct effective business in Ghana. The recent corruption-perceptions index of Transparency International ranked Ghana 61 out of 175 countries. It is no doubt that successive governments have made efforts at improving Ghana’s business climate and ease of doing business. Such interventions include improvements in the related costs and procedures of setting up business, accessing credit, provision of utilities like electricity, paying taxes, investor protection, contract enforcement, resolving insolvency, and dealing with construction permits.

2.3 Small and Medium-sized Enterprises (SMEs)

Generally, Nkuah et al. (2013) have observed that SMEs are predominantly privately-owned enterprises that have relatively small number of workers as well as relatively small sales volume and fixed assets. The composition of SMEs is diverse and differs across countries and by the industry within which they operate. This section presents definitions, characteristics, contributions and challenges of SMEs in the Ghanaian context.

2.3.1 The Definition of SMEs

There are varying definitions of SMEs (Kayanula & Quartey, 2000; Abor, 2017). Scholars have defined and described what constitutes SMEs in different ways. Some categorize and define SMEs based on criteria such as number of workers, annual turnover and fixed assets, operational sector and level of internationalization as well as the legal status and method of production (Abor, 2017). While definitions based on number of workers tend
to be the most predominant, the exact number of workers varies across and within countries (Ayyagari et al., 2003; Abor, 2017).

The World Bank’s (2013) definition of micro, small and medium-sized enterprises (MSMEs) is based on employee strength and sales turnover. According to the categorization, micro enterprises have up to 10 workers and up to US$10,000 sales turnover. Small enterprises engage up to 50 workers and about US$3 million sales turnover; medium-sized enterprises engage up to 300 workers and up to US$15 million annual sales turnover. Similarly, the European Union’s definition categorizes enterprises based on employee strength and sales turnover, albeit with different thresholds. Enterprises that have below 10 workers and €2 million in sales turnover are micro; enterprises with less than 50 workers and €10 million in sales turnover are small; and enterprises with less than 250 workers and €50 million in sales turnover are medium-sized (Oteh, 2010). The foregoing buttresses the current situation of the lack of a general definition of SMEs and highlights the country variations. Table 2.2 below provides a list of some categorizations of SMEs.

Table 2.2: Definitions of SMEs

<table>
<thead>
<tr>
<th>Country/Institution</th>
<th>Criteria</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
<th>SME</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Bank</td>
<td>No. of staff Turnover</td>
<td>≤10</td>
<td>≤50</td>
<td>≤300</td>
<td>50 to 300 staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>≤$10,000</td>
<td>≤$3 mil</td>
<td>≤$15 mil</td>
<td>$3 to 15 mil</td>
</tr>
<tr>
<td>EU</td>
<td>No. of Staff Turnover</td>
<td>&lt;10</td>
<td>&lt;100</td>
<td>&lt;250</td>
<td>10 to 249</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;€2 mil</td>
<td>&lt;€10 mil</td>
<td>&lt;€50 mil</td>
<td>€2 to 50 mil</td>
</tr>
<tr>
<td>OECD</td>
<td>No. of staff</td>
<td>1 to 9</td>
<td>10 to 49</td>
<td>40 to 499</td>
<td>10 to 499 staff</td>
</tr>
<tr>
<td>UNIDO</td>
<td>No. of staff</td>
<td>&lt;5</td>
<td>&lt;5-19</td>
<td>&lt;20-99</td>
<td>5 to 99 staff</td>
</tr>
<tr>
<td>China</td>
<td>No. of staff</td>
<td>N/A</td>
<td>&lt;300</td>
<td>300-2000</td>
<td>1 to 2000 staff</td>
</tr>
<tr>
<td>Australia</td>
<td>No. of staff</td>
<td>1 to 4</td>
<td>5 to 9</td>
<td>20 to 199</td>
<td>5 to 199 staff</td>
</tr>
</tbody>
</table>

Sources: Temperley et al., 2004; Oteh, 2010; Abor, 2017; World Bank, 2013.
In Ghana, institutions and scholars have defined SMEs using the different criteria, but the number of workers seems the most dominant in the definitions (Ackah & Vuvor, 2011). The operational definition of SMEs according to the National Board for Small Scale Industries (NBSSI) entails the following:

Small business is any business that employs up to 29 people. And small business is divided into: the micro and small and medium enterprises. The micro enterprises employ up to 5 employees with fixed assets (excluding land and building) not exceeding the value of $10,000; small enterprises are those employing between 6 and 29 employees or having fixed assets excluding land and building not exceeding $100,000 and; a medium-sized enterprise employ between 30 and 99 employees with fixed assets of up to $1m (Agyapong, 2010, p. 198).

Similarly, the Ghana Statistical Service (GSS) classifies enterprises that have below ten (10) staff as small and enterprises of above ten (10) workers as medium-scale (Kayanula & Quartey, 2000). The definition offered by the GSS lumps both medium and large enterprises together, and does not specify the cut off at which an enterprise cease to be medium-scale. Nonetheless, a NBSSI categorization of small enterprises is the same as that put forward by the GSS for micro enterprises. This ambiguity in the categorization of SMEs by these key institutions is worrisome.

According to the classification put forward by Osei et al. (1993), an enterprise is either micro, very small or small based on number of workers engaged. In their classification, micro enterprises engage below 6 workers; very small enterprises engage between 6 and 9 workers while small enterprises engage between 10 and 29 workers. Aryeetey et al. (1994) classify enterprises into four groups: micro, very small, small and medium enterprises. Aryeetey et al.’s (1994) work was founded on a field survey of 133 enterprises in Ghana. They noted that micro enterprises employ below 6 workers; very small enterprises employ between 6 and 9 workers; small enterprises employ between 10 and 29 workers; while medium enterprises employ between 30 and 140 workers. It is prudent to say that Aryeetey et al.’s (1994) definition only extend the definition put
forward by Osei et al. (1993) by adding the medium sized enterprises for enterprises beyond 30 workers. Abor (2017) reports a more recent definition of SMEs put forward by the Regional Project on Enterprise Development Ghana (RPEDG). The report defines micro enterprises as businesses that have less than 5 workers; small enterprises as businesses that have between 5 and 9 workers; medium enterprises as business that have between 30 and 99 workers; and large enterprises have more than 100 workers.

Not least, the Ghana Statistical Service (2016) categorized business establishments in Ghana through the Integrated Business Establishment Survey (IBES). The Integrated Business Establishment Survey (IBES) of the Ghana Statistical Service (2016) is the foremost economic census to cover all three sectors of Ghana’s economy: industry, services and agriculture of Ghana’s economy. The IBES report lists “all non-household establishments in Ghana with the primary aim of providing a business register and developing a sampling frame for which establishments will be sampled” (GSS, 2016, p. iii). The IBES economic census (GSS, 2016) used the number of employees’ criteria to categorize enterprises in Ghana into: (i) micro-sized business establishments (engaging less than 5 persons); (ii) small-sized establishments (engaging from six to thirty persons); (iii) medium-sized establishments (engaging from thirty-one to hundred persons) and (iv) large-sized establishments (engaging more than 100 persons). Some categorizations adduced from definitions of SMEs in Ghana are presented in Table 2.3 below.
Table 2.3: Classifications of SMEs in Ghana

<table>
<thead>
<tr>
<th>Institution/ Author(s)</th>
<th>Criteria</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
<th>SME</th>
</tr>
</thead>
<tbody>
<tr>
<td>NBSSI</td>
<td>No. of staff</td>
<td>&lt;Up to 5</td>
<td>&lt; 6 - 29</td>
<td>30-99</td>
<td>6 – 99 staff</td>
</tr>
<tr>
<td></td>
<td>Fixed assets</td>
<td>&lt; $10,000</td>
<td>&lt; $100,000</td>
<td>&lt; $1million</td>
<td>$100,000 – 1 million</td>
</tr>
<tr>
<td>GSS</td>
<td>No. of staff</td>
<td>N/A</td>
<td>&lt; 6</td>
<td>N/A</td>
<td>Small: up to 10 staff</td>
</tr>
<tr>
<td>Osei at al. (1993)</td>
<td>No. of staff</td>
<td>&lt; 6</td>
<td>Very Small 6 - 9</td>
<td>N/A</td>
<td>Small: 6 – 29 staff</td>
</tr>
<tr>
<td>Aryeetey et al. (1994)</td>
<td>No. of staff</td>
<td>&lt; 6</td>
<td>Very Small 6 – 9</td>
<td>N/A</td>
<td>Small: 6 – 29 staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Small 5 - 29</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30 - 140</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6 – 140 staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RPEDG (Abor, 2017)</td>
<td>No. of staff</td>
<td>&lt; 5</td>
<td>5 - 29</td>
<td>30 – 99</td>
<td>5 – 99 staff</td>
</tr>
<tr>
<td>IBES (GSS, 2014)</td>
<td>No. of staff</td>
<td>Up to 5</td>
<td>6 – 30</td>
<td>31 – 100</td>
<td>6 – 100 staff</td>
</tr>
</tbody>
</table>

Sources: Abor, 2017; GSS, 2016; Aryeetey et al., 1994; Osei et al., 1993; Agyapong, 2010

2.3.2 Defining SMEs in the Context of the Study

The heterogeneity in SMEs has resulted in different definitions and categorisations in the extant literature. This absence of acceptable universal definition of SMEs also highlights the lack of uniformity in the indicators and criteria that have been used to classify SMEs. The literature reveals that the size of SMEs has been operationalised in terms of number of workers, annual sales turnover, value of fixed assets, operational sector, etc. Weston and Copeland (1998), for example, have observed that defining SMEs based on size lacks universal applicability. This study relies on the operational definition provided by the National Board for Small Scale Industries (NBSSI) and the categorization provided by the Integrated Business Establishment Survey (IBES) report of the Ghana Statistical Service (2016) to define SMEs in the current research. In so doing, this study relies on the context-based approach and the multiplicity of criteria approach (Abor, 2017) to define SMEs based on number of workers, fixed assets and registration status. The number of workers’ criterion is by far the most dominant criterion in categorising SMEs, fixed assets excludes...
land and buildings whilst registration status makes it easy to identify formal and informal SMEs.

In the operational definition of the NBSSI (Agyapong, 2010), small enterprises have between 6 and 29 workers and fixed assets (excluding land and building) of up to $100,000 whilst medium-sized enterprises have between 30 up to 99 workers and fixed assets not exceeding $1 million. However, the Ghana Statistical Service in the IBES report indicates that only 9.5% of all establishments in Ghana are formal (GSS, 2016). This assertion is consistent with Abor and Quartey’s (2010) observation that about 90% of all enterprises in Ghana are in the informal sector. According to the Ghana Statistical Service, formal establishments are enterprises that have undergone formal business registration at the Registrar General’s Department of Ghana and maintain formal financial accounts. Informal establishments, on the other hand, are enterprises that have not undergone formal business registration at the Registrar General’s Department of Ghana (GSS, 2016). This study aims at assessing formalized enterprises; hence, only registered SMEs are considered in the operational definition of SMEs.

From the foregoing, the study operationalises small and medium enterprises based on number of workers and fixed assets as follows. Small enterprises engage 6 to 30 staff; have fixed assets (excluding land and building) not exceeding $100,000 and are formally registered at the Registrar General’s department. Medium enterprises have between 30 and 100 workers with fixed assets (excluding land and building) not exceeding $1 million and formally registered at the Registrar General’s department.

2.3.3 Features of SMEs in Ghana

SMEs, particularly in developing countries, exhibit peculiar features and characteristics that distinguish them from large firms and SMEs in developed countries. In developing
countries such as Ghana, SMEs are labour intensive, operate in diverse sectors, exhibit
diverse gender ownership and operational efficiency (Reuber & Fisher, 2000). In terms of
labour, Abor (2017) observes that most SMEs in Ghana are “one-person business” (p. 4).
As a result, “working proprietors” make up half of the SME workforce in Ghana while the
other half is comprised of active but unpaid family members and hired workers, trainees
or apprentices (Abor, 2017). Hence, the costs associated with job creation is lower in
SMEs than in large firms (Anheir & Seibel, 1987).

Moreover, SMEs in Ghana operate across diverse sectors though mostly in retail,
trade and manufacturing. It is important to note that although SMEs engage in
manufacturing, they do so predominantly in areas where factors of production such as raw
materials, consumption demand and export markets are highly available and developed.
SMEs in Ghana are also noted for their low participation in the capital market, compared
to large firms (Ackah & Vuvor, 2011). As a result, several SMEs lack the requisite capital
and financial resources to operate effectively and expand their businesses (Aryeetey et al.,
1994; Abor & Biekpe, 2006).

Furthermore, SMEs in Ghana seem more focused on providing goods and services
to the domestic and local markets than exporting to other emerging and foreign markets.
Truly, only a handful of SMEs have shown export capacity and the drive for
internationalization. Moreover, many enterprises in Ghana are family-owned businesses
operating with low technological know-how and under intensive labour requirements
(Ackah & Vuvor, 2011). In fact, an SME in Ghana is most probably owned by an
individual who often has limited formal education and lacks the technical know-how to
use new technological tools or access the capital market, yet has the sole responsibility of
the operational and strategic management of the enterprise (Ackah & Vuvor, 2011).
2.3.4 Development of SMEs in Ghana

Entrepreneurs are those who harness resources to act on business ideas to stimulate social and economic change. They are the enterprising individuals, thinkers, planners, doers, hard workers, risk takers and managers who can turn an idea into reality. As noted by Ogbor and Ogbor (2009), entrepreneurship “is about coming up with somethingvaluably new which is considered as an innovation” (p. 3). They observe further that:

the industrial health of a society depends on the level of entrepreneurship existing in it; a country might therefore remain backward not because of lack of natural resources or dearth of capital but because of its lack of entrepreneurial talents or its inability to tap the latent entrepreneurial talents existing in that society (Ogbor & Ogbor, 2009, p. 3).

Table 2.4: Regional distribution of SMEs in Ghana

<table>
<thead>
<tr>
<th>No</th>
<th>Region</th>
<th>Medium Enterprises</th>
<th>Small Enterprises</th>
<th>Total SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Western(^1)</td>
<td>798</td>
<td>9407</td>
<td>10205</td>
</tr>
<tr>
<td>2</td>
<td>Central</td>
<td>645</td>
<td>7580</td>
<td>8045</td>
</tr>
<tr>
<td>3</td>
<td>Greater Accra</td>
<td>4184</td>
<td>23008</td>
<td>27192</td>
</tr>
<tr>
<td>4</td>
<td>Volta(^2)</td>
<td>314</td>
<td>5817</td>
<td>6131</td>
</tr>
<tr>
<td>5</td>
<td>Eastern</td>
<td>482</td>
<td>8087</td>
<td>8569</td>
</tr>
<tr>
<td>6</td>
<td>Ashanti</td>
<td>1240</td>
<td>16105</td>
<td>17345</td>
</tr>
<tr>
<td>7</td>
<td>Brong Ahafo(^3)</td>
<td>476</td>
<td>7808</td>
<td>8284</td>
</tr>
<tr>
<td>8</td>
<td>Northern(^4)</td>
<td>283</td>
<td>7282</td>
<td>7565</td>
</tr>
<tr>
<td>9</td>
<td>Upper East(^5)</td>
<td>169</td>
<td>3358</td>
<td>3527</td>
</tr>
</tbody>
</table>


The sections below discuss the development of SMEs under the various political regimes or administrations in post-independence Ghana.

\(^1\)Now comprises Western and Western North  
\(^2\)Now comprises Volta and Oti  
\(^3\) Now comprises Brong Ahafo, Bono East and Ahafo  
\(^4\) Now comprises Northern and Savannah  
\(^5\) Now comprises Upper East and North East
• *The Nkrumah Era*

Prior to independence in 1957, the economic policy pursued by the British colonial government was underpinned by trade with European merchants and businesses. As such, the government focused on training persons who assumed public office to manage its interests and property in such trade. As a result, the promotion of private enterprises and small-scale enterprises was virtually non-existent during this period (Kayanula & Quartey, 2000). Following this, the government of Dr. Nkrumah also neglected the indigenous private sector to a large extent, focusing primarily on state-led policies and interventions. Nkrumah rather moved to seize control of the national economy by setting up numerous state-owned enterprises in agriculture and industry. Hence, the emergent post-independence economy of Ghana could be considered “interventionist and state-controlled” (Buame, 2012, p. 125).

Under Nkrumah’s administration, large and capital-intensive state enterprises were established. Nkrumah was concerned that economic wealth would easily translate into political power and opposition to his government. Nkrumah therefore, emphasized the collective growth of the country through state-controlled enterprises, and suppressed individual and private sector participation (Killick, 1978). Nkrumah’s post-independence government did not give private entrepreneurship a boost, but instead stifled control of the economy in state-owned enterprises managed by the government in a collective state-controlled entrepreneurship. Private enterprises during the period were limited to small-scale privately-owned foreign enterprises, joint state enterprises, cooperatives and enterprises exclusively reserved for private entrepreneurs (Killick, 1978). Overall, Nkrumah was accused to the development of entrepreneurship.
From NLC to Busia’s Government

Following the overthrow of Nkrumah, Ghana experienced a significant reduction in government involvement in economic matters in the immediate years (1966 to 1972). The NLC in 1968 launched “The Promotion of Ghanaian Business Enterprise” to spur and encourage private entrepreneurship. The Busia administration followed up with an agenda to stabilize the economy which focused on promoting local and indigenous-owned private business enterprises through trade liberalizations policies and a market-oriented economy. The Aliens Compliance Order (ACO) under Busia’s administration was one such instrument to make major socio-economic business activities the preserve of Ghanaians. The Ghanaian Enterprises Development Commission (GEDC) and the Small Business Credit Scheme (SBCS) were also introduced to provide capital for private entrepreneurs, particularly in the manufacturing sector.

Although entrepreneurship moved from state control to private and individual control, the gains were neutralized by the “over liberalization” policies of the government at the time. What came to be known as dumping – flooding the market with cheap imported products at very low selling prices – made it difficult for local producers to compete. As a result, several small-scale enterprises which were unable to meet their loan repayment obligations collapsed and were forced to close (Buame, 2012).

From Acheampong to Limann’s Government

The Acheampong regime which overthrew Dr. Busia’s second republican administration returned to centralized economy. The early years of the regime were marked by some unpopular policies and political rhetoric which led to import cuts from British companies. However, the Operation Feed Yourself (OFY) and Operation Feed your Industries (OFI) initiatives became very popular by 1974. These initiatives promoted private
entrepreneurship as everyone was encouraged to rely on produce from Ghana and indigenous enterprises rather than exporting raw materials and importing finished products from foreigners. The OFY and OFI policies also ensured that private individuals produced enough to fill the food basket of the country, and to supply the needed raw materials for industries to operate at full capacity for optimum performance and productivity. However, the initiatives were not sustainable due to poor management, corruption and political influence, and again private enterprises were significantly affected.

The collapse of private enterprises was exacerbated by widespread corruption, political opulence and bad governance. The productivity from all sectors was low and there were widespread food shortages which led to price hikes in basic commodities and foodstuffs. The result was “brain drain” and “kalabule”. The brain drains led to a situation where “men and women of all professions and vocations struggled to leave the country with their knowledge, expertise and experience in search for greener pastures outside the country” (Buame, 2012, p. 130). According to Buame (2012), further disdain for the opulence of public officials and state property led to the “kalabule era” – a flourishing underground economy, characterized by hoarding, smuggling, corruption and collusion among the military elite, local and foreign entrepreneurs.

The Limann government (1979-1981) introduced some austerity and conservative economic policies in line with IMF recommendations but with little improvement for the state of Ghana’s economy and social life of citizens. The poor and economic rot left behind by the Acheampong government, perhaps was too big to clean up. There was widespread corruption and private enterprises could only be sustained through affiliations with some segments of the government hierarchy. In fact, private enterprises could not recover from the shocks experienced under Acheampong’s regime.
• **Rawlings and the PNDC Era**

Rawlings and the quasi-military PNDC government ruled from 1981 to 1992. During this period, there was a renewed interest in private entrepreneurship through the IMF’s Economic Recovery Programme (ERP). The ERP helped the country to diversify state-owned enterprises and restructure the private sector to facilitate economic recovery. The objectives of the ERP (Buame, 2012, p. 133) were as follows:

- To re-align prices in favour of the export sector, especially cocoa, timber and minerals;
- To restore monetary and fiscal discipline to lead to reduction in fiscal deficit and inflation;
- To progressively move away from state control and interventions towards free markets;
- To reform the country’s exchange rate system;
- To initiate the rehabilitation of the country’s productive base and social infrastructure; and
- To encourage private investment.

In 1986, following the relative success of the ERP, the SAP was introduced to help consolidate Ghana’s recovery towards further economic development. SAP sought to (i) maintain an incentive framework that stimulates growth, encourage savings and investments to strengthen the balance of payments, and (ii) improve resource use, particularly in the public sector, while ensuring fiscal and monetary stability (Buame, 2012). Although the ERP and SAP introduced government’s favourable disposition towards private enterprises, Steel and Webster (1991), however, argue this was characterized by arbitrary interference and over liberation of the economy by the government.
The economic distress in the 1980s caused production in the manufacturing sector to stagnate and the several “factory-hands” had to find alternative means to earn decent income. This situation forced many people to venture into entrepreneurship and open private enterprises in the 1980s. The liberal economic policies under the ERP and SAP provided a somewhat conducive environment for such activities (Aryeetey et al., 1994). The government recognized the efforts and contributions of private enterprises to Ghana’s economic growth and development. As a result, it established the National Board for Small Scale Industries (NBSSI) in 1981 to coordinate the development of small-scale enterprises in the country. The Ghanaian Enterprises Development Commission (GECD) and the Cottage Industries Board were established in 1991 and 1994 respectively to facilitate the development of SMEs in Ghana.

• **The 4th Republican Era**

In 1992, the government rolled out several private sector economic reforms. Price control laws were repealed through the abolishment of the Manufacturing Industries Act, 1971 (Act 356). The Private Sector Advisory Group was set up and the Investment Code of 1985 (PNDC Law 116) revised to promote joint venture and partnerships between Ghanaian and foreign investors (Kayanula & Quartey, 2000). The government also embarked on several programmes to support enterprises acquire plant and machinery under flexible payment terms to facilitate production in the manufacturing sector. The Export Development and Investment Fund (EDIF) was also set up to promote and facilitate industrial and export services. As a result, EDIF was instrumental in the revitalization of several enterprises in the food processing and packing sector, wood processing sector and textile and garments sector. Then in 2001, the government established the Ministry for private Sector Development mandated to oversee and coordinate all activities aimed at positioning the
private sector as the engine of the country’s economic growth and development. In 2002, President Agyekum Kuffour again launched the President’s Special Initiative (PSI) to primarily promote the production and export of cassava and textiles.

In addition, the establishment of the Youth Enterprises Programme (YES); National Entrepreneurship Education programme (NEIP), among others, are indications of the government’s positive attitudes towards SMEs. Buame (2012) notes that the development of SMEs and entrepreneurship in Ghana is mixed, with some governments such as Nkrumah and Acheampong regimes adopting a more central economy approach which stifled private enterprises, while others like the Busia, PNDC and more recently the 4th Republic have done well to promote private enterprise and SMEs. He notes further

Thus, since colonial times, the environment has had different implications for entrepreneurial activities. While the colonial government and the post-independence government of pre-1980 pursued policies that discouraged private entrepreneurship, the post-1980 governments have been doing everything possible to create a congenial atmosphere for entrepreneurial activities and thereby revolutionizing entrepreneurship (p. 134).

However, he is quick to add also that:

Over the years, the state’s role in the economy in collaboration with foreign interests has retarded the emergence of an independent entrepreneurial class…until recently, both civilian and military governments were motivated by the necessity to keep themselves in power, hence, their inability to institute real structural reforms that will favour the development of an independent industrial entrepreneurial class. The long-term development of entrepreneurial activities in Ghana will not be fully implemented if the multinational corporations can take the centre stage (p. 134).

2.3.5 Contribution of SMEs to Ghana’s Economy

In many developing and developed countries, the contributions of small and medium-sized enterprises (SMEs) to economic growth and development are well documented. In a study of firms in 76 countries, Ayyagari et al. (2003) found that about 55% of manufacturing jobs are created by SMEs. Moreover, other studies have found that about 98% of businesses in developing countries are small and medium-sized. These enterprises create
between 50% and 80% of all employment in the industrial sector and account for about 50% of all manufacturing activities (Abor, 2017). Seibel (1996) notes that the market niches within which SMEs operate often generate small profits; hence, are unattractive to larger firms. It is for this reason that SMEs are considered the engine of accelerated growth and development.

In Ghana, Abor and Quartey (2010) found that 92% of all business establishments are SMEs employing about 85% of the work force in the manufacturing sector and contributing 70% of GDP. This is consistent with earlier observations by Kayanula and Quartey (2000) that a large portion of Ghana’s active work force is engaged by SMEs. This labour intensity and the regional distribution of SMEs have been important factors in facilitating income stability and ensuring a more equitable income distribution than large firms. It is important, therefore, to continue the promotion of SMEs to serve as a backbone of the economy (De la Torre et al., 2008).

2.3.6 The Challenges of SMEs in Ghana

The challenges faced by SMEs are multi-faceted and complex. These challenges include insufficient operational capital, difficulty in accessing credit, increasing competition in the business environment and tumbling consumer demands, among others (Stephanou & Rodriguez, 2008). Studies in Ghana have revealed that the major challenges that confront SMEs are access to credit, quality of work force, unavailability of technology and regulatory institutional factors (Aryeetey et al., 1994; Baah-Nuakoh, 2003; Kayanula & Quartey, 2000).

The difficulty in accessing credit remains a major hindrance to the operations of SMEs in most developing countries (Staphanou & Rodriguez, 2008; Beck & Cull, 2014). The World Bank Enterprises Survey (World Bank, 2013) found that the inability of SMEs
to access financial capital is the foremost reason for their limited growth and development. Aryeetey et al. (1994) surveyed 133 firms and found that access to credit remains a major obstacle to growth and future expansion in 60% of SMEs. Therefore, SMEs often do not have the financial capacity to respond to operational and investment needs (Abor, 2017).

Quality of work force due to inadequate skilled and specialized personnel also hinders the expansion and development of SMEs. The situation is worsened when institutions mandated to offer training in order to develop highly skilled workforce lack the resources to do so. Kayanula and Quartey (2000) observed that only few enterprises offer formal in-service training to their personnel, thus creating skills gap in the SME sector. According to Abor (2017), “the lack of managerial know-how places significant constraint on SME development. Even though SMEs tend to attract motivated managers, they can hardly compete with larger firms” (p. 6).

Equipment and technology remain difficult to acquire and maintain for efficient operations and effective production methods in SMEs. Abor (2017) observes that the SMEs often rely on foreign technology and only a small percentage have ownership to such technology and production equipment. As a result, many SMEs are forced to utilize simple equipment. Aryeetey et al. (1994) found that 18% of the sampled enterprise continue to use old equipment; hence, their inability to increase production capacity and productivity.

Regulatory and legal factors in the business environment such as the bureaucratic and cumbersome formalities involved in registering and commencing a business have been noted to constrain the operation of SMEs. The high licensing and registration costs associated with producing some products or acquiring some machinery, for instance, deter SMEs (Abor, 2017). Another regulatory requirement of the business environment is the payment of taxes. Firms complain not only of the rates of taxes but also of the
administration of the tax system in general. Previously, SMEs were protected from international competition but now they must contend with external competition for market share. The influx of cheap textiles from China, for example, has introduced price competition into the domestic textile market and, given the high costs of production, the local enterprises are unable to compete favourably. Institutional weakness to address such issues effectively is a major constraint for SMEs.

2.4 The Study Area in Ghana

The study is situated in the Greater Accra region. The following description is based primarily on information from the Government of Ghana’s official portal www.ghana.gov.gh (GoG, 2018). The region covers an area of 3,245 km² and it is the administrative capital of the government of Ghana. The region is inhabited by a total population of 4,010,050 people (GSS, 2016). This population represents 15.4% of the total population of Ghana. Although the region is inhabited by people of diverse ethnic groups, the Akans, Ga-Dangmes and Ewes are the most dominant ethnic groups. The region is home to religious plurality, where Christianity, Islam and African Traditional Religion are the dominant religions practised.

The region is divided into sixteen administrative districts, municipal and metropolitan assemblies, namely: Ga South, Ga West, Ga East, Accra, Adenta, Ledzokuku Krowor, Ashaiman, Tema, Shai Osudoku, Ada East, Ga Central, La Dadekopoh, La Nkwantang Madina, Kpone Katamanso, Ningo Prampram and Ada East. The region is noted for its diverse economic activity and almost every 1 in 2 (51.8%) economically active persons in the population is self-employed. The major areas of economic activity are trading, retail and manufacturing. There are more than 25,000 registered firms in the manufacturing sector and eighty percent of these firms are small size enterprises with most
of them located in the Greater Accra region (GSS, 2016). This is evidence of the high level of entrepreneurship and prevalence of SMEs in the Greater Accra region; hence, its selection as the study area to examine the impact of entrepreneurial capability on the performance of SMEs in the dynamic institutional environment in Ghana.

2.5 Chapter Summary
The chapter presented a history of the economy of Ghana vis-a-vis the development of SMEs since Nkrumah’s post-independence administration. It has been noted that the emergent post-independence economy in Ghana was “interventionist and state-controlled” where large and capital-intensive state enterprises were established to the detriment of private enterprises. However, the political administrations afterwards, such as Busia, Limann, Rawlings and the present 4th Republic have all done tremendously to support the renewed interest in private entrepreneurship. The rationale for selecting the Greater Accra region as the study area is due to high economic activity and home to most business establishments in Ghana.
CHAPTER THREE
THEORETICAL FOUNDATION OF THE STUDY

3.0 Introduction
The chapter presents the theoretical underpinnings of the study. This informs the development of a conceptual framework for the empirical investigation of the impact of Entrepreneurial Capability and the moderating effect of Institutional Factors on SME performance in Ghana. In all, three theories from three perspectives are discussed in this chapter. Firstly, the resource-based theory is discussed. This is followed by the dynamic capabilities’ theory and institutional theory. The chapter concludes with a justification for the selection of the theories for the study and a summary.

3.1 Theoretical Foundation
The foundation of entrepreneurial capability, institutional factors, and SME performance nexus rest on concepts and theories even if the practitioners themselves are unaware of it (Druker, 1985). Kerlinger (1979, p. 64) posits that theory is “a set of interrelated constructs or variables, definitions and propositions that presents a systematic view of phenomena by specifying relations among variables, with a purpose of explaining natural phenomena”. Theories, therefore, are very useful tools formulated to guide research and to help researchers to organize their thoughts and ideas to explain, predict, and understand the outcomes and objectives of phenomena (Miles, 2012). In that light, Creswell (2014) posits that in quantitative research, theory “is an interrelated set of constructs or variables formed into proposition, or hypotheses, which specify the relationship among variables typically in term of magnitude or direction” (p.54). In order words, theory specifies the nature of interrelationships among variables in a study. For example, it helps formulate a
causal relationship between two variables, X and Y; where X is the independent variable and Y the dependent variable.

In this study, three theories, namely the resource-based theory, dynamic capabilities theory and institutional theory underpin the examination of the impacts of Entrepreneurial Capability and Institutional Factors on SME performance in Ghana. The resource-based theory provides a lens to understand the link between the resources and the resultant performance of SMEs in Ghana. The dynamic capabilities theory extends the resource-based theory in the dynamic institutional environment to understand the interrelationships among opportunity exploration and exploitation activities and their resultant impact on the performance of SMEs in Ghana. The institutional theory provides insight into the embeddedness of SMEs in the institutional environment and how institutional factors constrain or enable entrepreneurial activity and ultimately SME performance in Ghana. The theories are further discussed below.

3.2 Resource-Based Theory

The thrust of the resource-based theory is that firms compete based on the resources and capabilities they possess (Wernerfelt, 1984; Barney, 1991; Alvarez & Barney, 2017). It examines the differences in performance attained by organizations based on their resources. It focuses on efficiency-based differences in utilizing resources across organizations, rather than the use of other competitive strategies (Peteraf & Barney, 2003). The resource-based theory, thus, provides a theoretical basis to assess how firms accumulate and utilize resources they possess to attain and sustain competitive advantage and ultimately superior performance. To generate and sustain competitive advantage, however, the resources must be valuable, rare, imperfectly imitable and organizationally exploitable (VRIO) (Barney, 1995; Barney & Hesterly, 2012).
The resource-based theory is underpinned by two fundamental assumptions: (i) resources are heterogeneous across firms within the same industry, and (ii) resources are immobile across firms; thereby, creating a long-lasting advantage (Barney & Clark, 2007; Barney & Hesterly, 2012). Due to the heterogeneity in resources possessed by firms, some firms can accomplish some tasks and activities better than others (Peteraf & Barney, 2003; Ferreira et al., 2010). Thus, the RBV assumes that the decision to select and accumulate types of resources in organizations is guided by rational choices based on available information or potential (Miles, 2012; Oliver, 1997). The nature and types of resources as well as application, relevance and criticisms of the theory are discussed below.

3.2.1 The Nature and Type of Resources

Penrose’s (1959) view of organizations as both administrative and collection of productive resources underpin the resource-based theory. According to Amit and Shoemaker (1993), these resources are the “stock of available factors that are owned or controlled by the firm, which are converted into final products or services by using a wide range of other firm assets” (p. 35). As noted further by Barney and Arikan (2001), resources are “tangible and intangible assets that firms use to conceive of and implement its strategies” (p. 138). It also denotes some form of strength that an organization can utilize to accomplish its goals (Wenerfelt, 1984). Resources are mainly categorized as physical, financial, human and organizational (Barney & Hesterly, 2012). As noted by Makadok (2001), capabilities on the other hand are “organizationally embedded non-transferable firm specific resource whose purpose is to improve the productivity of the other resources possessed by the firm” (p. 389). Madhani (2010, p. 9) compiles the types of resources and capabilities shown in Tables 3.1 and 3.2 below.
Table 3.1: Tangible Resources

<table>
<thead>
<tr>
<th>Resources</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>Internal and external financial capital</td>
</tr>
<tr>
<td>Physical</td>
<td>Geographical locations of plants, machinery and offices</td>
</tr>
<tr>
<td></td>
<td>Raw materials and distribution channels</td>
</tr>
<tr>
<td>Technological</td>
<td>Copyrights, patents, trademarks and trade secrets</td>
</tr>
<tr>
<td>Organizational</td>
<td>Planning, control systems, information systems</td>
</tr>
</tbody>
</table>

Source: Madhani (2010, p. 9)

Table 3.2: Intangible Resources

<table>
<thead>
<tr>
<th>Resources</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation</td>
<td>Research and Development (R &amp; D), new production processes and procedures, organizational innovation and change management</td>
</tr>
<tr>
<td>Human</td>
<td>Managerial competence and organizational culture</td>
</tr>
<tr>
<td>Reputation</td>
<td>Perceived product quality, reliability and durability among consumers, successful brand positioning, customer loyalty, employee job satisfaction and corporate social responsibility</td>
</tr>
</tbody>
</table>

Source: Madhani (2010, p. 9)

The resource-based theory focuses on explaining the “earning differentials” or performance differences across organizations attributable to resources that have varying levels of efficiency (Barney, 1991; Miles, 2012). The theory argues that superior resources have a greater tendency than inferior resources to enable organizations to produce improved products to meet customer needs. Similarly, organizational efficiency enables organizations perform tasks more efficiently than others; thereby, reducing operational costs and increasing net outcomes (Miles, 2012). The theory enables organizations to evaluate and compare the nature and value potential of their resource vis-a-vis that of competitors in order to find ways of improving or acquiring valuable resources (Warnier,
Weppe & Lecocq, 2013; Amit & Schoemaker, 1993). This is based on the logic that resource differentials across firms generate long lasting competitive advantage for firms controlling such difficult to imitate resources (Wernerfelt, 1984; Ferreira, Azevedo et al., 2011; Alvarez & Barney, 2017; Barney & Hesterly 2012). Barney (1995), one of the central thinkers within the resource-based theory, introduced the VRIO framework which seeks to enable firms to analyse the potential of their resources being sources of sustainable competitive advantage. The VRIO framework is a modification of Barney’s (1991) original resource-based framework of valuable, rare, imitable and non-substitutable (VRIN) resources.

The rationale for the VRIO framework is that valuable, rare, imitable and organizational exploitable resources are potential sources of competitive advantage (Barney & Hesterly, 2012). According to the framework, valuable resources “enable a firm to develop and implement strategies that have the effect of lowering a firm’s net costs and/or increasing a firm’s net revenues beyond what would have been the case without the resources” (Barney & Hesterly, 2012, p. 94). Resources are rare is they are controlled by only few competing firms while imperfectly imitable resources are difficult to acquire by means of direct duplication or substitution (Barney & Clark, 2007; Barney & Hesterly, 2012). Barney and Hesterly (2012) note further that the firm must be “organized to exploit the full competitive potential of its resources and capabilities” (p. 94).

3.2.2 Application of the Resource-Based Theory

Due to the characteristics of entrepreneurship, it seems to have multiple linkages with the resource-based theory (Foss, 2011). The motivation of entrepreneurship is to generate sustainable value through the exploration and exploitation of opportunities that introduce new products and services at more reduced costs and quality than those on the market.
(Foss, 2011). Hence, like the resource-based theory, the innovation differentials across firms could be potential source of competitive advantage to firms that control such innovative ideas and resources to exploit them. To exploit an opportunity for optimum value, firms must acquire and effectively utilize internal and external resources. As emphasised by Sarasvathy et al. (2008) in their work on effectuation, entrepreneurs begin with the resources. Foss (2011) opines, therefore, that both tangible and intangible resources are central to entrepreneurship.

The work of Mosakowski (1998) is considered the earliest to relate the resource-based theory and entrepreneurship. She defined entrepreneurial resources as “the propensity of an individual to behave creatively, act with foresight, use intuition and be alert to new opportunities” (Mosakowski, 1998, p. 625). These entrepreneurial resources are “either held by a single manager-entrepreneur or distributed across individuals in an entrepreneurial team” (p. 625). Although her work was important for understanding the embedded nature of entrepreneurial resources, it did not examine how these resources generate competitive advantage. In addition, the resource-based theory was extended by Alvarez and Busenitz (2001) to explain what they termed “entrepreneurial recognition” (p. 756). Alvarez and Busenitz (2001) opine that entrepreneurial recognition and resource organization “are rooted in path-dependent processes and tacit knowledge that are difficult to emulate; and highly in-mobile across firms because they are typically linked to specific resources with which they co-specialize”, hence essential for competitive advantage (p. 756).

3.2.3 Criticisms of the Resource-Based Theory

Despite the immediate face validity of the resource-based theory due to the simplicity of its core ideas, it is not without criticisms (Kraaijenbrink, Spender & Groen, 2010). Many
scholars, including Priem and Butler (2001), Bromiley and Fleming (2002) and Locket, Thompson and Morgenstern (2009) argue that the resource-based theory is tautological. Barney’s (2001) assertion that “resources that can generate a sustained strategic advantage are identified by their ability to generate a sustained strategic advantage” is evidence of this tautology. Priem and Butler (2001) opine that the tautological nature of the resource-based theory makes it “self-verifying” and therefore not “empirically testable”. It is, thus, difficult to disprove the resource-based theory since any proof that resource differentials across firms account for differences in competitive advantage would only suggest that the resources were not valuable (Hoopes et al., 2003; Kraaijenbrink et al., 2010).

In addition, scholars argue that the resource-based theory treats both resources and capabilities as though they are the same and ignores their static or dynamic nature (Kraaijenbrink et al., 2010; Locket et al., 2009). This portrayal of resources as static and inward-looking is not enough to make decisions about the future value of resources (Locket et al., 2009). The theory, thus, pays less attention to the different organizational situations or contexts (Priem & Butler 2001; Kraaijenbrink, Spender & Groen, 2010) and dynamics of changing market demand (Kozlenkova, Samaha & Palmatier, 2014). It also gives little regard to the source of resources in organizations and does not account for resource differentials across firms (Barney & Clark, 2007). This affirms Eisenhardt and Martin’s (2000) suggestion that the resource-based theory may not fully explain the potential of resources in a dynamic institutional environment. It is necessary, therefore, to understand the process through which organizations develop their resources, particularly in dynamic environments.

In response, Kozlenkova et al. (2014) disagree with the tautological critique of the resource-based theory. They argue that the resource-based theory is not a tautology per se, but rather, it has been operationalized in ways that make it to test empirically. To resolve
this issue, Kozlenkova et al. (2014) recommend that researchers define resources separately from the outcomes variables and the processes used to exploit the resources (Barney & Clark, 2007; Peteraf & Barney, 2003). Furthermore, Kozlenkova et al. (2014) disprove assertions that the resource-based theory is static and does not account for resources in dynamic environments. They opine that Barney’s (1995) VRIO framework recognizes that the mere possession of valuable, rare and imitable resources is not enough to generate sustainable resources, but those resources must be exploitable by the firm’s organization. This means that in dynamic and turbulent environments, resources must be exploitable in ways that generate sustainable competitive advantage (Kozlenkova et al., 2014). Day (2011) proposes “adaptive marketing capabilities that allow firms to anticipate trends and events before they are fully apparent and then adapt effectively”.

3.2.4 The Resource-Based Theory in Dynamic Environments

The business environment is changing rapidly and so requires resources to evolve over time to remain relevant to the competitive and dynamic institutional environment. However, Barney (2002) recognizes that one of the limitations of the resource-based theory is its applicability only in industries that remain unchanged. In other words, the resource-based theory does not account for the evolving nature of resources in dynamic and turbulent environments (Foss, 2011; Bjornskov & Foss, 2016). In environments characterized by rapid change and uncertainty, one needs to include other sources for why a firm can achieve sustainable competitive advantage (Barney, 2002). Several industries today are characterized as dynamic and fast-changing, which most certainly explains the need for capabilities that are dynamic (Teece, 2018; Hussain & Vyssios, 2017).

As noted by Eisenhardt and Martin (2000), “dynamic capabilities are essential in high velocity or turbulent markets” p. 1106). For Teece (2007), this is so because “dynamic
capabilities enable firms to continuously create, extend, upgrade, protect and keep relevant the enterprise’s unique asset base in a changing environment” (Teece, 2007, p. 1319). These capabilities include routines for the development of new products, capabilities for alliances and acquisitions, dynamic processes for knowledge creation and routines for the efficient allocation of resources (Teece, Pisano & Shuen, 1997; Teece, 2007; Augier & Teece, 2009). The “dynamic capabilities literature is entirely consistent with the resource-based theory and should not be viewed as a separate theory” (Peteraf & Barney, 2003, p. 321). The study, thus, employs the dynamic capabilities theory to extend the resource-based theory in the dynamic institutional environment to explain resource organization for opportunity exploration and exploitation activities in SMEs in Ghana.

3.3 Dynamic Capabilities Theory

The dynamic capabilities theory argues that organizations attain competitive advantage and ultimately superior performance through their distinctive capabilities in terms of routines, skills and complementary assets (Teece, 2012). According to Teece (2018), a firm’s dynamic capabilities is essential for designing and adapting business models in order to sustain competitive advantage and profitability. Firms can develop dynamic capabilities to transform ordinary capabilities and direct firm resources towards sensing and seizing opportunities in the business environment for superior performance (Teece, 2018). The multi-faceted nature of dynamic capabilities means that firms may not excel in all their dimensions. For example, firms may not equally excel at sensing and seizing the opportunities in the dynamic institutional environment (Teece, 2018). Nonetheless, because dynamic capabilities are built on idiosyncratic characteristics of entrepreneurial firms and embedded in the organizational culture, they are difficult to replicate by rival firms (Teece, 2014).
Teece identifies three categories of dynamic capabilities as “identification and assessment of an opportunity (sensing); mobilization of resources to address an opportunity and to capture value from doing so (seizing); and the continuous renewal of capabilities through enhancing, combining, protecting and reconfiguring intangible and tangible assets” (Teece, 2012, p. 1396). To thrive in the face of changing market conditions and rapid technological advancements, Teece (2012) advises that these cluster of dynamic capability activities be performed expertly although some may be performed better than others. Some key definitions of dynamic capabilities are shown in Table 3.3 below.
<table>
<thead>
<tr>
<th>Author</th>
<th>Definitions</th>
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| Teece and Pisano (1994, p. 537) | “Timely responsiveness and rapid and flexible product innovation, along with the management capability to effectively coordinate and redeploy internal and external competences”.
| Teece et al. (1997, p. 516) | “The firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments”.
| Eisenhardt and Martin (2000, p. 1006) | “The firm’s processes that use resources—specifically the processes to integrate, reconfigure, gain, and release resources—to match and even create market change; dynamic capabilities thus are the organizational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve and die”.
| Teece (2000, p. 36) | “The ability to sense and then seize opportunities quickly and proficiently”.
| Griffith and Harvey (2001, p. 597) | “Dynamic Capabilities is a combination of resources that are difficult-to-imitate, including effective coordination of inter-organizational relationships, on a global basis that can provide a firm competitive advantage”.
| Zollo and Winter (2002, p. 340) | “A dynamic capability is a learned and stable pattern of collective activity through which the organization systematically generates and modifies its operating routines in pursuit of improved effectiveness”.
| Adner and Helfat (2003, p. 1012) | “The capabilities with which managers build, integrate, and reconfigure organizational resources and competences”.
| Helfat and Peteraf (2003, p. 999) | “Dynamic capabilities do not directly affect output for the firm in which they reside, but indirectly contribute to the output of the firm through an impact in operational capabilities”.
| Winter (2003, p. 991) | “Those (capabilities) that operate to extend, modify, or create ordinary capabilities”.
| Zahra et al. (2006, p. 918) | “The abilities to reconfigure a firm’s resources and routines in the manner envisioned and deemed appropriate by its principal decision-maker(s)”.
| Helfat et al. (2009, p. 4) | “The ability to perform a task in least minimally acceptable manner”.
| Teece (2007, p. 1319) | “Dynamic capabilities can be disaggregated in the capacity (a) to sense and shape opportunities and threats, (b) to seize opportunities, and (c) to maintain competitiveness through enhancing, combining, protecting, and, when necessary, reconfiguring the business enterprise’s intangible and tangible assets”.
| Pavlou and El Sawy (2011, p. 239) | “Dynamic capabilities have been proposed as a means for addressing turbulent environments by helping managers extend, modify, and reconfigure existing operational capabilities into newness that better match the environment”.
| Helfat and Martin (2015, p. 1) | “The capabilities with which managers create, extend, and modify the ways in which firms make a living—helps to explain the relationship between the quality of managerial decisions, strategic change, and organizational performance”.

Source: Albot-Morant et al. (2018, p. 43)
3.3.1 Application of the Dynamic Capabilities Theory

Dynamic capabilities can serve multiple purposes enabling firms to create, extend and modify resources prior to commercial use (Helfat et al., 2007; Helfat & Martins, 2015; Teece, 2018). Through dynamic capabilities, firms are also able to manage tensions between exploration and exploitation activities towards the sensing and seizing of opportunities in the business environment (Ambrosini, Bowman & Collier, 2009). Abdelgawad et al. (2013) recognize that dynamic capabilities enable firms to induce or shape changes in the external environment, and to strategically mobilize resources to exploit new opportunities for firm value.

Lee and Venkataraman (2006) observe that changing market conditions shapes entrepreneurial characteristics and determines the entrepreneurial opportunities pursued by firms. In the entrepreneurship literature, therefore, dynamic capabilities theory has been used to assess the performance of entrepreneurial firms. For example, Woldesenbet and Ram (2012) recognize that entrepreneurial capability interacts in dynamic and complex ways with the institutional environment. From this perspective, they argue that entrepreneurial capability which comprises opportunity identification and enacting is a micro-foundation of dynamic capabilities. Their study of 18 small firms in the UK reveals that firms possess capabilities to identify and act on opportunities in varying degrees. They conclude that entrepreneurial capability is a micro-foundation of dynamic capabilities that enables firms to sense and shape gaps in customer needs and proactively develop new products and services to seize such opportunities (Woldesenbet & Ram, 2012; Wani & Butt, 2016).

In a recent study, Abdelgawad et al. (2013) conceptualize entrepreneurial capability as a type of dynamic capabilities that enables a firm to “sense, select, shape and synchronize internal and external conditions for the exploration and exploitation of
opportunities” (p.549). They argue that EC resembles ambidexterity in that it engenders organizational change but differs in its ability to induce change in the external environment (Birkinshaw, Zimmermann & Raisch, 2016; MacInerney-May, 2012; Bingham, Eisenhardt & Furr, 2007; Gavetti, Levinthal, & Rivkin, 2005; Zahra & George, 2002) thereby enabling the development of new capabilities.

Unlike other forms of dynamic capabilities, scholars argue that entrepreneurial capability empowers a firm to transform ordinary capabilities and to create new capabilities that expand the business and entrepreneurial activity of a firm and improves overall firm performance (Zahra, 2008; Teece, 2012; Lockett et al., 2013; Ambrosini & Bowman, 2009; Phan et al., 2009). Thus, the entrepreneurial capability of a firm is essential for opportunity exploration activities and the subsequent resource organization for opportunity exploitation to generate firm value (Lockett et al., 2013). This is the basis of the emerging consensus that entrepreneurial capability underpins effective entrepreneurial activity and, by extension, the performance of SMEs in the dynamic institutional environment.

3.3.2 Relevance of the Dynamic Capabilities Theory

The dynamic capabilities theory has provided a useful framework to explain long term performance of firms (Teece, 2014; MacInerney-May, 2012; Easterby-Smith & Prieto, 2008). Opportunity identification and subsequent exploitation require firms to collectively integrate their capabilities across functional units and individual levels to transform them into actions (Abdelgawd et al., 2013). Firms, therefore, require capability to engage in a continuous process of envisioning opportunities and mobilizing resources to act on such perceived opportunities, sustainable competitive advantage and firm value. This capability is necessary for effective entrepreneurial activity at the firm level to help focus on
recombining and reconfiguring various capabilities internal and external to the organization. It also enables firms to leverage available resources to identify and pursue new and existing opportunities for greater performance gains. Thus, dynamic capabilities enable firms to engage in a continuous process of opportunity exploration and exploitation for firm advantage.

This study argues that SMEs, like other firms, need to continuously identify, discover or create new opportunities and strategically mobilize and reconfigure resources to select, shape and act on such opportunities for profitability in dynamic institutional environments. But this is only possible if firms possess dynamic capabilities that enable them to “purposefully create, extend, and modify their resource base” (p. 4) including the physical, financial, human and organizational assets. Hence, the study argues from the dynamic capabilities perspective that by developing entrepreneurial capability, SMEs can balance the tensions between exploration and exploitation for superior firm performance. Through dynamic capabilities, firms can effectively “sense, select, shape and synchronize internal and external conditions for the exploration and exploitation of opportunities” (Teece, 2007, p. 549). The increasing need for SMEs with their limited resources to compete in this same competitive global environment makes the dynamic capabilities theory relevant to this study.

### 3.3.3 Criticisms of the Dynamic Capabilities Theory

The extant literature reveals that the dynamic capabilities theory has gained somewhat equal support and critique. According to Peteraf et al. (2013, p. 1), “the fact that the field has developed under the strong influence of two papers: Teece, Pisano and Shuen (1997) and Eisenhardt and Martin (2000) is a source of the polarization in the dynamic capabilities debate”. Zollo and Winter (2002) have observed that the definition put forward by Teece
et al. (1997) does not identify the source of dynamic capabilities and only exists in rapidly changing environments. Zollo and Winter (2002) alternatively define dynamic capabilities as “a learned and stable pattern of collective activity through which the organization systematically generates and modifies its operating routines in pursuit of improved effectiveness” (p. 340).

In addition, Arend and Bromiley (2009) criticise the theory for its “unclear valued-addition to existing concepts; lack of coherent theoretical foundation; weak empirical support, and unclear practical implications” (p. 75). Zahra, Sapienza and Davidson (2006) also observe that the dynamic capabilities literature is inconsistent and ambiguous. The inconsistencies arise from the inability of scholars to properly establish the linkage between dynamic capabilities and environmental conditions. This inability in the dynamic capabilities’ literature has generated a lot of confusion in the dynamic capabilities research and requires a well targeted deployment of the theory to achieve strategic goals (Zahra et al., 2006, p. 924).

Other scholars, like Easterby-Smith et al. (2009) also criticise the difficulty in empirically measuring the impact of dynamic capabilities on firm performance. Not least, Newbert (2007) critiques the dynamic capabilities theory for its lack of empirical research and testing. Wang and Ahmed (2007) found that only few empirically studies have quantitatively tested the dynamic capabilities theory while the majority only exists in qualitative case studies which lack generalization. As a result, dynamic capabilities remain an abstract concept with little operationalization in the extant literature (Barreto, 2010; Prieto, Revilla & Rodriguez-Prado, 2009).
3.4 Institutional Theory

Organizational embeddedness (Hollingsworth, 2002) suggests that entrepreneurship and related social phenomena exist in the external institutional environment. The pressures from the institutional environment (e.g. government, industry alliances and society) tend to influence and shape the nature and behaviour of firms (DiMaggio & Powell, 1983; Yang & Konrad, 2011; Berthod, 2018). Aldrich and Fiol (1994) observe that the creation and existence of organizations is no longer dependent upon some unused resource, but rather whether society views such establishments as legitimate or not. As a result, firms comply with conditions in the institutional environment to gain social approval for the firm’s actions and operations (Hodgson, 1998; Kostova, Roth & Dacin, 2008; Yang & Konrad, 2011).

The extent of this social acceptance by stakeholders in accordance with norms, rules and belief is termed legitimacy (Miles, 2012). The central theme of institutional theory, thus, is to address the issue of why over time, firms within an industry which hitherto exhibited considerable heterogeneity become homogenous in terms of organizational structures and practices (Miles, 2012; DiMaggio & Powell, 1983). The evolution, relevance and criticisms of institutional theory are discussed below.

3.4.1 Evolution and Application of the Institutional Theory

Institutional theory seeks to explain organizational communication in terms of shared pre-existing rules, beliefs, and norms in the external environment of organizations (Miles, 2012; Lammers et al., 2014). Institutional theory research has undergone major changes particularly from the 1970s and 1980s. In the period preceding this time, classical institutional theorists such as Selznick (1948) examined issues such as competing values, coalitions, informal structures and power relations (Greenwood & Hinings, 1996; Miles,
2012). In the subsequent periods, neo institutional theorists such as DiMaggio and Powell (1983) examined issues pertaining to both competitive and cooperative exchanges among organizations as well as issues of legitimacy and “taken for granted” organizational structures and processes.

The work of DiMaggio and Powell (1983) build on Meyer and Rowan (1977) on isomorphism at the organizational (micro-level) to explain the success and survival of organizations within the institutional environment. DiMaggio and Powell (1983) defined institutional isomorphism as “a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions”. According to DiMaggio and Powell (1983), institutions exert coercive, mimetic and normative isomorphism. The pressure exerted by institutions that have resources upon which organizations depend is termed coercive isomorphism. The constraining effect that emanates from professional networks, standard bodies, and codes of conduct as well as education and training methods is termed normative isomorphism. Not least, the constraining effect exerted on organizations to copy or imitate successful organizations in times of uncertainty is termed mimetic isomorphism.

North (1990) provides an elaborate description and implication of institutions stating that “institutions are the rules of the game in a society, or more formally, are the humanly desired constraints that shape human interaction” (p. 98). In other words, institutions comprise structures and constraints that humans impose on their dealings with one another. According to North, institutions are forced to reduce the uncertainty of transaction costs through “rules of the game” (North, 1992; 2005). Scott (1994) later proffered the idea of ‘institutional pillars’ in relation to his work on institutional isomorphism. Scott argues that the regulative, normative and cultural-cognitive
institutional pillars form the basis of any institutional structure and offer “related but distinguishable bases of legitimacy” (Scott, 1995, p. 47).

3.4.2 Relevance of the Institutional Theory

It is noted that studies linking institutions and SMEs tend to be segmented, focusing only on some aspects of institutional factors and their impact on performance (Veciana & Urbano, 2008; Diaz-Casero et al., 2012; Berthod, 2018; Ault & Spicer, 2014). Technical support and external advice (Johnson et al., 2007; Berry & Sweeting, 2006; Bennet & Robson, 1999) as well as government incentives (Siu et al., 2006; Alvarez et al., 2013; Dragnic, 2014) through various institutional arrangements greatly influence the growth and development of SMEs. In the case of Ghana, studies applying institutional theory have been somewhat explanatory (e.g. Essilfie, 2003; Adda & Hinson, 2006; Adomako et al., 2014; Yamoah, Arthur & Issaka, 2014). Peng, Wang & Jiang (2008) note that studies of SMEs often neglect the influence of the broader dynamic institutional environment in their analysis. In emerging economies, the nature and impact of institutions are more heterogeneous and diverse. Therefore, accounting for the effects of institutional factors on firm operations in such environments is important to improving our understanding of firm performance (Peng et al., 2008; Ault & Spicer, 2014).

Scholars contend that opportunity identification and exploitation are greatly influenced by the institutional environment within which the enterprise operates (Young, Welter & Conger, 2018; Alvarez & Barney, 2010; Stephan, Uhlaner & Stride, 2015). Yet, in the context of Ghana and in many developing economies, less is known about the extent to which the institutional environment affects opportunity exploration and subsequent exploitation in enterprises. In Ghana, private enterprises are considered the engine of
economic growth and successive governments have done well to promote private sector growth through several policies and reforms (Aryeetey & Asantewah-Ahene, 2007).

According to Buame (2012), there are several governmental and private institutions, agencies and authorities whose activities affect the operations of SMEs in Ghana. These institutions are mandated to regulate, promote and facilitate growth and development of SMEs across the country (Kuada & Sorensen, 2000; Buame, 2012). Although all three types of institutions relate to the same institutional environment, each of them reflects different facets of the prevailing institutional context and influence the outcomes of entrepreneurial activity differently. Hence, Institutional theory will help explain how institutions in the business environment exert pressures to promote or constrain entrepreneurial activity and SME performance in Ghana.

3.4.3 Criticisms of the Institutional Theory

Institutional theory has been criticised for its inability to explain the processes within organizations that facilitate their reaction or compliance to the institutional environment (Powell, 1991; DiMaggio, 1991). Greenwod, Hinings and Whetten (2014) argue that “the original focus of inquiry – understanding the organization as a social mechanism for achieving collective ends – has become relatively neglected” (p. 1209). They continue to argue contemporary institutional theory has shifted focus from understanding organizations through an institutional lens, to the institutions themselves. Greenwood et al. (2014) also have observed that the theory treats “all organizations as though they are the same, and ignores the obvious heterogeneity of organizations” (Meyer & Hollerer, 2014). Others also make similar criticisms about the neglect of organizations as actors in institutional theory (King et al., 2010).
Meyer and Hollerer (2014, p. 1222) concur with these criticisms and note that institutional scholarship should “emphasize how organizations are structured, managed and coordinated; look at the organization as a whole and explore the role of organization as actors; understand the various organizational arrangement across institutional spheres and/or fields, and return to comparative analysis”. Furthermore, despite the plethora of studies in the institutional theory literature championing the necessity and benefits of legitimacy, Kraatz and Zajac (1996) did not find enough evidence to support this claim. In other studies, Philips and Zuckerman (2001) observe that the pressure to act legitimately is borne by the middle-status players.

3.5 Justification of the Selected Theories

The performance of SMEs has been studied from different theories, including entrepreneurial orientation theory, entrepreneurs’ characteristics, etc. More recently, entrepreneurial capability has emerged to explain the skills required for successful entrepreneurship and entrepreneurial ventures (Authors & Busenitz, 2006; Abdelgawad et al., 2013). The resources and capabilities possessed by firms are potential sources of sustainable competitive advantage. Entrepreneurial capability does not only seek to explain the ability of entrepreneurs to find opportunities, but also how they strategically mobilize resources to exploit or turn ideas or opportunities into profitable ventures. Furthermore, SMEs are embedded in the institutional environment which exerts pressures to constraint and enable. The ability to use firm resources depends upon the environmental conditions and influenced by changes in institutional external environment within which SMEs operate. A firm may act on the interpretation of the external environment in one way, and another firm in a different institutional context may interpret the same changes differently (Scott, 2014).
Based on the foregoing, we can thoroughly investigate EC by seeking to explain, firstly, the resources and capabilities that enable SMEs to effectively explore and exploit opportunities to generate value and, secondly, the extent to which institutional factors incentivise or constrain entrepreneurial activity and ultimately SME performance. Hence, three theories are selected to explain the phenomenon under investigation outlined in the proposed theoretical framework. The resource-based theory and dynamic capabilities theory were used to explain the resources, capabilities and organisational skills required to effectively manage opportunity exploration and exploitation activities to develop EC and SMEs in a dynamic environment. Institutional theory was also used to help explain the direct and interactive effect of institutional factors on EC and SME performance in the dynamic institutional environment. Together, the resource-based theory, the dynamic capabilities theory and the institutional theory provide a string of theoretical foundation to collectively examine the antecedents and outcomes of EC on SME performance in the dynamic institutional environment.

3.6 Chapter Summary

This chapter presented and discussed the theoretical underpinnings of the study – resource-based theory, dynamic capabilities theory and institutional theory of the study. It noted that entrepreneurial activity comprises exploration of new opportunities and their subsequent exploitation to generate value. The study thus argues that firms require capability to continuously envision opportunities and mobilize resources to act on such perceived opportunities to attain and sustain competitive advantage and firm value. From the perspective of the resource-based theory and dynamic capabilities theory, the study observes that in the dynamic institutional environment, firms do not only require valuable resources to be successful, but also the ability to reconfigure resources and capabilities in
ways that proactively shape and seize perceived opportunities. Moreover, drawing on institutional theory, the study argues that the capability to use firm resources depends upon institutional factors and is influenced by changes in institutional external environment within which firms operate. The study, thus, adopted the resource-based theory, dynamic capabilities theory and institutional theory to underpin the proposed framework to explain the impact of entrepreneurial capability on SME performance in the dynamic institutional environment in Ghana.
CHAPTER FOUR
LITERATURE REVIEW

4.0 Introduction

This chapter reviews relevant literature to provide a conceptual background and understanding of the key concepts of the study. The chapter is divided into three sections. The first section provides a conceptualization of entrepreneurial capability (EC) from the capability perspective of the entrepreneurial process. The second section discusses institutional factors (IFs) and the entrepreneurial environment of Ghana. The third section discusses the subjective and objective performance measurement approaches in SMEs.

4.1 Entrepreneurial Capability

Scholars have argued that entrepreneurship operates at the nexus of opportunities and enterprising individuals and claim that “without opportunities and capable individuals, there is no entrepreneurship” (Short et al., 2010; Shane & Venkataraman, 2000; Guo & Bielefeld, 2014). With this notion at the background, the extant literature suggests that successful entrepreneurs must possess capabilities such as “strategic capability, financial management capability, management capability, empowerment capability, and networking capability” (Jiao, Ogilvie & Cui, 2010, p. 199; Ibrahim & Soufani, 2002). Others are “innovative capability, decision-making management capability, organizing and directing capability, communicating and coordinating capability, human resource management capability, operating capability, and basic capability” (Jiao, Ogilvie & Cui, 2010, p. 199; see Li, Zhang & Matlay, 2003). Taking all these studies into account, Jiao, Ogilvie, and Cui (2010) opined that “entrepreneurs’ capabilities comprise four kinds of capabilities, namely, conceptual capability, interpersonal capability, leading capability and
entrepreneurial capability” (p. 199). The categories of capabilities are shown in Table 4.1 below.

Table 4.1: Types of Entrepreneurs’ Capabilities

<table>
<thead>
<tr>
<th>Capability</th>
<th>Description</th>
<th>Key Source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conceptual</td>
<td>Includes understanding, judging, analysing, decision making, and innovative capabilities</td>
<td>Morris et al., 2005</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Includes expressing, relationship dealing and concerning public affairs capabilities</td>
<td>Sandberg, 2000; Park &amp; Luo, 2001</td>
</tr>
<tr>
<td>Leading</td>
<td>Includes planning, organizing, coordinating, directing, and controlling capabilities.</td>
<td>Williams, 1983; Stevenson et al., 1989; Li et al., 2003</td>
</tr>
<tr>
<td>Entrepreneurial</td>
<td>Includes risk-taking, innovation, team managing, and opportunity recognition and exploitation capabilities.</td>
<td>Covin &amp; Slevin, 1989; Alvarez &amp; Busenitz, 2001; Kuckertz et al., 2016</td>
</tr>
</tbody>
</table>

Source: Jiao, Ogilvie, & Cui, 2010

Capability, as noted by Thompson et al. (2013), is tacit knowledge as it resides in people and the processes and systems of the firm. As noted by Day (1994), capabilities are “complex bundle of skills and collective learning, experienced through organizational processes that ensure coordination of functional activities” (p. 38). Similarly, Teece (2018) recognises that capabilities change over time, thus are dynamic and include the ability to sense, sense and transform other capabilities and resources towards high-payoff endeavours. This capability therefore enables organizations to effectively produce significant output and product mix in a variety of ways (Winter, 2013; De Massis, Kotlar, Wright and Kellermanns, 2018). The Merriam-Webster Dictionary (2013) defines capability as “the ability to do something”. Capabilities therefore enable organisations to perform certain tasks and activities in more effective and efficient ways than competitors. It follows that, effective entrepreneurial activity required the enterprising ability to explore
and exploit opportunities for greater performance outcomes (Abdelgawad et al., 2013; Navis & Ozbek, 2016; Massis et al., 2018).

### 4.1.1 Entrepreneurial Capability Defined

The term entrepreneurial capability (EC) emerged from the entrepreneurship literature to clarify the skills and resources that are necessary to attain effective entrepreneurial activity and although mainly used in the context of individual entrepreneurs, EC is also applicable at the firm-level (Arthurs & Busenitz, 2006; Wilson & Martin, 2015). According to Russell (1999), EC is a process-oriented concept that captures the dynamics of the entrepreneurial process, and explains how innovative opportunities are recognized or created, and how innovation-supporting behaviours are generated and directed within the entrepreneurial process. Arthurs and Busenitz (2006) define EC as “the ability to identify opportunities and develop the resource base needed to pursue the opportunities” (p. 199). Thus, EC refers to firms’ overall capacity to generate value through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets. According to Abdelgawad et al. (2013), EC “is a special type of dynamic capability that enables a firm to “sense, select, shape and synchronize internal and external conditions for the exploration and exploitation of opportunities” (p. 549).

Applying dynamic capabilities to the industry context of entrepreneurship, De Massis, Kotlar, Wright and Kellermanns (2018) defined entrepreneurial capability as “the capacities (i.e. processes and routines) of an entrepreneurial actor (entrepreneurs, entrepreneurial teams, and enterprises) to prospect, develop and exploit opportunities by reconfiguring human, social and financial resources within and across industry sectors (p. 8). A firm’s EC, thus, enables it to explore (recognize, discover and create) opportunities and to develop resource combinations as well as harmonize internal and external
capabilities to exploit such opportunities for optimum gains (Abdelgawad et al., 2013; Narvis & Ozbek, 2016; Psano, 2017; De Massis et al., 2018; Teece, 2018). From the foregoing, EC comprises both exploration and exploitation activities to shape emergent conditions within and external to the firm; placing premium on the firm’s ability to identify, evaluate, realize and create new opportunities for subsequent exploitation (Arthurs & Busenitz, 2006; Roudini & Osman, 2012; Abdelgawad et al., 2013; Alvarez, Barney & Young, 2010; Alvarez, Barney & Anderson, 2013). However, resource-constrained SMEs lack the requisite resources and capabilities to simultaneously pursue opportunity exploration and exploitation across the firm. Such SMEs also do not possess the resources to establish dedicated R&D departments for exploration. But Gibson and Birkinshaw (2004) argue that without creating dual structures, a firm can create a context which helps achieve entrepreneurial capability. This could provide the ability to focus on one activity (exploration or exploitation) at a time and then switch to the other later (Lavie & Rosenkopf, 2006; Lavie et al., 2010). This shift from one activity to the other avoids the conflict presented by simultaneous opportunity exploration and exploitation, as it may require a lower level of resources and capabilities than does organizational separation and ambidexterity (March, 1991; Su & Ren, 2013).

Moreover, Zollo and Winter (2002) opine that exploration leads to exploitation and could feed back into a new exploration phase. This implies that a co-evolutionary relationship could exist between exploration and exploitation activities in the entrepreneurial process. This observation is supported by Lavie et al., (2010, p. 116) that “even though at any given moment exploration and exploitation are at odds, over time, exploration generates opportunities that the SMEs can later exploit. In turn, exploitation can produce income that can be invested in future exploration”. Hence, the thesis conceptualizes entrepreneurial capability (EC) in SMEs as the enterprising ability that
seeks to generate value, through continuous exploration and exploitation of entrepreneurial opportunities to create or expand business activity, where exploration is the SME’s ability to recognize, discover and/or create opportunities, and exploitation is the strategic mobilization of resources in pursuit of such opportunities.

4.1.2 Dimensions of Entrepreneurial Capability

Integrating the conceptual review, EC encompasses both exploration and exploitation of opportunities. Thus, EC consists of two distinct but related dimensions based on entrepreneurial opportunities and grounded in the entrepreneurial process: the ability to explore opportunities (opportunity exploration) and the ability to exploit opportunities (opportunity exploitation). To delineate and explain the dimensions of EC, the study applies the dynamic capabilities framework (Teece, 2007). Opportunity exploration capability corresponds to “the capacity to sense and shape opportunities and threats” (Teece, 2007, p. 1319) whilst opportunity exploitation capability corresponds to “the capacity to seize opportunities.” By extension, it is the ability to identify opportunities and the ability to exploit opportunities (Arthurs & Busenitz, 2006). Kammerlander et al. (2015) posit that the resources and capabilities for exploration and exploitation of opportunities differ. Thus, the ability to “to maintain competitiveness through enhancing, combining, protecting and, when necessary, reconfiguring the SMEs’ intangible and tangible assets” is imperative for superior performance (Teece, 2007, p. 1319). Table 4.2 depicts an overview of the dimensions of EC, specifying the nature, mechanism through which they operate and expected outcomes. The supporting literature is also provided.
<table>
<thead>
<tr>
<th>Dimension</th>
<th>Nature</th>
<th>Mechanism</th>
<th>Outcomes</th>
<th>Key Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opportunity</strong></td>
<td>Identifying entrepreneurial opportunities and evaluating their potential to generate value</td>
<td><strong>Idea Generation</strong> Alertness, active search, information gathering, prior knowledge and social networks</td>
<td>Generate business ideas/prospects and evaluate to select entrepreneurial opportunities ready for exploitation</td>
<td>Kirzner 1973; Schumpeter, 1934; Ardchvili et al., 2003; Short et al., 2010; Kor &amp; Mesko, 2013; Helfat &amp; Peteraf, 2015; Kuckertz et al., 2015</td>
</tr>
<tr>
<td><strong>Exploration</strong></td>
<td></td>
<td><strong>Opportunity Assessment</strong> Evaluating, screening, selecting based on heuristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Opportunity</strong></td>
<td>Developing a product and/or service based on perceived opportunity</td>
<td><strong>Entrepreneurial Behaviour</strong> Innovation, risk taking, proactiveness and competitive aggressive</td>
<td>Create and/or expand entrepreneurial activity</td>
<td>Shane &amp; Venkatramn, 2000; Short et al., 2010; Kuckertz et al., 2015; Covin &amp; Wales, 2012;</td>
</tr>
<tr>
<td><strong>Exploitation</strong></td>
<td></td>
<td><strong>Resource Mobilization</strong> Financial, human and technological resources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Developed by Author*
Opportunity exploration

Although the opportunity concept has been at the centre of most entrepreneurship research, there seem to be lack of consensus regarding the definition of the term. Nonetheless, Shane & Venkataraman (2000) stress that for opportunity to be worth exploiting, it must have a large demand and potential for high profits, require low capital and opportunity cost, attract moderate competition and a relatively low technology lifecycle. The study sides with Short et al.’s (2010) definition of opportunity as “an idea or dream that is discovered or created by an entrepreneurial entity and that is revealed through analysis over time to be potentially lucrative” (p. 55). From this perspective, the study conceptualizes opportunity exploration capability as comprising two stages: first, idea generation, which entails the ability to identify, discover or create an entrepreneurial idea or dream and, second, opportunity assessment, which entails the analysis and evaluation of the perceived entrepreneurial idea or dream based on the heuristics to determine its potential viability for subsequent pursuit.

The idea generation stage corresponds to the process of “sensing or perceiving market needs and/or underemployed resources” (Ardchvili et al., 2003, p. 110). This requires entrepreneurial alertness (Kirzner, 1973), prior knowledge (Shane, 2000; Vahlne & Johanson, 2013, systematic search (Fiet, 2002) and social networks (Singh, 2000). For example, both alertness and systematic search enhance a firm’s ability to identify and discover opportunities (Tang & Kang, 2007). The extant entrepreneurship literature also suggests that while systematic search improves the discovery of more codified opportunities, prior knowledge facilitates the discovery of more tacit opportunities which build up from experience (Smith, Mathews & Schenkel, 2009). Ardchvili et al. (2003) also opine that “entrepreneurial alertness, information asymmetry and prior knowledge, social networks, personality traits, including optimism and self-efficacy, and creativity as well
as the type of opportunity itself” characterize opportunity recognition. They proffer that development process begins with alertness which improves with a combination of any of the characteristics. The idea generation is followed by a cost benefit evaluation of exploiting the opportunity and to decide whether to pursue it (Guo & Bielfied, 2015). This is characterized by heuristics which guide the evaluation of perceived opportunities to determine whether they meet customer needs, have a market potential, generate value and are sustainable. Overall, opportunity exploration denotes firms’ ability to identify opportunities and threats in the environment through “scanning, creation, learning, and interpretive” activities (Teece, 2007, p.1322).

- **Opportunity Exploitation**

Opportunity exploitation generates performance outcomes by creating customer value and satisfaction, which, in effect, generates greater sales and profitability. It is “characterized by developing a product or service based on a perceived entrepreneurial opportunity, acquiring appropriate human resources, gathering financial resources, and setting up the organization” (Kuckertz et al., 2015). Shane and Venkatraman (2000) note that whilst opportunities may be identified, it requires the “requisite financial capital, social ties with resource providers, self-efficacy and motivation to pursue them successful”. From this perspective, opportunity exploitation capability denotes an enterprise’s capacity to act on opportunities through mobilization and deployment of resources underpinned by various entrepreneurial behaviours and strategies (Ge, Sun, Chen & Gao, 2015). This dimension of EC involves strategies to mobilize and deploy resources for opportunity realization in order to create or expand business activity. The study, thus, conceptualizes opportunity exploitation capability to comprise two aspects: strategic resources and entrepreneurial strategies.
The first step of opportunity exploitation – entrepreneurial strategies – entails a firm's strategy, entrepreneurial behaviours and managerial attitude towards the deployment of resources and opportunity realization. This includes factors like innovation, proactiveness, risk taking and competitive aggressiveness with some level of autonomy which reflect enterprising strategies for opportunity exploitation (Anderson, Covin & Slevin, 2009; Anderson et al., 2009; Miller, 2011; Covin & Wales, 2012). These entrepreneurial behaviours and strategies inform and shape entrepreneurial decisions and actions that enables enterprises to provide proactive innovation which beats the competitors (Rauch et al., 2009).

The second step of opportunity exploitation comprises strategic mobilisation resources of the enterprise such as financial capital, human resource and technological capital necessary to convert perceived opportunities into tangible products and services and the creation or expansion of business activity. Financial capital is the collection of the different monetary resources available to the enterprise that enables it to effectively exploit opportunities. Similarly, human capital encompasses the “individual capabilities, knowledge, skill, and experience of the company’s employees and managers, as they are relevant to the task at hand, as well as the capacity to add to this reservoir of knowledge, skills, and experience through individual learning” (Lumpkin & Dess, 2001, p. 26).

4.1.3 Entrepreneurial Capability and SMEs

Over time, established SMEs become more focused on exploiting the benefits of existing opportunities – both products and services. For instance, they continuously optimize internal routines and improve the production processes. However, although this persistent exploitation of existing opportunities is important, it is not enough for long term business success. It rather reduces the entrepreneurial activity of SMEs and causes stagnation (see
What is required for long term success is for SMEs to be entrepreneurial – searching and engaging in exploration activities to discover new opportunities whilst reaping the short-term productivity benefits of refining and implementing such opportunities (Lisboa, Skarmeas & Lages, 2013; Gedajlovic et al., 2012; Lavie et al., 2010; Weerawardena & Mort, 2006).

However, the capacity to explore and exploit opportunities requires different sets of resources and capabilities and often yields divergent performance outcomes. As such, pursuing both activities – exploring for new opportunities and exploiting for productivity gains – can be challenging (Lavie et al., 2010), particularly in SMEs (Rothaemel & Alexandre, 2009; Voss & Voss, 2013; Lavie et al., 2010). Similarly, Lubtakin, Simsek, Ling & Veiga (2006) contend that the difficulty in effectively managing exploration and exploitation in SMEs is due to the often resource-allocation constraints and performance trade-offs. Other scholars, however, argue that such dual structures are necessary to achieve contextual ambidexterity (Gibson & Birkinshaw, 2004) since both exploration and exploitation activities have been found to yield positive performance outcomes (Hernandez-Espallardo, Sanches-Perez & Segoia-Lopez, 2011; He & Wong, 2004). It is, therefore, imperative for SMEs to effectively manage both explorative and exploitative activities in order to maintain their innovation drive and renew competencies for continued performance (Ireland & Web, 2007; Stettner & Lavie, 2014).

The complementary perspective asserts that although exploration and exploitation are independent dimensions, they are positively correlated as depicted by Lavie et al. (2010) in their paradoxical framework of exploration and exploitation (see Figure 1). This stems from the assumption that short-term performance gains from successful exploitation activities could provide for future exploratory activities and, over time, this only fosters the “indirect reinforcing association” between the two activities despite the trade-offs.
(Lavie et al., 2010). To buttress this further is Blindenbach-Driessen and Ende’s (2014) assertion that exploratory innovation, for instance, will lead to ideas for exploitation and thus facilitate a culture of innovation across the organization, which is beneficial for responding to changes in market factors or introducing change in the environment for advantage (Abdelgawd et al., 2013).

![Paradoxical Framework of Exploration and Exploitation](Lavie et al, 2010, p. 117)

**Figure 4.1: Paradoxical Framework of Exploration and Exploitation (Lavie et al, 2010, p. 117)**

### 4.2 Institutional Factors

An underlying theme in institutional theory is embeddedness (Hollingsworth, 2002; Baum & Oliver, 1992; Welter, 2011) which suggests that the dynamic institutional environment provides a context for social phenomena. Hence, entrepreneurial activity and, by extension, SMEs are influenced by institutional factors (Roxas et al., 2007; Roxas & Coetzer, 2012) which offer incentives as well as constraints entrepreneurial activity (Yang & Konrad, 2010; Young, Welter & Conger, 2018). The pressures exerted by institutions on organizations is termed isomorphism and forces organizations in the same population to act in similar manner to establish legitimacy (DiMaggio and Powell, 1983; Hawley, 1968). In effect, institutions and the institutional environment of a country have been noted
to significantly influence the nature of entrepreneurial activity. In the ensuing sub-sections, North’s “rules of the game” together with Scott’s three “pillars of institutions” are discussed.

4.2.1 Institutions as the “Rules of the Game”

Institutions “are the rules of the game in a society, or more formally, are the humanly desired constraints that shape human interaction” (North, 1990; p. 98). Institutions comprise the structures and constraints that humans impose on their dealings with one another. North argues that institutions create a stable social, political, cultural or economic environment within which human interactions occur in a more structured manner. The institutional framework, thus, sets the mechanisms that enforce “the rules of the game” that firms must conform to or follow. North refers to institutions as “the rules of the game” and organizations as “the players of the game” and categorizes institutions as formal or informal (North, 1990; 2005).

Formal institutions follow a hierarchy, for example, from the constitution to statutes, to community laws, then to bye-laws and finally to specific contracts, encompassing laws, regulations, political and economic rules and contracts, etc. (North, 2005). Formal as used here denotes a legal foundation upon which such entities act and demonstrate impacts on economic and entrepreneurial firms (Adomako et al., 2015; Peng et al., 2008). On the other hand, societal norms, professional codes of conduct and conventions underpinned by societal culture working together with formal institutions to coordinate human interaction and resolve any conflicts that may arise are termed informal institutions. In other words, rules based on implicit understanding, are in most part socially derived and therefore not accessible through written documents or necessarily sanctioned through formal position (Adomako et al., 2015). As a result, informal institutions do not
have definitive legal sanctions or punitive measures in any given society but are mainly enforced by way of responsibility to family networks and family ties (North, 1990; Adomako et al., 2015).

4.2.2 The Three Pillars of Institutions

Institutions also “consist of regulative, normative and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life” (Scott, 2008, p. 48). These dimensions each entail peculiar institutional elements which in turn affect how individuals and firms behave differently. In recent years, Scott’s institutional pillars have gained importance in the entrepreneurship research (Vatn, 2005; Manolova, Eunni & Gyoshev, 2008; Descotes, Walliser & Guo, 2007; Volchek, Jantunen & Saarenketo, 2013; Descotes, Walliser, Holzmüller, & Guo, 2011; Volchek, Saarenketo, & Jantunen, 2015). Since entrepreneurial actions are within the dynamic institutional environment, the institutional pillars have provided a framework to explain entrepreneurial behavior and decision-making in the wider economic space (Hollingsworth, 2002; Lim, Morse, Mitchell & Seawright, 2010; Welter, 2011). In Ghana, studies reveal that the operations and behavior of SMEs are influenced by the dynamic institutional climate (Adomako et al., 2015). Scott’s institutional pillars are depicted in Table 4.1 below.
Table 4.3: Three Pillars of Institutions

<table>
<thead>
<tr>
<th>Basis of compliance</th>
<th>Regulative</th>
<th>Normative</th>
<th>Cultural-cognitive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Expediency</td>
<td>Social obligation</td>
<td>Take-for-grantedness, shared understanding</td>
</tr>
<tr>
<td>Basis of order</td>
<td>Regulative rules</td>
<td>Binding expectations</td>
<td>Constitutive schema</td>
</tr>
<tr>
<td>Mechanisms</td>
<td>Coercive</td>
<td>Normative</td>
<td>Mimetic</td>
</tr>
<tr>
<td>Logic</td>
<td>Instrumentality</td>
<td>Appropriateness</td>
<td>Orthodoxy</td>
</tr>
<tr>
<td>Indicators</td>
<td>Rules, laws, sanctions</td>
<td>Certification, accreditation</td>
<td>Shared logics of action, isomorphism</td>
</tr>
<tr>
<td>Affect</td>
<td>Fear guilt/ innocence</td>
<td>Shame/ honor</td>
<td>Certainty/confusion</td>
</tr>
<tr>
<td>Basis of legitimacy</td>
<td>Legally sanctioned</td>
<td>Morally governed</td>
<td>Comprehensible, recognizable, culturally supported</td>
</tr>
</tbody>
</table>

Source, (Scott, 2014)

4.2.3 Institutional Factors and Entrepreneurial Climate in Ghana

Entrepreneurship research is increasingly turning attention to investigating the impact of the social, political, cultural and economic systems on entrepreneurial activity (Welter, 2011). Some scholars (Veciana & Urbano, 2008) have observed that formal and informal institutional factors greatly dictate the process of entrepreneurship. Such informal institutions comprise culture, norms, values and traditions whereas the formal institutions include laws, economic regulations, and property rights as espoused by North (1990). The institutional environment within which entrepreneurship is embedded indeed shapes the outcomes of entrepreneurial activity (Parto, 2005; Freytag & Thurik, 2007; Kalantaridis, 2007; Welter & Smallbone, 2008; Li & Zahra, 2012; Stenholm et al., 2013).

Scholars also note that to effectively coordinate entrepreneurial activity, both informal and formal institutions must co-exist in harmony (Welter & Smallbone, 2011; Li & Zahra, 2012; Stenholm et al., 2013). Entrepreneurial activity and, by extension, the operation of
SMEs is greatly influenced by the institutional climate (Adomako et al., 2015; Buame, 2012). In Ghana, formal institutions generally function to regulate, facilitate and promote private sector development (Kuada & Sorensen, 2000; Buame, 2012) towards job creation and economic growth (Adomako et al., 2015).

4.2.4 Institutional Environment and SMEs

Several factors shape the growth and performance of SMEs in the dynamic institutional environment within which they operate (Young et al., 2018). In Ghana, as has already been noted in section 3.5.2 above, the contributions of private enterprises to economic growth has been well documented and recognized. This has been the rationale behind efforts by successive governments to promote private sector growth through policies and reforms (Aryeetey & Asantewah-Ahene, 2007). These efforts include establishing institutions mandated to regulate, promote and facilitate SMEs’ growth and development across Ghana (Kuada & Sorensen, 2000; Buame, 2012). Governmental and private institutions, agencies and authorities whose activities affect the operations of SMEs are captured by Kuada and Sorensen (2000) as follows:

Viewed from the functional perspective, the government institutions may be classified in three categories: (1) promotional institutions that are purposely established to create incentives and facilities that motivate firms, (2) facilitatory institutions whose actions directly or indirectly enhance the operational capabilities of firms, and (3) regulatory institutions to ensure that firms provide the goods and services promised and that their behaviours, in general, conform with established standards in the country and/or abroad (Kuada & Sorensen, 2000, p. 138).

Kuada and Sorensen (2000) argue that the functions of these institutions are not clearly delineated in practice, where a regulatory institution such as the Customs, Excise and Preventive Services (CEPS) may undertake some promotional or facilitatory services to mitigate any unintended negative effects of their activities. Buame (2012) on the hand contends that the performance and efficacy of these institutions are “very poor and full of
bureaucracy, very frustrating, inhibitive and making entrepreneurs incur a high transaction cost”.

Several institutions, including the Ghana Investment Promotion Centre (GIPC), National Board for Small Scale Industries (NBSSI), Ghana Free Zones Board (GFZB), Rural Enterprise Project (REP), Ghana Standards Authority (GSA), etc. have been set up to support SMEs. Yet, the growth and development of SMEs in Ghana have been saddled with constraints and poor performance. Adda and Hinson (2006) acknowledge that the inefficiencies of business registration processes, for example, and weak legal and regulatory regime for business and ethical practices in Ghana have been a major backlash for SMEs. Buatsi (2000) found that weak institutional capacity of the Ghana Investment Promotion Centre (GIPC) has hindered its ability to deliver on their mandate to promote private sector development and attract foreign investments to Ghana. Again, Arthur’s (2001) study of how development institutions, culture and politics encourage SMEs’ growth in Ghana reveals that financial, logistics and political interference account for inability to deliver institutions such as NBSSI.

4.2.5 Institutional Constraints on SMEs

Although institutions provide several opportunities to facilitate, regulate and promote the activities of SMEs in Ghana, their very operations oftentimes present some constraints to enterprise growth (World Bank, 2013). To improve entrepreneurial activity and stimulate growth requires that the institutional constraints perceived by small business owners – emanating from their peculiar characteristics (Robson & Obeng, 2008) – are identified and addressed holistically through targeted policies aimed at mitigating any negative impact on SMEs’ growth and development.
Furthermore, issues such as lack of financial capital, unskilled work force, obsolete technology, regulatory and legal business requirements continue to plague the operations of SMEs in Ghana. For example, labour costs are cheaper in Ghana than other neighbouring countries. However, the huge capitalisation required to register and operate a business in Ghana impedes market entry (Robson & Obeng, 2008). Other factors such as poor infrastructure and high cost of utilities have been found to inhibit entrepreneurial activity and growth in Ghana and Nigeria (ISSER, 2016; Olutunla & Obamuyi, 2008).

4.2.6 Dimensions of Institutional Factors

As already cited above, the extant literature categorises the functions of governmental agencies and authorities as well as private institutions whose activities affect the operations of SMEs in Ghana into regulatory, promotional and facilitatory institutions (see Kuada & Sorensen, 2000; Buame, 2012). The study adopts these dimensions of institutional factors to examine how the dynamic institutional environment influences entrepreneurial activity and ultimately the performance of enterprises in Ghana. Table 4.4 below lists some regulatory, promotional and facilitatory institutions in Ghana.

- **Regulatory Institutions**

Regulatory institutions “ensure that firms provide the goods and services promised and that their behaviours, in general, conform with established standards in the country and/or abroad (Kuada & Sorensen, 2000, p. 138). This is attained through rule setting, monitoring and sanctioning activities of regulatory agencies (Grewal & Dharwardkar, 2002). A major source of institutional constraint in Ghana also stems from excessive regulatory requirements and bribery. Business registration and legal operational permits from administrative governance bodies such as the district, municipal and metropolitan assemblies constrain SME activity by posing financial and non-financial costs (World
Bank, 2013). The lack of antitrust registration, for example, has been noted to favour large firms, whereas the absence of property rights protection mechanism limits the ability of SMEs to access technology (Kayanula & Quartey, 2000). Adda & Hinson (2006) also found that the bureaucracy which characterize the issuance of permits and licenses as well as the poor administration of tax laws constrains operations of SMEs in Ghana.

- **Promotional Institutions**

Promotional institutions are created to purposely provide incentives and facilities that motivate firms and SMEs (Kuada & Sorensen, 2000). These Government policies, such as trade liberalization policies, financial and non-financial assistance and infrastructural facilities (e.g. roads, transport systems, water and power supply), are aimed at encouraging entrepreneurial activity and supporting SMEs growth and sustainability. As noted above, agencies such as the National Board for Small Scale Industries (NBSSI), the Ghana Investment Promotion Centre (GIPC), the Ghana Free Zones Board (GFZB) and the Ghana Export Promotion Council (GEPC) all undertake programs to promote the operations of SMEs. Furthermore, institutions such as the Association of Ghana Industries (AGI) and the Ghana National Chamber of Commerce and Industries (GNCCI) also play diverse roles in promoting SMEs, although their programs are segmented and targeted (Aryeetey et al., 1994). However, these promotional institutions are poorly resourced with funds, logistics and people to effectively deliver on their mandate.
<table>
<thead>
<tr>
<th>Name of Institution</th>
<th>Type of Institution</th>
<th>Nature of Activity</th>
<th>Core Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accra Metropolitan Assembly</td>
<td>Facilitatory/</td>
<td>Administrative</td>
<td>“To promote and support productive activity and social development in the district and remove any obstacles to initiative and development”</td>
</tr>
<tr>
<td></td>
<td>Regulatory</td>
<td>governance</td>
<td></td>
</tr>
<tr>
<td>Annex International Inc. of USA (on USAID contract</td>
<td>Facilitatory</td>
<td>Technical assistance</td>
<td>“Provides technical assistance services to firms (e.g. market identification, market analysis, upgrading of production and management capacity)”</td>
</tr>
<tr>
<td>in Ghana</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export Finance Company</td>
<td>Facilitatory</td>
<td>Export finance</td>
<td>“Extends loan facilities to finance export trade”</td>
</tr>
<tr>
<td>Food and Drugs Authority</td>
<td>Regulatory</td>
<td>Standards</td>
<td>“To ensure adequate and effective standards for food, drugs, cosmetics, household chemicals and medical services”</td>
</tr>
<tr>
<td>Ghana Export Promotion Council</td>
<td>Promotional</td>
<td>Export Promotion</td>
<td>“To ensure the success of the national export diversification drive through an extensive scope of activities”</td>
</tr>
<tr>
<td>Ghana Investment Promotion Council</td>
<td>Promotional</td>
<td>Investment promotion</td>
<td>“Attracts foreign investors and encourages local investors through the creation of favourable conditions”</td>
</tr>
<tr>
<td>Ghana National Chamber of Commerce</td>
<td>Facilitatory/</td>
<td>Information and</td>
<td>“Enhances international trade opportunities through information and contacts”</td>
</tr>
<tr>
<td></td>
<td>Promotional</td>
<td>relational services</td>
<td></td>
</tr>
<tr>
<td>Ghana Revenue Authority</td>
<td>Regulatory</td>
<td>Tax administration</td>
<td>“Ensure efficient collection of revenue and the equitable distribution of tax burden and ensure greater transparency and integrity accountability of firms to Government tax obligations”</td>
</tr>
<tr>
<td>Ghana Standards Authority</td>
<td>Regulatory</td>
<td>Quality standards</td>
<td>“Ensure quality standards of products and goods for safety and export quality”</td>
</tr>
<tr>
<td>Ghana Trade Fairs Authority</td>
<td>Facilitatory/</td>
<td>Exhibition</td>
<td>“Organizing local and international trade fairs and exhibitions”</td>
</tr>
<tr>
<td></td>
<td>Promotional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Board for Small Scale Industries</td>
<td>Facilitatory/</td>
<td>Provide support</td>
<td>“To promote small-scale industries by contributing to the creation of an enabling environment, facilitating access to credit and providing high quality business development services”</td>
</tr>
<tr>
<td></td>
<td>Promotional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Enterprise and Export Development</td>
<td>Facilitatory</td>
<td>Export Finance</td>
<td>“To promote the growth of private Ghanaian exporters through the provision of short-term credits to exporters and the provision of technical assistance”</td>
</tr>
<tr>
<td>Private Enterprises Foundation</td>
<td>Facilitatory</td>
<td>Coordination</td>
<td>“Sustains dialogue between the government and the private sector”</td>
</tr>
<tr>
<td>Registrar General’s Department</td>
<td>Regulatory</td>
<td>Business registration</td>
<td>“To ensure an efficient and effective administration of entities inter –alia the registration of businesses, industrial property, marriages, administration of estates, and public trustees, to provide customer friendly services and accurate data for national planning.”</td>
</tr>
<tr>
<td>Sigma One</td>
<td>Facilitatory</td>
<td>Policy guidelines</td>
<td>“Assists MoTI in making the policy framework friendly and conducive for enterprises”</td>
</tr>
<tr>
<td>Trade and Investment Program</td>
<td>Facilitatory</td>
<td>Institutional Support Services</td>
<td>“Influences changes in official policies that hinder exports, removes confusing rules and regulations, bottlenecks such as documentation in exporting”</td>
</tr>
</tbody>
</table>

85
<table>
<thead>
<tr>
<th>Organization</th>
<th>Type</th>
<th>Area of Service</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Labour Commission</td>
<td>Regulatory/</td>
<td>Industrial relations</td>
<td>“To develop and sustain a peaceful and harmonious industrial relations environment through the use of effective dispute resolution practices, promotion of co-operation among the labour market players and mutual respect for their rights and responsibilities.”</td>
</tr>
<tr>
<td>Ghana Free Zones Board</td>
<td>Promotional/facilitatory</td>
<td>Export promotion</td>
<td>“To promote processing and manufacturing of goods through the establishment of Export Processing Zones (EPZs). It also encourages the development of commercial activities at seaports and airports areas.”</td>
</tr>
<tr>
<td>Federation of Association of Ghanaian Exporters (FAGE)</td>
<td>Facilitatory</td>
<td>Technical and information services</td>
<td>“To provide technical and information services to facilitate transactions between Ghanaian firms and their global partners”</td>
</tr>
<tr>
<td>Association of Ghana Industries (AGI)</td>
<td>Promotional</td>
<td>Industry support services</td>
<td>“To support and influence legislation or other measures considered favourable for industry and oppose those which are considered inimical to the growth of industry.”</td>
</tr>
<tr>
<td>Ghana National Chamber of Commerce and Industry</td>
<td>Promotional/facilitatory</td>
<td>Commerce promotion</td>
<td>“To promote commercial and industrial interests in the country”</td>
</tr>
<tr>
<td>Private Enterprise Foundation (PEF)</td>
<td>Facilitatory</td>
<td>Policy advocacy</td>
<td>“Undertake policy dialogue to ensure that policies favour the smooth growth of the private sector.”</td>
</tr>
</tbody>
</table>

Source: Adapted and updated from Kuada and Sorensen, 2000, pp. 139-140
Facilitatory Institutions

Facilitatory institutions directly or indirectly enhance the operational capabilities of firms (Kuada & Sorensen, 2000) through activities such as training and capacity building, business advisory and other forms of support, including access to loans and financial services to support its operations. In Ghana, the Ministry of Trade and Industry has oversight responsibility for the private sector. Others, like the Ministry of Finance and Economic Planning, the Ministry of Food and Agriculture, and the Ministry of Tourism also have responsibilities for SMEs. They engage in several activities that are supposed to facilitate the operation of SMEs to ensure growth and sustainability in the sector.

4.3 SME Performance

SMEs are the backbone and growth engine of many economies around the world, spurring employment, economic growth and social development (Wiklund, Patzelt & Shepherd, 2009; Aceleanu et al., 2014; Love & Roper, 2015; Li & Rama, 2015; Hassan & Hart, 2016). Research has examined the factors which promote or stifle the growth and performance of SMEs across several countries (Hassan & Hart, 2016). Performance is a widely used concept and in general terms, defined as “a measure of how well a mechanism/process achieves its purpose” (Wu, 2009; Anderson et al., 2015). Neely (2002) delineate two dimensions of performance as effectiveness and efficiency. Effectiveness denotes the degree to which a firm meets stakeholder requirements while efficiency denotes the economic utilization of firm resources in meeting performance objectives. Firms that achieve their objectives with greater effectiveness and efficiency than the competition attain relative superior firm performance (Wu, 2009; Hassan & Hart, 2016). SME performance is, thus, defined as the degree to which an enterprise achieves proposed
objectives and generates value from an entrepreneurial activity in the face of internal and external environment (Wu, 2009; Hassan & Hart, 2016).

4.3.1 Performance Measurement in SMEs

By measuring their performance relative to the competition, Neely (2002) asserts that firms can check position by establishing their current status and monitoring progress over time against benchmarks; communicate position to stakeholders, customers and employees through annual reports; confirm priorities based on performance data insights to address shortfall; and improve progress by focusing on specific issues and finding ways to improve performance. Nevertheless, the measure of SME performance could be complex and challenging (Hassan & Hart, 2016). The challenges are usually distinct from those of large organizations and, because most existing performance measurement systems were designed for the latter, few tools are available for SMEs. Some scholars note that the lack of information and guidance on performance measurement in the field of entrepreneurship have resulted in varying definitions and measurements of successful performance in SMEs (Murphy, Trailer & Hill, 1996; Simpson, Padmore & Newman, 2012). The main challenges to measuring performance in SMEs include the following: lack of adequate and accurate historical performance information; the issue of enormous and erratic growth rate and uneven record-keeping; the emphasis on day-to-day operations; and the placement of greater emphasis on potential performance rather than lagged performance (Wang & Ang 2004; Wu, 2009; Anderson et al., 2015).

4.3.2 Financial and Non-Financial Performance Measures

The measure of performance in enterprises was based on their financial data prior to the 1980s. However, scholars soon realized that historical financial data of enterprises did not
fully provide an exact measure of performance because enterprises and the environments they operate in were becoming more complex (Kennerley & Neely, 2002; Hassan & Hart, 2016). As a result, non-financial indicators were added to the existing financial measures to provide a holistic measure of firm performance against benchmarks and set times (Chong, 2008). Overall, performance indicators include growth measures in terms of sales, assets and profits (Hassan & Hart, 2016).

Comparing the studies of Murphy, Trailer and Hill (1996) and Wu (2009) examining the performance dimensions and measures used in the literature on performance in SMEs from 1987 to 1993 and 1997 to 2006 respectively, the following are evident. Firstly, financial measures based on growth indicators, for example sales growth and profitability, were adopted by most surveyed SMEs in the latter years. Secondly, efficiency indicators such as return on assets (ROA) have gained prominence in recent years over return on investment (ROI) which was dominant in the early years and, thirdly, intangible and non-financial indicators such as customer satisfaction and managerial satisfaction were common in the performance measurements in recent years. SME performance encompasses market share, sales growth, profitability ratios, and return on assets etc. (Cavusgil & Zou, 1994; Knight, 2000; Hassan & Hart, 2016). Table 4.5 below shows some SME performance indicators.
4.3.3 Subjective and Objective Measures of Performance

Scholars have criticized the dominant financial and accounting measures for performance. So, over the years, firm performance has been operationalized and measured with both the historical and non-financial indicators. Notwithstanding, the strain associated with assessing objective financial data in the context of SMEs makes financial performance measures almost non-applicable to SMEs. Largely, SMEs do not readily share their financial information, not because they do not want to, but mostly because of the strain in preparing the documentation and financial reports. For this reason, subjective financial data became an alternative to historical financial data in the case of SMEs (Dess & Robinson, 1984). A comparison of subjective and objective measures of performance are shown in Table 4.5 below.

### Table 4.5: SME performance indicators

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measures</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial performance</td>
<td>Growth</td>
<td>Growth on profit; Growth on revenue; Growth on annual sales volume</td>
</tr>
<tr>
<td></td>
<td>Profitability</td>
<td>Return on sales; Profit after tax; Overall profit</td>
</tr>
<tr>
<td></td>
<td>Liquidity</td>
<td>Net cash flow; Cash flow relative to competitors; Case flow to sales</td>
</tr>
<tr>
<td></td>
<td>Efficiency</td>
<td>Return on assets; Return on investment; Return on equity; Average return on sales</td>
</tr>
<tr>
<td></td>
<td>Revenue</td>
<td>Gross revenues; Revenue per customer;</td>
</tr>
<tr>
<td>Non-financial and intangible performance</td>
<td>Customers orientation</td>
<td>Customer satisfaction; Customer service calls; sales volume from single customer; The growth of customer number; The distribution of customer.</td>
</tr>
<tr>
<td></td>
<td>Employees orientation</td>
<td>Employee satiation; Employee turnover/royalty; Remuneration and benefits benchmark; The culture building; Employee training; the collaboration between employee and business units.</td>
</tr>
<tr>
<td></td>
<td>Competitiveness orientation</td>
<td>Growth on market share; Position in the market; New market entry; Customer satisfaction relative to competitors; Other indicators relative competitors…</td>
</tr>
<tr>
<td></td>
<td>Strategic partners orientation</td>
<td>The indicators on cooperation with supplier; The process align with other organizational processes on the value chain; The network building on NPD or sales;</td>
</tr>
<tr>
<td>Specific performance</td>
<td>Depends on the SMEs’ business types and strategies employed</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Wu (2009)*
Table 4.6: Objective versus Subjective Measures of Performance

<table>
<thead>
<tr>
<th>Differentiation Aspect</th>
<th>Subjective Measures</th>
<th>Objective Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicators</td>
<td>• Focus on overall performance</td>
<td>• Focus on actual financial indicators</td>
</tr>
<tr>
<td>Measurement standard</td>
<td>• Key informants are asked to rate performance relative to their competitors</td>
<td>• Key informants report absolute financial data (for example, profit per employee)</td>
</tr>
<tr>
<td>Scale anchors</td>
<td>• Scales range from “very poor: to “very good, or “much lower” to “much higher”, or “worst in industry” to “best in industry”</td>
<td>• No use of scales</td>
</tr>
</tbody>
</table>

Source: Dawes (1999); Wall et al. (2004); Kim (2006).

4.4 Chapter Summary

The chapter has advanced the argument that entrepreneurship is a process-oriented activity – starting with opportunity recognition and the subsequent mobilization of resources to act on such opportunity for gains. The chapter then conceptualized and defined entrepreneurial capability (EC) in SMEs from the dynamic capabilities perspective and delineated its dimensions as opportunity exploration capability and opportunity exploitation capability.

The chapter has also discussed the embeddedness of SMEs in the institutional environment in Ghana and has established that institutions perform three main functions: regulatory, promotional and facilitatory functions. From institutional theory, these regulatory, promotional and facilitatory institutional factors in Ghana’s entrepreneurial landscape exert pressures which promote or constrain entrepreneurial activity and ultimately affect EC and SME performance. The chapter has also discussed performance measurement in SMEs and established that performance of SMEs depends largely on the ability to meet
the objectives of market share, sales growth, profitability ratios such as return of assets, return of sales, customer satisfaction and productivity. Following the lead of several studies that have adopted subjective measures of performance, the study adopts a subjective approach to measure SME performance in this study.
CHAPTER FIVE
CONCEPTUAL FRAMEWORK AND HYPOTHESES
DEVELOPMENT

5.0 Introduction

This study seeks to examine the impact of entrepreneurial capability and the effect of institutional factors on SME performance in Ghana. Earlier chapters have reviewed the literature on the main concepts of the study: entrepreneurial capability, institutional factors and SME performance. The theories that underpin the study – resource-based theory, dynamic capabilities theory and institutional theory – have also been duly discussed. This chapter develops a conceptual framework and formulates hypotheses based on the literature review of concepts and theories in the previous chapters to guide the empirical investigation.

5.1 Conceptual Framework

According to Maxwell (2004), conceptual framework is a graphical or narrative description of key concepts, factors or variables under study and their interrelationships (Maxwell, 2004). In effect, the conceptual framework is

primarily a conception or model of what is out there you plan to study, and what is going on with these things and why – a tentative theory of the phenomena that you are investigating. The function of this theory is to inform the rest of your design – to help you assess and refine your goals, develop realistic and relevant research questions, select appropriate methods, and identify potential validity threats to your conclusions. It also helps to justify your research (Maxwell, 2004; p. 33).

This study sets out to develop and test a theory-driven and practice-oriented model to explain the impacts of entrepreneurial capability on the performance of SMEs in the dynamic institutional environment of Ghana. The study postulates that entrepreneurial capability (EC) enables SMEs to effectively undertake opportunity exploration and exploitation activities continuously to attain relative superior performance in the dynamic
institutional environment. Extant literature reveals that the entrepreneurial process begins with opportunity recognition and then followed by acquisition of resources to transform these opportunities into new products, processes and services for rent (Alvarez et al., 2013; Kuckertz et al., 2015). The study, therefore, conceptualizes entrepreneurial capability (EC) as an enterprise’s ability that seeks to generate value through the continuous process of exploration and exploitation of entrepreneurial opportunities to create or expand business activity. Exploration capability is the enterprise’s ability to identify, discover or create opportunities and exploitation capability is the enterprise’s ability to strategically mobilize and organize resources in pursuit of perceived opportunities.

Further, the extant literature emphasizes that firms’ performance reflects how well SMEs achieve financial and strategic objectives (Hassan & Hart, 2016; Anderson et al., 2015; Hult et al., 2004; Knight, 2000). The study, thus, argues that EC enables SMEs to develop unique capabilities to identify, discover or create opportunities and to strategically mobilize resources to exploit such opportunities to maintain innovation and stay ahead of the competition for relative superior performance. However, factors in the institutional environment within which SMEs operate have the tendency to enable or constrain entrepreneurial activity and, ultimately, SME performance (Kuada & Sorensen, 2000; Buame, 2012; Young et al., 2018). A conceptual framework depicting a graphical description of the concepts under study and their interrelationships based on a literature review of relevant concepts and theories is depicted in Figure 5.1 below.
Figure 5.1: Conceptual Framework

**Source:** Author’s conceptualization from literature review
5.2 Hypothesis Development

Based on the conceptual framework in Figure 5.1, the study puts forward five (5) propositions. The first hypothesis (H1) examines the linkage between the proposed exploration and exploitation dimensions of entrepreneurial capability (EC). The second hypothesis (H2) assesses the direct influence of EC on SME performance. The third set of hypotheses (H3a, b, c) determines the moderating impact of institutional factors on the relationship between EC and SME performance.

5.2.1 Dimensions of Entrepreneurial Capability

As indicated earlier, the entrepreneurial process comprises opportunity exploration and subsequent exploitation through strategic mobilisation of resources to generate value (Alvarez et al., 2010; Alvarez et al., 2013). Opportunity exploration is the ability to discover and/or create opportunity (through alertness, social networks, information gathering, prior knowledge and active search) which facilitates development of innovative goods that satisfy customer needs, have market potential, are sustainable and economically viable to generate value. Opportunity exploitation on the other hand entails strategic mobilisation of financial, human and technological resources to act on perceived opportunities through entrepreneurial strategies (such as innovation, proactiveness, risk taking and competitive aggressiveness) to create or expand business activity to generate value. From the perspective of the entrepreneurial process, the study considers entrepreneurial capability to be a process-oriented concept in which opportunity exploration precedes exploitation.

Entrepreneurial opportunities are the foundation of opportunity exploration to “identify a good idea and transform it into business concepts” with the potential to generate and add value (Lumpkin & Lichtenstein, 2005, p. 457). The outcome of opportunity
exploration, thus, is the generation of “viable business concepts” awaiting conversion into tangible products and/or markets. These outcomes – the result of idea generation and opportunity assessment – are still intangible cognitive and abstract entities, making empirical classification difficult (Young, Welter & Conger, 2018). They cannot yield concrete performance outcomes but rather imply prospects for long-term competition (Sttetner & Lavie, 2013). In other words, the opportunity exploration dimension of entrepreneurial capability does not yield any concrete short-term performance gains, but rather provides prospects for long term competitiveness, which is only realized when the perceived opportunity is exploited. It is for this reason that disproportionate exploration of opportunity may affect the performance outcomes of firms (Wiklund & Shepherd, 2011).

Opportunity exploitation, thus, generates performance outcomes by creating customer value and satisfaction, which, in effect, generates greater sales and profitability and allows organizations to harvest short-term productivity gains. This dimension of entrepreneurial capability involves the strategic posturing of the enterprise towards the mobilization and deployment of resources for opportunity realization (Kuckertz et al., 2015). Therefore, the “viable business concepts” derived from the opportunity exploration stage in the entrepreneurial process require enterprises to be proactive, innovative, risk inclined and competitive (Anderson, Covin & Slevin, 2009; Miller, 2011; Covin & Wales, 2012). It is for this reason that becoming engrossed in harvesting the benefits of existing opportunities is not enough for long term business success but rather reduces the entrepreneurial activity and causes performance stagnation (March, 1991; Levintah & March, 1993; Rosenbusch et al., 2011).

It is evident that entrepreneurial firms explore and exploit, and this must be continuous to generate value. In other words, EC is contingent upon the continuous exploration and exploitation of opportunities. Except the opportunities identified are not
worth exploiting (see Shane & Venkataraman, 2000), it follows that an enterprise that explores more is likely to exploit new opportunities, and desist from over-exploitation which could lead to entrepreneurial exit. Therefore, as dimensions of EC, exploration and exploitation must be positively associated to create or expand entrepreneurial activity and generate value for organisational performance. From this notion, the study hypothesizes that:

**H1: Exploration is positively associated with exploitation as dimensions of EC**

### 5.2.2 Impact of Entrepreneurial Capability on SME Performance

Entrepreneurial capability is expected to positively impact the performance of SMEs. The performance of enterprises is the “achievement of organizational goals related to profitability and growth in sales and market share as well as the accomplishment of general firm strategic objectives” (Hult et al., 2004, pp. 430 – 431). The performance of SMEs is indicated by relative growth in market share, sales, profits, customer satisfaction and productivity (Wu, 2009; Anderson et al., 2015; Hassan & Hart, 2016). Entrepreneurial opportunities refer to “situations in which new goods, services, raw materials and organizing methods can be introduced and sold at greater prices than their cost of production (Casson, 1982; Shane & Venkatraman, 2000, p. 220;). Hence, SMEs generate value for organizational performance by exploring and subsequently exploiting opportunities that create or expand entrepreneurial activity.

The extant literature reveals that opportunity exploration and subsequent exploitation rely on different organizational activities and capabilities (Kammerlander et al., 2015; Raisch, Birkinshaw, Probst & Tushman, 2009) and yield differing performance outcomes. Opportunity exploration involves the discovery, recognition or creation of lucrative business opportunities that serve as viable prospects that enable the organization
to adapt to changes and shocks in the dynamic institutional environment (Raisch & Birkinshaw, 2008). It is not prudent, however, to continuously engage in opportunity exploration as it creates a situation where organizations never fully reap the potential of such opportunities (Wiklund & Shepherd, 2011). Similarly, the exploitation of opportunities yields short-term performance gains. But over-exploitation of opportunities may lead organizations to become obsolete as they miss the opportunity to innovate by creating new products, services and markets. Long term success of the organization depends on the organization’s ability to continuously engage in opportunity exploration for future-oriented innovative prospects while also organizing resources to pursue perceived opportunities to reap short term productivity and performance gains (Lavie et al., 2010; Gedajlovic et al., 2012; Choi & Shepherd, 2004; Cao, Gedajlovic & Zhang, 2009).

Some enterprises can develop these distinct but related set of capabilities to conjointly sense, shape, seize and generate value from opportunities in the dynamic institutional environment (Teece, 2007; Abdelgawad et al., 2013). This is termed entrepreneurial capability defined as the enterprising ability that seeks to generate value, through continuous exploration and exploitation of entrepreneurial opportunities to create or expand business activity. Entrepreneurial capability, thus, provides specific heuristics for sensing and shaping opportunities in the business environment as well as strategically mobilizing and deploying resources to act on such perceived opportunities to generate value. In other words, entrepreneurial capability helps firms to explore (recognize, discover and create) opportunities and subsequently organize the resource base to strategically exploit perceived opportunities to generate value (Abdelgawad, Zahra, Svejenova & Sapienza, 2013; Arthurs & Businitz, 2006; Kuckertz, Kollmann, Krell, & Stockmann, 2017). For example, the continuous innovative output by firms such as
Ceragem Ghana Limited, Emmajets Forex Bureau Limited and His Presence Hotel Limited opens new markets and alters existing ones to generate value towards improved organizational performance. These firms appear to possess EC that keeps them ahead of competition.

Further, the extant literature emphasizes that firm performance reflects how well SMEs achieve financial and strategic objectives (Hassan & Hart, 2016; Anderson et al., 2015; Hult et al., 2004; Ebben & Johnson, 2005; Knight, 2000). The study, thus, argues that EC enables SMEs to develop unique capabilities to identify, discover or create opportunities and to strategically mobilize resources to exploit such opportunities to maintain innovation and stay ahead of the competition for relative superior performance. Organizations that develop entrepreneurial capabilities to continuously identify opportunities and obtain resources to exploit such perceived opportunities that produce significant outputs and product mix in a variety of ways achieve superior performance (Wilden & Gudergan, 2015; Stettner & Lavie, 2014). Several studies have found evidence to suggest that the combined impact of opportunity exploration and subsequent exploitation generates firm value and improves performance (He & Wong, 2004; Ireland & Webb, 2007; Raisch et al., 2009; Wilden & Gudergan, 2015; Kammerlander et al., 2015). Hence, the ability of SMEs to continuously maintain competitive advantage through entrepreneurial capability brings greater performance advantages. The study posits that:

\[ H2: \text{Entrepreneurial capability is positively associated with SME performance} \]

5.2.3 The Moderating Role of Institutional Factors

SME performance emanates from entrepreneurial capabilities (i.e. opportunity exploration and exploitation) (Abdelgawad et al, 2013), which are embedded in institutional
environment (Adomako et al., 2015; Young et al., 2018). Several studies have assessed the
direct impact of IFs on SME performance (Adomako et al., 2016; Ada & Hinson; 2006;
Nyarku & Oduro, 2018). However, this study argues that SME performance is the
aggregate impact of the interaction between EC and IFs. Hence the need to ascertain the
moderating role of IFs on the EC-SME performance relationship. Entrepreneurial activity
occurs in the increasing dynamic institutional environment, which has the tendency to
constrain or enable the development of entrepreneurial capabilities in order to ultimately
gaining competitive advantage and sustainable growth (Peng et al., 2008; Adomako et al.,
2015; Young et al., 2018). Each country is characterized by its own idiosyncratic
institutional environments which present significant differences in the attitudes, beliefs
and behaviours that create and develop entrepreneurial capability and influence SME
performance (Young & Makhija, 2014; Covin & Miller, 2014). According to Buame
(2012), there are several governmental and private institutions, agencies and authorities
whose activities affect the operations of SMEs in Ghana by way of regulation, promotion
and facilitation. These institutions are mandated to regulate, promote and facilitate growth
and development of SMEs across the country.

Although all three types of institutions relate to the same institutional environment,
each of them reflects different facets of the prevailing institutional context and affects
SME performance differently. Institutional factors, by virtue of their nature, are meant to
provide legitimacy and support for SME growth and development. Notwithstanding, these
same institutional factors have the tendency to either enable or constrain entrepreneurial
activity and ultimately affect SME performance. The study contends that the changing
dynamics in the institutional environment in Ghana exerts pressures on SMEs and
entrepreneurial activity. In other words, institutional factors can hamper or foster
exploration and exploitation activities towards performance in SMEs. Thus, the moderating role of the institutional factors are discussed below.

- **Regulatory Institutional Factor**

The regulatory institutional factor encompasses the laws, rules, regulations and government policies in an environment that might promote or obstruct entrepreneurial activity (Busenitz, Gomez & Spencer, 2000; Stenholm, Acs & Wuebker, 2013). In fact, laws and regulations shape the level of risk and access to resources involved in the formation and sustainability of an enterprise (Autio & Acs, 2010; Busenitz et al., 2000; Bradley, Wiklund & Shepherd, 2011). It is argued, therefore, that the regulatory environment is meant to enhance perceptions of opportunity and entrepreneurial conditions. The regulatory institutional factor, thus, influences entrepreneurial activity and behaviour in the dynamic institutional environment towards the development of entrepreneurial capability and ultimately SME performance.

It has been observed above that a major source of institutional constraint is excessive regulatory requirements and corruption (Klapper, Laeven & Rajan, 2006; Chadee & Roxas, 2013; Young et al., 2018). As pointed out earlier, the lack of antitrust registration favours large firms, whereas the absence of property rights protection mechanism limits the ability of SMEs to access technology (Kayanula & Quartey, 2000). Registration and legal requirements also constrain SME activity by posing financial and non-financial costs (World Bank, 2013; Kim et al., 2016). This is what has been captured by Adda and Hinson (2006) in their observation that the inefficiencies of business registration processes as well as weak legal and regulatory regime for business and ethical practices in Ghana have been the major backlash for SMEs in Ghana. They further opine that the poor tax administration and inefficient auditing systems, difficulty in obtaining
operational licenses and permits as well as the poor delivery and unequal access to public services impede good corporate governance in enterprises.

Bureaucratic requirements that make potential investors spend significant time is another shortfall of the regulatory institutional environment (Lall & Pietrobell, 2002). More so, poor institutional framework to protect intellectual property, property rates and contract laws also hinder entrepreneurial activity in Ghana (Li & Atuahene-Gima, 2001). Entrepreneurship, thus, suffers from regulations enacted by government and the rigor with which they are enforced (Baumol & Strom, 2007; Miller & Kim, 2017). This implies that the relationship between entrepreneurial capability and ultimately performance of SMEs could be affected by regulatory institutional factors. From the foregoing, the study posits that

\[ H3a. \text{Regulatory institutional factor constrains the relationship between EC and SME performance} \]

- **Promotional Institutional Factor**

Promotional institutions are created to purposely provide incentives and facilities that motivate firms and SMEs (Kuada & Sorensen, 2000). These Government policies, such as trade liberalization policies, financial and non-financial assistance, and infrastructural facilities (e.g. roads, transport systems, water and power supply) are aimed at encouraging entrepreneurial activity and supporting SMEs growth and sustainability. Ghana has always regarded private enterprises and SMEs as instrumental for socio-economic growth and development. As observed above, successive governments have, therefore, done well to promote private sector growth through several policies and reforms (Aryeetey & Asantewah-Ahene, 2007). As such, promotional institutions are mandated to provide financial incentives, technical support and training, infrastructure and utility services to support and propel the operations of SMEs towards growth and sustainability.
Thus, a high promotional institutional environment would help SMEs to leverage their entrepreneurial capability to effectively create new opportunities and acquire the necessary resources to convert such opportunities into tangible products and services for profitable gains. The availability of financial capital, for instance, is often linked to the growth and success of SMEs (Bradley, Wiklund & Shepherd, 2011) as it enables enterprises to manage risk and weather potential economic shocks; purchase more productive resources; and even maintain cash flow (Ault & Spicer, 2014). In this regard, an effective promotional environment enhances entrepreneurial activity and generates greater performance in SMEs. However, the lack of institutional capacity of promotional institutions in Ghana continue to limit their ability to effectively promote the growth and development of SMEs.

For example, the weak institutional capacity of the Ghana Investment Promotion Centre (GIPC) has hindered the institution from effectively delivering on its mandate to promote private sector development and attract foreign investments to Ghana (Buatsi, 2000). Other problems facing SMEs in Ghana in the context of promotional institutions include the continuous use of rudimentary technology, poor managerial capacity and skills, low productivity, inadequate financial capital and unskilled labour (Saleh & Ndubisi, 2006). These problems impede the activities of SMEs and ultimately affect their potential for growth and development (Robson & Obeng, 2008). The somewhat inability of promotional institutions to improve the technological capacity and managerial competence and to offer adequate financial incentives continue to stifle the growth and performance of SMEs in Ghana. From the foregoing, it is evident that although the activities of promotional institutions support and promote the growth of SMEs, the inadequacies and inefficiencies of such institutions can also constrain entrepreneurial activity and SME performance.
H3b. Promotional institutional factor enhances the relationship between EC and SME performance

- **Facilitatory Institutional Factor**

Facilitatory institutions provide technical training, capacity building, business advisory and other forms of support including access to loans and financial services to directly or indirectly enhance the operational capabilities of SMEs (Kuada & Sorenson, 2000). These activities improve the knowledge and skills of SMEs which helps in effective decision making about opportunities in the business environment (Alvarez & Busenitz, 2001; Spencer & Gómez, 2004). These cognitive structures affect the behaviour of SMEs by shaping the cognitive frames that facilitate opportunity exploration activities. For instance, if SMEs possess the required knowledge to start evaluate and act on opportunities, a business might be widely available and dispersed among individuals, while in other nations it is not (Busenitz et al., 2000; Alvarez et al., 2013). This provides a boost for SME development and ultimately organisational success.

Hence, it is evident that the type and quality of knowledge acquired may have an impact on the ability of SMEs to be innovative and proactive, both of which are constituents of exploration and even opportunity exploitation. As such, the behaviour of SMEs to be innovative and proactive, both of which are constituent of exploration and even opportunity exploitation is influenced by the type and quality of information accessible. It follows that appropriate policy direction and business advice could facilitate positive attitudes towards entrepreneurship and entrepreneurial behaviour (Bennet & Robson, 1999; 2003). Effective entrepreneurship education, assistance and related support could improve entrepreneurial capability of SMEs towards relative superior performance and growth (Berry & Sweeting, 2006). For example, Bowen and De Clerq (2008) found that entrepreneurial effort is high in areas that have effective institutional arrangements
(e.g. entrepreneurial education) to promote entrepreneurship. However, the facilitatory function of National Board for Small Scale Industries is threatened by inadequate resources. From the foregoing, the study posits that

_H3c. Facilitatory institutional factor enhances the relationship between EC and SME performance_

### 5.3 Control variables

Control variables are a special type of independent variables that have the possibility of influencing the dependent variable (Creswell, 2013). To avoid the weakness introduced by lack of controls in similar studies (Sousa, Martínez-López, & Coelho, 2008), the effect of some variables was controlled. Demographic variables such as sector, age and size of SMEs have frequently been controlled in the extant literature. SME size was operationalized as the amount of resource it controls determined by the number of workers. For example, SMEs with bigger size may be able to allocate more resources to undertake both exploration and exploitation activities simultaneously. They may also have the organizational muscle to navigate the institutional environment more easily than SMEs with smaller size. Similarly, the period for which the SME has operated was taken to represent the age variable and the sector within which the SME has operated was taken to represent the sector variable, accordingly. Together, age and sector variables were also controlled because familiarity with the business landscape and sectoral differences may influence the results.

### 5.4 Chapter Summary

As indicated earlier, the purpose of the study is to examine how entrepreneurial capability and the institutional environment interact to influence the performance of SMEs in Ghana.
This chapter has presented a proposed conceptual framework to examine the multiple inter-relationships among EC (Exploration and Exploitation), Institutional Factors (Regulatory, Promotional and Facilitatory factors) and SME Performance. The proposed framework draws on the Dynamic Capabilities theory and Institutional theory to explain the hypothesized relationships between the construct. Overall, the study postulates five hypotheses to examine the process-oriented relationship between Exploration and Exploitation as dimensions of EC; the collective impact of EC on SME Performance as well as the direct and moderating effect of the regulatory, promotional and facilitatory institutional factors on EC and SME Performance. These hypotheses have been stated in this chapter.
CHAPTER SIX

RESEARCH PARADIGM AND METHODOLOGY

6.0 Introduction

Methodology is the philosophical approach to knowledge discovery, and is classified under philosophy and methods. The philosophical position that underpins the chosen methods is discussed in this chapter. The chapter also discusses the methods and techniques used to collect and analyse data in order to address the objectives of the study. The following sections make up the chapter: basic philosophical beliefs, research paradigm, research design, research methods, methods of data analysis and ethical considerations.

6.1 Basic Philosophical Beliefs

Research is rooted in philosophical beliefs about assumptions, values, concepts and practices that constitute a worldview of reality. The beliefs encompass the axiological, ontological, epistemological and methodological assumptions of a researcher. All these, according to Ponterrotto (2005, p. 127), constitute “the conceptual roots undergirding the quest for knowledge” (Hoover, Strapp, Ito, Foster & Roth, 2018). To understand research, one must examine the philosophy behind it. In other words, the philosophical stance influences the way research is organized, how data is collected and analysed as well as the expected outcomes of the research (Guba & Lincoln, 1994; Braimah, 2014). Together, the researcher’s assumptions based on axiology, ontology, epistemology, and methodology dictate the choice of an appropriate method and design to collect and analyse data (Krauss, 2005). Thus, basic philosophical assumptions underlying this research are discussed below.
6.1.1 Axiological Assumptions

Axiology is “the study of the nature, types, and criteria of values and value judgements especially in ethics” (Merriam-Webster Dictionary, 2013). In philosophy, the term axiology deals with ethical values and religion. In research, these ethical values rooted in research paradigms direct researchers’ decision-making process. Thus, axiology in research paradigm encompasses the ethical beliefs of the researcher, which help to strike a balance between what the researcher values and other ethical consideration in the conduct of a study (Killam, 2013).

6.1.2 Ontological Assumptions

In philosophical terms, ontology refers to the study of our existence and the fundamental nature of reality or being (Killam, 2013). In research, ontology entails the beliefs of the researcher about the nature of reality. As such, it describes the researcher’s view which encompass his/her claims or assumptions about what constitutes reality. Central to ontology, therefore, is the assumption about the nature of social phenomena – whether social reality is external to social actors or constructed by them (Burrel & Morgan, 2006). From an ontological perspective, three strongly contrasting views or perceptions of reality – that is Realism, Relativism and Critical Realism (Killam, 2013) – are noted though not exhaustive.

- **Realism**

Realism is an ontological belief in which realists see the world as an orderly and organized place that is administered by natural laws and that the world can be studied devoid of how people create meaning of reality. The realist ontological belief, thus, implies that social phenomena is an external reality beyond the reach and influence of social actors themselves. In other words, the rules, regulations, structures, hierarchy and other such
elements of social configuration constitute a reality that is totally outside the control of social actors who inhabit it. This presents a more objective assessment of social phenomena as it lessens bias and context-dependence of social research (Saunders et al., 2009). Although social phenomena are in constant state of revision due to social interaction, realists view such phenomena as what social actors have come to know, but not what they have created (Remenyi, William, Money & Swartz, 1998). Realists ontology is the foundation of objective epistemology in the positivistic research paradigm (Bilgrami, 2002; Braimah, 2014). Realists believe that knowledge or truth is static, and that truth does not change once it is discovered. As such, traditional science is founded on realism where truth or facts are determined by scientific laws through experimentation. Once truth or reality has been discovered, it does not change as realists believe that knowledge or truth is static.

- **Relativism**

In contrast, relativism underpins the subjective epistemology in the constructivist research paradigm. Relativists believe that truth is dynamic and truth changes based on the context and individual experiences (Killam, 2013). Furthermore, relativists see the world as a product of internal construction based on the meanings and collective experiences of social actors themselves. In other words, the social setting is a product of the social order created by the continuous social interaction of actors. The relativist ontological position, thus, emphasizes the active involvement of social actors in the construction of what constitutes social reality (Saunders et al., 2009). As such, relativists opine that context shapes the meaning attached to truth and therefore cannot be separated from reality. Thus, rather than obtaining truth from scientific experiments, relativists believe in talking to people in order to obtain in-depth understanding of the stories and contexts.
• **Critical Realism**

Critical Realism, on the other hand, is the ontological belief that reality exists. However, critical realists are of the view that reality cannot be discovered perfectly due to the nature of phenomena and the inconsistent way we find truth (Guba & Lincoln, 1994; Lincoln, Lynham & Guba, 2011). In other words, critical realists believe that although a plethora of means exist to assess the claims of reality, there will never be perfect reality (Killam, 2013). Critical realism is the ontological belief of the post-positivistic paradigm. This ontological belief determines the most appropriate epistemology and methodology for research paradigms (Bilgrami, 2002; Killam, 2013).

**6.1.3 Epistemological Assumptions**

Killam (2013) affirms that epistemology is the assessment of how knowledge is discovered and the relationship between the researcher and the knowledge during the process of discovery. As noted by Guba and Lincoln (1994), the ontological beliefs of the researcher prescribe whether the relationship that exists between the research and knowledge is either objective or subjective in nature. For example, if a researcher’s ontological belief is that reality exists and can be discovered, then the epistemology will be objective. In this case, the researcher and what is being researched do not influence each other and are, thus, independent entities. The objective epistemology dictates that the researcher is detached from what is being researched. This ensures researcher objectivity and avoids bias. On the other hand, a subjective epistemology is founded on the researcher’s ontology of relativism whose belief is that reality cannot exist without context and that multiple cognitive constructions of reality exist. Furthermore, a researcher’s epistemology determines the methodology for the research.
6.1.4 Methodological Assumptions

Methodology is philosophical belief to discovering knowledge. The Merriam-Webster (2013) defines methodology as “a set of methods, rules, or ideas that are important in a science or art: a particular procedure or set of procedures.” In research, methodology denotes the processes and procedures by which researchers systematically discover knowledge. Methodology, therefore, constitutes the theoretical analysis of the collection of methods and values pertaining to a branch of knowledge in a systematic manner. Usually, methodology comprises the research paradigm, theoretical model and the research approaches, whether quantitative or qualitative. By extension, “methodology refers to the rationale and the philosophical assumptions that underpin any natural, social or human science study, whether articulated or not” (McGregor & Murnane, 2010, p. 419). Simply put, it refers to how each of the logic, reality, values and what counts as knowledge inform research. As noted earlier, the ontological and epistemological beliefs espoused by the research underpin its methodology (Killam, 2013).

Knowing or not, the interrelationship among a researcher’s assumptions about ontology, epistemology and methodology within a research paradigm is evident. As a result, answering a question about one assumption shapes the responses to questions about the others. For example, the choice of methodology is gleaned from the answer to what epistemology to adopt if the researcher believes reality exists. In order words, if we say that a researcher whose ontological belief is that reality exists and can be measured adopts an objective epistemology, then it follows that an experimental methodology would be the most appropriate choice. Different research paradigms hold different philosophical perspectives and, for this reason, it is important that researchers situate their study within a specific research paradigm (Ponterotto, 2005). The positivism, post-positivism,
constructivism, and pragmatism research paradigms (Guba & Lincoln, 1994; Neuman, 2014; Neuman, 2005) and their variations are discussed below.

6.2 Research Paradigms

Research is guided by philosophical beliefs (i.e., assumptions, concepts, values and practices) that constitute a way of viewing reality. This set of beliefs is known as paradigm or worldview. According to Guba and Lincoln (1994), research paradigm constitutes the basic belief systems that guide how a researcher investigates a phenomenon and outlines the process of investigation. Research paradigms are also frameworks that researchers use as a basis for everything that they do and dictates the researcher’s ontological, epistemological, methodological, and axiological stance. Thus, research paradigm “involves philosophical assumptions as well as distinct methods or procedures” and “although they remain largely hidden in research, they still influence the practice of research and need to be identified (Creswell, 2014, p. 5). The four dominant research paradigms, namely positivism, post-positivism, constructivism and pragmatism are discussed below.

6.2.1 Positivism

Positivism is a research paradigm employed by traditional science. Positivists assume that the only way people can be positive that knowledge is true is if it was discovered using the scientific method. The axiology, ontology, epistemology and methodology within the positivistic research paradigm are explored. In any paradigm, values are integral to belief. The axiological position in the positivistic paradigm is honesty, integrity and truth of the researcher. Since researchers search for truth, an environment where their research findings and reports can be trusted with honesty is very important. Any researcher who
falsifies research or misrepresents ideas as their own would be banned from the scientific community. Researchers, therefore, need to keep and produce the raw data they collected should it be requested of them (Killam, 2013).

The ontological belief of positivistic research paradigm is grounded in realism; a belief or an assumption that there exists an objective and constant reality that is independent of theories and/or the researcher that is context-free and can be measured objectively (Polit & Beck, 2010; Polit & Hungler, 1999). The epistemology in positivism is objective in nature, meaning that the researcher and the researched are independent entities and have no influence on each other (Guba & Lincoln, 1994). The methodology in the positivistic research paradigm is experimental or survey, a situation where hypotheses are tested and verified.

Putting all these together, positivists believe reality exists and can be directly measured through objective methods such as experiments rather than methods that rely on subjective inference based on reflection, sensation or intuition (Saunders et al., 2009). Positivists, thus, underscore the need to maintain distance between the researcher and what is being researched and rely on rigorous processes and methods such as experiments to collect and analyse data (Krauss, 2005; Ponterotto, 2005). Positivism is underpinned by quantitative methodology to explain social phenomena by generating testable numeric data from observation (Creswell, 2009). Quantitative methodology enables data to be collected about an observable social reality and facilitates the identification of trends of irregularities and causal associations among variables and enables generalization of findings of the research (Gill & Johnson, 2010). Proponents of positivism, therefore, support the notion that knowledge is obtained through the systematic gathering of facts and by deductive inference in a value-free manner. As such, they uphold the explanation of social phenomena through the deductive generation on testable hypothesis (Macionis & Gerber,
Creswell (2009) asserts that “positivists are most interested in examining social behaviour through the generation of numeric values of observation” (p. 5). Following this assertion, Gill and Johnson (2010) opine that the quantitative approach underlies the positivist research paradigm. In so doing, positivists can identify patterns and causal dependencies among variables by collecting and analyzing numeric data about observable social reality and generalise the findings to the larger population (Gill & Johnson, 2010).

6.2.2 Post-positivism

The post-positivistic paradigm is one of the earliest shifts away from positivism (Kuhn, 1996). However, there are more similarities than differences in these two paradigms; which are prominent in quantitative research than in qualitative research (Creswell, 2014). The axiological belief within post-positivism requires researchers to pay attention to the ethical principles of beneficence, respect and justice (Methens, 2010). For this reason, it involves selection of the best method to answer a question, as well as the following considerations: Intellectual honesty, suppression of bias, careful data collection, accurate data reporting, and admission of limitations. In consequence, therefore, post-positivist researchers’ value randomized experiments as the most ethical since they aid in establishing cause and effect relationship and are of greater value than other research approaches in showing effectiveness of treatments (Killam, 2013).

The ontology of post-positivism is critical realism. As a result, the belief of researchers with the post-positivistic lens is that reality exists, but cannot be perfectly discovered due to the imperfections of the manner of discovery and of the nature of phenomena itself (Guba & Lincoln, 1994). The epistemology of the post-positivism is based on the belief that an objective reality exists “out there” in the world which can be careful observed and measured. Whilst the post-positivists accept the existence of an
objective external reality, they argue that such reality is imperfectly understandable and measurable due to limited rationality of humans. As such, the main purpose of scientific research for post-positivists is to provide an approximately accurate and objective description of reality in which causes (probably) determine effect or outcome (Ponterotto, 2005). Hence, post-positivists are “neither value-laden nor value-free,” but rather “value aware”, but rather accept that advanced and precise techniques and methods can be used to precisely explain both observable and unobservable phenomena (Healy & Perry, 2000, p. 120). Thus, post-positivists are concerned with researching problems that involve causal relationships. The methodology of the post-positivists, thus, emphasizes quantitative research more than qualitative research (Creswell, 2014). Hence, the post-positivist research paradigm begins with theory, followed by collection and analysis of data to support or refute the theory and revisions to conduct additional test.

6.2.3 Constructivism

Constructivism is the strongest contrasting paradigm to positivism. It is also known as interpretivism or naturalistic. In this research paradigm, the concept of a reality that can be discovered is rejected, but constructivists contend that there are multiple understandable and equally valid realities. The axiology in constructivism is based on the various codes of ethics including the principle of beneficence, respect, and justice. These researchers place much emphasis on authenticity, trustworthiness, fairness, reflexivity, rapport, and reciprocity (Methens, 2010). They also consider that the interpretation of participants’ experiences is trustworthy and can be followed by others. The ontology of constructivism is based on relativism, a belief that reality cannot exist without context, but depends on mental construction of realities that are influenced by experiences and social interactions (Lincoln et al., 2011). They argue that reality is time and context-specific and the
perception of reality depends on the researcher who interpret the world around them based on their individual experiences and participants and the quality of their interaction with participants (Ponterotto, 2005), memories and expectations. This view is a combination of phenomenology – which refers to the way people make sense of the world around them – and interactionism – which refers to how the peoples’ interpretation of their social interactions shapes their own meaning of the world and the way they respond to it (Saunders & Lewis, 2012). Given the epistemological stance in constructivism, the researcher and participants are co-creators of findings. As a result, constructivism is underpinned by subjective epistemology (Saunders et al., 2009; Saunders & Lewis, 2012), where researchers put emphasize on dialogic interactions with participants to gain deeper insights about reality. The methodologies employed in constructivism are based on interactions between the researcher and participants (Guba & Lincoln, 1994). In general, qualitative research approach is use and context specific.

6.2.4 Pragmatism

Pragmatism argues that we can interpret the world and investigate phenomena in different ways, rejecting the idea that the function of the mind is to describe, represent or mirror reality. Instead, pragmatists contend the mind is an instrument for prediction, action, and problem solving. As such, the focus of pragmatism is on the research problem and the multiplicity of approaches or methods that can be used to collect and analyse data to advance understanding and knowledge about the phenomenon (Kelemen & Rumens, 2008). According to Creswell (2009), pragmatism opens the door to diverse worldviews and different assumptions that oftentimes result in multiple approaches of data collection and analysis as in mixed method studies. The underlying factor in pragmatism is to find the best combination of approaches that produce meaningful results that provide greater understanding and answer to the research problem under investigation (Hoshmand, 2003).
Pragmatist, therefore, look at multiple ways of collecting data and analysing data instead of subscribing to a single method and, hence, draws on both qualitative and quantitative methods (Silverman, 1998).

6.3 Philosophical Underpinning of the Study

Given the possibility of positivism, post positivism, constructivism, and pragmatism paradigms, what affect the choice of one research paradigm over another is the researcher’s ontological belief. In this study, the belief is that the effects of EC and IF on SME performance is a static reality that exists independently and can be measured objectively. From the foregoing discussions, this belief is based on realist ontology within positivism. Hence, this study is rooted in the positivistic research paradigm; a research paradigm that is rooted in the search for “the truth” or “fact about reality”.

Furthermore, the positivist research paradigm dictates an objective relationship between the researcher and what is being researched, which by extension, directs how the researcher discovers knowledge about the phenomenon under study, and prescribes the processes and methods the researcher must follow in the systematic discovery of knowledge. Studies conducted with the positivistic lens (e.g. Braimah, 2014; Odoom, 2016; Acheampong et al., 2017) emphasize the use of experiments and hypothesis testing to arrive at deductive inference and verification. Positivists consider quantitative methods to be a superior research approach and the findings are value-free and generalisable.
Table 6.1: Research paradigm

<table>
<thead>
<tr>
<th>RESEARCH PARADIGM</th>
<th>AXIOLOGY (Main ethical values)</th>
<th>ONTOLOGY (What is the nature of reality)</th>
<th>EPISTEMOLOGY (Knowledge and the relationship between the knower and the known)</th>
<th>METHODOLOGY (Approach to systematic inquiry)</th>
<th>EXAMPLES OF STUDIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positivism</td>
<td>Honesty, integrity and trust</td>
<td>Realism: One reality exist that can be discovered.</td>
<td>Dualist and objective. Researcher and researched are independent entities. Results are true, time and context-free and generalizations</td>
<td>Quantitative; verification of research questions or hypotheses; experiments that lead to context-free results.</td>
<td>Braimah 2015; Odoom 2016; Acheampong et al., 2017</td>
</tr>
<tr>
<td>Postpositivism</td>
<td>Respect, beneficence, and justice</td>
<td>Critical Realism: “Truth” exists but it cannot be accurately detected.</td>
<td>Modified dualist and objective – results are likely true. Cause and effect laws. Determination and reductionism</td>
<td>Quantitative; Modified experimental/survey. Empirical observation and theory observation</td>
<td>Neuman, 2014; Mertens, 2010</td>
</tr>
<tr>
<td>Constructivism</td>
<td>Balance viewpoints, raise awareness, develop community rapport</td>
<td>Relativism: Realities are co-constructed</td>
<td>Interactive / transactional and subjective with co-created findings. Understanding, social historical construction.</td>
<td>Qualitative; interpretative and logical with well described context. Ethnographies and theory generation.</td>
<td>Jayasinghe &amp; Ritson, 2012</td>
</tr>
</tbody>
</table>

Source: Guba and Lincoln (1994); Creswell (2014), Killam (2013)
6.4 Research Approach

Research approach, also called strategy of inquiry, provides general and specific directions for procedures regarding data collection, analysis and interpretation. There are three dominant approaches to research, namely: qualitative, quantitative and mixed methods approach (Tillal et al., 2002; Yin, 2009; Denzin & Lincoln, 2011; Creswell, 2014). Qualitative research refers to “an array of interpretive techniques which seek to describe, decode, translate and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomenon in the social world” (Van Maamen, 1983, p. 9). In other words, it is conducted to gain better understanding and deeper insight of a complex occurrence (Yin, 2009). The qualitative research approach does not emphasize data collection and analysis based on large samples. It rather focusses on research subjects to gather deeper information by way of interviews and related techniques. This enables researchers to unravel peculiar information embedded in the experiences of study subjects.

Quantitative research, according to Creswell (2009), “employs strategies of inquiry such as experimental and survey to collect data on predetermined instruments that yield statistical data” (p. 18). Quantitative research, thus, “seeks explanations and predictions to establish, confirm or validate relationships and to develop generalizations that contribute to theory” (Leedy & Ormrod, 2001, p. 102). In other words, the thrust of quantitative research is to collect and analyse numerical data to explain a phenomenon and to generalize the findings across groups of people or subjects. To apply quantitative research approach, literature on the phenomenon under study should exist to enable the researcher formulate hypotheses to measure theoretical constructs (Edmonson & McManus, 2007).
According to Creswell (2014), “mixed methods research is an approach to inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data and using distinct designs that may involve philosophical assumptions and theoretical frameworks” (p. 32). This approach is suitable in situations where the combined effect of both “qualitative and quantitative approaches provides a more complete understanding of a research of a research problem than either approach alone” (p. 32). In so doing, a researcher can combine inductive and deductive research methods in a single study to fully investigate the phenomenon under study (Creswell, 2014). Moreover, by using mixed methods, researchers can substantiate and cross-validate the results and findings from both approaches (Erzberger & Prein, 1997; Onwuegbuzie & Leech, 2005).

Table 6.2 presents summary of the philosophical assumptions, strategies of inquiry, and methods of analysis pertaining to the three approaches.
Table 6.2: Characteristics of Research Approaches

<table>
<thead>
<tr>
<th></th>
<th>Qualitative</th>
<th>Quantitative</th>
<th>Mixed Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophical assumptions</td>
<td>Constructivist or transformative knowledge claims</td>
<td>Positivist/post-positivist knowledge claims</td>
<td>Pragmatic knowledge claims</td>
</tr>
<tr>
<td>Strategies of inquiry and data collection</td>
<td>Phenomenology, grounded theory, ethnography, case study and narrative</td>
<td>Survey and experiment design</td>
<td>Sequential, concurrent and transformative</td>
</tr>
<tr>
<td></td>
<td>Open ended questions, emerging approaches, text or image data</td>
<td>Close-ended questions, predetermined approaches and numeric data</td>
<td>Both open and close-ended questions, merging and pre-determined approaches, text, image or numeric data</td>
</tr>
<tr>
<td>Methods of analysis and interpretation</td>
<td>Inductive analysis to derive concepts, themes and models</td>
<td>Deductive analysis to understand relationships among constructs</td>
<td>Both inductive and deductive analysis</td>
</tr>
<tr>
<td></td>
<td>Less emphasis on statistical analysis - thematic analysis</td>
<td>Emphasis on statistical analysis - descriptive and inferential statistics</td>
<td></td>
</tr>
</tbody>
</table>

Source: Creswell, 2013

As indicated earlier, the positivist paradigm adopted by the study dictates the use of quantitative approach. The quantitative research approach according to Creswell (2009, p. 18), “employs strategies of inquiry such as experimental and survey to collect data on predetermined instruments that yield statistical data”. Quantitative research, thus, “seeks explanations and predictions to establish, confirm or validate relationships and to develop generalizations that contribute to theory” (Leedy & Ormrod, 2001, p. 102). In other words, the thrust of this study is to collect and analyse numerical data pertaining to EC and IFs to explain the performance of SMEs in Ghana and to generalize the findings from the sample to the population. To facilitate this, literature on the phenomenon under study is available.
to enable the formulation of hypotheses to measure the theoretical constructs of interest, namely EC, IFs and SME performance (Edmonson & McManus, 2007). This ability of the quantitative approach to make inferences or generalizations to a larger population based on analysis of data from a representative sample makes it cost effective. The proceeding sections outline the research design, sample design (i.e. population of the study, sample size, sampling technique), survey instrument design, pre-testing, construct measures, data collection procedure and the method of data analysis as well ethical considerations

6.4.1 Research Design

After deciding on the quantitative research approach, the study proceeded to choose a data collection strategy. Two main research designs are available within the quantitative design: experimental design and survey design (Creswell, 2014). The experimental design assesses the effect of a specific treatment on an outcome by comparing the relative scores of different experimental groups (Creswell, 2014). This includes true experiments where subjects are randomly assigned to treatment conditions and quasi-experiments where the assignments are non-randomized (Creswell, 2014). Survey design, on the other hand, provides “a quantitative or numeric description of trends, attitudes or opinions of a population by studying a sample of that population. It includes cross-sectional and longitudinal studies using questionnaires or structured interviews for data collection” (Creswell, 2014, p. 13). The survey design enables generalization of findings from a representative population sample (Fowler, 2013). Hence, the study adopts the survey design to collect data about the constructs of interest.

Survey is the “systematic method for gathering information from (a sample of) entities for the purpose of constructing quantitative descriptors of the attributes of the larger population of which the entities are members” (Groves et al., 2009, p. 2). It enables
data to be collected from a sample and permits statistical generalization of research findings and results (Saunders et al., 2009). Robson (2011) notes, for example, that the survey design overcomes the resource and time constraints of case study design. The survey design can avoid the problem of collecting and managing large datasets which characterize case study design by a tailored data collection based on hypothesized paths. Nonetheless, issues of reliability and validity associated with self-reported questionnaires as well as common method bias could limit the effectiveness of survey design (Podsakoff et al., 2003).

Data for the study was collected in a single stage cross-sectional survey. This enabled data to be collected one-time from the representative sample, ensuring that the same data is collected from all respondents in order to give an unbiased representation of the population of interest (Creswell, 2014). Survey design facilitates data collection about the main constructs in the study as well as control variables from respondents using a questionnaire instrument to test the proposed research framework (Glasow, 2005). The drawbacks of survey design such as common method bias, reliability and validity of the research instrument were carefully mitigated through multiple techniques. The subsequent sections discuss aspects of the research design in detail.

6.4.2 Sample Design

The population of a study may be so small enough to warrant the total inclusion in the sample to study, but in other instances, the population may be large, and so cannot be studied in totality. A complete enumeration of all the elements in the population is seldom appropriate due to the high cost and complexity. In such cases, therefore, a portion of the population called the study sample which represents a small group of objects drawn from an accessible sampling frame (i.e., list of all those within a population) through a definite
procedure is studied (Saunders et al., 2009; Malhotra, 2007). A sample inquiry is clearly less costly, can be conducted more speedily, provides a timely report and often yields greater data quality than complete enumeration (Kalton, 1983). A sample design, therefore, provides a framework or road map that guides the selection of a survey sample and other processes in the survey as well (Lavrakas, 2008). The study adopts the six-step sample design process of “defining the population, identifying the sampling frame, selecting a sampling procedure, determining the sample size, selecting the sample elements, and collecting the data from the designated elements” (Churchil, cited in Braimah, 2014, p. 155).

- **Defining the Population**

Generally, population refers to “the totality of the elements under study, where the elements are the units of analysis. The elements may be persons, but they could alternatively be households, firms, schools or any other unit” (Kalton, 1983, p. 3). Hair et al. (2006) assert that elements are specifically identified as relevant for the study by the research objective. As such, the 99,204 registered (formal) SMEs in Ghana, as at 2016, constitute the target population of the current study. This is summarised in table 6.3 below:

<table>
<thead>
<tr>
<th>Region</th>
<th>Small Sized Firms</th>
<th>Medium Sized Firms</th>
<th>Total SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western</td>
<td>9,407</td>
<td>798</td>
<td>10,205</td>
</tr>
<tr>
<td>Central</td>
<td>7,580</td>
<td>465</td>
<td>8,045</td>
</tr>
<tr>
<td><strong>Greater Accra</strong></td>
<td><strong>23,008</strong></td>
<td><strong>4,184</strong></td>
<td><strong>27,192</strong></td>
</tr>
<tr>
<td>Volta</td>
<td>5,817</td>
<td>314</td>
<td>6,131</td>
</tr>
<tr>
<td>Eastern</td>
<td>8,087</td>
<td>482</td>
<td>8,569</td>
</tr>
<tr>
<td>Ashanti</td>
<td>16,105</td>
<td>1,240</td>
<td>17,345</td>
</tr>
<tr>
<td>Brong Ahafo</td>
<td>7,808</td>
<td>476</td>
<td>8,284</td>
</tr>
<tr>
<td>Northern</td>
<td>7,282</td>
<td>283</td>
<td>7,565</td>
</tr>
<tr>
<td>Upper East</td>
<td>3,358</td>
<td>169</td>
<td>3,527</td>
</tr>
<tr>
<td>Upper West</td>
<td>2,229</td>
<td>112</td>
<td>2,341</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90,681</strong></td>
<td><strong>8,523</strong></td>
<td><strong>99,204</strong></td>
</tr>
</tbody>
</table>

• **Identifying the Prospect List**

The objective of survey researchers is to obtain some type of information about a population of interest through a survey. The prospect list represents the population of interest from which a survey sample is drawn (Lavrakas, 2008; Malhotra, 2007). It consists of all eligible subjects in a target population (Malhotra, 2007) that a researcher can find a way to contact and include in the study. Hence, the list of all the 27,192 SMEs operating in the Greater Accra Region (See table 6.3) constitute the prospect list of this study.

Both the researcher and his university of research are located in the Greater Accra Region. Due to resource constraints the study is restricted to Greater Accra Region of Ghana. The focus of the study on the Greater Accra Region, however, did not bias the sample for two main reasons: Firstly, Greater Accra Region is described as the business hub of Ghana, with businesses of all forms and characteristics (micro, small, medium and large) across all sectors (agriculture, industry and service) of the Ghanaian economy (Buame, 2012). Secondly, Greater Accra Region is a cosmopolitan region, which is believed to have the characteristics of firms in other regions of Ghana (Buame, 2012).

• **Selecting a Sampling Procedure**

Sampling is a suitable alternative to census in situations where appraisal of all elements in the population is impracticable. More so, when time and budgetary constraints restrict census data collection and the results from data collection are needed quickly, sampling is suitable data collection approach (Saunders et al., 2009). Sampling techniques refer to ways of choosing a subset of subjects from the target population to include in the survey sample (Kalton, 1983; Saunders, 2011; Saunders et al., 2009). An appropriate sampling technique is required to choose a representative sample size from the population (Raykov & Marcoulides, 2000; Saunders et al., 2009). Sampling techniques are either probabilistic (i.e. random sampling, systematic sampling, stratified sampling, cluster sampling and
multi-stage sampling) where every element has a fair chance of selection and inclusion in
the survey sample or non-probabilistic (i.e. quota sampling, snowball sampling,
convenience sampling and purposive sampling) where elements are rather selected into a
representative sample for the study (Creswell, 2014; Fowler, 2013; Taherdoost, 2016).

The study used convenience sampling technique to select the respondents for the study. Lavrakas (2008) describes convenience sampling as nonprobability sampling where respondents are sampled from a convenient data source. Elaborating on this, Etikan, Musa and Alkassim (2016) advanced reasons to back the choice of convenience sampling. According to them, convenience sampling is appropriate where the target respondents meet certain practical criteria such as the willingness to participate in the study, availability at a given time, easy accessibility and geographical proximity of the respondents. The study relied on convenience sampling because, during the pilot study in which simple random sampling was used, majority of the SMEs contacted expressed their unwillingness to take part in the study. Some of the firms were not able to be contacted because they have folded up and were no longer in existence. Willingness and availability to participate in the study has become a major consideration and the basis for choosing convenience sampling. In the application of this sampling technique, the potential respondents were contacted, the purpose of the study explained to them, their willingness to participate in the study sought, and those willing to take part in the study were selected to constitute the sample size.

- **Determining the Sample Size**

Generally, the number of elements chosen from which data was collected is the sample size. Lavrakas (2008) distinguishes between the designated and final sample size.
Designated sample size refers to the elements selected for contact and/or data collection while the final sample size denotes the actual elements from which data is gathered. As such, the final sample size which denotes the response rate is often smaller than the designated sample size (Lavrakas, 2008). Moreover, the sample size has the tendency to affect the accuracy of results (Malhotra, 2007) and influence the appropriateness of statistical techniques of analysis (Hair et al., 2010). The three approaches employed to estimate the sample size are discussed below.

According to Hair et al. (2016), in structural equation modelling (SEM), the sample size can be determined from the number of constructs in the research model. A sample size of between 350 and 500 is recommended for a model of 5-7 constructs, and a sample size of above 500 for a model of more than 7 constructs. The current study has a total of 7 constructs – exploration, exploitation, entrepreneurial capability, regulatory IF, facilitatory IF, promotional IF, and SME performance. As such, a sample size of between 350 and 500 enterprises is deemed acceptable.

Similarly, the conventional formula put forward by Snedecor and Cochran (1967, p. 75) to calculate representative samples for large populations was used. Assuming a confidence level of 95% ($z = 1.965$), a variability of 0.5 and a precision of 5%, the equation yielded a sample size of 385, being representative of large populations.

The formula is given as:

$$n_0 = \frac{z^2pq}{e^2}$$

Where:
- $n_0$ – sample size
- $z$ – confidence level
- $p$ – variability in population
- $q = 1 - p$
- $e$ – level of precision
Alternatively, the study relied on published tables (Krejcie & Morgan, 1960; The Research Advisors, 2006; Saunders et al., 2009) to determine the sample size. Table 6.4 below presents sample sizes that would be necessary for a given population. The sample sizes indicated match the number of responses obtained for the study and not the mere number of questionnaires administered to respondents. Hence, a population of about 5,000 would require a representative sample size of around 357 elements. From the foregoing, a sample size of between 350 (minimum) and 500 (maximum) was deemed representative of the target population and appropriate for the study. However, to achieve the final sample size, a designated 550 SMEs were surveyed. The study accounted for incomplete responses, refusal of some enterprise to participate in the study and the delay in returning completed questionnaires.
Table 6.4: Published Sample Size Table

<table>
<thead>
<tr>
<th>$N$</th>
<th>$S$</th>
<th>$N'$</th>
<th>$S'$</th>
<th>$N''$</th>
<th>$S''$</th>
</tr>
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<tbody>
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<td>220</td>
<td>140</td>
<td>1200</td>
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<td>159</td>
<td>1700</td>
<td>313</td>
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<tr>
<td>40</td>
<td>36</td>
<td>280</td>
<td>162</td>
<td>1800</td>
<td>317</td>
</tr>
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<td>320</td>
</tr>
<tr>
<td>50</td>
<td>44</td>
<td>300</td>
<td>169</td>
<td>2000</td>
<td>322</td>
</tr>
<tr>
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<tr>
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<td>52</td>
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</tr>
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<td>80</td>
<td>66</td>
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<td>201</td>
<td>3500</td>
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<td>4000</td>
<td>351</td>
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<tr>
<td>120</td>
<td>92</td>
<td>600</td>
<td>234</td>
<td>8000</td>
<td>367</td>
</tr>
<tr>
<td>130</td>
<td>97</td>
<td>650</td>
<td>242</td>
<td>9000</td>
<td>368</td>
</tr>
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<tr>
<td>150</td>
<td>108</td>
<td>750</td>
<td>254</td>
<td>15000</td>
<td>375</td>
</tr>
<tr>
<td>160</td>
<td>113</td>
<td>800</td>
<td>260</td>
<td>20000</td>
<td>377</td>
</tr>
<tr>
<td>170</td>
<td>118</td>
<td>850</td>
<td>265</td>
<td>30000</td>
<td>379</td>
</tr>
<tr>
<td>180</td>
<td>123</td>
<td>900</td>
<td>269</td>
<td>40000</td>
<td>380</td>
</tr>
<tr>
<td>190</td>
<td>127</td>
<td>950</td>
<td>274</td>
<td>50000</td>
<td>381</td>
</tr>
<tr>
<td>200</td>
<td>132</td>
<td>1000</td>
<td>278</td>
<td>75000</td>
<td>382</td>
</tr>
<tr>
<td>210</td>
<td>136</td>
<td>1100</td>
<td>285</td>
<td>100000</td>
<td>384</td>
</tr>
</tbody>
</table>

Note—$N$ is population size.
$S$ is sample size.


- **Selecting the Sample Elements**

The study sample comprised all registered SMEs in the Greater Accra region which is a vibrant economic centre in Ghana and home to most business establishments in the country (GSS, 2016). The study, therefore, selected registered (formal) SMEs in the Greater Accra region to collect data to examine the proposed research model. Although the respondents cut across different operational areas, they are typical and representative of SMEs in Ghana. The convenience sampling technique (Creswell, 2014; Taherdoost, 2016) was used to select and collect data from SMEs listed in the Integrated Business Establishment Survey (IBES) database. The offices of the SMEs were called to book appointments with
the owners or senior managers. The SMEs which agreed to participate were contacted and the questionnaire administered accordingly. In all, 550 SMEs were easily accessible and readily available to willingly provide information for the research.

- **Data Collection**

As indicated earlier, a sample size representative of the population of registered SMEs in Ghana is between 350 to 500 enterprises. In order to attain this number of complete responses, a designated sample size of 550 SMEs was drawn from the prospect list of all registered SMEs in the Greater Accra Region of Ghana, zoned into sixteen (16) districts (see Table 6.5).

To extensively administer questionnaires to SMEs in all the districts in the Greater Accra Region, five (5) Research Assistants (RAs) were engaged to assist in the distribution of questionnaires to and retrieval of same from sampled SMEs. Each RA was assigned three (3) districts, given a prospect list of the assigned districts and introduced to sampled SMEs via telephone calls. They distributed paper-based questionnaires to the identified SMEs. Apart from very few respondents who completed and submitted their questionnaires immediately, majority of the respondents submitted the completed questionnaire between 2 to 4 weeks.

The questionnaires were administered to owner/managers of SMEs who were deemed more knowledgeable about the constructs of interest and have the potential to be most informative to ensure that the data is representative at the organizational level (Curwin & Slater, 2008; Huck & Muller, 2012). A total of eight (8) weeks were designated for data collection and at the end 512 completed responses were returned, representing a response rate of 93.09%. However, 488 were used in the data analysis after cleaning the data.
Table 6.5: Distribution of SMEs by Districts in the Greater Accra Region

<table>
<thead>
<tr>
<th>No</th>
<th>District</th>
<th>No of SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ga South Municipal</td>
<td>1,402</td>
</tr>
<tr>
<td>2</td>
<td>Ga West Municipal</td>
<td>1,053</td>
</tr>
<tr>
<td>3</td>
<td>Ga East Municipal</td>
<td>870</td>
</tr>
<tr>
<td>4</td>
<td>Accra Metro</td>
<td>14,230</td>
</tr>
<tr>
<td>5</td>
<td>Adenta Municipal</td>
<td>911</td>
</tr>
<tr>
<td>6</td>
<td>Ledzkokuku Krowor</td>
<td>1,023</td>
</tr>
<tr>
<td>7</td>
<td>Ashaiman Municipal</td>
<td>714</td>
</tr>
<tr>
<td>8</td>
<td>Tema Metropolis</td>
<td>3,344</td>
</tr>
<tr>
<td>9</td>
<td>Shai Osudoku</td>
<td>86</td>
</tr>
<tr>
<td>10</td>
<td>Ada East</td>
<td>283</td>
</tr>
<tr>
<td>11</td>
<td>Ga Central</td>
<td>536</td>
</tr>
<tr>
<td>12</td>
<td>La Dadekopoh</td>
<td>969</td>
</tr>
<tr>
<td>13</td>
<td>La Nkwantang Madina</td>
<td>653</td>
</tr>
<tr>
<td>14</td>
<td>Kpone Katamanso</td>
<td>555</td>
</tr>
<tr>
<td>15</td>
<td>Ningo Prampram</td>
<td>430</td>
</tr>
<tr>
<td>16</td>
<td>Ada West</td>
<td>134</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>27,192</strong></td>
</tr>
</tbody>
</table>


6.4.3 Instrument Design

Consistent with the positivistic philosophical stance, the quantitative approach and survey design were deemed appropriate data collection approaches to address the objectives of the study. Questionnaires were self-administered to gather data in this research as they have been reported to be useful because of their inherent confidentiality which encourages candid and truthful responses among respondents (Creswell & Clark, 2007). This method allows for consistency, as the same set of questions are posed to all respondents in the survey and enables a more efficient way of data collection from a larger sample (Sekaran & Bougie, 2009; Dillman, 2007; Fink, 2003). The question structure was designed such that respondents were provided with a question sequence that was easy to understand. For example, considering suggestions for proper survey design (Trochim & Donnelly, 2007), opening questions were made easy to answer in order to put respondents at ease.
Transition statements were also used each time the survey moved to a different topic. This type of design does not only reduce the incidence of non-response, but also leads to more accurate responses (Dillman, 2007).

The survey instrument used in the collection of data consisted of four parts. The purpose of the study and participant consent were explained in a preceding preamble. Part A captured general information about respondents, such as position in the enterprise, the sector within which the enterprise operates, age of enterprise and the staff strength. Part B captured respondents’ perception of statements about the enterprise’s opportunity exploration and opportunity exploitation behaviour using 5-point Likert scale of 1 (Strongly Disagree) to 5 (Strongly Agree). Part C captured respondents’ perception of statements about the extent to which institutional factors (i.e. regulatory, facilitatory and promotional) have enabled or constrained the entrepreneurial activity of the enterprise on a five item Likert scale of 1 (Greatly Burden) to 5 (Greatly Benefit). Part D captured respondents’ perception of the extent of the enterprise’s three-year performance relative to competitors on a 5-point Likert scale of 1 (Very Low Extent) to 5 (Very High Extent). This section describes each construct and its measures as well as the sources.

6.4.4 Pre-testing and Survey Instrument Revision
According to Brun et al. (2014), it is important to pre-test a questionnaire prior to administering it to study respondents. This is necessary to help identify and correct any potential problems with measures developed for a specific study or adopted from existing scales. It is imperative, though, to use respondents who are representative of the target sample. First, the research questionnaire was perused by the thesis supervisors for content validity, whose inputs and comments were integrated into the final instrument. The survey instrument was pilot-tested with responses from 30 SMEs. It was noticed that most
respondents in the pilot-test were not representative of the target respondents. They included tellers, secretaries and account officers who may not be the most informative respondents to provide data on the constructs of interest. This was corrected in the main administration of the questionnaire where five (5) research assistants were tasked categorically to only elicit responses from owner managers and senior management members. Again, the initial performance measures did not meet the statistical construct reliability and so was revised to include other relevant items such as productivity, growth in market share, growth in sales. These modifications were undertaken to arrive at the final version of the questionnaire administered to the target sample (see Appendix C).

6.4.5 Constructs and Measures

The measures for this study were adapted from prior literature specifically for the study. All concepts were modelled as reflective constructs and measured using multi-item scales. The constructs and the items with which they are measured are shown in the questionnaire in Appendix C.

- **Entrepreneurial Capability**

As stated earlier, the study conceptualizes entrepreneurial capability (EC) in SMEs as the enterprising human ability that seeks to generate value, through continuous process of exploration and exploitation of entrepreneurial opportunities to create or expand business activity. The study measured thus, EC as a second-order reflective-formative construct comprising exploration capability and exploitative capability as underlying first-order constructs. The exploration dimension of Entrepreneurial Capability (EC) is characterized by identifying or creating opportunities through alertness, prior knowledge, social networks and active information search. The construct was measured by adapting the scale of Kuckertz et al. (2017). The exploitation dimension of Entrepreneurial Capability (EC)
is the SME’s ability to strategically mobilize resources – financial, human and technological – in pursuit of such opportunities. The construct was measured by adapting the scale of (Kammerlander, Burger, Fust & Fueglistaller, 2015). The constructs were modelled as reflective constructs and measured on a 5-point response scale ranging from 1 “strongly disagree” to 5 “strongly agree”.

- **Institutional Factors**

As has been mentioned above, in the Ghanaian context, governmental agencies and authorities as well as private institutions whose activities affect the operations of SMEs are mainly categorized into regulatory, promotional and facilitatory institutions. These regulatory institutions ensure that firms provide the goods and services promised and that their behaviours, in general, conform to established standards in the country and/or abroad (Kuada & Sorensen, 2000). Promotional institutions are created to purposely provide incentives and facilities that motivate the growth of SMEs (Kuada & Sorensen, 2000). These Government policies, such as trade liberalization policies, financial and non-financial assistance and infrastructural facilities (e.g. roads, transport systems, water and power supply) are aimed at encouraging entrepreneurial activity and supporting SME growth and sustainability. Facilitatory institutional factors directly or indirectly enhance the operational capabilities of firms through activities such as training and capacity building, business advisory and other forms of support, including access to loans and financial services to support their operations (Kuada & Sorensen, 2000). They engage in several activities that facilitate the operation of SMEs to ensure growth and sustainability in the sector. All three institutional factors – regulatory, promotional and facilitatory – were measured on scales developed for the study based on the works of Kuada & Sorensen.
(2000) and Adomako et al. (2014). The constructs were modelled as reflective constructs with a 5-point response scale ranging from “strongly disagree” to “strongly agree”.

- **SME Performance**

  The performance objectives of a firm are mainly financial, particularly in the context of SMEs, which are often off-shoot of new ventures set up primarily to exploit an identified business opportunity. SME performance, thus, measures the ability of the enterprise to meet the objectives of market share, growth in sales, growth in profits, ROI, ROA, productivity and customer satisfaction. The SME performance measures were constituted based on the works of Adomako, Danso & Domoah (2016) and Murphy, Trailer & Hill (1996). SME performance was modelled as a reflective construct focusing on overall performance and respondents rated their relative performance on a 5-point response scale ranging from “very low extent” to “very large extent” based on an earlier work by Dawes (1999), Wall et al. (2004) and Kim (2006). A summary of the construct measures and their sources are indicated in Table 6.5 below.
Table 6.6: Summary of Constructs and Sources

<table>
<thead>
<tr>
<th>Nature of Variable</th>
<th>Construct</th>
<th>Number of Items</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent</td>
<td>Entrepreneurial Capability</td>
<td>9 Items</td>
<td>Kuckertz, Kollmann, Krell &amp; Stockmann (2017)</td>
</tr>
<tr>
<td></td>
<td>Exploration</td>
<td>7 items</td>
<td>Kammerlander, Burger, Fust &amp; Fuglistaller (2014); March (1991)</td>
</tr>
<tr>
<td></td>
<td>Exploitation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderators</td>
<td>Regulatory Institutional Factor</td>
<td>5 Items</td>
<td>Kuada &amp; Sorensen (2000); Adomako et al. (2014)</td>
</tr>
<tr>
<td></td>
<td>Promotional Institutional Factor</td>
<td>4 Items</td>
<td>Kuada &amp; Sorensen (2000); Adomako et al. (2014)</td>
</tr>
<tr>
<td></td>
<td>Facilitatory Institutional Factor</td>
<td>6 Items</td>
<td>Kuada &amp; Sorensen (2000); Adomako et al. (2014)</td>
</tr>
</tbody>
</table>

6.4.6 Method of Data Analysis

As indicated in table 6.1 above, the quantitative research approach emphasizes the use of statistical techniques to establish and understand relationships among constructs either through descriptive or inferential statistics. These, together, constitute deductive analysis which enables the researcher to estimate parameters about a sample and draw inferences about the population (Trochim, 2000; Trochim & Donnelly, 2007). The study conducted descriptive statistics using the Statistical Package for Social Sciences (SPSS) and inferential statistics using SmartPLS software.
Data collected from respondents was coded, cleaned and prepared for analysis. First, data was analysed in the Statistical Package for Social Sciences (SPSS) version 25. This included checks for missing values, descriptive statistics and test of assumptions for multivariate analysis. The resultant data was then transferred into SmartPLS version 3 (Ringle, Wender & Becker, 2015) for multivariate data analysis to enable inferential statistics. Partial least squares approach to structural equation modelling (PLS-SEM) was deemed the appropriate method for data analysis due to the following reasons: (i) data met criteria for multivariate data analysis, (ii) the ability of PLS-SEM to model latent concepts as multi-item measurements constructs and (iii) the suitability of PLS for predictive models of small or large samples and maximizes explained variance of multiple interrelated concepts (Chin, 1998; Hair et al., 2016).

The structural equation modelling technique has two dominant categories: the composite-based approach and the partial least squares approach (Hair et al., 2016). Hair et al (2010) advise that the researcher’s decision to use either of the approaches should be guided by the strengths and weaknesses of each approach. The primary focus of PLS-SEM in applying structural modelling is to predict and explain target variables. PLS-SEM is prediction-oriented using beta coefficients and coefficients of determination to explain the predictive ability of exogenous constructs on endogenous constructs. As a result, the choice of PLS-SEM is favoured in instances where the study is premised on “theory development and explanation of variance (prediction of the constructs)” (Hair et al., 2016, p. 41). PLS-SEM is based on pre-specific relationships between constructs in a model and their respective measures (Mateos-Aparicio, 2011). According to Hair et al. (2016), PLS-SEM offers the benefit of “high efficiency on parameter estimation, which is manifested in the method’s greater statistical power than that of CB-SEM” (p. 54).
Nonetheless, PLS-SEM is not without limitations. For example, the technique is not applicable in cases where the relationship among constructs is circular. As a result, PLS-SEM is not suitable when the study is premised on testing and confirming theory (Hair et al., 2016). In recent years, however, the applicability of PLS-SEM is becoming increasingly important due to the inclusion of goodness-of-fit measures (Bentler & Huang, 2014). The Standardized Root Mean Square Residual (SRMR) developed by Henseler et al. (2015) has also widened the acceptability and applicability of PLS-SEM. This method is gradually being introduced into newer versions of PLS-SEM software. While there is statistical variance between CB-SEM and PLS-SEM, the strengths of one approach makes up for the shortfalls of the other (Roldan & Sanchez-Franco, 2012; Hair et al., 2016).

As indicated earlier, the PLS-SEM approach, using SmartPLS (Ringle et al., 2015), was used to analyse the proposed research model. PLS-SEM is the most suitable statistical technique for this study due to its ability to maximize explained variance, that is, prediction of constructs (Hair, Black, Babin & Anderson, 2009). This strength of PLS is consistent with the objectives of this study to examine the extent to which entrepreneurial capability and institutional factors predict and explain the performance of SMEs in Ghana. More so, PLS-SEM is generally suitable for studies consisting of small samples and robust in the face of missing values and the usual violations of statistical assumptions for modelling latent variables. Nevertheless, the recommendations of Hair et al. (2009) in preparing data for multivariate analysis were carefully followed. The choice of PLS-SEM is further grounded in the following assumptions:

(i) the data meets the assumptions of multivariate data analysis (Hair et al., 2016; Lings & Greenley, 2010);

(ii) PLS-SEM is suitable for examining the predictive ability of entrepreneurial capability on SME performance and the moderating effect of institutional factors
on this relationship. For five to seven constructs, as is the case of the current model, a sample of 550 is ideal (Hair et al., 2009);

(iii) The key concepts under study (i.e. exploration, exploitation, entrepreneurial capability, regulatory institutional factor, promotional institutional factor, facilitatory institutional factor and SME performance) are modelled as reflective constructs and measured on multi-item scales (Hair et al., 2016). Entrepreneurial capability was modelled as a higher order reflective-formative construct comprising exploration and exploitation as underlying lower level first-order constructs. PLS is suitable for measuring and handling latent variables.

(iv) Theory and research on EC, IFs, and SME performance in Ghana is limited. More importantly, they are often descriptive and lack a rigorous data analysis. PLS-SEM provides a statistically rigorous framework to analyse and answer the research questions pertaining to EC, IFs, and SME performance posed in this study. More so, the study does not seek to confirm theory, but rather test the predictability of EC on SME performance and ascertain the moderating effect of institutional factors to understand the persistent poor performance and failure of SMEs in Ghana.

These make PLS-SEM the most suitable analytical technique. PLS-SEM analysis consists of two steps (Hair et al., 2016). In step one, the measurement model is validated. Since the constructs in the research model are modelled as reflective, tests of composite reliability, convergent validity and discriminant validity are conducted. In step two, the structural model is examined to determine the strength and significance of the interrelationships among the constructs in the model. Structural model efficiency such as path coefficient (β), predictive accuracy or explanatory powers of exogenous constructs (R²) and effect sizes (f²) are examined (Hair et al., 2016; Chin, 1998). Standard bootstrap procedure (5000
sub-samples) available in PLS provides a measure of the degree of significance of interrelationships.

6.4.7 Reliability and Validity

Reliability refers to the extent to which the data collection instrument will produce consistent results if replicated in another study (Saunders, 2012). Hence, reliability assesses the instrument’s consistency over a variety of different conditions. Composite Reliability and Cronbach’s Alpha (α) tests examine construct reliability. Chin (1998) recommends that an instrument indicates acceptable reliability if the results of reliability tests exceed 0.70 threshold. The constructs are measured on multi-scale items; hence, it is important to ascertain how well these multiple indicators measure a construct, termed convergent validity. Average Variance extracted values above 0.50 indicates acceptable convergent validity of items measuring the construct (Chin, 1998; Hair et al., 2016). Discriminant Validity assesses how well indicators measure their respective constructs or whether the items selected to measure a variable do so (Chin, 1998; Hair et al., 2016). Discriminant validity of the constructs was assessed using both the Fornell and Larcker (1981) criterion and Heterotrait-Monotrait (HTMT) criterion (Henseler et al., 2015). With the Fornell-Larcker criterion, measures indicate acceptable discriminant validity if constructs share a higher variance with items that measure the construct than with items in other constructs.

6.5 Ethical Consideration

Ethical issues are the concerns and dilemmas arising in relation to the proper way to execute research to ensure the researcher does not create any harmful conditions for the subjects (humans) involved in the study (Barnard, Schurink, & De Beer, 2008). Neuman
(2005) defines ethics as what is or is not legal to do, or what moral research procedures involve. This study was aware of the huge responsibility to be sensitive and respectful of the study respondents and their basic human rights. As such, approval from the University of Ghana Ethics Committee (see Appendix B) was sought prior to administering the data collection instrument. The study adhered to the under-listed ethical considerations to ensure that the research was conducted honestly and that respect for the respondents superseded the interest of the researcher.

- Informing the respondents about the purpose and objective of the study
- Seeking the consent of respondents and making it known that their participation is voluntary and that should anyone for some reasons want to withdraw from participating, the individual has the right to voluntarily do so at any time
- The privacy of the participants is respected and as such any information they provide or share will be treated as confidential.

6.6 Summary

The philosophical beliefs, research approach, research design, method of data analysis and ethical considerations have been discussed in this chapter. The chapter discussed the choice of the positivist philosophical stance to underpin the study and how this leads to the quantitative method and survey design. Given the overall objective, quantitative research approach was deemed the most suitable to guide the collection and analysis of data. Quantitative research also aims to develop, test, refine and explain the conceptual model proposed in the earlier chapters. The structural equations modelling was used to analyse the data due to its robustness and explanatory power. Results of analysis are presented in the next chapter.
CHAPTER SEVEN

PRESENTATION OF RESULTS

7.0 Introduction

This chapter presents the results of this study. The first section presents the description of data including the sample characteristics and descriptive statistics of the variables used in the proposed framework performed in SPSS. This is then followed by results from the two-stage PLS-SEM analysis. This comprises results of the measurement model validation, results of the structural model assessment and results of the moderation analysis in SmartPLS 3 software. This section reports the results of the hypothesis tests to explain the performance of SMEs in the context of entrepreneurial capability and the institutional environment in Ghana. The chapter concludes with a summary.

7.1 Description of Data

This section details the sample characteristics and presents the descriptive statistics of the constructs used in the model.

7.1.1 Sample characteristics

The participants were high ranking executives or owner managers of the enterprises surveyed. Hence, they were deemed knowledgeable to provide adequate and accurate information pertaining to the exploration and exploitation activities, influence of institutional factors and the performance relative to other sector competitors. As shown in Table 7.1 below, 80.2% of the SMEs surveyed were in the service sector, 16.3% were in the industry sector and only 3.5% were in the agriculture sector. More so, most of the SMEs have operated for above three years but below 30 years (44.7% operating for 4-10 years and 47.1% operating 11-30 years). Typical of SMEs, most surveyed enterprises have
about 6-30 staff (72.4%), and the least having between 31-100 staff (27.6%). Table 7.1 below provides details.

Table 7.1: Sample Characteristics

<table>
<thead>
<tr>
<th>Position of Respondent</th>
<th>Freq.</th>
<th>Percent</th>
<th>Sector</th>
<th>Freq.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO/Owner</td>
<td>207</td>
<td>42.4%</td>
<td>Agriculture</td>
<td>17</td>
<td>3.5%</td>
</tr>
<tr>
<td>Managing Director</td>
<td>19</td>
<td>3.9%</td>
<td>Industry</td>
<td>79</td>
<td>16.3%</td>
</tr>
<tr>
<td>Director</td>
<td>47</td>
<td>9.6%</td>
<td>Service</td>
<td>390</td>
<td>80.2%</td>
</tr>
<tr>
<td>Director</td>
<td>47</td>
<td>9.6%</td>
<td>Service</td>
<td>390</td>
<td>80.2%</td>
</tr>
<tr>
<td>Manager</td>
<td>204</td>
<td>41.8%</td>
<td></td>
<td>486</td>
<td>100.0%</td>
</tr>
<tr>
<td>Administrator</td>
<td>11</td>
<td>2.3%</td>
<td></td>
<td>488</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>488</td>
<td>100.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7.1.2 Descriptive statistics of variables

The data was subjected to descriptive analysis before any further data validation and multivariate analysis (Pallant, 2011). As noted by Odoom (2016), these descriptive statistics include measures of central tendency such as the mean, standard deviation, range of scores, skewness and kurtosis. The descriptive statistics of the variables used in the survey instrument are shown in Table 7.2 below. The table depicts the respondents’ extent of agreement or disagreement to statements contained in the administered survey instrument and show the performance of each measurement indicator or item in the survey instrument from the respondents’ view point. A total of 41 items representing the
components of the six main constructs in the conceptual framework for the study are shown in Table 7.2 below.

Table 7.2: Descriptive Statistics of Latent Variables

<table>
<thead>
<tr>
<th>Scale Item</th>
<th>Variable Code</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Excess Kurtosis</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exploration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Our enterprise is always alert to business opportunities</td>
<td>Explore_1</td>
<td>4.08</td>
<td>0.96</td>
<td>1.15</td>
<td>-1.16</td>
</tr>
<tr>
<td>2. Our enterprise evaluates potential markets of business opportunities</td>
<td>Explore_2</td>
<td>3.83</td>
<td>1.04</td>
<td>-0.01</td>
<td>-0.76</td>
</tr>
<tr>
<td>3. Our enterprise systematically searches for business opportunities</td>
<td>Explore_3</td>
<td>3.82</td>
<td>1.03</td>
<td>-0.09</td>
<td>-0.73</td>
</tr>
<tr>
<td>4. Our enterprise looks for information about new ideas on products or services</td>
<td>Explore_4</td>
<td>3.93</td>
<td>1.02</td>
<td>0.84</td>
<td>-1.12</td>
</tr>
<tr>
<td>5. Our enterprise regularly assesses the sustainability of new initiatives and business opportunities</td>
<td>Explore_5</td>
<td>3.73</td>
<td>1.15</td>
<td>-0.00</td>
<td>-0.86</td>
</tr>
<tr>
<td>6. Our enterprise actively explores ways to introduce new products and services that will meet customer needs</td>
<td>Explore_6</td>
<td>3.86</td>
<td>1.06</td>
<td>0.55</td>
<td>-1.00</td>
</tr>
<tr>
<td>7. Our enterprise builds social networks to access profitable opportunities</td>
<td>Explore_7</td>
<td>3.94</td>
<td>1.03</td>
<td>0.46</td>
<td>-0.96</td>
</tr>
<tr>
<td>8. Our enterprise creates new products and services based on prior knowledge of the sector</td>
<td>Explore_8</td>
<td>3.79</td>
<td>1.08</td>
<td>0.26</td>
<td>-0.88</td>
</tr>
<tr>
<td>9. Our enterprise evaluates the economic viability of new initiatives to see if they are highly profitable</td>
<td>Explore_9</td>
<td>3.64</td>
<td>1.23</td>
<td>0.08</td>
<td>-0.89</td>
</tr>
<tr>
<td><strong>Exploitation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. We expand our operations to pursue new and innovative opportunities we have perceived</td>
<td>Exploit_1</td>
<td>3.72</td>
<td>1.30</td>
<td>-0.57</td>
<td>-0.80</td>
</tr>
<tr>
<td>11. Our enterprise effectively mobilizes financial resources to seize on opportunities</td>
<td>Exploit_2</td>
<td>3.62</td>
<td>1.19</td>
<td>-0.35</td>
<td>-0.72</td>
</tr>
<tr>
<td>12. Our enterprise has developed a new market based on perceived opportunities</td>
<td>Exploit_3</td>
<td>3.45</td>
<td>1.20</td>
<td>-0.45</td>
<td>-0.61</td>
</tr>
<tr>
<td>13. We have transformed perceived opportunities into new products/services even when not all proved profitable</td>
<td>Exploit_4</td>
<td>3.52</td>
<td>1.24</td>
<td>-0.61</td>
<td>-0.59</td>
</tr>
<tr>
<td>14. Our enterprise puts together human resources teams to seize opportunities</td>
<td>Exploit_5</td>
<td>3.55</td>
<td>1.23</td>
<td>-0.64</td>
<td>-0.56</td>
</tr>
<tr>
<td>15. Our enterprise leverages technology resources to act on opportunities</td>
<td>Exploit_6</td>
<td>3.61</td>
<td>1.23</td>
<td>-0.53</td>
<td>-0.67</td>
</tr>
<tr>
<td>16. We proactively introduce new products and services to respond to market changes</td>
<td>Exploit_7</td>
<td>3.44</td>
<td>1.34</td>
<td>-0.76</td>
<td>-0.55</td>
</tr>
</tbody>
</table>
### Regulatory Institutional Factor

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Regulation Factor</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Correlation</th>
<th>Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Business registration processes</td>
<td>Regulat_1</td>
<td>3.83</td>
<td>1.24</td>
<td>-0.505</td>
<td>-0.779</td>
</tr>
<tr>
<td>18</td>
<td>Legal and operational requirements for SMEs</td>
<td>Regulat_2</td>
<td>3.81</td>
<td>1.40</td>
<td>-1.527</td>
<td>-0.039</td>
</tr>
<tr>
<td>19</td>
<td>Regulatory and law enforcement agencies</td>
<td>Regulat_3</td>
<td>3.90</td>
<td>1.38</td>
<td>-1.522</td>
<td>-0.130</td>
</tr>
<tr>
<td>20</td>
<td>National policy framework and economic indicators (e.g. interest rates, inflation etc.)</td>
<td>Regulat_4</td>
<td>4.48</td>
<td>1.18</td>
<td>0.123</td>
<td>-1.288</td>
</tr>
<tr>
<td>21</td>
<td>Administrative and governance structures (e.g. MMDAs, public agencies etc.)</td>
<td>Regulat_5</td>
<td>3.76</td>
<td>1.43</td>
<td>-1.557</td>
<td>-0.096</td>
</tr>
<tr>
<td>22</td>
<td>Labour and employment regulation</td>
<td>Regulat_6</td>
<td>3.49</td>
<td>1.28</td>
<td>-1.12</td>
<td>0.324</td>
</tr>
<tr>
<td>23</td>
<td>Financial regulation (e.g. transfer of funds, initial deposits, minimum capitalization etc.)</td>
<td>Regulat_7</td>
<td>3.89</td>
<td>1.45</td>
<td>-1.366</td>
<td>-0.435</td>
</tr>
<tr>
<td>24</td>
<td>Tax policy (e.g. permits, tax stamps etc.)</td>
<td>Regulat_8</td>
<td>4.38</td>
<td>1.00</td>
<td>2.504</td>
<td>-1.760</td>
</tr>
</tbody>
</table>

### Promotional Institutional Factor

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Promotion Factor</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Correlation</th>
<th>Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>Access to credit and financial capital</td>
<td>Promot_1</td>
<td>3.48</td>
<td>1.09</td>
<td>-0.47</td>
<td>-0.46</td>
</tr>
<tr>
<td>26</td>
<td>Government intervention and subsidies</td>
<td>Promot_2</td>
<td>3.30</td>
<td>1.05</td>
<td>-0.42</td>
<td>-0.21</td>
</tr>
<tr>
<td>27</td>
<td>Foreign Direct Investments (FDIs)</td>
<td>Promot_3</td>
<td>3.03</td>
<td>0.98</td>
<td>0.42</td>
<td>-0.30</td>
</tr>
<tr>
<td>28</td>
<td>Technical assistance and technology development</td>
<td>Promot_4</td>
<td>3.56</td>
<td>1.04</td>
<td>-0.03</td>
<td>-0.53</td>
</tr>
<tr>
<td>29</td>
<td>Provision of utilities and structural support (e.g. transport system, road networks, etc.)</td>
<td>Promot_5</td>
<td>3.44</td>
<td>1.10</td>
<td>-0.24</td>
<td>-0.51</td>
</tr>
<tr>
<td>30</td>
<td>Strategic partnerships with stakeholders</td>
<td>Promot_6</td>
<td>3.74</td>
<td>1.10</td>
<td>0.07</td>
<td>-0.78</td>
</tr>
</tbody>
</table>

### Facilitatory Institutional Factor

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Facilitation Factor</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Correlation</th>
<th>Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Business advisory and administrative support</td>
<td>Facil_1</td>
<td>3.25</td>
<td>0.98</td>
<td>0.10</td>
<td>-0.35</td>
</tr>
<tr>
<td>32</td>
<td>Technical training and assistance</td>
<td>Facil_2</td>
<td>3.38</td>
<td>0.99</td>
<td>0.19</td>
<td>-0.36</td>
</tr>
<tr>
<td>33</td>
<td>Managerial capacity building</td>
<td>Facil_3</td>
<td>3.23</td>
<td>1.00</td>
<td>-0.01</td>
<td>-0.21</td>
</tr>
<tr>
<td>34</td>
<td>Other non-financial incentives</td>
<td>Facil_4</td>
<td>3.65</td>
<td>1.15</td>
<td>-0.36</td>
<td>-0.56</td>
</tr>
</tbody>
</table>

### SME Performance

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Performance Factor</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Correlation</th>
<th>Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>Productivity</td>
<td>Perfm_1</td>
<td>3.95</td>
<td>0.74</td>
<td>1.50</td>
<td>-0.88</td>
</tr>
<tr>
<td>36</td>
<td>Market Share Growth</td>
<td>Perfm_2</td>
<td>3.41</td>
<td>0.96</td>
<td>0.33</td>
<td>-0.64</td>
</tr>
<tr>
<td>37</td>
<td>Profit Growth</td>
<td>Perfm_3</td>
<td>3.68</td>
<td>0.82</td>
<td>-0.26</td>
<td>-0.29</td>
</tr>
<tr>
<td>38</td>
<td>Return on Assets</td>
<td>Perfm_4</td>
<td>3.64</td>
<td>0.86</td>
<td>-0.21</td>
<td>-0.21</td>
</tr>
<tr>
<td>39</td>
<td>Return on Sales</td>
<td>Perfm_5</td>
<td>3.72</td>
<td>0.83</td>
<td>-0.54</td>
<td>-0.17</td>
</tr>
<tr>
<td>40</td>
<td>Growth in Sales</td>
<td>Perfm_6</td>
<td>3.82</td>
<td>0.82</td>
<td>-0.50</td>
<td>-0.25</td>
</tr>
<tr>
<td>41</td>
<td>Customer Satisfaction</td>
<td>Perfm_7</td>
<td>4.21</td>
<td>0.76</td>
<td>-0.06</td>
<td>-0.67</td>
</tr>
</tbody>
</table>
The charts below provide graphical representations of the descriptive statistics of the variables used in the study. In Figure 7.1 below, opportunity exploration recorded a mean of 3.85, greater than 3.56 recorded for opportunity exploitation. This is simply an indication that there is more exploration than exploitation in the SMEs surveyed.

![Exploration and Exploitation in SMEs](image)

**Figure 7.1: Exploration and Exploitation in SMEs**

A further probe revealed the mean scores for the various indicators or activities of both opportunity exploration and exploitation. As indicated in Figure 7.2 below, there are two aspects to opportunity exploration: idea generation and idea/opportunity assessment. In the idea generation phase, alertness (4.08), social networks (3.94) and information gathering (3.93) came to the fore as the dominant activities for idea generation or opportunity identification in SMEs. Customer needs (3.86) and market potential (3.83) dominated the assessment criteria of perceived opportunities in SMEs. Furthermore, as depicted in Figure 7.3 below, financial capital (3.62) and technological know-how (3.61) were the dominant resources in SMEs for exploitation. The entrepreneurial mindset or strategies that guide exploitation activities in SMEs are innovation (3.72), risk taking, (3.52). SMEs were found to lack proactiveness (3.45) and competitive aggressiveness (3.44) in their exploitation of opportunities.
The institutional environment was assessed based on three functions of institutions: regulatory, promotional and facilitatory functions. Of these, the results show that regulatory factors are very high (3.94). Apparently, promotional (3.43) and facilitatory
(3.38) institutional factors are rather low in Ghana (see Figure 7.4). As shown in Figure 7.5, the aspects of the regulation function of institutions that exert the most pressure to constrain entrepreneurial activity are the national economic environment (4.48) and the tax policy regime (4.38). As depicted in Figure 7.6, strategic partnership with stakeholders (3.74) and technology development and assistance (3.56) are the most enabling promotional activities in Ghana. Non-financial incentives (3.65) and technical training (3.38) form the basis of facilitatory functions for SMEs in Ghana (see Figure 7.7).

Figure 7.4: Extent of Institutional Factors
### Figure 7.5: The Regulatory Institutional Function

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax policy (e.g. permits, tax stamps etc.)</td>
<td>4.38</td>
</tr>
<tr>
<td>Financial regulation (e.g. transfer of funds etc.)</td>
<td>3.89</td>
</tr>
<tr>
<td>Labor and employment regulation</td>
<td>3.49</td>
</tr>
<tr>
<td>Administrative and governance structures</td>
<td>3.76</td>
</tr>
<tr>
<td>National economic environment</td>
<td>4.48</td>
</tr>
<tr>
<td>Regulatory and law enforcement agencies</td>
<td>3.90</td>
</tr>
<tr>
<td>Legal/operational requirements</td>
<td>3.81</td>
</tr>
<tr>
<td>Business registration</td>
<td>3.83</td>
</tr>
</tbody>
</table>

### Figure 7.6: The Promotional Institutional Factor

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic partnerships</td>
<td>3.74</td>
</tr>
<tr>
<td>Utilities and structural support</td>
<td>3.44</td>
</tr>
<tr>
<td>Technical/technology assistance</td>
<td>3.56</td>
</tr>
<tr>
<td>Foreign Direct Investments</td>
<td>3.03</td>
</tr>
<tr>
<td>Government subsidies</td>
<td>3.30</td>
</tr>
<tr>
<td>Access to credit</td>
<td>3.48</td>
</tr>
</tbody>
</table>
The performance of SMEs was measured by seven indicators. Out of these, the most dominant performance indicator in SMEs is customer satisfaction (4.21) and the least is growth in market share (3.41). Detailed results of the performance of SMEs are shown in Figure 7.8 below.

Figure 7.8: SME performance Indicators
7.2 Results of Multivariate Analysis

The research model was analysed using the PLS-SEM approach. The approach follows a two-step analysis:

1. validating the measurement model with reliability and validity tests, and
2. assessing the structural model with path coefficients, explanatory powers and significance levels.

Assessing the reliability and validity of reflective and formative constructs in structural equation modelling differ (Chin, 1998; Hair et al., 2016). The proposed model or framework in this study does not contain any formative constructs. All concepts in the framework were modelled as reflective constructs (see DeVellis, 2003; Hair et al., 2009). For this reason, composite reliability and Cronbach’s alpha tests were used to assess reliability. Composite reliability and Cronbach’s alpha values of above 0.70 are considered acceptable indication of construct reliability. In addition, items should have high factor loadings exceeding a threshold of 0.60 on the respective constructs to exhibit acceptable reliability (Chin, 1998; Hair et al., 2016). Moreover, Average Variance Extracted (AVE) values of the constructs depict their convergent validity. AVE values of above 0.50 are considered acceptable indication of convergent validity (Hair et al., 2016; Henseler et al., 2015). Furthermore, to meet the conditions of discriminant validity, the following are recommended:

I. each construct should have acceptable estimates for discriminant validity according to the Fornell and Larcker (1981) criterion.

II. The square root of the AVE for each factor (diagonal values) should be higher than the pair-wise correlation between factors (off-diagonal values) (Fornell & Larcker, 1981; Chin, 1998; Chin, 2010).
(III) Constructs do not have issues of discriminant validity when the HTMT estimates are within and not exceed the HTMT$_{1.0}$ criterion (Hair et al., 2016; Henseler et al., 2015).

The structural model is assessed once the measurement model indicates acceptable reliability and validity. The efficiency of the structural model is assessed and interpreted using various techniques including path coefficient ($\beta$), predictive accuracy or explanatory powers of exogenous constructs ($R^2$) and effect sizes ($f^2$) (Hair et al., 2016; Chin, 1998). In fact, structural equation modelling is often considered simultaneous multiple regressions on multiple interrelated constructs. As such, the coefficient of determination or explanatory power ($R^2$) is important to explain the effect of the exogenous constructs on the respective endogenous constructs. Coefficient of determination values of 0.35 or 35% are considered large explanation of the variance in an endogenous construct (Chin, 1998). The degree of the impact or effect of an exogenous construct on the endogenous construct is denoted by the effect size. The effect of an exogenous construct is small, medium or large if the effect size value is 0.02, 0.15 or 0.35, respectively (Cohen, 1998; Hair et al., 2016). The standard bootstrapping procedure with recommended 5,000 sub-sample (Hair et al., 2016) available in PLS-SEM software tests the significance of the hypothesized interrelated paths in the model. The resultant beta weight – standard error, standard deviation, t-statistic and p values – are interpreted to indicate whether a relationship is significant or not. For a two tailed test, a relationship is significant at the 0.05 level when the t-statistic is above 1.96, at the 0.01 level, when the t-statistic is above 2.58, and at the 0.001 level for t-statistics values above 3.28 (Hair et al., 2016).
7.2.1 PLS measurement model validation

The SmartPLS software was employed in the analysis of the proposed research model (Ringle, Wende & Becker, 2015). The concepts of interest – opportunity exploration, opportunity exploitation, entrepreneurial capability, regulatory institutional function, promotional institutional function and facilitatory institutional function, and SME performance – were modelled as multi-item reflective constructs. For this reason, the data must first meet conditions of data validity and reliability as outlined by Chin (1998). Composite reliability denotes the ability of the measurement instrument or scale to produce results which are consistent if replicated in another study (Saunders et al., 2012). Hence, reliability assesses the instrument’s consistency over a variety of different conditions. Composite Reliability (CR) and Cronbach’s Alpha (α) tests were used to assess reliability.

Chin (1998) argues that an instrument indicates acceptable reliability if the Composite Reliability (CR) and Cronbach’s Alpha (α) are greater than 0.70. Convergent validity tests the extent to which two or more indicators measure the same variable/construct. For example, Exploitation was measured with seven items or indicators. Hence, it is important to test whether all these indicators measure the concept of “exploration” well or not. Chin (1998) recommends that a construct exhibits acceptable validity if the Average Variance Extracted value is above 0.50. Table 7.3 below shows the results for the test for reliability and validity of the constructs used in the research model. The Cronbach’s Alpha values range from 0.84 to 0.97 and Composite Reliability (CR) values range from 0.88 to 0.97, well above the recommended threshold of 0.70. This implies that the items used to measure the constructs show high reliability and would produce consistent results if replicated on another sample. Similarly, the AVE values range from 0.50 to 0.80, showing acceptable convergent validity of measures since they are well above the recommended 0.50 value.
Table 7.3: Reliability and Validity Tests

<table>
<thead>
<tr>
<th></th>
<th>Cronbach's Alpha</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Capability</td>
<td>0.97</td>
<td>0.97</td>
<td>0.68</td>
</tr>
<tr>
<td>Exploitation</td>
<td>0.96</td>
<td>0.97</td>
<td>0.80</td>
</tr>
<tr>
<td>Exploration</td>
<td>0.95</td>
<td>0.96</td>
<td>0.71</td>
</tr>
<tr>
<td>Facilitatory</td>
<td>0.90</td>
<td>0.93</td>
<td>0.77</td>
</tr>
<tr>
<td>Promotional</td>
<td>0.90</td>
<td>0.92</td>
<td>0.66</td>
</tr>
<tr>
<td>Regulatory</td>
<td>0.84</td>
<td>0.88</td>
<td>0.50</td>
</tr>
<tr>
<td>SME Performance</td>
<td>0.92</td>
<td>0.93</td>
<td>0.67</td>
</tr>
</tbody>
</table>

Discriminant validity tests whether the items selected to measure a variable do so. To assess discriminant validity, the Heterotrait-Monotrait (HTMT) (Henseler et al., 2015) criterion together with the Fornell and Larcker (1981) criterion were examined. With the Fornell-Larcker criterion, measures indicated acceptable discriminant validity because constructs share a higher variance with items that measure the construct than with items in other constructs. The square root of the AVE for each factor (diagonal values) was found to be higher than the pair-wise correlation between factors (off-diagonal values) (see Table 7.4). The constructs were found to be well within the strict HTMT$^{1.0}$ criterion and, hence, did not exhibit any discriminant validity issues (see Table 7.5). The cross loadings also revealed that items load higher on their respective constructs (i.e. above 0.60) than on another construct (see Table 7.6). No item was deleted because they all showed high loadings of above 0.60.
Table 7.4: Discriminant Validity: Fornell and Larcker

<table>
<thead>
<tr>
<th></th>
<th>Exploitation</th>
<th>Exploration</th>
<th>Facilitatory</th>
<th>Promotional</th>
<th>Regulatory</th>
<th>SME Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploitation</td>
<td>0.896</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploration</td>
<td>0.817</td>
<td>0.844</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitatory</td>
<td>0.467</td>
<td>0.448</td>
<td>0.878</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotional</td>
<td>0.415</td>
<td>0.346</td>
<td>0.607</td>
<td>0.814</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulatory</td>
<td>0.488</td>
<td>0.432</td>
<td>0.459</td>
<td>0.505</td>
<td>0.685</td>
<td></td>
</tr>
<tr>
<td>SME Performance</td>
<td>0.460</td>
<td>0.449</td>
<td>0.518</td>
<td>0.494</td>
<td>0.376</td>
<td>0.815</td>
</tr>
</tbody>
</table>

*Note: Values on the diagonal are the square roots of the average variance extracted (AVE) for each factor.*

Table 7.5: Discriminant Validity: Heterotrait-Monotrait Criterion

<table>
<thead>
<tr>
<th></th>
<th>Exploitation</th>
<th>Exploration</th>
<th>Facilitatory</th>
<th>Promotional</th>
<th>Regulatory</th>
<th>SME Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploitation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploration</td>
<td>0.855</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitatory</td>
<td>0.504</td>
<td>0.484</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotional</td>
<td>0.446</td>
<td>0.370</td>
<td>0.673</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulatory</td>
<td>0.532</td>
<td>0.473</td>
<td>0.514</td>
<td>0.573</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SME Performance</td>
<td>0.466</td>
<td>0.458</td>
<td>0.554</td>
<td>0.527</td>
<td>0.394</td>
<td></td>
</tr>
</tbody>
</table>
### Table 7.6: Cross Loadings

<table>
<thead>
<tr>
<th></th>
<th>Exploitation</th>
<th>Exploration</th>
<th>Facilitatory</th>
<th>Promotional</th>
<th>Regulatory</th>
<th>SME Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploit_1</td>
<td><strong>0.928</strong></td>
<td>0.769</td>
<td>0.408</td>
<td>0.343</td>
<td>0.456</td>
<td>0.402</td>
</tr>
<tr>
<td>Exploit_2</td>
<td><strong>0.902</strong></td>
<td>0.754</td>
<td>0.392</td>
<td>0.349</td>
<td>0.410</td>
<td>0.402</td>
</tr>
<tr>
<td>Exploit_3</td>
<td><strong>0.910</strong></td>
<td>0.715</td>
<td>0.406</td>
<td>0.372</td>
<td>0.420</td>
<td>0.398</td>
</tr>
<tr>
<td>Exploit_4</td>
<td><strong>0.908</strong></td>
<td>0.745</td>
<td>0.413</td>
<td>0.356</td>
<td>0.446</td>
<td>0.418</td>
</tr>
<tr>
<td>Exploit_5</td>
<td><strong>0.900</strong></td>
<td>0.744</td>
<td>0.453</td>
<td>0.406</td>
<td>0.473</td>
<td>0.417</td>
</tr>
<tr>
<td>Exploit_6</td>
<td><strong>0.919</strong></td>
<td>0.746</td>
<td>0.442</td>
<td>0.393</td>
<td>0.435</td>
<td>0.437</td>
</tr>
<tr>
<td>Exploit_7</td>
<td><strong>0.795</strong></td>
<td>0.642</td>
<td>0.416</td>
<td>0.389</td>
<td>0.422</td>
<td>0.415</td>
</tr>
<tr>
<td>Explore_1</td>
<td>0.603</td>
<td><strong>0.788</strong></td>
<td>0.317</td>
<td>0.273</td>
<td>0.367</td>
<td>0.400</td>
</tr>
<tr>
<td>Explore_2</td>
<td>0.633</td>
<td><strong>0.832</strong></td>
<td>0.388</td>
<td>0.286</td>
<td>0.386</td>
<td>0.387</td>
</tr>
<tr>
<td>Explore_3</td>
<td>0.689</td>
<td><strong>0.865</strong></td>
<td>0.398</td>
<td>0.316</td>
<td>0.392</td>
<td>0.415</td>
</tr>
<tr>
<td>Explore_4</td>
<td>0.705</td>
<td><strong>0.870</strong></td>
<td>0.372</td>
<td>0.256</td>
<td>0.341</td>
<td>0.350</td>
</tr>
<tr>
<td>Explore_5</td>
<td>0.716</td>
<td><strong>0.859</strong></td>
<td>0.392</td>
<td>0.290</td>
<td>0.350</td>
<td>0.377</td>
</tr>
<tr>
<td>Explore_6</td>
<td>0.691</td>
<td><strong>0.839</strong></td>
<td>0.370</td>
<td>0.279</td>
<td>0.319</td>
<td>0.361</td>
</tr>
<tr>
<td>Explore_7</td>
<td>0.695</td>
<td><strong>0.862</strong></td>
<td>0.357</td>
<td>0.260</td>
<td>0.358</td>
<td>0.384</td>
</tr>
<tr>
<td>Explore_8</td>
<td>0.745</td>
<td><strong>0.874</strong></td>
<td>0.390</td>
<td>0.315</td>
<td>0.360</td>
<td>0.416</td>
</tr>
<tr>
<td>Explore_9</td>
<td>0.719</td>
<td><strong>0.802</strong></td>
<td>0.415</td>
<td>0.352</td>
<td>0.409</td>
<td>0.319</td>
</tr>
<tr>
<td>Facil_1</td>
<td>0.474</td>
<td>0.460</td>
<td><strong>0.886</strong></td>
<td>0.499</td>
<td>0.441</td>
<td>0.458</td>
</tr>
<tr>
<td>Facil_2</td>
<td>0.305</td>
<td>0.265</td>
<td><strong>0.848</strong></td>
<td>0.585</td>
<td>0.359</td>
<td>0.444</td>
</tr>
<tr>
<td>Facil_3</td>
<td>0.397</td>
<td>0.396</td>
<td><strong>0.917</strong></td>
<td>0.518</td>
<td>0.372</td>
<td>0.483</td>
</tr>
<tr>
<td>Facil_4</td>
<td>0.465</td>
<td>0.451</td>
<td><strong>0.860</strong></td>
<td>0.534</td>
<td>0.444</td>
<td>0.434</td>
</tr>
<tr>
<td>Promo_1</td>
<td>0.336</td>
<td>0.244</td>
<td>0.492</td>
<td><strong>0.804</strong></td>
<td>0.419</td>
<td>0.351</td>
</tr>
<tr>
<td>Promo_2</td>
<td>0.273</td>
<td>0.217</td>
<td>0.421</td>
<td><strong>0.808</strong></td>
<td>0.376</td>
<td>0.372</td>
</tr>
<tr>
<td>Promo_3</td>
<td>0.367</td>
<td>0.287</td>
<td>0.464</td>
<td><strong>0.752</strong></td>
<td>0.358</td>
<td>0.374</td>
</tr>
<tr>
<td>Promo_4</td>
<td>0.360</td>
<td>0.296</td>
<td>0.588</td>
<td><strong>0.848</strong></td>
<td>0.414</td>
<td>0.429</td>
</tr>
<tr>
<td>Promo_5</td>
<td>0.282</td>
<td>0.255</td>
<td>0.458</td>
<td><strong>0.830</strong></td>
<td>0.396</td>
<td>0.393</td>
</tr>
<tr>
<td>Promo_6</td>
<td>0.396</td>
<td>0.367</td>
<td>0.526</td>
<td><strong>0.838</strong></td>
<td>0.487</td>
<td>0.473</td>
</tr>
<tr>
<td>Regul_1</td>
<td>0.493</td>
<td>0.458</td>
<td>0.375</td>
<td>0.404</td>
<td><strong>0.709</strong></td>
<td>0.234</td>
</tr>
</tbody>
</table>
7.2.2 Test of Control Variables

As indicated earlier, three variables – sector (operationalised as the business area in which the SME operates), age (operationalised as the years the SME has operated) and size (operationalised as the number of workers engaged by the SME) – were controlled in the analysis. Therefore, prior to testing the structural model, the extent to which these control variables (i.e. sector, age and size) of the surveyed SMEs predict the endogenous construct or dependent variable, SME performance, was assessed. The results show that the effects – age ($\beta = 0.063$, p value = 0.144, n.s.), sector ($\beta = -0.020$, p value = 0.663, n.s.) and size ($\beta = 0.040$, p value = 0.362, n.s.) – were found to be non-significant. Hence, sector, age and size of SMEs whose effect was controlled in the study, indeed, were not significant predictors of SME performance. See Table 7.7 below.
Table 7.7: Control Variables

<table>
<thead>
<tr>
<th></th>
<th>Path Coefficient</th>
<th>T Statistics</th>
<th>P Values</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age -&gt; SME Performance</td>
<td>0.063</td>
<td>1.461</td>
<td>0.144</td>
<td>No</td>
</tr>
<tr>
<td>Sector -&gt; SME Performance</td>
<td>-0.020</td>
<td>0.436</td>
<td>0.663</td>
<td>No</td>
</tr>
<tr>
<td>Size -&gt; SME Performance</td>
<td>0.040</td>
<td>0.793</td>
<td>0.362</td>
<td>No</td>
</tr>
</tbody>
</table>

7.2.3 PLS structural model assessment

In all, two models were run: the main or original and moderation models. The linkages between exploration and exploitation and the collective impact of the second order reflective-formative construct (entrepreneurial capability) with exploration and exploitation as its first order constructs on SME Performance were examined in the main model. The moderation model examined the direct and moderating effects of the regulatory, promotional and facilitatory institutional factors on EC and SME performance. For each, the standard bootstrapping procedure in SmartPLS followed by the PLS algorithm was used to assess hypothesized path significance and the strength of the hypothesized paths denoted by path coefficients (β) and explanatory powers (R²) of endogenous variables, respectively.

Results from Table 7.8 and Figure 7.9 provide support for hypothesis H1 and H2. In H1, the study posited from the process view of entrepreneurship that exploration is positively associated with exploitation as dimensions of EC. This is supported with the highly positive and significant path coefficient between opportunity exploration and exploitation (β = 0.818, p ≤ 0.001). Further, exploration (β=0.562, p≤0.01) and exploitation (β=0.487, p≤0.01) were found to be high predictors of the second-order
construct entrepreneurial capability and, hence, provided further support for the assertion that exploration and exploitation are dimensions of EC. The study posited in H2 that *entrepreneurial capability is positively associated with SME performance*. The results indicate positive and significant path strength between EC and SME performance ($\beta=0.493$, $p \leq 0.01$) to support H2. The study also found that EC alone explains about 24% ($R^2 = 0.243$) of the variance for SME performance. Hence, EC moderately accounts for the performance of SMEs surveyed (see Cohen, 1998; Hair et al., 2016).

<table>
<thead>
<tr>
<th>Table 7.8: Main Model Path Significance</th>
<th>Path Coefficient</th>
<th>T Statistics</th>
<th>P Values</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploration -&gt; Entrepreneurial Capability</td>
<td>0.562</td>
<td>77.428</td>
<td>0.000</td>
<td>Yes</td>
</tr>
<tr>
<td>Exploitation -&gt; Entrepreneurial Capability</td>
<td>0.492</td>
<td>15.553</td>
<td>0.000</td>
<td>Yes</td>
</tr>
<tr>
<td>Exploration -&gt; Exploitation</td>
<td>0.818</td>
<td>48.257</td>
<td>0.000</td>
<td>Yes</td>
</tr>
<tr>
<td>Entrepreneurial Capability -&gt; SME Performance</td>
<td>0.492</td>
<td>64.445</td>
<td>0.000</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Figure 7.9: Main Model Results
7.2.4 Direct and Moderation effects of Institutional Factors

In the second model, the institutional factors (regulatory, promotional and facilitatory factors) were introduced and their direct and interaction effects on EC and SME performance were tested. Again, the bootstrap procedure was run to test path significance (see Table 7.10). This was followed by the PLS algorithm to determine the path coefficient (β), explanatory powers (R²) and effect sizes (f²) of selected exogenous constructs (see Figure 7.10).

In H3a, the study posited that regulatory institutional factor constrains the relationship between EC and SME performance. The results indicate that regulatory institutional factor (β = -0.117, p value = 0.040) has a significantly negative moderating effect on the relationship between EC and SME performance. The equation β(EC-SME performance) + β(regulatory moderating effect) is used to ascertain the moderating effect of the institutional factor on the relationship (see Hair et al., 2016). Since the regulatory moderating effect is negative, the relationship between EC and SME performance is weakened by 0.117 (i.e. 0.271 + (-0.117) = 0.154). The resultant effect is evidence that indeed regulatory institutional factor constrains the relationship between EC and SME performance relationship, though not significantly.

Similarly, the study hypothesized in H3b that promotional institutional factor strengthens the relationship between EC and SME performance. The results show that the promotional environment (β = 0.121, p value = 0.031, p ≤ 0.05) has a significant positive moderating effect on the relationship between EC and SME performance. Hence, promotional institutional factor strengthens (i.e. 0.271 + 0.121 = 0.323) the attainment of relative superior SME performance through EC as hypothesized. Thus, the results of the moderation analysis provide support for hypothesis H3b.
In H3c, the study hypothesized that *facilitatory institutional factor strengthens the relationship between EC and SME performance*. The outcome of the moderation analysis reveals that the facilitatory institutional factor (β=0.052, p value=0.299, *n.s.*) has a positive but weak and non-significant influence on the EC-SME performance relationship in SMEs in Ghana. This moderating effect was statistically non-significant, hence, does not provide support for H3c.

Interestingly, as direct exogenous constructs, the institutional factors, promotional (β = 0.298, p value = 0.000, p ≤ 0.001) and facilitatory (β = 0.2359 p value = 0.000, p ≤ 0.01) were found to be moderately positive and statistically significant predictors of SME performance. Regulatory (β = -0.098, p value = 0.082, *n.s.*) on the other hand, exhibited a rather negative, weak and statistically non-significant impact on SME performance. This implies that, by themselves, both promotional and facilitatory institutional factors are significant predictors of SME performance while regulatory function constrains SME performance in the Ghanaian context. More so, the results reveal that the introduction of institutional factors into the model reduced the impact of EC to (β = 0.271, p value = 0.000, p ≤ 0.01), but increased the overall explanatory powers of the model (R² = 0.388). This shows that, together, EC and Institutional Factors moderately explain 39% variation in the performance of SMEs in Ghana. This also shows that, collectively, institutional factors contribute to the performance of SMEs in the external environment. See Table 7.9 below for a summary of the moderation analysis results.

Summary of the overall model results and hypotheses are shown in Figure 7.11 and Table 7.10 below respective.
Table 7.9: Summary of Moderation Model Path Significance

| Path                      | Coefficient | T Statistics (|O/STDEV|) | P Values | Significance |
|---------------------------|-------------|-----------------|---------|-----------|--------------|
| Regulatory -> SME Performance | -0.098      | 1.741           | 0.082   | No        |
| Promotional -> SME Performance | 0.298       | 5.548           | 0.000   | Yes       |
| Facilitatory -> SME Performance | 0.259       | 4.463           | 0.000   | Yes       |
| Regulatory Moderating Effect -> SME Performance | -0.117      | 2.055           | 0.040   | Yes       |
| Promotional Moderating Effect -> SME Performance | 0.121       | 2.160           | 0.031   | Yes       |
| Facilitatory Moderating Effect -> SME Performance | 0.052       | 1.038           | 0.299   | No        |
Figure 7.10: Moderation Analysis Results
Table 7.10: Summary of Hypotheses

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path Coefficient</th>
<th>R Square</th>
<th>P Value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Opportunity exploration is positively associated with exploitation</td>
<td>0.818</td>
<td>0.670</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H2: Entrepreneurial Capability is positively associated with SME</td>
<td>0.492</td>
<td>0.242</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>Performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H3a: Regulatory institutional factor weakens the relationship between</td>
<td>-0.117</td>
<td>0.388</td>
<td>0.040</td>
<td>Supported</td>
</tr>
<tr>
<td>EC and SME performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H3b: Promotional institutional factor strengthens the relationship</td>
<td>0.121</td>
<td>0.388</td>
<td>0.031</td>
<td>Supported</td>
</tr>
<tr>
<td>between EC and SME performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H3c: Facilitatory institutional factor strengthen the relationship</td>
<td>0.052</td>
<td>0.388</td>
<td>0.299</td>
<td>Not supported</td>
</tr>
<tr>
<td>between EC and SME performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 7.11: Overall Model Results

Path Significance

**p ≤ 0.05

*p ≤ 0.1

H1 = 0.818***

H2 = 0.271***

H3a = -0.117**

H3b = 0.121**

H3c = 0.052

Entrepreneurial Capability

R² = 1.000

SME Performance

R² = 0.388

Exploration

Exploitation

Exploration

Exploitation

Exploration

Exploitation

Entrepreneurial Capability

R² = 1.000

SME Performance

R² = 0.388

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7.3 Chapter Summary

The analysis and results of data collected from 488 SMEs in a cross-sectional survey have been presented in this chapter. Preparation, examination and coding of the data for analysis as well as the choice of multivariate analysis – the partial least squares structural equations modelling approach – have been detailed. The two-stage approach in PLS-SEM analysis has been outlined with recommendations for examining construct reliability, convergent and discriminant validity of the reflective constructs in the model. This was followed by structural model assessment where the standard bootstrapping procedure tested hypothesized path significance and the PLS algorithm to test the strength of hypothesized paths and explanatory powers of the exogenous constructs on SME performance. Institutional factors were introduced into the model to test the extent to which they impact the relationship between EC and SME performance. Overall, the results show support for four (4) out of five (5) hypotheses. The results of the empirical analysis have confirmed that, as hypothesized, there exists a causal relationship between exploration and exploitation and these two constructs form the second order construct, entrepreneurial capability which significantly positively impacts SME performance.

In terms of moderation and interaction effects, it was found that indeed the institutional environment interacts with EC to influence SME performance. The relationship between EC and SME is constrained significantly by the regulatory institutional factor but enabled by the promotional and facilitatory institutional factors. However, these interaction effects were statistically significant for promotional but non-significant for facilitatory institutional factor. As direct predictors, regulatory factor was found to be detrimental to SME performance, whilst both promotional and facilitatory institutional factors were found to be positive predictors of SME performance. The findings from the analysis are discussed in the subsequent chapter.
CHAPTER EIGHT
DISCUSSION OF FINDINGS

8.0 Introduction

The results of the analysis were presented in the previous chapter. The data comprised responses gathered from 488 SMEs in the Greater Accra region of Ghana in a self-administered questionnaire instrument. The data was prepared and analysed using the two-stage structural equations modelling (SEM) approach to test the hypothesized relationships in the research model. This chapter discusses the outcomes of the data analysis vis-à-vis other studies reported in the extant literature. The chapter is divided into two main sections. The first section presents a summary of the study; and the second section discusses the findings in view of the three research questions posed in the introductory part of this study. The chapter then concludes with a summary.

8.1 Summary of Key Findings

The purpose of this study was to develop a theory-driven and practice-oriented model to explain and predict the performance of Small and Medium-sized Enterprises (SMEs) in Ghana from the entrepreneurial process perspective. The extant literature acknowledges that in both developed and developing countries, SMEs have emerged as dynamic enterprises critical for accelerated growth, development and economic stability. Given this significant potential of SMEs, successive Ghanaian governments have sought to regulate, promote, facilitate and support SMEs through institutional framework and policy interventions. However, the rate at which SMEs continue to fail casts doubt on the effectiveness of the internal capability and usefulness of the institutional mechanisms in the business environment. Entrepreneurial capability has emerged in the extant literature as a prerequisite for effective entrepreneurial activity. It is also considered as a driving
force of creativity and innovation for organizational success. From the resource-based theory, dynamic capability theory and institutional theory, the study developed a conceptual framework to examine the impact of entrepreneurial capability and the effect of institutional factors on the performance of SMEs in Ghana.

The study argues that entrepreneurial capability (EC) enables SMEs to continuously explore and exploit opportunities that create or expand business activity to generate value and attain organizational success in today’s dynamic institutional environments and competitive markets. As a result, it was essential to examine and validate the dimensions or constituents of EC and determine their collective impact on SME performance in Ghana. Recognizing further that SMEs are embedded in the institutional environment, it was essential to investigate the extent to which the regulatory, promotional and facilitatory functions of institutions enable or constrain entrepreneurial activity and impact the performance of SMEs in Ghana. The insight obtained from the empirical results of the impact of this process perspective of entrepreneurial capability and the effects of the institutional factors on SME performance is important to holistically address the persistent failure of SMEs in Ghana. A summary of the key findings is listed below.

1. The study reveals that SMEs explore more than they exploit new opportunities in the business environment in Ghana. SMEs exploit only a fraction of perceived opportunities, but rather continuously exploit existing opportunities. But this results in entrepreneurial burnout and exit. Hence, the persistent failure of SMEs in Ghana could be attributed to their persistent exploitation of existing opportunities.

2. Another contributing factor to the high failure rate of SMEs in Ghana is their lack of critical evaluation of perceived opportunities prior to exploiting such opportunities. SMEs fail to assess the viability and sustainability of opportunities using appropriate
heuristics. Rather, the penchant to be innovative and risk-inclined drives SMEs to exploit opportunities that fail to generate the desired value for organizational success. In other words, SMEs invest in products and services that do not yield the expected value or competitive advantage in the dynamic institutional environment toward SME performance.

3. The study found that opportunity exploration and exploitation are process-based dimensions of EC, which leads to SME performance. However, it found also that the overall performance of most SMEs in Ghana was not based on EC. In other words, SMEs seem to lack the ability to engage in the continuous process of opportunity exploration and subsequent exploitation to generate value. Perhaps the persistent failure of SMEs only demonstrates that the organizational strategies adopted by SMEs are not generating desired outcomes in the dynamic institutional environment. SMEs should rather develop and utilize EC, defined earlier as the enterprising ability to generate value through continuous process of exploration and exploitation of entrepreneurial opportunities to create or expand business activity to improve organizational performance and success.

4. Institutional factors influence entrepreneurial activity and ultimately impact SME performance in Ghana. The regulatory function exerts a constraining effect on SMEs as a result of harsh tax policies and unfavourable national economic indicators, etc. Promotional and facilitatory institutional functions significantly provide an enabling environment for SME performance through technical assistance, international strategic partnerships and other non-financial incentives.

5. Further, regulatory and promotional institutional factors significantly moderate the relationship between EC and SME performance. Whereas the regulatory institutional
factor weakens the relationship between EC and SME performance, the promotional institutional factor enhances the relationship between EC and SME performance. Moreover, the facilitatory institutional factor also enhances the relationship between EC and SME performance, but not significantly. This is evident that the functions of institutional agencies in Ghana are not properly coordinated and targeted towards SME performance. However, inadequate resources, bureaucratic administrative processes and lack of managerial capability might inhibit the activities of institutional agencies.

6. The study demonstrates the importance of the interplay between EC and IFs on SME performance in Ghana. EC within a favourable institutional environment improves the performance of SMEs. It enables SMEs to continuously sense, shape and subsequently seize opportunities in the dynamic institutional environment. Yet, SMEs are not able to generate desired value from their exploration and exploitation activities due to the current regulatory regime. Moreover, SMEs are unable to create and expand business activity because the support received from institutional agencies is not sufficient and consistent.

8.2 Discussion of Findings

This study was occasioned by the neglect of the process perspective of investigating the persistent failure of SMEs. According to Ropega (2011), business failure is a process which could occur at any stage, be it the opportunity exploration stage or the opportunity exploitation stage. Even though Arthur and Busenitz’s (2006) conceptualisation of EC suggests that there is a theoretical link between opportunity exploration and exploitation, there appears to be limited empirical investigation of the phenomenon. It is established also that entrepreneurial activities are embedded in an institutional environment (North,
2005), which has the tendency to constrain and/or enable entrepreneurial activities and ultimately performance outcomes. However, a unified framework that explains the interactions between EC and institutional factors and their resultant impact on SME performance outcomes is limited in extant literature. This study seeks to investigate the process link between opportunity exploration and exploitation as dimensions of EC and examine the aggregate impact of the interaction between EC and IFs on SME performance, in a theory-driven and process-oriented framework. The results presented in the earlier chapter are discussed and elaborated in the subsequent sections vis-à-vis previous studies reported in the extant literature in the light of the research questions.

8.2.1 The Dimensions of Entrepreneurial Capability

This section discusses the dimensions of EC and the causal relationship between opportunity exploration and exploitation. As hypothesized in H1, the study found that the relationship between opportunity exploration and opportunity exploitation was positive, high and significant ($\beta = 0.818$, $p \leq 0.001$). This finding reveals that indeed, exploration leads to exploitation, and together they are appropriate measures and dimensions of entrepreneurial capability. This demonstrates that although opportunity exploration is important, it is only a first step in the entrepreneurial process. That is, the entrepreneurial process is not complete if exploitation does not follow exploration, hence the presence of a causal relationship between opportunity exploration and exploitation is important. EC, thus, enhances the ability of SMEs to continually engage in this process of opportunity exploration and exploitation. This affirms earlier findings that entrepreneurship stems from opportunity recognition and subsequent pursuit of such opportunities for profitable gains (Schumpeter, 1934; Alvarez & Busenitz, 2006; Abdelgawad et al., 2013). This exploration and exploitation aspects of EC have long been recognized by entrepreneurship
scholars. For example, Alvarez and Busenitz (2001, p. 199) defined EC as “the ability to identify opportunities and develop the resource base to pursue the opportunity”.

This supports earlier findings of some scholars (Bingham et al., 2007; Gavetti, Levinthal & Rivkin, 2005) that EC differs from ambidexterity in that EC induces change in the external environment (Zahra & George, 2002) and helps enterprises develop new capabilities, rather than just upgrade existing ones and enables enterprises to venture into new areas of business activity (Zahra, 2008) to sustain and improve performance.

Opportunity exploration comprises two sets of activities: idea generation or opportunity identification and idea/opportunity assessment. The idea generation/opportunity identification aspect of opportunity exploration denotes the ability of SMEs to employ alertness, active search, information gathering, social network and prior knowledge to discover and/or create opportunities in the business environment. The findings suggest that (see Figure 7.2) SMEs surveyed exhibit high levels of entrepreneurial alertness, followed by use of social networks and information gathering to discover opportunities in the business environment. Although not very prominent, the SMEs also engage in active search – systematic search and research into new products and services – to create opportunities worth exploiting for economic gains. The use of prior knowledge was the least of the opportunity exploration activities undertaken by the SMEs surveyed. This empirical finding points to the fact that SMEs are highly alert and rely on social networks and other information sources to discover entrepreneurial opportunities and generate business ideas. These perceived opportunities are then assessed for their ability to meet customer needs, generate economic value, satisfy potential markets and yield sustainable performance outcomes. It was also evident that SMEs mainly focused predominantly on customer needs and market potential of the perceived opportunities.

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They did not seem to actively engage in assessment of the sustainability and economic viability of the perceived opportunities.

Not all the perceived opportunities in the exploration stage are exploited. Shane and Venkataraman (2000) stress that for opportunity to be worth exploiting, it must have a large demand and potential for high profits, require low capital and opportunity cost, attract moderate competition and a relatively low technology lifecycle. As such, some opportunities at the exploration stage may not qualify for the exploitation stage. Kuckertz et al. (2015, p. 82) define opportunity exploitation as “developing a product or service based on a perceived entrepreneurial opportunity by acquiring the appropriate human resources, gathering financial resources and setting up the organization”. This is like Choi and Shepherd’s (2004) assertion that opportunity exploitation is intended to act on perceived opportunities to gain economic returns and comprise investment and commitment of resources to build an effective business system to support the operations of an enterprise. Opportunity exploitation was modelled to comprise two aspects – resource and strategic entrepreneurial orientation.

Resources required to exploit opportunities include financial capital, human capital and technological know-how. The study found that SMEs have a rather high ability to mobilize financial capital to pursue perceived opportunities. Moreover, technological know-how seemed a very important factor in exploitation opportunities. However, the ability to effectively constitute human resource teams to exploit opportunities is low.

Strategies comprise the entrepreneurial orientation (Ibrahim & Mas’ud, 2016) that guides the pursuit of business opportunities by SMEs. These include innovation, risk taking, proactiveness, and competitive aggressiveness (Guo & Bielefeld, 2014). The study found that the most dominant strategic intent of SMEs in exploiting perceived
opportunities is innovation and risk taking at the expense of proactiveness and competitive aggressiveness required for effective opportunity exploitation.

The study indicated further that opportunity exploration explains 69% of the variation in opportunity exploitation. There are other factors that explain about 31% of variation in and predict opportunity exploitation beyond opportunity exploration. Aside some opportunities not being viable for exploitation (Guo & Bielefeld, 2014), it is possible also that SMEs are not able to mobilize all resources necessary to pursue every opportunity identified or created (Kuckertz et al., 2017). Sometimes too, the institutional environment, such as regulation or policies, prevents the exploitation of some identified opportunities (Ada & Hinson, 2006; Nyarku & Oduro 2018). This situation is evidence that other factors could affect the opportunity exploitation capability of enterprises and ultimately affect the performance of SMEs and lead to their subsequent failure. EC is therefore, not limited to the ability to explore and exploit opportunities, but also the collective and continuous process of exploration and exploitation of entrepreneurial opportunities (Shane & Venkataraman, 2000).

8.2.2 The Impact of EC on SME Performance

In relation to the collective impact of opportunity exploration and exploitation (EC) on SME performance, the study found evidence to support H2 that there is a positive association between EC and SME performance ($\beta = 0.492$, $p \leq 0.01$). The study contends that complementary outcomes of both exploration and exploitation, which is termed EC, yield performance benefits. This empirical evidence supports earlier studies which suggest that the interaction between exploration and exploitation leads to firm performance, such as sales growth rate (He & Wong, 2004; Ireland & Webb, 2007). While the findings
suggest that EC leads to SME performance, it also reveals that EC accounts for only 24.3% of the performance attained by SMEs. This shows that the performance of SMEs in Ghana depends on other factors beyond EC, which are recommended for future studies.

8.2.3 The Moderating Effect of Institutional Factors

From the perspective of SME embeddedness in the dynamic institutional environment, the study opined that pressures exerted by institutional factors affect entrepreneurial activity and ultimately SME performance. In hypothesis H3a, the study posited that the regulatory institutional factor in Ghana constrains more than enables entrepreneurial activity and ultimately weakens the relationship between EC and SME performance. In hypothesis H3b, the study further posited that the promotional institutional factor enables more than constrains entrepreneurial activity and ultimately strengthens the relationship between EC and SME performance. Finally, in hypothesis H3c, the study opines that the facilitatory institutional factor also enables more than constrains entrepreneurial activity and ultimately enhances the outcomes of EC towards SME performance. The study verified the propositions by modelling and assessing the moderating effect of the three institutional factors (i.e. regulatory, promotional and facilitatory factors) on the relationship between EC and SME performance. The empirical data only shows partial support for the propositions. The findings are discussed further in the sections below.

- **Regulatory Institutional Factors**

As hypothesized in H3a, the study found that the regulatory institutional factors influence the relationship between EC and SME performance. The moderating effect was negative, weak and statistically significant (β = -0.117, p ≤ 0.040). This is an indication that the regulatory function of institutional factors constrains the relationship between EC and SME performance. In effect, the finding demonstrates that the development of EC in SMEs
is dependent on how easy or difficult regulation makes the implementation of new activities – which includes exploration of new opportunities and exploitation of existing or perceived opportunities. This inability limits the potential of SMEs to generate value and lead to poor performance and subsequent failure. SMEs require a favourable regulatory environment to promote entrepreneurial activities and ultimately generate greater performance which will avert the persistent failure of SMEs in Ghana.

As shown in Table 7.2, the study found that the national economic environment and tax policy exerted the greatest impact on the ability of SMEs to continuously engage in opportunity exploration and exploitation activities to generate value for superior performance and organizational success. The activities of regulatory and enforcement agencies such as the Ghana Standards Authority, Food and Drugs Authority, Metropolitan, Municipal and Districts Assemblies (MMDAs), and the Ghana Revenue Authority were also found to greatly constrain the performance of SMEs. These enforcement agencies exist to ensure that products meet quality standards, for example, or businesses do not renege on their obligations to consumers. Perhaps, the focus of these agencies has been antagonistic, rather than collaborative with SMEs. Financial regulation such as funds transfer, minimum deposits, etc. business registration, legal and operational requirements, as well as the bureaucratic administrative structure of the public sector all work together to constrain entrepreneurial activities and ultimately SME performance. The least constraining of the regulatory function activities is the labour and employment guidelines and obligations (see Figure 7.5). There is currently a huge unemployment rate in Ghana. So, perhaps, SMEs do not have any issues regarding recruitment and staffing. Adomako et al. (2015) demonstrate that various laws – byelaws and regulations – apply to the establishment and operations of SMEs at the national, regional and district levels of Ghana.
Interestingly, the results also indicate that the regulatory function also directly constrains SME performance ($\beta = -0.098$, n.s.). Although this direct effect is negative, it is weak and statistically non-significant. This is contrary to the assertions that the regulatory institutional factor is meant to enhance perceptions of opportunity and entrepreneurial conditions by shaping access to resources involved in the formation and sustainability of an enterprise (Autio & Acs, 2010; Busenitz et al., 2000; Bradley, Wiklund & Shepherd, 2011). Rather, it supports the claim that a major institutional constraint is excessive regulatory requirements and corruption (Klapper, Laeven & Rajan, 2006; Chadee & Roxas, 2013; Young et al., 2018). In the context of Ghana, these include lack of antitrust registration (Kayanula & Quartey, 2000), cumbersome registration and legal requirements (World Bank, 2013; Miller & Kim, 2016; Kim et al., 2016) and weak legal and regulatory regime (Adda & Hinson, 2006). However, excessive regulation stifles innovation and ability of SMES to effectively undertake opportunity exploration and exploitation activities. This situation limits the potential of the SMEs to generate value and consequently lead to business failure.

It is important to involve SMEs in the formulation, enactment, implementation and enforcement of regulations. Again, SMEs need to be educated and sensitized on the various regulations in the business environment, particularly issues pertaining to tax, operations permit, legal remedies, etc. Government should also do well to improve the national economic environment (lower interest rates, stabilize the exchange rate, reduce inflation etc.) to improve factors of production and reduce the cost of doing business. These would immensely improve the ability of SMEs to develop EC for continuous exploration and exploitation of business opportunities to generate value for superior performance and organizational success. In other words, regulatory institutional factors are necessary for the entrepreneurial climate, though currently they constrain the activities
of SMEs and weaken their ability to develop and build EC to attain relative superior performance in the Ghanaian context.

- **Promotional Institutional Factors**

The study found that promotional institutional factors enable SMEs to generate relative superior performance through EC. The moderating effect of promotional institutional factor on the relationship between EC and SME performance ($\beta \leq 0.121$, $p \leq 0.031$) was found to be positive and significant (see Table 7.9). This implies that the relationship between EC and SME performance is stronger for SMEs operating in an institutional environment with high promotional activities than for those operating in an institutional environment with low promotional activities. The promotional activities that enabled entrepreneurial activities the most are technology development and strategic partnerships with stakeholders (such as connection to markets and investors). All others promotional activities, including government subsidies, access to credit, provision of utilities and structural support, as well as foreign direct investment, did not yield much impact on improving EC and SME performance. This is perhaps an indication that SMEs do not benefit from the FDIs and government subsidies that come into or are allocated to the sector. This only affirms earlier findings that financial incentives and structural support such as roads, water, electricity, etc. promote entrepreneurial activities. The findings demonstrate that the promotional institutional factor has the potential to enable SMEs develop EC for greater performance. The current weak moderating effect is only a reflection of the current low level of promotional activities (mean = 3.43; see Figure 7.4) by the promotional institutions towards SMEs in Ghana.

In Ghana, policy makers have introduced several incentive programmes aimed at increasing or boosting the number of entrepreneurs or private sector business. This has in some ways helped SMEs to strengthen and adequately resource their enterprises to develop
EC necessary for the continuous identification and exploitation of opportunities to generate value. Moreover, this focus of promotional institutions on increasing entrepreneurial activity in Ghana makes the promotional institutional factor a strong predictor of SME performance ($\beta \leq 0.298$, $p \leq 0.001$). This is evident that in Ghana, promotional institutional factors strengthen the relationship between EC and SME performance.

- **Facilitatory Institutional Factors**

As hypothesized, the study found that facilitatory activities significantly contribute directly ($\beta = 0.259$, $p \leq 0.01$) to improvements in the performance of SMEs in Ghana. This only shows that institutions undertake trade facilitation, but fail in building the entrepreneurial capability of SMEs. However, it reveals that the moderating effect of the facilitatory institutional factor on the relationship between EC and SME performance is statistically non-significant ($\beta = 0.052$, $p \leq 0.299$). Therefore, facilitatory functions do not significantly influence the ability of SMEs to develop EC towards improved performance. The SMEs surveyed show that non-financial incentives were the greatest enabler of EC and SME performance. Technical training and assistance, business advisory and managerial capacity building exerted the least impact (see Figure 7.7). As noted, there are low levels of managerial capacity building, low technology assistance/training and business advisory in the SME sector of Ghana. These together work to inhibit the progress and performance of SMEs and lead to their persistent failure in Ghana.

The inability of facilitatory institutions to significantly moderate the relationship between EC and SME performance could also be attributed to the often-fluctuating economic performance of the country. Scholman, van Stel and Thurik’s (2014) study found that economic openness was a very essential factor in creating entrepreneurial
opportunity in OECD economies but this was tied to the recurrent economic performance of the countries. For example, in well performing economies, the rate of self-employment often increases in the medium to long term. The contrary is the case in times of slow growth and economic recessions. Thus, openness of the economy is essential for thriving entrepreneurship (Acs & Szerb, 2010; Alonso & Garcimartin, 2010). This openness also encourages entrepreneurial activity and innovation. In other words, the motivation for innovation is lost when entrepreneurs and enterprises recognize that their control over the return of assets in the innovation process or production is minimal (Aidis, Estrin & Mickiewicz, 2009). More so, entrepreneurship development relies heavily on the adequate and timely provision of credit and finance. As noted by Schumpeter (1934), access to credit or finance facilitates innovation and cannot be dissociated from effective entrepreneurship. The lack of credit hampers entrepreneurs’ capacity to start a business or act upon opportunities (Aidis, 2005). The lack of trade facilitation, is also a major impediment to entrepreneurial development (Estrin, Korosteleva & Mickiewicz, 2013; Dinh, Mavridis & Nguyen, 2010).

8.3 Chapter Summary

The chapter has discussed the findings of the study and ascribed reasons and explanations for the outcomes of the analysis. The study found support for the two hypotheses which test the relationship between the dimensions (exploration and exploitation) of entrepreneurial capability and their collective impact on SME performance. The explanation adduced for the former is that the entrepreneurial process begins with exploration to discover or create business opportunities and then mobilization of resources to act on such opportunities to gain profits. In the case of the latter, the study has noted that neither opportunity exploration nor opportunity exploitation is enough to ensure SME
performance, but the continuous process of both activities. Hence, EC enables SMEs to dynamically identify or induce change in the external environment and leverage their resource base to capitalize on such changes as opportunities to introduce new products and services for profitable gains. Institutional factors, however, produced mixed results regarding their moderating effect on the relationship between EC and SME performance. The study found that the regulatory institutional factor is detrimental to SME performance and weakens the EC and SME performance relationship. Both promotional and facilitatory institutional factors were found to strengthen the relationship between EC and SME performance and contribute to performance of SMEs directly.
CHAPTER NINE

SUMMARY, CONCLUSIONS AND IMPLICATIONS

9.0 Introduction

This chapter presents a summary and conclusions for the study. It also provides implications, and directions and recommendations for future research. Overall, the chapter evaluates the approach and processes employed in the study and discusses the contributions to theory and managerial practice. The chapter is divided into four sections. The first section presents a summary of the study, reiterating the research problem, the objectives of the study and the expected outcomes of each objective. The second section discusses the contributions of the study as reflections on the theories, conceptual framework and methodology employed in the study as well as the implications for theory and practice. The third section presents the conclusions, whilst the fourth section discusses the limitations and directions for future research in the domain of entrepreneurial capability, institutional factors and SME performance.

9.1 Summary of the Research and Main Findings

The study set out to develop a theoretical and process-oriented understanding of the antecedents and impacts of EC on SME performance within the dynamic institutional environment of Ghana. To achieve this, three objectives were put forward. The study sought to:

(i) examine and validate the linkages in the proposed dimensions (i.e., exploration and exploitation) of Entrepreneurial Capability in Ghana;

(ii) determine the impact of Entrepreneurial Capability on SME performance in Ghana; and
(iii) ascertain the moderating impact of Institutional Factors on the relationship between Entrepreneurial Capability and SME performance in Ghana.

The first objective stems from a lack of conceptualization of EC based on the process view of entrepreneurship which captures both the opportunity exploration and exploitation aspects of entrepreneurial activity. As a preliminary step to achieving this objective, the study examined the nature of opportunity exploration and exploitation in the entrepreneurship literature and how they constitute EC in Ghana. The second objective stems from the dearth of empirical research on how the dimensions of EC collectively generate sustainable value and impact performance in SMEs in Ghana. The third objective was premised on the fact that SMEs are embedded in the institutional environment which has the tendency to constraints or promote entrepreneurial activity.

The study reviewed literature pertaining to the key concepts and relevant theories to situate the model in the proper context and theoretical domain. The extant literature has revealed that whilst scholars generally agree that EC is a function of both opportunity identification and subsequent exploitation (see Abdelgawad et al., 2013; Arthurs & Busenitz, 2006) to shape the emergent conditions within the environment external to the firm, there is no explicit conceptualization of EC based on opportunity exploration and exploitation. This situation is particularly of interest in the context of SMEs, due to the acclaimed notion of resource limitation in SMEs, and requires a process-oriented understanding of the nature, measures and outcomes of entrepreneurial capability. In the case of the later, the study observed that the capability to strategically organize resources to explore and act on perceived opportunities often depends on factors and changes in the institutional environment within which SMEs operate (Navis & Ozbek, 2016). The lack of theorization about the interaction between EC and IFs and their interactions with the
effects on SME performance in developing economies, especially Ghana, requires a theoretical and practice-oriented understanding of the phenomenon.

The review of literature has revealed that the entrepreneurial process begins with opportunity exploration and continues with exploitation by acquiring requisite resources to transform ideas and opportunities into tangible products and services for profitable gains (Kuckerts et al., 2015; McMullen & Dimov, 2013; Dimov, 2011; Short et al., 2010; Alvarez & Busenitz, 2001; Shane & Venkataraman, 2000). The framework was underpinned by three theories: the resource-based theory, dynamic capability theory and institutional theory. The resource-based theory was employed to explain the efficient and effective use of resources to attain sustainable competitive advantage in SMEs. The dynamic capability theory was employed to extend the resource-based theory to explain EC in a dynamic environment. The institutional theory was employed to explain the tendency of institutional factors to constrain or enable entrepreneurial activity and ultimately SME performance. EC was conceptualized to comprise of two dimensions: opportunity exploration and exploitation from the process-oriented view of entrepreneurship. The institutional environment was conceptualized based on the three main functions institutions perform in the Ghanaian context: regulatory, promotional and facilitatory (Kuada & Sorensen, 2000).

Following this, five (5) hypotheses were put forward to examine the inter-relationships among EC (i.e. exploration and exploitation), institutional factors (i.e. regulatory, promotional and facilitatory) and SME Performance. Hypothesis H1 was formulated to examine the relationship between the two dimensions of EC – exploration and exploitation. Hypothesis H2 was formulated to determine the impact of EC on SME performance. Hypotheses H3 (a, b, c) were formulated to assess the moderating effect of the three functions of institutions on the relationship between EC and SME Performance.
Using data collected from 488 SMEs in Ghana in a cross-sectional survey, the proposed framework and hypothesized relationship among constructs were empirically tested. The outcomes of the analysis were discussed vis-à-vis the research objectives and in the context of previous studies on the subject matter. A summary of the research findings is presented in Table 9.1 below.

Table 9.1: Summary of Main Findings/Results

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<th>Research Objective</th>
<th>Main Findings/Results</th>
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<tr>
<td><strong>Objective 1:</strong> Examine and validate the theoretical and conceptual linkages in opportunity exploration and exploitation as dimensions of Entrepreneurial Capability in Ghana</td>
<td>The study provided evidence that opportunity exploration is positively associated with exploitation as dimensions of entrepreneurial capability. As with the entrepreneurial process, opportunity must be explored, then subsequently exploited. The short-term performance gains that accrue to the enterprise from exploiting the opportunity feeds the cycle of opportunity exploration to identify or create prospective business ideas for subsequent exploitation.</td>
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<td><strong>Objective 2:</strong> Determine the impact of Entrepreneurial Capability on SME performance in Ghana.</td>
<td>The study showed that EC positively and significantly impacts SME performance in Ghana. EC enables SMEs to dynamically identify or induce changes in the external environment and leverage their resource base to introduce new products and services for profitable gains. SMEs, thus, generate value by continuously identifying and exploiting opportunities that create or expand business activity to generate value for sustainable organizational performance and success.</td>
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<tr>
<td><strong>Objective 3</strong> Ascertain the direct and moderating impact of Institutional Factors on the</td>
<td>The study revealed that institutional factors influence entrepreneurial activity and SME performance differently. The findings suggest the regulatory factor is detrimental to entrepreneurial</td>
</tr>
</tbody>
</table>
Entrepreneurial Capability and SME performance in Ghana. activity and constrains the relationship between EC and SME performance. On the other hand, both promotional and facilitatory institutional factors enhance the relationship between EC and SME performance in Ghana. Hence, the ability to identify and effectively utilize firm resources to exploit business opportunities for superior performance depends upon the existing institutional matrix within which SMEs operate.

9.2 Reflections

The approach and processes adopted in the investigation of the phenomena under study to achieve the research objectives underpin the originality and unearth the contributions of the study. These main aspects are the theoretical underpinnings of the study, the conceptual framework based on the review of literature, and the methodology adopted to proceed with the collection and analysis of data to provide empirical results. This section discusses the main contributions of the study by reflecting on the theories, conceptual framework and methodology employed in the study.

9.2.1 Reflections on Theories

As noted in Chapter 3, 3.2, the foundation of EC, IFs, and SME performance nexus rest on theories even if the practitioners themselves are unaware of it (Drucker, 1985). Given the significant potential of SMEs to economic growth and stability, successive Ghanaian governments have sought to regulate, promote and facilitate and support SMEs through institutional framework and policy interventions (Kuada & Sorensen, 2000; Buame, 2012). However, the rate at which SMEs continue to fail cast doubt on the effectiveness their EC and the institutional framework in Ghana. Scholars have recognized EC as an internal factor necessary for effective entrepreneurial activity and a major driving force for
creativity and innovation (Drucker, 1985; Buame, 2012; Bradley & Klein, 2016) for organizational success. The lack of theorization of EC and IFs and their interaction effect on SME performance in developing economies such as Ghana requires a theory-based and practice-oriented understanding of the phenomenon. The study employed the resource base theory, dynamic capability theory and institutional theory as theoretical underpinnings to conduct the research to achieve set objectives.

The resource-based theory was chosen to provide an understanding of the resource positions of SMEs in Ghana. The dynamic capability theory extended the resource-based theory to provide understanding of the effectiveness of entrepreneurial activity in dynamic business environments. The institutional theory was employed to shed light on how institutional factors in the dynamic environment of SMEs exert pressure to constrain or provide incentive for entrepreneurial activity and ultimately SME performance in Ghana. In isolation, each of the theories affords a distinct but fragmented knowledge about the research gaps under study. Collectively, however, these theories provide a broader perspective and lens to fully understand and situate the issues in the appropriate context for investigation. They also underpin the proposed conceptual framework and guide the methodological approach and analytical techniques. The application of these theories does not indicate their novelty per se, but rather their suitability in providing understanding and guide in the investigation of the phenomena to achieve the research objectives. As a result, the three theories have together demonstrated in the study that SMEs must have resources and develop them into capabilities, and be supported with the right institutional environment to achieve success.

9.2.2 Reflections on Conceptual Framework

Several existing frameworks in EC and IFs were examined in the literature review. For example, Abdelgawad et al.’s (2013) conceptualization of EC; North’s (1990) formal and
informal institutions, as well as Scott’s (2005) three pillars of institutions were examined. This was necessary to provide a good foundation for the framework of this study. A conceptual framework was developed based on the literature review to reflect the inter-relationships among entrepreneurial capability, institutional factors and SME performance. Entrepreneurial capability was conceptualized from the process-oriented view of entrepreneurship and the dynamic capability as the continuous exploration and subsequent exploitation of opportunities. Institutional factors were conceptualized to reflect the three main functions of institutions in Ghana – regulatory, promotional and facilitatory, as enumerated by Kuada and Sorensen (2000). Since none of the models and frameworks reviewed provided a means to simultaneously investigate the effects of EC and IFs on SME performance in Ghana, the framework developed in this study is deemed appropriate to investigate the phenomenon of interest. This framework is unique in the context of entrepreneurship research in Ghana as it brings together separate concepts that have been studied in isolation extensively.

The empirical results in the earlier chapter provide support for the research framework and related constructs. Out of the five propositions put forward, the empirical results showed support for four (H1, H2, H3 a, and b) and partial support for (H3 c). It is noted that EC and IFs, for instance, only explain about 35% of the variance for SME performance. This implies that there is the likelihood that other factors, such as branding (see Odoom et al., 2017) influence the performance of SMEs other than those postulated in the framework. Therefore, the constructs used in the model to examine the subject matter are not exhaustive, but can be considered the most suitable for the current study to achieve the research objectives. As such, the outcomes of the analysis are representative and reflective of the situation of SMEs in Ghana.
9.2.3 Reflections on Methodology

This study was underpinned by positivistic research paradigm. Following this, the quantitative research approach with the survey design to collect data from a representative sample of SMEs in Ghana in a single stage cross-sectional survey design from a representative sample of respondents at a single point in time was adopted. The quantitative research approach has been justified in earlier chapters as the most appropriate for the current study since this study tests the strength and significance of hypothesized relationships between the constructs in the conceptual framework, and statistically generalise the findings to the selected context – SMEs in Ghana (Saunders et al., 2011; Creswell, 2014). The quantitative research approach supports prediction and hypothesis testing using empirical data to examine the linkages and interrelationships among exploration, exploitation, entrepreneurial capability, institutional factors and SME performance in Ghana. Through the quantitative approach, the study was able to provide an empirical explanation for the conceptual linkages between exploration and subsequent exploitation of opportunities as dimensions of entrepreneurial capability and their collective impact on the performance of SMEs in the dynamic institutional environment of Ghana. More so, the choice of quantitative research permitted the generalization of the findings of the study (Saunders et al., 2011; Creswell, 2014).

Qualitative or mixed methods research approaches could have revealed some insights about the phenomenon. However, the limited external validity of qualitative research constrains the generalisation of its findings beyond the scope of a study. More so, the nature of the study warranted a relatively large sample size. It would have been laborious and expensive to elicit information from all respondents and analyse accordingly in qualitative research (Creswell & Clark, 2007; Onwuegbuzie, & Leech, 2005). Besides, scholars suggest that both quantitative and qualitative methods are ends of a continuum.
Hence, researchers should adopt the method which facilitates data collection and analysis to address the phenomenon of interest. As Davidson (2004, p. 60) puts it, “research questions that are inherently quantitative in nature need quantitative research to be answered”. This study sought to answer questions that pertain to the strength, direction and significance of multiple interrelationships among exploration, exploitation, entrepreneurial capability, institutional factors and SME performance. As such, qualitative or mixed-methods were not ideal approaches. The quantitative approach was ideal as it offers cost-effective means of data collection and statistical techniques to effectively test the proposed model.

9.3 Contributions of the Research

The study makes some key contributions to entrepreneurship research as well as the EC and IFs literature. First, the study puts forward and validates a conceptualization of EC comprising two dimensions: opportunity exploration and opportunity exploitation. The review has established an emerging consensus that entrepreneurial capability underpins effective entrepreneurial activity and by extension, the performance of SMEs. In this conceptualization of EC, it is noted that entrepreneurial capability is based on the ability of firms to effectively explore and exploit opportunities to generate value. This is different from other studies in which EC has not been explicitly conceptualized and measured as a function of opportunity exploration and exploitation (Abdelgaward et al., 2013). The study, thus, responded to calls to provide clear distinction and understanding of the exploration and exploitation aspects of EC with this re-conceptualization based on the entrepreneurial process. This conceptualization of EC draws on the process view of entrepreneurship from the perspective of the resource-based theory and the dynamic capability theory. It indicates the firm’s overall capacity to generate value through the
creation or expansion of entrepreneurial activity, by identifying and exploiting new products, processes or markets. The analysis and results section of the study has provided empirical evidence of the robustness, reliability and validity of this re-conceptualization and measurement of EC based on theoretical perspectives from entrepreneurship and capability literature. This is a further empirical support for the entrepreneurial process and dynamic capability theory.

Secondly, the study has provided an empirical evidence of a theory-driven and process-oriented understanding of the impact of EC and the effect of institutional factors on SME performance in the Ghanaian context. The study recognizes that due to the embeddedness of SMEs, institutional factors have the tendency to enable or constrain entrepreneurial activity, and by extension, performance. The debate on the role and appropriateness of government intervention and regulatory focus in industry remains largely inconclusive. As a result, entrepreneurship scholars (Zahra et al., 2011) have recommended that future studies examine the effects of institutional factors on entrepreneurship. This study has developed a unique framework to address this situation, drawing on resource base theory, dynamic capability theory and institutional theory. Furthermore, the analysis and results presented earlier, confirms that the indicators and measurement scales of the constructs are reliable and valid and would produce consistent results if replicated in other studies. This provides empirical support and validates the proposed entrepreneurial capability construct and related propositions put forward in this study. Hence, the study contributes to the entrepreneurship literature by bringing clarity and understanding to the dimensions and impact of EC on SME performance in the dynamic institutional environment in the context of Ghana.

Thirdly, the literature review has revealed that most research and scales determining the dimensions of EC and the effects of IFs on SME performance have been
predominantly Western, with little empirical evidence from Ghana. This study has proposed and validated a scale for measuring EC in the Ghanaian context. Moreover, the study has also operationalized Kuada and Sorensen’s (2000) conceptualization of institutional factors in the Ghanaian context as regulatory, promotional and facilitatory factors. This is a departure from the dominant measures focusing on North’s (1990) formal and informal institutions, or Scott’s (2005) regulative, cognitive and normative institutional pillars. From the foregoing, the study provides a contextual evidence from a developing economy setting and contributes immensely to advancing research on entrepreneurship and institutions in the developing economy context. The study calls for further operationalization of the EC measures developed in this study in subsequent research seeking to examine entrepreneurial capability in SMEs. Although not exhaustive, the study’s attempt to rely on the resource base theory, dynamic capability theory and institutional theory to propose, validate and assess the collective impact of the dimensions of EC on SME performance in a dynamic institutional environment has produced relevant outcomes to deepen our understanding and direct future research.

Furthermore, the study has synthesized literature in EC, institutional factors and performance of SMEs. It is evident that EC has emerged as an important concept in the entrepreneurship literature to explain the extent to which developing capability to effectively identify and exploit opportunities could improve the performance and organizational success of SMEs. Institutional factors have also been found to influence entrepreneurial activity either positively or negatively, thereby constraining or enabling the attainment of organisational success. The interaction of these concepts is, thus, essential to understanding the performance of SMEs and the current phenomenon of the persistent failure of SMEs, particularly in the Ghanaian context. Based on the synthesis of literature, the study aligns the EC, institutional factors and SME performance nexus in a
single comprehensive framework underpinned by the resource-based theory, dynamic capability theory and institutional theory. Hence, the resultant research model or conceptual framework developed by this study is a major contribution to the entrepreneurship literature and relevant for future research.

**9.4 Implications for Practice**

The findings provide several valuable insights that are relevant for management and practice of entrepreneurship in Ghana and, for that matter, in other developing countries. Firstly, the study affirms that entrepreneurship begins with opportunity exploration and the subsequent mobilization of resources to exploit such opportunities to generate value. Entrepreneurial capability, therefore, facilitates a cycle of opportunity recognition (i.e. sensing, shaping and selecting opportunities) and the subsequent strategic mobilization of resources (i.e. human, financial and technological) to act on opportunities to transform them into new or improved products, processes and services that yield performance gains. This establishes a co-evolutionary relationship between opportunity exploration and opportunity exploitation where over time the short-term performance gains that accrue to the enterprise from exploiting the opportunity feeds the cycle of opportunity exploration to identify, discover or create prospective business ideas and opportunities. Therefore, opportunity exploration and opportunity exploitation behaviours are both essential for entrepreneurial capability, but either alone is not enough. In so doing, EC enables SMEs to continuously explore opportunities and subsequently act on such perceived opportunities to continuously generate value. This implies also that enterprises should not only have the capability to explore or create new opportunities, but also develop the capability to effectively mobilize strategic resources such as financial capital, human resources, and technological know-how to set up or expand entrepreneurial activity.
The study observes that firms are successful when they have the capability to continuously innovate and exploit new opportunities that open new markets or alter existing markets. It means that in the effort to generate value, SMEs should not over-rely on opportunity exploration or exploitation. This is because, by focusing more on opportunity exploration activities, an enterprise could lose the revenue or gains that may accrue in the short term in exchange for prospects for innovation in the long term. Over-reliance on opportunity exploitation may yield immediate performance gains but the SME stands the risk of becoming obsolete and losing out on emerging opportunities. Hence, EC is a process-oriented concept that captures the dynamics of the entrepreneurial process and explains how innovative opportunities are recognized or created and how innovation supporting behaviours underpin effective entrepreneurial activity and by extension, superior performance of SMEs.

Ghana, through the government has shown interest in SMEs – regarded as the engine of growth – thereby setting up institutions to regulate, promote, facilitate and support the operations of SMEs in Ghana. From this perspective, an empirical insight into the effects of regulatory, promotional and facilitatory functions of institutions on SME performance gives a more representative assessment and evaluation of the institutional environment in the Ghanaian context. The findings suggest that regulation is good but excessive regulation is detrimental to SME operations and ultimately reduces entrepreneurial capability and SME performance. Policy makers should dialogue with SMEs to find common grounds for regulating entrepreneurial activity. Regulatory institutions should not frustrate entrepreneurial activity with excess and stringent regulations, but rather protect the legitimacy of enterprises within the regulatory framework to support and build EC for superior SME performance. Moreover, promotional and facilitatory institutional factors promote more than constrain
entrepreneurial activity and subsequent superior performance of enterprises. The dominant promotional factors that enable entrepreneurial activity are technological assistance, access to financial incentives, and strategic partnership. The key facilitatory factors that yield positive impact on entrepreneurial activities are non-financial incentives, technical assistance and training as well as business advisory services. The study highlights the uniqueness of the institutional context in Ghana, which varies from North’s (1990) “formal and informal rules of the game”, and Scott’s (1995) “three pillars of institutions”.

9.5 Conclusions

The emergence of SMEs as highly vibrant enterprises relevant for accelerated growth, development and economic stability in developing countries is commendable. SMEs contribute the largest proportion of businesses globally and are therefore critical for generation of employment, provision of goods and services, contribution to GDP and creation of better standards of living in many countries (OECD, 2011; Abor & Quartey, 2010; Odoom et al., 2017). As has been noted earlier, in Ghana, SMEs constitute 92% of active businesses, providing about 85% of employment and contributing about 70% of GDP (Abor & Quartey, 2010). It is as a result of this economic potential that governments have sought to regulate, promote, facilitate and support SMEs through institutional framework and policy interventions, as noted earlier (Kuada & Sorensen, 2000; Buame, 2012). This is aimed at motivating and providing information and support to address operational issues and resources limitation of SMEs. However, the rate at which SMEs continue to fail heightens the uncertainty that surrounds the perceived effectiveness of EC and IFs as predictors of SME performance in Ghana.

Looking at the internal factors of SMEs, scholars have recognized EC is a prerequisite for effective entrepreneurial activity and a major driving force for creativity
and innovation (Drucker, 1985; Buame, 2012; Bradley & Klein, 2016) for organizational success. EC enables SMEs to explore opportunities and to strategically develop resource base and configurations to exploit such opportunities to generate value by creating or expanding entrepreneurial activity. Whilst EC is necessary for SME performance, it interacts with factors in the institutional environment that have the tendency to enable or constrain entrepreneurial activity. This interaction between the EC and IFs, and their effect on SME performance in the long run, has not been investigated in the Ghanaian context.

The findings suggest that opportunity recognition is characterized by high levels of alertness, active search for information, the use of prior knowledge and social networks to recognize, create or identify opportunities in the business environment. Opportunity exploitation has been defined as developing products or services based on a perceived opportunity, and characterized by engaging adequate human resource, gathering enough financial capital, acquiring appropriate technology, developing new markets and setting up or expanding entrepreneurial activity. Together, exploration and exploitation lead to SME performance, particularly customer satisfaction, increased productivity, sales growth and return on sales and profitability. The inability of enterprises to increase market share growth, for example, is due to their inability to develop new markets as part of their exploitation activities. The study further evaluated the effects of the regulatory, promotional and facilitatory functions of institutions on EC and SME performance. The findings suggest that institutional factors do not significantly influence the relationship between EC and SME performance. However, the regulatory function of institutions has a greater constraining effect whilst the promotional and facilitatory functions have a greater enabling effect on entrepreneurial activity and ultimately SME performance.

In conclusion, the study recognized that entrepreneurs are those who harness resources to act on business ideas to stimulate social and economic change. They are the
enterprising individuals, thinkers, planners, doers, hard workers, risk takers and managers who can turn an idea into reality. Therefore, the entrepreneur only depends on his/her understanding of the causes and effects in the environment and only believes in his/her ability to succeed based on the view of how the world works. The study found that either opportunity exploration or opportunity exploitation is not enough to generate desired levels of SME performance, but the continuous cycle and process of exploring and exploiting over time. Hence, EC enables SMEs to identify or induce changes in the external environment and leverage their resource base to capitalize on such changes as opportunities to introduce new products and services for profitable gains. Overall, the theories have together demonstrated in the study that SMEs must have resources, develop them into capabilities and be supported with the right institutional environmental to achieve success.

9.6 Recommendations

From the foregoing, the study makes the following recommendations. SMEs should desist from over-exploiting existing opportunities in the business environment. Rather, SMEs should re-direct their effort and resources into exploring opportunities through idea generation based on alertness, social network, active search information gathering and prior knowledge, and idea assessment. The heuristics for opportunity assessment should include value potential, market potential, and sustainability potential. Is is equally important that SMEs should strategically mobilise critical resources such as financial, technological, physical and human resources to effectively exploit the explored opportunities. In so doing, SMEs would be able to escape the threat of becoming obsolete by introducing new products and services to capture existing markets or develop new markets. What is important, however, is that SMEs should critically appraise opportunities
before mobilizing resources to exploit them, because venture can be based on poor ideas and fail to live up to their promise.

The study reveals that strong EC improves SME performance and averts persistent failure of SMEs, hence the need for SMEs to develop EC. The relevance of EC in attaining SME performance cannot be over-emphasized in SMEs. The study has revealed that it is not enough to explore opportunities, without exploiting them, a great idea will never make a difference in the world if the idea is not developed into a venture. Neither is it enough to continue exploiting existing opportunities. SMEs should engage in the continuous process of opportunity exploration and subsequent exploitation, termed EC for improved performance and organizational success. As enterprises mature, the tendency to continue exploiting existing opportunities is high. But this only results in performance stagnation. It is important, therefore, that SMEs do not rely on a single dimension of EC as that could be detrimental to their performance. Rather, SMEs should develop the capacity to effectively balance their activities between exploration and exploitation (EC) to effectively generate value for organizational success.

The study suggests to practitioners that they should lobby to minimize the constraining effects of regulatory functions, and advantage of the enablement of promotional functions. The embeddedness of SMEs in the institutional environment requires them to conform in order to gain the necessary support and legitimacy. Entrepreneurs and SMEs must be aware particularly of the constraining effect of the regulatory institutional factor and take advantage of the enabling promotional and facilitatory institutional factors for improved SME performance and organizational success. Policy makers should ensure that the overall institutional environment is enabling and that executing institutional agencies deliver on their mandates. It is prudent to set regulations to guide the conduct of SMEs but such regulations should not stifle the activity
of the very enterprises they seek to promote and facilitate. Hence, policy makers should ensure that the regulatory function is enabling by providing favourable tax regimes, interest rates, etc. Promotional and facilitatory institutions should focus on helping SMEs develop EC by providing financial incentives, infrastructural support, technical assistance, external business advisory services, etc. Once SMEs have the capability to identify, shape, evaluate and select opportunities for exploitations, they will continuously generate business value for success.

9.7 Limitations and Directions for Future Research

The study has investigated EC, IFs and SME performance within the Greater Accra region of Ghana, due to the high level of economic and entrepreneurial activity in the region. Although generalizable, the results only give insight into the nature of the phenomenon as it pertains to SMEs in only one region in Ghana. Future studies should undertake a multi-regional survey to encompass SMEs across various regions in Ghana. This would provide greater understanding and pattern in multi-group or regional analysis on how EC and IFs interact to affect SME performance in Ghana.

The study found mixed results for the moderating effect of IFs on the relationship between EC and SME performance. While the regulatory factor exhibits a negative and significant moderating effect, the promotional factor has a significantly positive moderating effect and the facilitatory factor has no moderating effect. The study found that except for regulatory functions which has no direct significant impact on SME performance, both promotional and facilitatory functions contributed highly to SME performance directly. It is therefore interesting to observe that regulatory functions impact the relationship between EC and SME performance but did not influence SME performance. Similarly, facilitatory functions which significantly influenced SME
performance had no interaction impact on the relationship between EC and SME performance. It is recommended therefore that qualitative studies are conducted in the future to understand the behaviour of both the regulatory functions and facilitatory functions.

To a large extent, the study’s adoption of Kuada and Sorensen’s (2000) categorization of IFs to moderate the relationship between EC and SME performance, all of which fall under the umbrella of formal institutions (North, 1990; Adomako et al., 2015) is a limitation, as informal aspects of institutions and their interaction were not investigated. In a collective culture such as that of Ghana, it is possible the informal institutional environment can influence owner managers’ decision to explore or exploit entrepreneurial opportunities. Family businesses are dominant in the SME sector, and the informal ties tend to impact the general internal organizational environment and the decisions of owner managers to take business decisions. It is important, therefore, that future studies investigate the interaction between EC and informal aspects of the Institutional environment to affect SME performance.
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APPENDICES
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APPENDIX A: THESIS TIMELINE
APPENDIX B: ETHICAL COMMITTEE REPORT

UNIVERSITY OF GHANA
ETHICS COMMITTEE FOR THE HUMANITIES (ECH)
P. O. Box LG 571, Legon, Accra, Ghana

My Ref. No. [Redacted]

5th November, 2018

Mr. Desmon Akpalu,
P. O. Box 78
Department of Marketing and Entrepreneurship
University of Ghana Business School
University of Ghana

Dear Mr. Akpalu,

ECH 004/18-19: ENTREPRENEURIAL CAPACITY, INSTITUTIONAL FACTORS AND SME PERFORMANCE IN GHANA.

This is to advise you that the above-referenced study has been presented to the Ethics Committee for the Humanities for a full board review and the following actions taken subject to the conditions and explanation provided below:

Expiry Date: 25/08/19
On Agenda for: Initial Submission
Date of Submission: 23/08/18
ECH Action: Approved
Reporting: Annually

Please accept my congratulations.

Yours sincerely,

[Signature]

Prof. C. Charles Mate-Kole
ECH Vice Chair

Tel: +233-303913856
Email: ech1@ug.edu.gh
APPENDIX C: QUESTIONNAIRE

QUESTIONNAIRE

I am a PhD candidate at the University of Ghana Business School. My thesis is titled “Entrepreneurial Capability, Institutional Factors, and SME Performance in Ghana”. The research seeks to examine how entrepreneurial capability and the institutional environment interact to influence the performance of SMEs in Ghana. Please take a few minutes to complete the ensuing questionnaire. Your participation is voluntary and you are free to withdraw from the study as you may deem appropriate. If you choose to participate in this research, please answer all questions as honestly as possible and submit the completed questionnaire or make available for pick up within 5-days. By completing and submitting this questionnaire, you indicate your consent to participate in this research study. Thank you for taking time to assist me in my educational endeavour. Please find below definition of some key terms.

Section A: General Information

1. What is your official title in your organization?

2. What sector does your organization belong? (i.e. Agriculture, Industry or Service)
   - Agriculture
   - Industry
   - Service

3. How long has your organization operated in this sector?
   - Below 3 years
   - 4 – 10 years
   - 11 – 30 years
   - Above 30 years

4. What is the employee strength of your organization?
   - 6 – 30 workers
   - 31 – 100 workers

Section B: Entrepreneurial Capability

Please indicate the extent to which you agree or disagree to the following statements about your enterprise’s opportunity exploration and exploitation activities (Please tick where appropriate)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
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</thead>
<tbody>
<tr>
<td>Our enterprise is always alert to business opportunities</td>
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<tr>
<td>Our enterprise researches potential markets to identify business opportunities</td>
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University of Ghana http://ugspace.ug.edu.gh
| Our enterprise systematically searches for business opportunities | | | | |
| Our enterprise looks for information about new ideas on products or services | | | | |
| Our enterprise regularly scans the environment for business opportunities | | | | |
| Our enterprise actively explores ways to introduce new products and services | | | | |
| Our enterprise builds social networks to access profitable opportunities | | | | |
| Our enterprise creates new products and services based on prior knowledge of the sector | | | | |
| Our enterprise explores new initiatives even if not all prove to be highly profitable | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

| We have expanded our operations to pursue opportunities we have perceived | | | | |
| Our enterprise effectively mobilizes financial resources to seize on opportunities | | | | |
| Our enterprise has developed a new market based on perceived opportunities | | | | |
| We have transformed perceived opportunities into new products/services | | | | |
| Our enterprise puts together human resources teams to seize opportunities | | | | |
| Our enterprise leverages technology resources to act on opportunities | | | | |
| We have approached investors (e.g. business angels or venture capitalists) to acquire funding for a business opportunity | | | | |

**Please answer the following questions:**

5. How many opportunities have you discovered/created in last three years?

6. How many have been successfully transformed into new products/services?

7. Does your organization have an autonomous R&D department?  ○ Yes   ○ No

8. If Yes, indicate the years the R&D department has been established.
Section C: Institutional Environment

Please indicate the extent to which you agree or disagree to the following statements about the extent to which institutional factors burden or benefit your enterprise and SMEs in general. (Please tick where appropriate)

<table>
<thead>
<tr>
<th>Regulatory</th>
<th>Greatly Burden</th>
<th>Slightly Burden</th>
<th>Neutral</th>
<th>Slightly Benefit</th>
<th>Greatly Benefit</th>
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<tbody>
<tr>
<td>Enterprise/business registration processes</td>
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<td>Legal and operational requirements for SMEs</td>
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<td>Regulatory and law enforcement agencies</td>
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<td>National policy framework and economic indicators (e.g. interest rates, inflation etc.)</td>
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<tr>
<td>Administrative and governance structures (e.g. MMDAs, public agencies etc.)</td>
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| Promotional                                                               |                |                 |         |                  |                 |
| Access to credit and financial capital                                    |                |                 |         |                  |                 |
| Government intervention and subsidies                                     |                |                 |         |                  |                 |
| Foreign Direct Investments (FDIs)                                         |                |                 |         |                  |                 |
| Technical assistance and technology development                           |                |                 |         |                  |                 |
| Provision of utilities and structural support (e.g. transport system, road networks, etc.) |                |                 |         |                  |                 |
| Strategic partnerships with stakeholders                                   |                |                 |         |                  |                 |

| Facilitatory                                                              |                |                 |         |                  |                 |
| Business advisory and administrative support                              |                |                 |         |                  |                 |
| Technical training and assistance                                         |                |                 |         |                  |                 |
| Managerial capacity building                                              |                |                 |         |                  |                 |
| Other non-financial incentives                                            |                |                 |         |                  |                 |
Section D: SME Performance

Please rate your performance relative to your competitors on the following indicators

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<thead>
<tr>
<th></th>
<th>No Extent</th>
<th>Some Extent</th>
<th>Neutral</th>
<th>Great Extent</th>
<th>Very Great Extent</th>
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<tbody>
<tr>
<td>Productivity</td>
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<td>Growth in market share</td>
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<tr>
<td>Growth in profit</td>
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<tr>
<td>Return on assets</td>
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<td>Return on sales</td>
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<tr>
<td>Growth in sales</td>
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<tr>
<td>Customer satisfaction</td>
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