

DOCTORAL DISSERTATION

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DOCTORAL DISSERTATION

On

**Investigating the Effects of Entrepreneurial Orientation on the
Business Performance of Manufacturing SMEs in Ethiopia:
The Configurational Approach**

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Dedication

I dedicate this dissertation to my parents, my wife (Meron Desalegn), and my daughter (Jehoadan Adisu)

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My Ph.D. journey has taught me that there is nothing impossible in life if we plan for it and act on it. I also learned that getting cooperation, compliments, and support from others is indispensable to achieving great things. Throughout my journey, I have been surrounded by guidance, support, sympathy, and care from many wonderful people; therefore, I would like to take this opportunity to express my sincere gratitude to them all.

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Sincerely Yours,

Bate, Adisu Fanta

Statement of Declaration

I, hereby, declare that none of the dissertation parts have been submitted or accepted previously for degree fulfillment at any other educational institution. Furthermore, to the best of my knowledge and belief, the dissertation does not contain any material that was partly or wholly published by others, except where appropriate acknowledgment is made in the form of bibliographical reference.

Signature.....

Date.....

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ACRONYMS

AF: Access to Finance

BP: Business Performance

CIMO: Context, Intervention, Mechanism, and Output

DV: Dependent Variable

EO: Entrepreneurial orientation

FMSMEDA: Federal Manufacturing Small and Medium Enterprises Development Authority

HC: Human Capital

IV: Independent Variables

NC: National Culture

HC: Human Capital

MD: Market Dynamism

SLR: Systematic Literature Review

SQ: Search Queries

SMEs: Small and Medium Enterprises

SMME: Small and Medium Manufacturing Enterprises

GDP: Gross Domestic Product

Abstract

Entrepreneurial orientation (EO) is an emerging trend in entrepreneurship and strategic management literature; however, much more needs to be known about developing countries. Besides, even though the inextricable influence of EO on business performance has been widely debated, the results have been equivocal pertaining to factors such as national culture, access to financial capital, and market dynamism. The way national culture induces entrepreneurship and business growth remains contestable in the literature, and there is a considerable void concerning how national culture influences entrepreneurship in different countries. This dissertation, therefore, investigates the EO-performance relationship considering national culture, access to finance, and market dynamism in Ethiopia. Both qualitative and quantitative research methods are applied. In all research objectives, the configurational approach and models are pursued. A systematic literature review method was used to investigate the influence of national culture on entrepreneurship. For empirical analysis, hierarchical linear regression and PROCESS Macro moderation models were utilized to unveil the moderating role of market dynamism and access to finance on the EO-performance relationship.

The systematic review shows that individualism, long-term focus, indulgence, femininity, low uncertainty avoidance, and low power distance are all positively linked to entrepreneurship across developed and developing countries. I argue that these are a set of pro-entrepreneurship cultural dimensions and propose that bundling these dimensions, not just a single dimension, determines how well entrepreneurs do. Ethiopia's national culture is not pro-entrepreneurship because it shows the unfit configuration of high-power distance, very low individualism, high masculinity, high uncertainty avoidance, and low indulgence. It plays an inhibiting role in the performance of the country's SMEs. The study, therefore, suggests establishing a pro-entrepreneurship national culture re-configuration program that goes beyond the usual entrepreneurial attitude training program. The empirical result also shows that Ethiopia's SMEs in the textile and furniture industries face a lack of financial capital, political instability, a shortage of modern technologies, power supply disruptions, and poor market integration or networks, ranking them based on severity. As a result, a moderate level of EO is observed in SMEs. Since the SMEs are not strongly entrepreneurially oriented, adequate EO training on innovativeness, risk-taking, proactiveness, competitive aggressiveness, autonomy, and

networking should be given to the owners or managers of the SMEs. EO shows a statistically significant and positive effect on business performance. Hence, SMEs should keep improving EO to achieve higher business performance. In configurational analysis, high market dynamism weakens the role of access to finance in the EO-performance relationship. With adequate access to capital and EOs, SMEs can achieve higher business performance even in a less dynamic market. Therefore, the configuration of access to finance, high market dynamism, and EO is not required to achieve the desired business performance level.

The study offers invaluable contributions: theoretically, by advancing the discourse on the EO-performance relationship with moderating variables and embracing networking as a new EO dimension; contextually, by uncovering SMEs' challenges and shedding light on how to improve the EO and business performance of SMEs in Ethiopia; and methodologically, by pursuing the configurational approach and applying descriptive, hierarchical linear regression, and PROCESS macro models with sensitivity analysis.

CHAPTER ONE

1. INTRODUCTION

1.1. Research Background

Tracing back the evolution of entrepreneurship theory, we see that from the first half to the beginning of the second half of the 20th century, the focus of the research was on defining entrepreneurship and exploring its roles in the economic growth of countries (Marshall, 1930; Schumpeter, 1934, 1942; McClelland, 1961). The research horizon had started broadening from its economic contribution and roles in the 1960s and 1970s. Then, the antecedents of entrepreneurial behavior and factors affecting entrepreneurs in startups, such as work experience, educational influence, family background, need for achievement, locus of control, self-efficacy, risk-taking propensity, and others, along with various demographic characteristics, have become the central themes of research work in the field of entrepreneurship (Hagen, 1962; Conley, 1974; Weick, 1976; Lachman, 1980). Then, from the advent of the 1980s up to the whole 1990s, entrepreneurship research devoted considerable resources to building and validating the constructs of entrepreneurial orientation (EO) dimensions and the alignment of EO and firm strategy models (Miller and Friesen, 1982; Miller, 1983; Miller and Toulouse, 1986; Covin and Slevin, 1988; Lumpkin and Dess, 1996). It also shows that even the implication of entrepreneurship has been extending from an economic point of view to firms' strategic management, especially after the discovery of EO.

During the 1990s, many studies were conducted on the entrepreneurial opportunity and its recognition and exploitation (Venkataraman, 1989; Shaver and Scott, 1991; Shane and Venkataraman, 2000). Since the late 1990s, in the last three decades, several researchers have given utmost attention to explaining the relationship between EO-business performance and developing a conceptual framework with moderating variables (Awang *et al.* 2010; Buli, 2017; Covin and Slevin, 1989; Gebremichael and Kassahun, 2014; Wales, Gupta, and Mousa, 2011; Wiklund and Shepherd, 2005; Wiklund, 1999; Zahra, 2000; Zahra and Garvis, 2000). In line with this, this dissertation investigates the effects of EO on SMEs' business performance, considering the influence of moderating variables such as national culture, financial capital, and

market dynamism. The dissertation renders attention to the EO-performance relationship in the context of a developing country, Ethiopia, with an emphasis on manufacturing SMEs.

Over time, scholars, researchers, and policymakers heeded considerable attention to SMEs because of their role in changing economies in both developing and developed countries. SMEs play an indispensable role in terms of the size of firms, the number of jobs they create, and their contribution to the GDP. Globally, SMEs are responsible for up to 99 percent of all businesses (Gilmore *et al.* 2013). Closely supporting this, Te (2018) claims that SMEs are responsible for 95% of all businesses and 66% of all jobs in the world. According to the OECD (2017) report, SMEs are the main engine of job growth at the global level, accounting for 45% of jobs, 80% of the formal sector, and contributing 34% of global GDP on average.

Moreover, a 2014 report from the United Nations Economic Commission (UNEC) for Africa says that SMEs hold 60–70% of all jobs in developing countries. They also cover over 90 percent of all firms in Western economies (Fink and Kraus, 2008). For instance, as of 2008, Indonesia was home to 99.8 percent of all businesses in Asia (Kusumawardhani, McCarthy, and Perera, 2009). Broussard and Tekleselassie (2012) reported that SMEs make up 99% of all businesses and over 60% of private jobs in Ethiopia, but they only make up 30% of the export market. Ethiopia was the 12th fastest-growing economy in the world as of 2014, though it has been declining since then due to political shocks. About 83% of the country's people live in rural areas and depend on agriculture for a livelihood. The country's manufacturing sector, including small and large companies, is still underdeveloped (Ethiopian Country Report, 2014). Economists argue that a country's economy should work in productive sectors to raise living standards and create more jobs. The manufacturing sector is the main productive sector, and every manufacturing job created results in more than 1.6 service jobs (Sun, 2017).

There is high heterogeneity in the types of SMEs, emancipated from the nature of their functions like communication, restaurants and cafes, trade, construction, tourism, agriculture, manufacturing, and so on. With varying degrees of contribution, they accelerate economic growth and act as a driving force for resource mobilization in each economy (Nichter and Goldmark, 2009; Gilmore, 2011; Laukkanen *et al.* 2013). They play a prominent role in reducing unemployment and creating job opportunities (Gilmore, 2011; UNDP, 2012). SMEs enable

countries to tap resources that otherwise remain untapped by large firms and speed up economic development by enhancing start-ups, pursuing business opportunities, technological progress, and mass wealth creation (Lumpkin and Dess, 1996; Nichter and Goldmark, 2009). And they are highly regarded as a source of vibrant and innovative ideas and new businesses (Gilmore *et al.* 2013). However, the type and level of innovation and other entrepreneurial activities are highly divergent across SMEs. Hence, the dissertation emphasizes the manufacturing sector to reduce industry dynamics effects.

Accelerating economic growth, furthermore, through capacitating manufacturing SMEs and making them innovative, competitive, risk-takers, and proactive has become one of the critical fiscal policy issues facing governments around the world, especially the developing ones. Their high vulnerability to a shortage of resources, a need for fast technology adaptation, and the availability of opportunities to engage in diverse business lines have made them a key area of government intervention (Buli, 2017). To pursue entrepreneurial opportunities, create and deliver customer value, and remain competitive, SMEs must reshape their decision-making processes and practices (Boso *et al.* 2013). The success of entrepreneurs who own SMEs, notably, depends on their entrepreneurial orientation (EO) (Lumpkin and Dess, 1996). EO refers to a firm's strategic directions, acquiring specific entrepreneurial aspects of decision-making styles, practices, and methods (Lumpkin and Dess, 1996). Also, it refers to firms' decisions, practices, and strategies that make them innovative, proactive, risk-takers, autonomous, and aggressive competitors in the marketplace (Lumpkin and Dess, 2001; Lumpkin, Cogliser, and Schneider, 2009; Johan and Sven, 2007; Rigtering *et al.* 2013; Buli, 2017; and Yimer *et al.* 2019). Its contribution to SMEs growth has been widely studied and accepted; however, the arguments over the constructs and scales used to measure them remain debatable.

EO was initially proposed and studied in three dimensions: innovativeness, risk-taking, and proactiveness of firms (Miller, 1983; Miller and Toulouse, 1986; Covin and Slevin, 1988). Later, two more dimensions: competitive aggressiveness, and autonomy, were discovered by Lumpkin and Dess (1996) and highly applied in EO research (e.g., Lumpkin and Dess, 2001; Lumpkin, Cogliser, and Schneider, 2009; Johan and Sven, 2007; Buli, 2017; Yimer *et al.* 2019). On the other side, several scholars argue that EO's constructs are not exhaustive. They recommend networking as an additional construct for boosting entrepreneurial behavior through the social

ties of firms (Ramachandran and Ramnarayan, 1993; Kusumawardhani, McCarthy, and Perera, 2009; Saha and Hajela, 2015); or as a facilitator that leverages firms' relationships with both internal and external environments (Jianga *et al.* 2018). Entrepreneurial orientation, however, has not been studied by incorporating networking as a dimension that can show the entrepreneurial behavior of firms and influence business performance. This research, therefore, adopts and includes networking as one of the EO dimensions and assesses the EO effect on SMEs' business performance from six dimensions, which is expected to amply contribute to the theoretical and empirical development of EO concepts. Besides, the study also applies a configurational approach that considers the three-way interaction of EO, access to capital, and market dynamism, and their combined effect on Ethiopian textile and furniture manufacturing SMEs' performance.

Moreover, another unique feature of this study is that it uses a systematic literature review (SLR), which is rarely done in the field, to explore the influence of national culture on the EO performance of SMEs. To the best of my knowledge, the EO of the firms is yet to be addressed in Ethiopia. So far, only a few researchers have studied the EO of SMEs at the regional level without considering the influence of national culture and the resource availability of organizations. For example, Gebremichael and Kassahun (2014) studied entrepreneurial orientation and its effect on small enterprises, getting evidence from the Tigray region of Ethiopia; Yimer *et al.* (2019) conducted research in the Amhara region of Ethiopia with particular emphasis on the manufacturing sector, applying only three dimensions of EO (innovativeness, risk-taking, and proactiveness), and considering none of the influencing variables (see also Yehualashet and Tsoka, 2015; Assefa, Zerfu and Tekle, 2014; Buli, 2017; Tekeba, 2018). Most importantly, this dissertation contributes by adopting the configurative approach and inculcating the moderating variables: national culture, financial capital, and market turbulence, to analyze the EO-performance relationship, specifically in the textile and furniture manufacturing SMEs.

The review unfolded that with a configuration of high-power distance, very low individualism, high masculinity, high uncertainty avoidance, and low indulgence, the national culture of Ethiopia is not pro-entrepreneurship and, seemingly, plays an inhibiting role in the EO-performance relationship. The survey indicates that the SMEs also face a lack of sufficient financial capital, political instability, modern technologies, power supply disruptions, and poor market integration or networking. Due to these challenges, the SMEs are not firmly

entrepreneurially oriented, and only a moderate level of EO is observed in the SMEs. EO with a networking dimension shows a statistically significant and positive effect on business performance. Access to finance remains the strongest predictor of the EO-performance relationship. The level of market dynamism has a positive and direct effect on EO. However, in the configuration analysis, a high market dynamism weakens the role of access to finance and makes the effect of EO on business performance insignificant. Therefore, we cannot infer that small business performance increases with EO but at a faster rate for those in a dynamic environment. The following section of the thesis further elaborates on the rationale and motivation for this research. Additionally, it addresses the study context, the notion of selecting the sector, and the research themes.

1.2. The Rationale for the Research

The strength of Africa relies on its people, and it is estimated that by 2030, the continent will be home to 1.6 billion people, which will be 19% of the world's population (Isabelle, 2018). Unlike on other continents, the unemployment rate in most African countries has been rising due to rapid population growth and sluggish economies. To alleviate this problem and enhance economic transformation, besides strengthening existing SMEs, UNDP suggests that becoming and producing entrepreneurs is the best and end-all means for developing economies (United Nations Development Program, 2012). African countries, including Ethiopia, have been striving to bring industrialization for economic transformation and develop the manufacturing sector, which is believed to be the primary source of substantial employment opportunities (United Nations Development Program, 2012). Developing countries, like Ethiopia, focus more on the agriculture and manufacturing sectors, whereas developed countries rely more on the service sector than other sectors for employment generation and economic growth. As economies grow, there is a transition from agriculture to manufacturing and then to the service sector. For example, 79% of Americans work in the service sector, whereas only 31% and 22% do so in India and Ethiopia, respectively (World Bank, 2018). In Switzerland, the service industry sector contributing to GDP is 64.5%, whereas it is 68.0% and 70.8% in Germany and Austria, respectively (Rigtering *et al.* 2013).

Despite the governments' prolonged efforts to promote the manufacturing sector as a gateway from an agrarian economy to industrialization, its GDP contribution has stagnated or declined in

most African countries (United Nations Economic Commission for Africa, 2014). Besides, most of the export items from Africa are either raw materials or unprocessed or semi-processed goods without significantly added value to the products (Isabelle, 2018). Had adequate infrastructures been built and machines and equipment provided, opportunities could have been created for entrepreneurs to produce and supply industrial inputs and add value to these primary products (Isabelle, 2018). In a march to industrialization, transforming the manufacturing sector and strengthening SMEs in the industry are underlined as the prime aims for Africa's "2030 sustainable development agenda" as well as "2063 The Africa We Want" Vision (Africa Sustainable Development Report, 2018). And the report suggests that countries should invest in manufacturing industries to be competitive in the world market with value-added and better-quality products.

Ethiopia set the vision to be among the lower-middle-income countries by 2025 (Ethiopia Country Report, 2014; National Planning Commission, 2016). Since 2004, the last decade, Ethiopia has been among the fastest-growing economies in the world. The economy has been growing by a double-digit average of about 10.5% to 11%, much higher than 5 percent for Sub-Saharan Africa (UNIDO, 2013; Ethiopia Country Report, 2014; Tekeba, 2018). As a result, it became the 7th biggest economy in Africa and the 69th in the world, with 118.2 billion USD in GDP purchasing power parity as of 2013 (Tekeba, 2018). The country has set and been pursuing a Growth and Transformation Plan (GTP) with a focus on improving the productive and competitive capacity of the economy, mainly developing the manufacturing sector capacity, increasing the competitiveness of export products, and enabling emerging sectors to compete at the national, continental, and global level (National Planning Commission, 2016). During the first GTP (GTP I), from 2008/2009-2012/2013, promising signs of successful import substitutions were observed on some of its imported goods, such as shoes, textiles, and other consumables goods (National Planning Commission, 2016). Specifically, the country aims for its manufacturing sector to become a light manufacturing hub in Africa by 2026. In GTP II, from 2015/2016 to 2019/2020, the growth in the manufacturing sector was given considerable attention. Building the capacity of, especially SMEs in this sector, has taken a prominent place by the government to create jobs, improve the living condition, promote export, competitiveness, and enhance the technological capability of the economy.

To ensure this, in 2016, the government established an agency at the federal level that focuses on SMEs only in the manufacturing sector. The agency named “Federal Manufacturing Small and Medium Industry Agency” was officially instituted by the Ethiopian government under the Ministry of Industry for two primary purposes. First, “to accelerate the expansion of small and medium manufacturing industries so that they could lay the foundation for the development of large-scale industry, ensure equitable distribution of wealth and catalyze the transformation of the agricultural-led economy to the industrial-led economy.” Second, “to strengthen, assist and coordinate institutions that provide support to small and medium manufacturing industry sector intending to make the sector competitive and sustainable and thereby create a strong base for industrial development” (Federal Negarit Gazette, 2016, p 8818). Researching the challenges and prospects of SMEs in the sector is one of the activities the agency is expected to do. But still, problem-solving research works have not yet been done, primarily related to entrepreneurial behavior of innovativeness, risk-taking, pro-activeness, and other dimensions of the sector enterprises. It is, therefore, worth noting to undertake this thesis work on the EO of SMEs in the manufacturing sector to support the government's development efforts in realizing its Growth and Transformational Plan II.

Besides, the Ethiopian Ministry of Industry (MoI) works on improving the manufacturing industries such as textile, leather, metal, chemical, food and beverage, meat, and dairy products identified as vital for the country's economic transformation. The government has realized the immense potential of these industries to accelerate export trade (MoI, 2019). To boost competitiveness through managerial efficiency and research and development, the government of Ethiopia has established an institute, under the Ministry of Industry, for each of these export-oriented industries (MoI, 2019). The agency has also prioritized these sectors and categorized them as wood and metal, leather/hide and skin processing, textile and garment and agro-processing (that includes food and beverage), construction, and chemical inputs to support all entrepreneurial activities of them as per the national policy (Esseye, 2018). Among others, the leather industry is the leading exporter within the manufacturing sector, accounting for up to 67% of the total manufacturing export (Yehualashet and Tsoka, 2015). Textile industries take a considerable share in the manufacturing sector next to the leather industry in export trade and generating foreign currency. Concerning domestic consumption, the enterprises in the manufacturing sector of metal and woodwork tend to be more successful than other sectors in

Ethiopia (Assefa, Zerfu, and Tekle, 2014; Buli, 2017). Therefore, conducting this research, specifically on SMEs in textile and metal, and woodwork manufacturing industries, is worthwhile to the country's industrialization.

Literature, moreover, reveals that EO remains virtually uninvestigated even in several strategically important countries such as Brazil, India, and Russia, as well as in regional clusters such as Latin America, the Middle East, and Sub-Saharan Africa (Wales, Gupta, and Mousa, 2011; Buli, 2017). And much of the existing studies on SMEs focus on challenges such as lack of resources, lack of skilled industrial workforces, unresponsive management structure, access to international markets, skills, and lifelong learning (Gilmore *et al.* 2013; ILO, 2015; Oqubay, 2018; Tekeba, 2018). In Ethiopia, the studies indicate the SMEs' challenges range from the high cost of transportation, inadequate infrastructure, bureaucratic red tape, and poor product quality to the international market network (Yehualashet and Tsoka, 2015; Oqubay, 2018; Tekeba, 2018). Significantly, the three main barriers halting the industry's internationalization are informational, logistics, and functional barriers, including a need for more managerial capacity and resources (Yehualashet and Tsoka, 2015; Oqubay, 2018; Tekeba, 2018). Moreover, in getting credit access, the country ranks 165th/189 (Sapovadia, 2015), and the SME loan accounts for only 7% of the country's loan portfolio. If these challenges are not solved, it will be halting to have more middle-size and large enterprises emerge in the private sectors in Ethiopia and Africa as well.

According to the report of the Ministry of Urban Development and Housing of Ethiopia (2016), for instance, if there are half a million Micro & Small Enterprises (MSEs), 99% of them are not able to grow up to medium or large enterprises or probably fail through time. That means only 1% - or 5,000 of them can become medium-sized enterprises and eventually reach the large-scale business level. Apart from external factors, the SMEs' problem is perhaps related to a lack of resources and managerial competence, especially the EO of firms. EO includes innovativeness, risk-taking, pro-activeness, autonomy, and aggressive competitiveness strategies (Lumpkin and Dess, 2001; Johan and Sven, 2007; Lumpkin, Coglisier, and Schneider, 2009). Up to now, EO has not been adequately investigated in Ethiopia in the manufacturing sector of SMEs. Coupled with a lack of adequate EO and resources, the industry has not been unleashing its potential as expected (in employment and GDP contribution) and using entrepreneurial opportunities for the country's economic prosperity. Therefore, I am motivated by these facts on the ground to undertake this

research. The study focuses on the EO-performance relationship of manufacturing SMEs and deals with moderating variables such as national culture, market turbulence, and access to capital. It can be envisaged that the research findings will significantly contribute to the sector's development endeavor and advance the discourse on EO-performance. The research themes, questions, and objectives are described below in the following section.

1.3. Research Questions and Objectives of the Study

Over the last three decades, entrepreneurship studies have emphasized EO and its relationship with business performance. Despite EO's wide acceptance and the horizon of studies, the research results have been coming up with equivocal results, mainly its association with performance (Kraus *et al.*, 2012). The reasons for this inconsistency of research findings are anticipated to be the fragmentation regarding the understanding and portrayal of the concept of EO (Covin and Lumpkin, 2011) and an incoherent approach to the study of EO (Miller, 2011). This incoherence in the approach of the EO study is mainly due to relatively small sample sizes, country-specific studies, and studies within very specific sub-industries and failure to consider moderating variables (Lee and Lim, 2009; Rigtering *et al.* 2013, see also Gebremichael and Kassahun, 2014 and Yimer, et al. 2019). The dynamism in the business environment, industry context, and even stages of firm growth influence the EO-performance relationship (Kusumawardhani, McCarthy, and Perera, 2009). If a study fails to consider the moderating variables, the findings on the EO-performance relationship will not be consistent. Also, if it considers a very tiny area of the population as the study subjects, it would not be possible to generalize to the whole population or industry.

Moreover, the context of the country, whether developed or developing, and its national culture's direct or indirect effect on business performance as well as the EO of firms, cannot be underestimated. In this study, thus, national culture, market dynamism, and access to capital are expected to be discussed in connection with EO and firm performance. Finally, to portray the general outlook of the flow of the research, an attempt is made to visualize the approach in Figure 1.1 below in the conceptual framework.

The thesis has five objectives to achieve, which are categorized into three research themes as follows:

The first theme of the research qualitatively deals with national culture and EO by applying SLR methodology. It achieves the following objective: -

- ✓ To investigate the influence of national culture on EO and business performance, with a focus on developing countries' contexts (1)

The second research theme addresses the challenges, practices, and significance of EO dimensions and their effect on the business performance of manufacturing sector SMEs in Ethiopia. It meets the following specific objectives: -

- ✓ To investigate the prevailing challenges that affect SMEs' EO and business performance (2)
- ✓ To assess the level of application of EO (innovativeness, pro-activeness, risk-taking, aggressive competitiveness, autonomy, and networking) in Manufacturing sector SMEs in Ethiopia (3)
- ✓ To assess how the dimension of EO (innovativeness, pro-activeness, risk-taking, aggressive competitiveness, autonomy, and networking) affects the business performance of manufacturing sector SMEs (4)

The third theme of the study investigates the three-way interaction or configurative effect of access to capital, market dynamism, and EO on the business performance of manufacturing SMEs. It meets the following specific objective: -

- ✓ To examine the moderating effect of access to capital and environmental dynamism on EO and business performance relationship (5)

To achieve the research objectives, both qualitative and quantitative approaches were applied. The general research methodology and techniques are discussed and addressed under the research theme. Correspondingly, to ensure the achievement of the objectives, the study's research questions are identified and can be categorized under three themes.

In the first theme of the research, the concepts, constructs, and contexts of EO in developing and developed countries are discussed qualitatively using SLR methodology. The context of EO here refers to the general national culture and the country's development status where EO is practiced. Since most EO studies are from developed countries, the implications may not be appropriate for developing countries (Kusumawardhani, McCarthy, and Perera, 2009). Thomas and Mueller (2000) argued that some of the dimensions of EO might vary over countries. Naldi et al. (2007)

and even Lumpkin and Dess (1996) suggest that a given country's national culture may affect the adoption and practice of EO. Therefore, the following research questions are developed: *how does the national cultural dimension influence the entrepreneurship and entrepreneurial orientation (EO) of firms? Do the practice and process of EO vary based on national culture, and how does it affect the EO dimensions of SMEs in Ethiopia?* To analyze the national culture, there are primarily used two options: Schwartz's seven dimensions- autonomy vs. embeddedness, egalitarianism vs. hierarchy, and harmony vs. mastery (Schwartz, 2008) -and Hofstede's national culture insights: individualism vs collectivism, uncertainty avoidance, power distance, masculinity vs femininity, long-term- vs short-term orientation, and indulgence. But this study used the latter because it's widely studied concerning EO and the availability of country data on the website, making it easy to compare (Soares *et al.*, 2007).

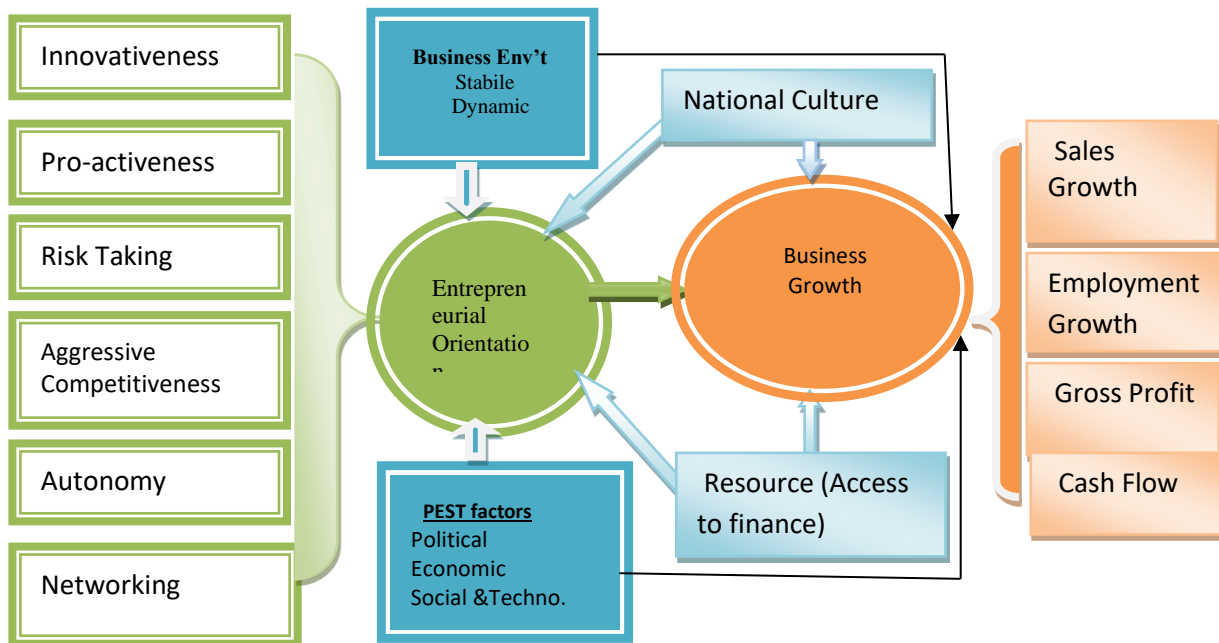
The second research theme discusses the application and significance of EO in different industries with a focus on manufacturing sector SMEs. The assumption is that the service firms such as commercial traders and businesses, finance and insurance firms, accessible occupations, science and technical services, restaurants, and catering companies, information and communication firms, daycare centers and education, and so on, do not have the same policy implication with that of manufacturing sector firms. Thus, studying the EO of SMEs sector-wise is believed to help obtain the actual context-specific facts on the ground and enact sound policy packages which might fit the firms within the sector. Also, it can explicitly be generalized to the whole industry (Lee & Lim, 2009). With this theme, the study answers the following questions: *What are the main challenges of manufacturing SMEs that affect their EO performance? How much EO is practiced in these SMEs? How does EO affect their business performance?* In the third theme of the study, the effect of EO on the business performance of small and medium manufacturing enterprises along with moderating variables are addressed, and the following question is answered: *How does the configuration of market dynamism, access to capital, and EO affect the business performance of the SMEs?*

1.4. The Conceptual Framework of the Dissertation

Based on the literature background, the research framework of the study is visualized in Figure 1.1 below. Those blue shaded in the figure, such as market dynamism, national culture, and PEST factors, are moderating variables, but the first two are emphasized to limit the scope of the study.

However, these factors are addressed and descriptively analyzed to figure out major challenges affecting the EO and growth of SMEs, primarily access to finance, which is studied as a variable that moderates the relationship between EO and business performance. The figure illustrates that the EO that leads to the desired business growth remains under the influence of internal factors such as human capital and financial capital and external factors such as market dynamism, national culture, and PEST factors.

Figure 1.1 The Conceptual Framework of the Research



Source: Own Creation, 2020

1.5. The Organization of the dissertation

This dissertation is organized into five chapters. The first chapter presents the introduction parts. The second chapter deal with the first objective of the research and presents the entire SLR procedures on national culture and entrepreneurship, including its methodology and findings. The third chapter deals with the empirical part of the thesis and addresses the study's second, third, fourth, and fifth objectives, including methodology, results, discussion, and conclusion. The fourth chapter summarizes and concludes both theoretical and empirical analysis as per research themes. In the end, the fifth chapter displays the policy implications, contributions, limitations, and future research direction of the study from both the systematic review and empirical survey parts.

CHAPTER TWO

2. ENTREPRENEURIAL ORIENTATION AND NATIONAL CULTURE: SYSTEMATIC LITERATURE REVIEW

2.1. Introduction

The issue of considering entrepreneurship as one of the economic variables dates to the time of Schumpeter (1934). The essence of entrepreneurship to economic growth has also been long debated in the literature (e.g., Baumol, 1990; Acs, 2006). Economic growth and entrepreneurship affect each other and display a causal-effect relationship. Economic growth can spur an increase in demand for entrepreneurial activity, which creates a demand for resources necessary for innovation (Chowdhury and Audretsch, 2021). However, the relationship between entrepreneurship and business performance as well as economic growth has been moderated by numerous factors, including entrepreneurs' traits (Laskovaia *et al.* 2017) and psychological characteristics (Smale, 2016), formal institutions, and resources in a given economy (Chowdhury and Audretsch, 2021; Vershinina *et al.*, 2018), and the stages of economic development (Kedmenec and Strašek, 2017; Fernández-Serrano and Romero, 2012). In addition, national culture appears to be one of the preponderant predicting as well as moderating factors of entrepreneurial performance measured by sales growth, growth in profits, and market share of firms (Watson *et al.*, 2019; Saeed *et al.*, 2014) and economic growth of nations (Kedmenec and Strašek, 2017; Kreiser *et al.*, 2010; Smale, 2016; Rauch *et al.*, 2013; Peprah and Adekoya, 2020).

Nonetheless, the answer to the question- *how does national culture affect the practice of the EO dimension in different cultural contexts, especially in developing countries with low GDP per capita?* remains far from consensus. Since most of the entrepreneurship studies, particularly on firms' entrepreneurial orientation, are from developed countries, the findings are not appropriate to directly apply to firms in countries with low GDP per capita (Kusumawardhani, McCarthy, and Perera, 2009). Besides, the entrepreneurial orientations (EO) such as innovativeness, risk-taking, and proactiveness, which Lumpkin and Dess (1996) introduce, may vary from country to country (Thomas and Mueller, 2000), and a given country's national culture may affect the adoption and practice of these EOs (Naldi *et al.* 2007; Lumpkin and Dess, 1996). The context of EO here refers to the general national culture and the country's development status where EO is practiced. This study follows Hofstede's national culture dimensions: *individualism versus*

collectivism, masculinism versus feminism, long-term versus short-term orientation, power distance, indulgence versus restraint, and uncertainty avoidance culture (Hofstede, 2011).

The current study, therefore, aimed to review the nexus between national culture, entrepreneurial orientation, business performance, and economic growth, considering the national culture as the primary antecedent. The review result is expected to address the following question: *Which national culture dimensions negatively (positively) influence entrepreneurial activities, and with what mediating or moderating variables? How does national culture affect the EO-business performance relationship? How does this relationship vary with the level of economic development?* The SLR methodology addresses these questions. A series of attempts were made to develop search queries and test them in the databases: Web of Science and EBSCO (Academic Search Complete and Business Source Premier databases). A total of three search attempts were done in the first attempt, three search queries; in the second attempt, seven search queries, and in the third query, ten search queries were developed and tested. Finally, after the critical appraisal method and inculcation of the expert-suggested articles, a total of 60 articles were synthesized. The endnote online was utilized for warehousing articles obtained from databases and filtering them in the records management process.

The review reveals that individualism, long-term orientation, and indulgence positively affect entrepreneurship. On the other hand, masculinity, high power distance, and uncertainty avoidance yield a negative influence on entrepreneurship. The main variables that moderate this relationship are the distribution of entrepreneurial talents, the complementarity or configurations of cultural values, institutional environment, psycho-social factors and demographic variables, and implementation strategies and adoption of new technologies. Literature leaves not enough evidence to conclude that a particular national culture is behind the underdevelopment of developing countries. But a configuration of cultural values determines business and economic growth through entrepreneurial activities. Since the firms in developed nations are relatively more innovative, risk-takers, and proactive, the respective effect of cultural dimensions is less in developed than in developing countries. The current review contributes identifies and proposes a set of pro-entrepreneurship cultural bundling and attempts to add value to the ongoing discourse on culture and entrepreneurship. The following sections, consecutively, present: the methodology, discussion, findings and conclusion, and implications and limitations of the study.

2.2. Systematic Literature Review Methodology

This section discloses the set of methods, keywords, the conceptualization of searching terms, search strategies and search queries, search results, and the tools used to assess the studies' quality and extract the data.

2.2.1. The Search Strategy and Conceptualization

Literature postulates search strategies and models to conceptualize the research questions and ease the search process. Some of the most well-known are PICOC (Population, intervention, comparison, output, and context), SPIDER (sample, phenomena of interest, design, and research type) (Cooke, Smith, & Booth, 2012), SPICE (setting, perspective, intervention, comparison & evaluation) (Booth, 2006) and CIMO (context, intervention, mechanism, and output). The first three are mainly used in medical science, whereas CIMO, which is the selected one here, can be applied to social science studies. Table 2.1., Shows the CIMO concept of RQs.

Table 2.1. The CIMO Concept of the Study

Settings	The application of EO in a different national cultural context with a particular focus on developing countries
C-Context	The cultural perspective of EO in developing Countries: How are EO dimensions practiced in developing countries? How does the national culture affect the EO of developing countries?
I-Intervention	EO dimensions: the firms' innovativeness, risk-taking, and pro-activeness application. The societal practice of national culture: Individualism–collectivism, uncertainty avoidance, power distance, masculinity-femininity, Long-term orientation, and indulgence
M-Mechanisms	e.g., an increase in innovation rate, amount of investment in R&D, making risky decisions and facing uncertainty, taking proactive measures, not reactive criteria, for market changes, making independent decisions, domestic market networks, and internationalizing business. Collective or individual decision-making, investing, and saving for long-term or short term
O-Outcomes	SMEs' business growth: employment growth, profitability, market share, and sales growth, shareholders value, GDP per capita

Sources: Adopted from the references (e.g., Lumpkin and Dess, 1996; Lumpkin & Dess, 2001; Johan & Sven, 2007; Lumpkin, Coglisier, and Schneider, 2009; Kusumawardhani, McCarthy, & Perera, 2009; Kraus, et al. 2012; Buli, 2017; Yimer, et al., 2019)

2.2.2. The Keywords for Scoping Search

In addition to experts' suggestions, keywords are pooled from previous studies. Table 2.2. below displays the series of keywords adopted from various sources to conceptualize the review setups and create search queries for database searches. The keywords identified by the sources mentioned below are directly incorporated into the pool of search terms.

Table 2.2. Keywords for Database Search

Concept 1 Context	Concept 2 Intervention	Concept 3 Mechanisms	Concept 4 Outcomes
The application of EO in different national cultural contexts with a special focus on countries with low GDP or developing countries			
Developing Undeveloped Less developed~ Economies Countries Third-world ~ countries Economy Non- industrialized countries Economy National culture Cultural perspective African countries	Entrepreneurial orientation (EO): innovativeness, risk- taking, & pro-activeness National culture dimensions: individualism/collectivism, uncertainty avoidance, power distance, masculinity/femininity, long-term orientation, and indulgence/restricted	Innovation rate, amount of investment in R&D, creativity, novelty, new products, making risky decisions, risk-averse or avoid, facing uncertainty, overact or outperforming competitors, defensive or offensive action, taking proactive measures, response to competition, pursuing new opportunities, risk taker, domestic market networks and internationalizing business, collective or group or individual decision making, investing, or saving for long-term or short term, free lifestyle, the hierarchy of society, power distribution among society, power centralization or decentralization, respect for authority, embracing or accepting uncertainty, group or teamwork or individual performance	SMEs business growth~ employment growth, profitability, market share, SMEs~ productivity Performance Success Achievement

Sources: Adopted from references (e.g., Lumpkin and Dess, 1996; Lumpkin and Dess, 2001; Johan Frishammar & Sven ÅkeHörte, 2007; Lumpkin, Cogliser, and Schneider, 2009; Kusumawardhani, McCarthy, and Perera, 2009; Kraus, *et al.*, 2012; Buli, 2017; Yimer, et al. 2019)

2.2.3. Developing Search Queries (SQs) and Test Results

The SQs are exclusively developed from the keywords displayed in Table 2.2, applying one or more similar words from each column. The search queries were tested in both Web of Science core collection and EBSCO databases, of which main business source premiere (BSP), academic source complete (ASC), and science direct (SD) are utilized. To develop the optimized search queries, three rounds of attempts were made. Three search queries (SQs) were generated and tested in the first attempt. In the first SQ of this attempt, no records were found in both Web of Science Core Collection databases and EBSCO; in the second SQ, too many irrelevant records (17,413,840 from 1990-2020) were found in EBSCO, while no records were found in Web of Science collection (advanced search option). In the third SQ, no search results in Web of Science, and about 848 were found in EBSCO, but all of them seemed irrelevant to the topics. The details of search queries can be found in Table 2.3 (appendix). In the second SQs creation attempt, seven SQs were developed and tested. Then, a total of 10,968 studies were found from two databases, and the details can be seen in Table 2.4 (appendix), which is still too much to go for screening. After adjustment on Booleans and connectors in the third attempt, the final 10 SQs were developed and tested to ensure the best-optimized result, which is displayed in Table 2.5(see Appendix 1).

In this attempt, out of 1326 articles obtained from the web of science, 260 were pre-screened, while out of 19,759 articles from EBSCO, 200 articles were pre-screened. Among the last 460 papers, 207 were left after removing duplicates, as shown in PRISMA Figure 2.1. Database searching was conducted by selecting a *topic* search. Then, all the pre-screening was done based on the title and abstract readings, and the details can be seen in Table 2.5 (Appendix 1). The pre-screening in Web of Science is done by taking the 30 articles (ten highly cited, ten relevant, and ten newest). In contrast, for EBSCO, there is no option to see highly cited; hence the selection is based on relevance and the latest publication (total of 20) for each search query. The details of the screening process and limiters applied are shown in Table 2.6. below. Also, the inclusion and exclusion criteria used are indicated in Table 2.7 below.

2.2.4. Inclusions and Exclusion Criteria

Tables 2.6 and 2.7, below, display the limiters and inclusion and exclusion criteria applied during database searches.

Table 2. 6. The Limiters During the Search Process

Limiters	Database	Details
1.	WOS	<i>Basic Search only, Refined By: Publication: Years (1975-2021): Document Types: (Article) And Web of Science Categories: (Management Or Business Or Economics) Timespan: All Years (1990-. Indexes: Sci-Expanded, Ssci, A&Hci, Cpci-S, Cpci-Ssh, Bkci-S, Bkci-Ssh, Esci, Ccr-Expanded, Ic.</i>
2.	EBSCO	<i>EBSCO Search Discovery, Basic search Category, Peer reviewed only, academic journal, English Language only, Database/Index: ASC, and BSP, and SD. Subjects: management, business, Economics, Entrepreneurship, and applied psychology are selected. Years:1990-2020. To keep consistency with the web of science, all the keywords and search queries are directly copy pasted. N.B. to minimize the volume of search results, for example, for SQ B EBSCO: - limiters like Geography:- <u>Africa</u> is used.</i>

Source: **Author’s Creation, 2022**

Table 2.7. The Inclusion/Exclusion Criteria

Inclusion/Exclusion criteria	
[WHO]:	All the studies that focus on SMEs exclusively and compare SMEs with large businesses
[WHAT]:	Only the studies related to or connecting entrepreneurial orientation to business performance or national culture or GDP, or GDP per capita
[HOW]:	The studies must show the causal effect relationship among the variables in Row 2 of this Table
[WHERE]:	Studies should include developing countries or some countries from Asia, Africa, Latin America, and other continents
Subjects	Only Business, Management, Entrepreneurship, Economics, and Applied Psychology. Only English Text.
Journal details	Literature Type: Peer-reviewed articles, no grey literature Year of Publication: 1990 to 2021
Type of Study & Methodology	Both qualitative and quantitative studies, theoretical and empirical

Source: **Author’s Creation, 2022**

2.2.5. Summary of Search and Screening Strategy

To conclude the search strategy and processes, the following shortlisted 7 steps are followed. These search strategies have been adapted from the SLR that has been conducted for Regional Entrepreneurship and Development Index (Szerb, *et al.*, 2017). Then, the search results summary is displayed in PRISMA (i.e., Preferred Reporting Items for Systematic Reviews and Meta-Analyses) Figure 2.1, below:

Step 1) Identify all records through database search using your search query/s and search each database separately.

Step 2) Collect every top 10 records (from each database for each search query)

(total 20-30) sorted by:

(1) Relevance

(2) Top cited (is not applied for EBSCO search)

(3) Newly published

Step 3) Incorporate publications recommended by experts (if there are any)

Step 4) Remove duplicates

Step 5) Read titles, keywords, and abstracts and select articles

Step 6) Trace out the references of the selects

Step 7) Carefully check the reference list of articles meeting the criteria if the additional article is needed & exclude unwanted

Step 8) Pool of the selects from the references

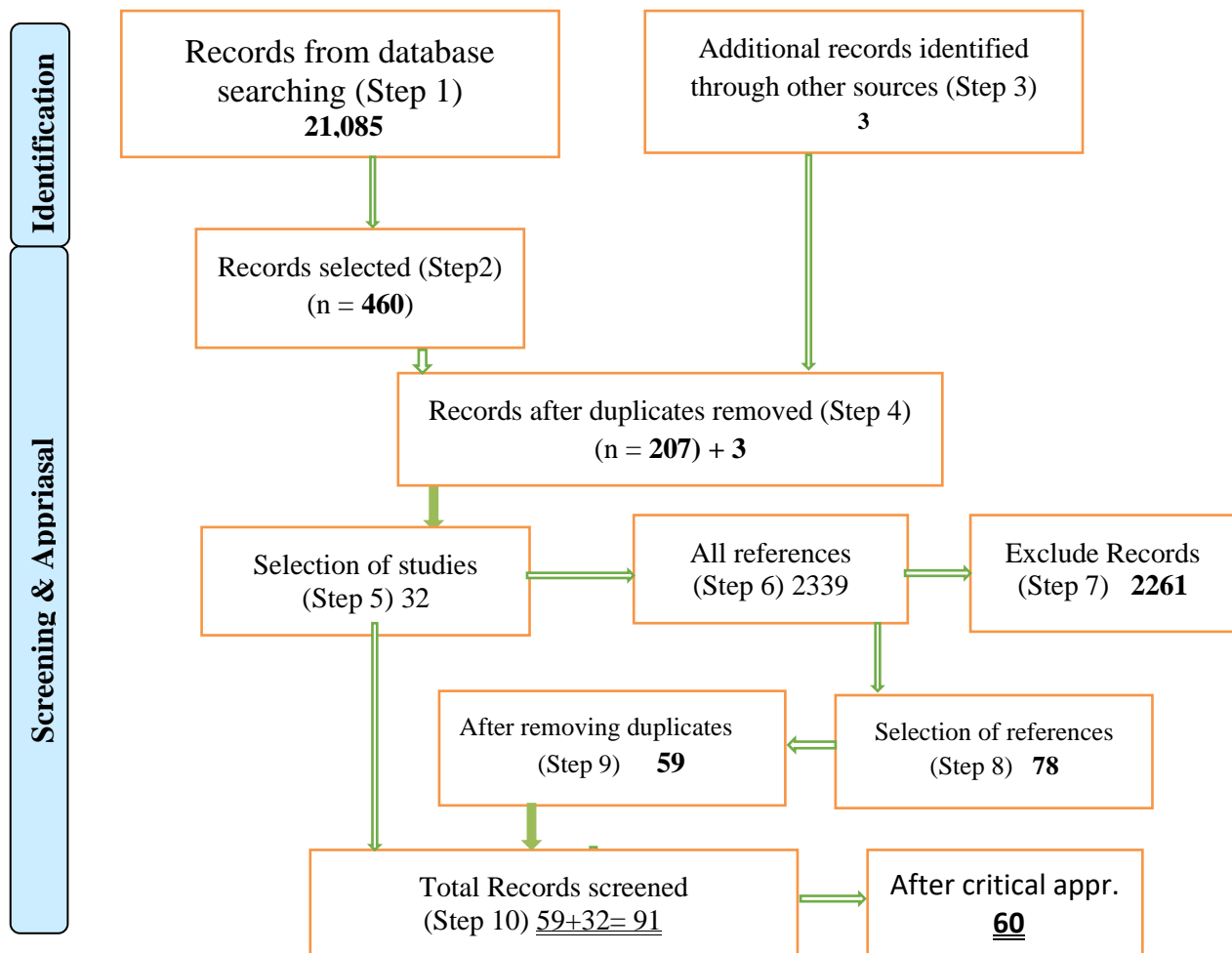
STEP 9) Remove duplicates from the selects

Step 10) Final list of records for quality assessment or critical appraisal

2.2.6. The Summary of Search Results

The flow diagram depicts the flow of information through the different phases of a systematic review. It maps out the number of records identified, included, and excluded and the reasons for exclusions. In addition to 32 articles obtained from the search main database result, the references of these articles were traced out to identify the relevant reports. Of 2339 articles from the reference search, 2261 were excluded, while 78 were selected for further process. After duplicates, 59 are specified for the study quality assessment; 32 studies were obtained from databases.

Figure 2. 1. PRISMA Flow Diagram



Source: Author’s Creation, 2022

2.2.7. Study Quality Assessment

In a systematic review, examining each targeted study's section of methods and results is often referred to as *critical appraisal* and sometimes as “assessing study quality.” A study quality means different things to different people working in various disciplines. In this review, it refers to “internal validity” – which indicates the extent to which a study is free from the main methodological biases or the susceptibility to bias (Littell *et al.*, 2008) related to selection, response, attrition, and observer; and “external validity”-that underpins the extent of the application and replication of a study and its results. The study quality assessment tool, Table 2.8, below, and Table 2.9 (Appendix 2), was adopted from Littell *et al.* (2008) and Pittaway *et al.* (2004) that includes theory robustness and implications for practice, soundness of

methodology, and data supporting argument. And from Dixon-Woods et al. (2006) suggest considering aims and objectives, research design, and method of analysis, a clear account of the process by which adequate data support their interpretations, findings, and conclusions. Table 2.8 (Appendix 2) summarizes the criteria for the critical appraisal of the studies.

Perhaps the study would automatically be discarded without further assessment if any of the mentioned criteria are not applicable (deemed under the ‘not applicable’ column). Based on the scales and criteria, the quality of each study was critically assessed, as shown in Table 2.9 (Appendix 2). The average score of the five criteria was calculated, and the selection of the final articles for extraction was decided by a cut-off point to be set by the review panel that includes the principal advisor and co-advisor of this research work. The assessment results above the average are considered for data extraction.

2.2.8. Data Extraction

Extracting the relevant information from each study can be done by copying it onto printed proforma templates or directly entering it into a database or tabular form (Higgins & Green, 2006). They also argue that the data forms used to extract information bridge the previous research studies and the current review synthesis and serve as a historical record of reviewers’ decisions. Jesson and Stone (2009) suggest extracting author and publication details, including title and journal, paradigm (academic discipline: e.g., management science, entrepreneurship, sociology, etc.), aim and focus of the paper, and method details (sample selection, size, method design, response rate, location of the study, etc.), theory or models (at least the list of them), data characteristics, segmentation, and other relevant and valuable information. In addition, Brown (2006) recommends incorporating the keywords, discipline, and abstract of studies. Inculcating these suggestions, the data extraction tool, below Table 2.10 (see Appendix 2), is developed and proposed mainly following Green et al. (2013). The software program such as endnote and NVivo were utilized for the extraction of the relevant information.

2.2.9. Synthesis of the Results

Combining the results systematically and appropriately is crucial to a systematic review. The literature underlines two broad modes of synthesis: *configurative synthesis and aggregative synthesis* (Gough et al., 2012, P. 181). Syntheses that *configure* generate a new theory or explore

the salient features of the existing theories applied in different situations. The studies in such cases are heterogeneous or quite different from each other even if they affiliate to the same discipline. In contrast, aggregative synthesis helps to test a particular hypothesis and theory and uses a relatively more homogeneous set of studies. Nonetheless, it may also help build a configured big-picture result from similar pieces (studies). Since the study follows the configurational approach, *configurative synthesis*, is pursued in this systematic review. The studies' results are synthesized both quantitatively using descriptive statistics, including means, standard deviation (SD), and frequency distribution tables, and qualitatively in the form of narration. The coding of the extracted qualitative information and generation of reports are assisted by NVivo software. The reporting structure of the report was adopted from Higgins & Green (2006) that includes background, objectives, methodology, data synthesis and evidence base of the analysis, discussion, conclusion and findings, implication, and acknowledgment.

2.3. Evidence Base of Data Analysis and Synthesis

This section displays the data distribution background and pieces of evidence for the review synthesis and findings. The first section presents the internal data validity and reliability based on the qualitative data software (NVivo) outputs. The second section presents the descriptive statistics related to the general characteristics of the studies incorporated in the review.

2.3.1. Reliability and Validity of the Review

Reliability in qualitative research includes category and inter-judge reliability. "*Category reliability depends on an analyst's ability to formulate categories and present them to the judges,*" who are supervisors in the current research, whereas "*inter-judge reliability refers to the degree of consistency that coders processing the same data*" (Sekaran and Bougie, 2016, p 348). The assurance of the category reliability can be claimed from the NVivo results shown in Figures 2.2, 2.3., 2.4., 2.5, and 2.6., below. They also argue that the review study's internal validity refers to the extent to which the collected data support research results. Figure 2.2. visualizes the top one hundred words obtained from the text search of all target studies of this review. The core variables of the current research, culture, and entrepreneurship, are at the forefront. Among others, the most frequently observed words are national culture, entrepreneurship, innovativeness and innovation, individualism/collectivism, uncertainty avoidance, Hofstede's cultural dimension, developing, business, and countries developing and

development. The current study has included all of these as keywords for search queries. Most importantly, entrepreneurship and culture, the dependent and independent variables, respectively, are at the center of word clouds and frequently observed variables. This can signal that the collection of studies for review is consistent and reliable to meet the study's specific objectives. Moreover, the codebook (see Appendix 2, Table 2.10) was commented on to avoid coder bias before use. In this case, the coded items were also reviewed by the panel of experts, supervisors.

Figure 2.2. The Word Clouds of the Top 100 Words from the Articles



Source: Own Review NVivo result, 2021

Figure 2.3. below elucidates the mapping concept of the variables in the study. It depicts the interconnection among dependent, independent, control, mediating, and moderating variables and how the data synthesis will occur. As shown in the Figure, entrepreneurship, and culture are the core variables that the analysis revolves around. Each of the three main entrepreneurial orientations: risk-taking, innovativeness, and proactiveness, independently interacts with the six dimensions of national culture: individualism, masculinity, uncertainty avoidance, power

distance, indulgence, and long-term orientation. Given the controlling variables, other individual and institutional factors moderated the relationship between these entrepreneurial orientations and national cultural dimensions.

Figure 2.3. The Conceptual Map of the review



Source: Own review NVivo result, 2021

The cluster of the nodes is based on the word similarity (Figure 2.4., Appendix 3). The clustering process of the nodes was based on Jaccard's coefficient of word similarity. Compared to the

Pearson correlation coefficient, under NVivo, Jaccard's coefficient seems better to identify the topic modeling and creation of subtopics and ensure the consistency of data extraction output. As shown in the cluster, the synthesis, conforming to the objectives of the analysis, addresses entrepreneurial orientation and culture, innovativeness, and national culture, proactiveness and national culture, risk-taking and national culture, business performance, entrepreneurial orientation and national culture, and economic growth, entrepreneurial orientation, and national culture, respectively. The synthesis was further supported by the clustering of sources shown in Figure 2.5 (see Appendix 3) below, in which attempts were made to ensure the studies in the same cluster were utilized for the topic under analysis.

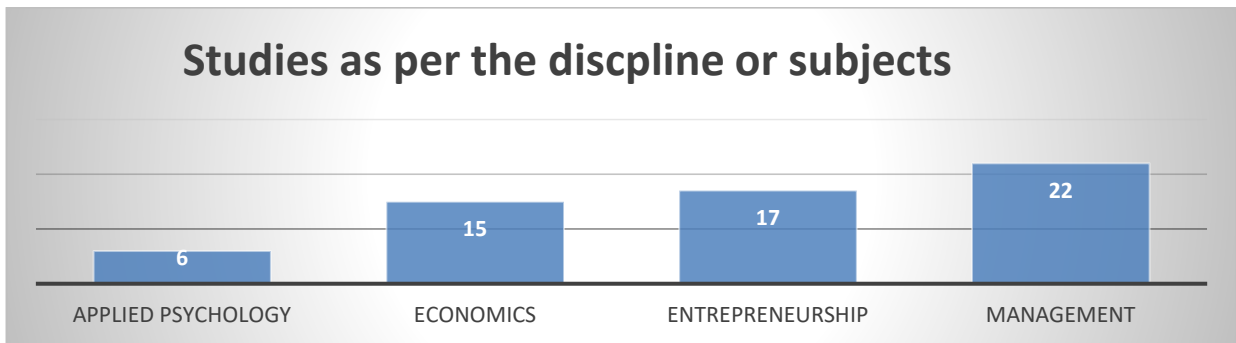
The textual comparison in Figure 2.6 (see Appendix 3) shows the implicit interaction between entrepreneurial orientation and national culture on one side and economic growth, entrepreneurial orientation, and national culture on the other. Studies such as Saeed *et al.* (2014) (STUD67), Lee Park and Paiva (2018) (STUD63), Lortie *et al.* (2019) (STUD54), Kreiser *et al.* (2010) (STUD 49), Hancioğlu *et al.* (2014) (STUD39), Facchini *et al.* (2021) (STUD31), Dheer, 2017 (STUD 27), and Çelikkol *et al.* 2019 (STUD19), those at the center, address the causal-effect relationship and dynamics among entrepreneurship, national culture, and economic growth. Hence, these studies were exploited to reveal the nexus among these variables.

Furthermore, the hierarchical comparison results in Figure 2.7 (see Appendix 3) show all the integral components of the review and the nodding process. The main features are the studies' findings or results (green highlighted), research methodology (yellow highlighted), and general characteristics of the study (brown highlighted)

2.3.2. Descriptive Statistics of the Review Results

This section describes the review results using descriptive statistics: tabulation, frequency distribution, charts, and histograms. Table 2.2. (Appendix 1) and Figure 2.8. shows that concepts of entrepreneurial orientation and national culture are being studied from Management 22(37%), Entrepreneurship 17 (28%), and Economics 15(25%) subjects points of view. The concepts of entrepreneurship had been embedded in management and economics, but in the last three decades, entrepreneurship has evolved as an independent field of study.

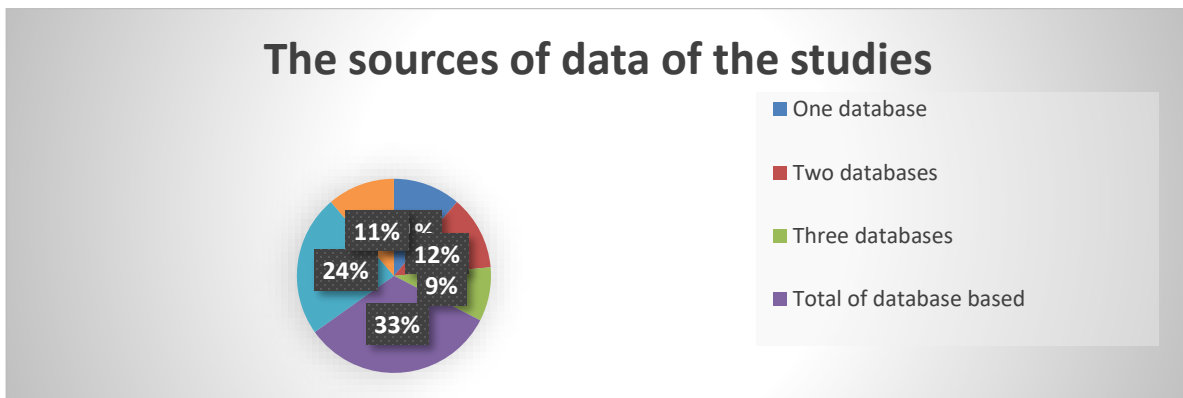
Figure 2.8. Number of analyzed studies per discipline



Source: **Own analysis result, 2021**

Table 2.3. (see Appendix 3) and Figure 2.9., below, displays the size of databases employed in the studies under review. Most of the studies, 29 (48.3%), are quantitative studies based on databases that address entrepreneurship and/or national culture, from which 19(31.%) have used two or three databases to do the research. Besides, a significant portion of studies, 21(35%), use a survey alone or survey and one or two database/s, whereas 10 (16.7%) are literature reviews.

Figure 2.9. The Size of Databases Utilized in the Studies



Source: **Own Analysis result, 2021**

Below, Table 2.8 shows the databases utilized in the reviewed studies. To analyze the national cultural dimensions, the most frequently employed databases are Hofstede National Culture 20 (30%), Global Leadership and Organizational Behavior Effectiveness (GLOBE) 5 (7.6%), World Value Survey 2 (3%), and The Schwartz Value Survey 2(3%), respectively. On the other side, to analyze the entrepreneurial orientation dimensions, the Global Entrepreneurship Monitor 7(10.6%), World Bank Entrepreneurship Survey 6(9%), and the Global Innovation Index 3

(4.5%) are utilized. The classical Hofstede national culture dimensions continue to be widely debated in studies published in the world's leading journals, including the Academy of Management, Entrepreneurship Theory and Practice (e.g., Saeed et al., 2014; Kreiser et al., 2010), Journal of Business Venturing (e.g., Taylor and Wilson, 2012), and Small Business Economics (e.g., Dheer, 2017, Laskovaia *et al.* 2017; Bennett and Nikolaev, 2021).

Table 2.8., The Databases Observed in the Reviewed Studies

No.	Database	Freq	Prop.
1.	Hofstede National culture (e.g., Çelikkol et al.,2019; Chui et al., 2010; Haq et al., 2018)	20	30.3
2.	Global Entrepreneurship Monitor (e.g., Dheer, 2017; Hancıoğlu et al., 2014; Morales-Alonso et al., 2021)	7	10.6
3.	World Bank (e.g. Castellani, 2019; 37)	6	9.1
4.	Global Leadership and Organizational Behavior Effectiveness (GLOBE) (Laskovaia et al., 2017)	5	7.6
5.	The Global Innovation Index (GII) Tekic and Tekic, 2021	3	4.5
6.	World Value Survey (WVS) (Lortie et al., 2019)	2	3.0
7.	World Governance Indicators (WGI) (Xia and Liu, 2021)	2	3.0
8.	The Schwartz Value Survey (Jaen, Fernandez-Serrano, & Linan, 2013)	2	3.0
9.	World Development Indicator (2019) (Peprah and Adekoya, 2020)	2	3.0
10.	Global Competitiveness Index (Saeed et al., 2014)	2	3.0
11.	Global Entrepreneurship and Development Institute (Çelikkol et al.,2019)	1	1.5
12.	CRSP database (Chui et al., 2010)	1	1.5
13.	United Nations Development Program (Dheer, 2017)	1	1.5
14.	Freedom House database (Dheer, 2017)	1	1.5
15.	CIA's World Fact Book (Gantenbein et al., 2019)	1	1.5
16.	A global dataset of publicly listed banks (Haq et al., 2018)	1	1.5
17.	UNESCO, 2002 (Kreiser et al., 2010)	1	1.5
18.	Global University Entrepreneurial Spirit Students' Surve (Laskovaia et al., 2017)	1	1.5
19.	WCM (world-class manufacturing) database 63 (Lee Park and Paiva, 2018)	1	1.5
20.	World Bank's Entrepreneurship Survey and Database (Peprah and Adekoya, 2020)	1	1.5
21.	NBER patent database (Taylor and Wilson, 2012)	1	1.5
22.	Thomson-ISI National Science Indicators database (Taylor and Wilson, 2012)	1	1.5
23.	the Urban Development Index (UDI) (Xia and Liu, 2021)	1	1.5
24.	Heritage Freedom Index (HFI) (Young et al., 2018)	1	1.5
25.	The Economic Freedom Index (EFI) (Xia and Liu, 2021)	1	1.5
		66	100

Source: Own Review Nvivo result, 2021

It seems familiar for researchers to puzzle with finding the right data analysis software. As shown in Table 2.5. (see Appendix 3), in this review, the most frequently applied software for quantitative data analysis of the studies are SPSS, STATA, and R, respectively. It also signifies that in social science studies, SPSS is still valid and appropriate quantitative data analysis software followed by STATA and R. It also shows that SPSS 23 version appears to be the latest in use in the literature; any of its versions, however, can be applied for the data analysis in the current field of study.

2.3.3. Methodological Challenges

The subjects of entrepreneurship and national culture have been independently, and jointly as well, researched in various disciplines from different perspectives using meta-theoretical assumptions and methodologies. Due to this fact, the first challenge emerges from conceptualizing the terms. Entrepreneurship is innately a broad concept with a wide range of applications in profit- and non-profitmaking or social enterprise aspects. In this review, entrepreneurship is considered from the profit-making business. Besides, national culture is a multidimensional construct, which has been studied from sociological, psychological, and economic perspectives. In this review, national culture is investigated from an economic point of view. And the disciplines included are entrepreneurship, management, economics, and applied psychology (only six studies, less than 9% included it) (Table 2.8). To conceptualize the terms, I have adopted CIMO (context, intervention, mechanism, and output) (Booth, 2006; Cooke, Smith, & Booth, 2012).

Regarding the ‘context’, in every search query, I included the keywords: “developing* AND econom* OR countr* or world or Africa*, also refer to Table 2.5 (appendix)” to make sure studies represent or involve developing countries, which are less researched. As a result, in Table 2.10, under the “subject” column, all the studies contain one or more of the developing countries. As ‘interventions’, the search queries contain the dimensions of EO (e.g., innovativeness, proactiveness, and risk-taking) and national culture (e.g., individualism, masculinism versus feminism, long-term versus short-term orientation); as a ‘mechanism’, an attempt is made to bring together the two terms: an increase in innovation rate, amount of investment in R&D, making risky decisions, and facing uncertainty, collective or individual decision-making, investing, and/or saving for the long-term or short term; finally, as ‘outputs’, terms such as SMEs' business

growth, employment growth, profitability, market share, and sales growth, shareholders value, and GDP per capita are included in each search query.

The second main challenge of the review emanates from database searching. The review utilized Web of Science and EBSCO databases for article searching. Since the databases differ by their user interface, the search strings, Booleans applications, and search options, it is impossible to apply the same search queries in all. For example, as shown in Table 2.3 (Appendix 1), in the first attempt of Testing search queries (SQ), in SQ A, no records were found in both Web of Science Core Collection databases and EBSCO; in SQ B, too many irrelevant records (17,413,840 from 1990-2020) were found in EBSCO while no records found in Web of Science collection (advanced search option); SQ C, no search results in Web of Science and about 848 search results were found in EBSCO but all irrelevant based on the topics. Three separate series of database searching were made to resolve this discrepancy and obtain optimum results from each database. In this regard, though it increases the size of SQs, it is a good practice to prepare tailor-made search queries that are suitable for each database instead of trying to apply the same SQ in all.

Another review challenge is associated with applying pre-set criteria for pre-screening articles from the databases. This review considers the top 10 articles based on each of the criteria: the latest publication, relevance, and citation, which makes a total of 30 articles for each SQ in a database. However, among these criteria, screening based on “citation” is not applicable in EBSCO. I, hence, decided to screen out only 20 articles based on relevance and the latest time of publication in the case of EBSCO, as shown in Table 2.5 (Appendix 1). Thus, I commend considering the database difference while pre-setting the pre-screening criteria. Finally, the biggest review challenge is subjectivity and possible personal bias in the critical appraisal of the study quality. Even though the quality assessment tool was adopted from the existing time-tested research, the evaluation results and scoring are not free from the rater biases (see Tables 2.8, and 2.9, Appendix 3). As a result, there was a chance for high-quality studies to be rejected, and it is, thus, recommended to do a SLR in Team.

2.4. The Discussion of Review Results and Findings

This section depicts the results and findings obtained from the SLR. The discussion has been done on national culture and entrepreneurship, national culture, and entrepreneurial orientations, specifically innovativeness, risk-taking, and proactiveness. Following this, the interaction between national culture, entrepreneurship, business performance, and economic growth is presented.

2.4.1. National Culture and Entrepreneurship

2.4.1.1. Concepts and Definition of National Culture

Since the 1980s, culture has become the central point of discussion in management and economics literature. The horizon of the influence of culture is not only limited to individuals' lifestyles but also extends to the community, organizations, regions, and nations. Studies show the inherited association of culture with the entrepreneurial intentions of individuals (Farrukh *et al.* 2019; Chukwuma-Nwuba, 2018; Lortie *et al.* 2019), formal institutions such as policies and regulations (Dheer, 2017; Young *et al.* 2018), psychological and demographic variables (Kutan *et al.* 2021; Laskovaia *et al.* 2017; Smale, 2016), business decisions such as investment choices (Gantenbein *et al.*, 2019; Haq *et al.*, 2018) and operation management (Boscari *et al.* 2018; Knein *et al.* 2020; Schneider and Engelen, 2015; Lee Park and Paiva, 2018), the entrepreneurial performance that includes sales growth, growth in profits, and market share (Watson *et al.* 2019; Saeed *et al.* 2014). Most importantly, it is also associated with the economic growth of nations (Kedmenec and Strašek, 2017; Kreiser *et al.* 2010; Smale, 2016; Rauch *et al.* 2013; Peparah and Adekoya, 2020).

The culture of a nation, thus, determines the entrepreneurial attitudes of potential entrepreneurs and the economic transition from a resource-based economy to a knowledge-based economy (Facchini *et al.* 2021; Donaldson, 2021; Chukwuma-Nwuba, 2018). It determines the willingness and commitment of potential entrepreneurs for self-employment and corporate entrepreneurs to innovate or engage in entrepreneurial activities (Facchini *et al.*, 2021). A culture that favors entrepreneurship is a fertile ground for entrepreneurial intentions to flourish and promotes the creation of new ventures (Chukwuma-Nwuba, 2018). It can also be considered an entrepreneurial culture. Opper and Andersson (2019) define entrepreneurial culture as shared beliefs, norms, and

expected behavior transferred and internalized over multiple generations. Entrepreneurial culture differs from the non-entrepreneurial culture in which the former enhances behaviors that capsule with entrepreneurship, e.g., risk-taking, innovating, creating, etc., and prioritizes engagement in socially desired entrepreneurial activities; regenerates and shapes the communities in a way they regulate the salient features of entrepreneurial practices (Donaldson, 2021).

Hancıoğlu *et al.* (2014) argue that the entrepreneurship-oriented culture tends to show an appreciative and positive social attitude toward entrepreneurial activities. It demonstrates a greater tolerance for failure and enables entrepreneurs to create jobs. As a result of fear of social stigmatization associated with business failure and favorable social recognition of public sector jobs, potential entrepreneurs, for example, in countries like UEA, demonstrate a low interest in starting their businesses (Facchini *et al.* 2021). Even though culture is an intensively researched topic in various fields of study, there is no single universally accepted definition. The terminological diversion related to culture includes organizational, societal, and national cultures. As the current research focuses on the national culture perspective, some of its definitions are displayed in Table 2.9. below.

As shown below, Table 2.9, the key terms in the definitions of culture include "beliefs, values, and norms," "common," "mental models or ideas and thoughts," "transmitted or interpreted," and "shared by a group of people or collectives," "distinguishes or differentiates," and "regulates or governs." Inculcating these words, I define national culture as a unique set of values, beliefs, norms, ideas, and thoughts that are shared by a group of people that distinguish them from other groups and regulate their interactions within themselves, with others, with their creator, and with nature. National culture has also been further classified into different dimensions, and the following section presents Hofstede's national culture dimensions and their effect on entrepreneurship.

Table 2.9., Definitions of National Culture

Authors	Definitions
Hofstede (1980)	Culture is a set of beliefs and values shared by a group of people that, in turn, regulates what the people regard as socially acceptable behaviors
Hofstede, 1981, p. 24. cited in Saeed et al. (2014)	Culture is the “collective programming of the human mind that distinguishes the members of one group from those of another”
Opper and Andersson (2019)	Culture is a set of shared belief, norms, and expected behavior internalized and transmitted over multiple generations.
Smale (2016)	National culture is an interconnected web of mental models that national groups and individuals share.
Bik, 2010, 72, cited in Tian et al. (2021)	Culture can be defined as a particular set of values, behaviors, beliefs, and attitudes that are shared, interpreted, and transmitted over time within a collective and distinguish that collective from other collectives.
Kutan et al., (2021)	Culture is the collective norms and values that differentiate the members of one group from the other
Greif, 1994, p915 cited in Castellani (2019).	Culture is defined as “ideas and thoughts common to several individuals that govern interactions between these people, and between them, their gods, and other groups, and differ from knowledge in that they are not empirically discovered or analytically proven and become known through the socialization process.”
House and Javidan, 2004, 15; cited in Urbach et al.(2021)	“A set of shared motives, values, identities, beliefs and interpretations or meanings of significant events that result from common experiences of members of collectivities”

Source: Author’s creation, 2022

2.4.1.2. The Dimensions of National Culture and Effects on Entrepreneurship

The Hofstede national culture dimensions are the most debated in various social science studies such as applied psychology (Laskovaia *et al.* 2017; Smale, 2016) and business and management literature (Saeed et al., 2014; Lee Park and Paiva, 2018; Nakata, & Sivakumar, 1996). To develop Hofstede’s national culture index, a comprehensive survey was conducted on 117,000 surveys from over 88,000 IBM employees across 70 nations, which was translated into 20 languages and collected between 1967 and 1969 and again between 1971 and 1973. In 1980, Hofstede introduced a set of four partially bi-polar, national cultural dimensions: individualism/collectivism, masculinity/femininity, power distance, and uncertainty avoidance. This database was later expanded with ten additional countries and three regions (i.e., Arab countries and East and West Africa). In the 1980s, based on the research of psychologist Michael

Harris Bond, a fifth dimension was added (Hofstede & Bond, 1988), named long-term orientation. Finally, in the 2000s, Michael Minkov utilized the data from the World Values Survey (Minkov, 2007), which allowed the addition of a sixth dimension (Hofstede, & Minkov, 2010), named indulgence (Kedmenec and Strašek, 2017; Saeed et al., 2014; Kreiser et al., 2010). Therefore, we now have six of Hofstede's national culture, mostly bi-polar, dimensions: Individualism versus Collectivism, Masculism versus Feminism, Power distance, uncertainty avoidance, long-term versus short-term orientation, and indulgence versus restraint culture.

Uncertainty avoidance refers to the ease with which people deal with situations they perceive as ambiguous, unpredictable, unforeseeable, and unknown (Hofstede, 2001; Saeed et al., 2014). Individualism is defined as a loosely knit social framework in which individuals are supposed to care for themselves and their immediate families only (Hofstede, 1983). On the contrary, in the continuum of individualism versus collectivism, the latter is characterized by a tight social framework in which people identify themselves in groups and out-groups. They expect their in-group to look after them and exchange all thoughts, resources, and feelings of people in-group (Hofstede, 1983; Saeed et al., 2014). Power distance refers to the extent of equity in power distribution among societal members and societal norms that shows how much individuals accept the unequal power distribution in a society (Zaandam *et al.* 2021; Hofstede, 2001).

Traditionally, masculinity refers to the dominant male society with a clear-cut role difference between males and females (Çelikkol *et al.* 2019). It, moreover, shows the tendency of the members of a society or a nation towards materialism, achievement, success, assertiveness, and wealth accumulation. A higher masculine culture exhibits assertive, ostentatious, and competitive behaviors that could lead to higher achievements (Kutan *et al.* 2021). While indulgence refers to the level of freedom given to individuals to entertain, relax, enjoy life, and experience new things. Each of the dimensions of national culture influences the entrepreneurial activities and entrepreneurial ecosystems of a nation directly as well as indirectly.

However, the studies on national culture and entrepreneurship mainly focus on either developed countries' contexts alone or mix both developed and developing countries (Farrukh *et al.* 2019). Hence, comparative studies are limited to showing the effect of different national cultural dimensions on entrepreneurship and making evidence-based analyses by differentiating developed countries from developing countries. A five-year longitudinal study covering 82

countries measures the impact of national culture on entrepreneurship rate, based on the Global Entrepreneurship and Development Institute (GEDI) data. It shows that individualism, long-term orientation, and indulgence culture support entrepreneurship rates, whereas masculinity renders entrepreneurship. The other dimensions do not significantly affect the change in entrepreneurship rates in these countries (Çelikkol *et al.* 2019).

Besides, the findings from six regions of a developing country, the Republic of Cape Verde, depict that individualism plays the most prominent role in enhancing new venture creation. In contrast, masculinity does not exert a significant effect on new business creation rates in the country (Almodóvar-González *et al.*, 2020). This is also seen in multiple countries where individualism remains an accelerator of entrepreneurial venture creations (Çelikkol *et al.* 2019; Gantenbein *et al.* 2019; Kutun *et al.* 2021). Controlling for economic conditions, the legal environment (the rule of law), and other cultural dimensions (power distance, uncertainty avoidance, masculinity, long-term orientation indulgence), the study on 88 countries from 1998 to 2014 reveals that individualism is positively and significantly related to venture-capital investments and explains 30% of cross-country variation. This establishes that individualism, which is intrinsically associated with values of individual freedom, personal responsibility, and reward, is a driving factor of entrepreneurial spirit and, thus, venture-capital investments (Gantenbein *et al.*, 2019).

Notwithstanding, Farrukh, *et al.* (2019) argue that both individualism and collectivism influence entrepreneurial intentions. Their study in Pakistan reveals that individualism moderates the attitudes towards entrepreneurship through perceived behavioral control, whereas collectivism moderates the attitude through the subjective norms commonly accepted by the community. However, even though both individualism and collectivism have their different and unique effect on entrepreneurship, they argue that individualism plays a vital role in the motivational antecedents of entrepreneurship, and individualistic values such as independent thinking, independence, and achievement could be obtained through action-based learning (Farrukh *et al.*, 2019). It indicates that the advantage of individualism outweighs collectivism, specifically in entrepreneurial motivation and the size of venture creations because of its strong linkage with individual freedom and autonomy. Its positive association with various entrepreneurial aspects of entrepreneurship, such as entrepreneurial attitudes, abilities, and aspirations (Çelikkol *et al.*

2019), entrepreneurial behavior (Almodóvar-González *et al.* 2020), entrepreneurial intentions (Farrukh *et al.* 2019), and venture capital investment on start-ups (Gantenbein *et al.* 2019) and risk-taking (Kutan *et al.* 2021) is well established.

Nonetheless, the fortunes of entrepreneurship in collectivistic culture need not be overlooked. In a collectivistic culture, individuals allude that if their ‘significant others’ approve of their decision to become entrepreneurs, they would be more motivated to self-employment and feel capable of engaging in entrepreneurial activities (Chukwuma-Nwuba, 2018). The collectivistic culture can also determine the type of entrepreneurship, which is mainly practiced in the form of cooperatives. It serves as a source of income for entrepreneurs. Especially, family and friends become the primary sources of funds for new venture creation, and, in this regard, collectivism positively influences entrepreneurship (Chukwuma-Nwuba, 2018).

In an indulgent culture, people prefer to have enjoyable, more leisurely life, and there is less self-control which results in more debt structure. Hence, there is higher risk-taking in a society that exercises an indulgence culture (Kutan *et al.*, 2021). It does elevate not only risk-taking but also creativity and technology outputs (Prim *et al.*, 2017), entrepreneurial innovativeness (Tehseen *et al.*, 2021), and entrepreneurial attitudes, abilities, and aspirations (Çelikkol *et al.*, 2019). Its positive association with entrepreneurship is not only limited to profit-making businesses but also to creating social entrepreneurial ventures (Kedmenec and Strašek, 2017). This highlight that the more individuals are exposed to free-thinking, relaxation, entertainment, and new adventures and experiments, the more they learn from mistakes and failures and become creative, risk-takers, and innovative.

Despite the common belief, masculinity is negatively related to venture capital (Gantenbein *et al.*, 2019). The studies on a sizeable country-based sample size disclosed a negative rendering effect of masculinity on entrepreneurship. The studies by Çelikkol *et al.* (2019) considered 82 countries and studied entrepreneurial attitudes, abilities, and aspirations, and Gantenbein *et al.*(2019), on 88 countries that dealt with decisions on venture capital investment claimed it. Their findings support the previous study by Prim *et al.* (2017) that showed the negative effect of masculinism on creativity and technology outputs considering the data from 72 countries. However, this does not mean masculinism culture has no use in entrepreneurship. For instance, it is positively associated with entrepreneurial risk-taking (Kutan *et al.*, 2021). Besides, it could also

positively contribute if we consider only the initial stage of entrepreneurial decision when bold decisions are required, the masculine culture may positively precipitate entrepreneurial activities.

Regarding uncertainty avoidance, a dearth of literature reveals its opposite correlation with entrepreneurship. Gantenbein *et al.* (2019) argue that it is negatively related to entrepreneurship, especially with venture capital creation. It also negates the risk-taking propensity of decision-makers (Kutan *et al.*, 2021; Bate, 2022) and reduces creativity and technology outputs (Prim *et al.*, 2017) and the adoption and implementation of new technologies (Veiga *et al.*, 2001). This shows that the more the level of uncertainty avoidance, the more a society becomes risk-averse and less open to experiencing new experiments or products that finally result in low venture creation and innovation. Nonetheless, uncertainty avoidance will not have a significant effect if we merely consider the entrepreneurial rates or the creation of new business ventures (Çelikkol *et al.*, 2019; Hancıoğlu *et al.*, 2014) because there are so many non-entrepreneurial businesses that only play in their comfort zone. Also, we cannot conclude that the high uncertainty avoidance in developing countries negatively influences their total entrepreneurial activities (TEA) or that a low uncertainty avoidance culture in developed countries positively influences the TEA (Hancıoğlu *et al.*, 2014).

Since entrepreneurs are dreamers, it seems to be believed that they are long-term oriented. Several studies reveal that long-term orientation stanches entrepreneurial activities in various economic settings (e.g., Çelikkol *et al.*, 2019; Gantenbein *et al.*, 2019; Lortie *et al.*, 2019). Regarding the level of power distribution, Çelikkol *et al.* (2019) find no significant effect of power distance on entrepreneurial attitude, abilities, and aspiration. However, several pieces of literature argue that it negatively affects various aspects of entrepreneurship, such as entrepreneurial risk-taking (Kutan *et al.* 2021), adoption and implementation of new technologies (Veiga *et al.*, 2001), and creativity and technology outputs (Prim *et al.*, 2017). Veiga *et al.* (2001) show that countries with a higher power distance are slow to accept new things or IT products. Japanese people (higher power distance) do not move as fast as the USA citizens (low power distance) in IT adoption rates. For example, in 1993, Japan had 9.9 personal computers per 100 workers compared to 41.7 in the USA. In line with this, Prim *et al.* (2017) find the idea that power distance is negatively related to creativity and innovative technological outputs, which means that those countries with more decentralized organizations tend to be more creative. This also pinpoints the interpretation

that the influence of national culture dimensions could vary based on the level of complementarity with other cultural dimensions and economic variables. The Table 2.10. below, summarizes the effects of national culture dimensions on entrepreneurship in general.

Table 2.10. The Effect of National Cultural Dimensions on Entrepreneurial Activities

Dimension	References	Subjects	Measures	Effects
Masculinity	Çelikkol et al., (2019)	82 countries	Entrepreneurial attitudes, abilities, and aspirations	-ve influence
	Almodóvar-González et al., (2020)	Cape Verde, six regions.	Entrepreneurial behavior	-ve influence
	Kutan et al., (2021)	Systematic review	Entrepreneurial risk-taking	+ve influence
	Prim et al., (2017)	72 countries	Creativity and technology outputs	-ve influence
	Gantenbein et al., (2019)	88 countries	Venture capital investment	-ve influence
Individualism	Çelikkol et al., (2019)	82 countries	Entrepreneurial attitudes, abilities, and aspirations	+ve influence
	Almodóvar-González et al., (2020)	Cape Verde, six regions.	Entrepreneurial behavior	+ve influence
	Gantenbein et al., (2019)	88 countries	Venture capital investment in start-ups	+ve influence
	Farrukh et al., (2019)	One country, Pakistan	Entrepreneurial intentions	+ve influence
	Prim et al., (2017)	72 countries	Creativity and technology outputs	+ve influence
Uncertainty avoidance	Çelikkol et al., (2019)	82 countries	Entrepreneurial attitudes, abilities, and aspirations	no significant effect
	Hancioğlu et al., (2014)	57 countries	Total entrepreneurial activity (TEA)	no significant effect
	Gantenbein et al., (2019)	88 countries	Venture capital investment in start-ups	-ve influence
	Veiga et al., (2001)	Literature Review	Adoption and implementation of new technologies	-ve influence
	Kutan et al., (2021)	Systematic Review	Entrepreneurial risk-taking	-ve influence
	Prim et al., (2017)	72 countries	Creativity and technology outputs	-ve influence
Long-term orientation	Çelikkol et al., (2019)	82 countries	Entrepreneurial attitudes, abilities, and aspirations	+ve influence
	Lortie et al., (2019)	29 nations 262 regions	Self-employment rates	+ve influence
	Gantenbein et al., (2019)	88 countries	Venture capital investment in start-ups	+ve influence
	Prim et al., (2017)	72 countries	Creativity and technology outputs	+ve influence

Dimension	References	Subjects	Measures	Effects
Power distance	Çelikkol et al., (2019)	82 countries	Entrepreneurial attitudes, abilities, and aspirations	no significant effect
	Kutan et al., (2021)	Systematic Review	Entrepreneurial risk-taking	-ve effect
	Veiga et al., (2001)	Literature Review	Adoption and implementation of new technologies	-ve influence
	Prim et al., (2017)	72 countries	Creativity and technology outputs	-ve influence
Indulgence	Kutan et al., (2021)	Systematic Review	Entrepreneurial risk-taking	+ve influence
	Prim et al., (2017)	72 countries	Creativity and technology outputs	+ve influence
	Kedmenec and Strašek (2017)	40 countries	Social entrepreneurial ventures	+ve influence
	Tehseen et al., (2021)	1 country, Malaysia, 450SMEs	Entrepreneurial Innovativeness	+ve influence
	Çelikkol et al., (2019)	82 countries	Entrepreneurial attitudes, abilities, and aspirations	+ve influence

Source: **Author's Creation, 2022**

In a nutshell, as we see in Table 2.10. above, individualism, long-term orientation, and indulgence are the national culture dimensions that positively affect entrepreneurial creativity, attitudes, abilities, aspirations, self-employment rates, and adoption and implementation of new technologies. On the other hand, masculinity, high power distance, and uncertainty avoidance negatively influence entrepreneurship in these aspects.

2.4.2. Moderators of Culture and Entrepreneurship Relationship

In this sub-section, a review is done on the moderation effects of the extraneous variables that affect the impact of culture on entrepreneurship. Some of these factors are the distribution of entrepreneurial talents, the complementarity or configurations of cultural values, institutional environment, psycho-social factors and demographic variables, and implementation strategies and adoption of new technologies.

I. Culture and the distribution of entrepreneurial talents across a nation

There is a high tendency that the attitude and intentions of entrepreneurship to transcend from one generation to another. The longitudinal research by Opper and Andersson (2019) in China

reveals that the provinces that had been practicing entrepreneurial activities during the Ming (1368–1644) and Qing (1644–1912) dynasties tend to be more entrepreneurial in modern days as well, but the form of entrepreneurship showed changes over time. The research further emboldens (1) the underlying regional cultural differences that persist for the long term; (2) the entrepreneurial activities adapt to the changing environment and institutional setups (Opper and Andersson, 2019). This result also implies the presence of variation in entrepreneurial culture among regions within a given nation. The national cultural dimensions of Hofstede are not evenly distributed across regions in each country. Hence, nations may need to consider the intracultural variations in the policy formulations (Almodóvar-González et al., 2020; Lortie et al., 2019; Tekic and Tekic, 2021; Tehseen et al., 2021).

Almodóvar-González *et al.* (2020) find the existence of cultural differences, especially individualism, among the six regions of the Republic of Cape Verde, as well as their capacity to explain entrepreneurial behavior in these regions. The regions with high individualistic characteristics tend to show higher entrepreneurial rates. Also, the survey by Lortie et al. (2019) on 36,652 individual observations across 29 nations and 262 regions reveals that, especially at regional level analysis, long-term orientation exerts a significant effect on entrepreneurial activities even controlling for other cultural dimensions: individualism, power distance, uncertainty avoidance, and masculinity. They further argue that the national-level analysis is not adequate to explain the cultural difference at the regional level and their effect on entrepreneurial activities (Lortie *et al.*, 2019). They suggest that a fundamental level of analysis within-nation regions is subsequently linked to entrepreneurial activity more than the usual national culture(Lortie *et al.*, 2019).

Consistently, a survey of 450 SMEs from three Malaysian ethnic firms (Malaysian Chinese, Indian, and Malays) indicates that indulgence, collectivism, and low power distance are prominent positive predictors of innovativeness (Tehseen *et al.* 2021). However, against the widely agreed terms, the other three cultural dimensions (long-term orientation, masculinity, and uncertainty avoidance) do not support innovativeness across these groups of firms. They also uphold the perspective that cultural differences are more pronounced across cultural regions than across countries by acknowledging the existence of supra-national cultural regions (Tehseen *et al.* 2021). This pinpoints that the cultural variation within regions of a nation seems to defy the

rationality and reliability of analyzing the effect of Hofstede National Culture on entrepreneurship. The proper unit of analysis appears to be the regions, not nations, especially in highly diversified societies.

II. Cultural Profile or Configurations and Effects on Entrepreneurship

A unidimensional approach to explaining the effect of a national culture dimension without considering the impact of other cultural dimensions seems flawed (Tekic and Tekic, 2021; Tian et al., 2021; Yong et al., 2020). Tekic and Tekic (2021) apply the neo-configuration approach to explain how the national culture dimensions interact with each other and advocate treating these dimensions in combination, not independently or in isolation. A cultural profile comprising the configuration of different cultural dimensions better defines the culture-entrepreneurship relationship. Tekic and Tekic (2021) argue that a high national innovation performance (NIP) is associated with a culture profile that is based on individualism complemented by either low power distance (Solution A) or a combination of femininity and high uncertainty avoidance (Solution B), or the combination of high uncertainty avoidance and long-term orientation (Solution C).

Seemingly, the same high national innovation performance could be achieved from the culture profile based on collectivism, which is complemented by high power distance, masculinity, low uncertainty avoidance, and long-term orientation (Solution D) (Tekic and Tekic, 2021). Moreover, collective reliance and social responsibility could be positively related to the social entrepreneurial behavior shaped by the value of collectivism –“me because of you” (Vershina et al., 2018). Yong et al. (2020) criticize that research traditionally focuses on the moderating role of a single cultural dimension in fostering individuals’ creativity across nations and may not offer a clear understanding of the role of national culture. Focusing on one or two values rather than on cultural bundles could lead to partial and even misleading conclusions (Tekic and Tekic, 2021) and may also lead to a different form of innovation. The influence of different cultural factors on innovation does not exist in isolation. For instance, uncertainty avoidance alone had a negative influence on all aspects of the invention, but a positive impact when combined with either one of the other two cultural dimensions – individualism and masculinity (Tian et al., 2021). Hence, I postulate that the moderating effect of culture is better understood by focusing on the configuration of diverse cultural values or cultural bundle, which is a set of cultural profile that characterizes a given country and shows the strength of the norms enforcing these values.

Given the various dimensions of national culture and their respective effect on entrepreneurship, one may ask how the impact of a given culture gets transferred and extends its effect on decision-makers. The way culture impacts entrepreneurship could be multifaceted. But, Lortie et al. (2019) unfold two ways culture influences entrepreneurship: socialization (primary) and institutions (secondary). Primary socialization through immediate family and secondary socialization through schools, religious, and government organizations. Both primary and secondary socializations have a significant role in teaching and constantly reinforcing which behaviors are accepted, discouraged, and rewarded (Lortie *et al.* 2019).

Besides, the effect of culture on entrepreneurship is not limited to profit-making entities but also affects social enterprises, which primarily work on achieving the social goal (Kedmenec and Strašek, 2017). Countries' economic development moderates the influence of culture on social entrepreneurship ventures. In factor-driven economies, lower masculinity levels appear to support social entrepreneurship development (Kedmenec and Strašek, 2017). On the other hand, in innovation-driven economies, social entrepreneurial ventures emerge more often in those cultures characterized by short-term orientation and indulgence. A negative relationship is observed between power distance and social entrepreneurial activity.

In comparison, uncertainty avoidance and individualism showed no linear associations with social entrepreneurship activities (Kedmenec and Strašek, 2017). They also pointed out that national culture is not sufficient to explain the countries' differences in social entrepreneurial activities (SEA). For example, Saud Arabia and UAE have similar cultures, including societal norms and religious values, but the rate of SEA between the two is incomparable.

III. Institutional Environment and Culture

Formal institutions are not free from the positive or negative externalities of the prevailing culture in a nation. The informal institutions (cultural values) emanate, shape, and embolden the formal institutions (Dheer, 2017; Young *et al.*, 2018; Chowdhury and Audretsch, 2021; Zaandam *et al.*, 2021). Without taking into the cultural framework of a society, a focus on formal institutions is not effective in fostering the level of entrepreneurial activity across nations. Dheer (2017) observed that the cultural context shapes the effect of regulations and policies. Individualism positively moderates political freedom and negatively mediates the impact of corruption on the rate of entrepreneurial activity (Dheer, 2017). Formal and informal institutions do not directly

imitate each other, and the extent they affect entrepreneurial activities also varies (Xia and Liu, 2021). Apart from informal institutions, the innovation type and form can be determined by an arrangement of formal institutions. This also underscores the latter's moderation effect on the relationship between culture and entrepreneurship.

These institutions, thus, dictate the ability of entrepreneurial firms to own and protect their property; assess their tax burden; freely manage their labor requirements; acquire necessary funding, and start, operate, and close a business that will influence the development of more innovative opportunities. A cross-national survey across 40 countries from the GEM data indicates that institutional arrangements that promote stability lead to more imitation, while institutions that promote flexibility foster more innovation (Young *et al.* 2018). As institutions are essential for EO, clear rules and regulations can help reduce entrepreneurs' exploitation, risk, and uncertainty. Establishing a culture of transparency and the enforcement of laws equally and consistently can also help develop trust in the government (Chowdhury and Audretsch, 2021). From the meta-analysis of 117 studies across 22 countries conducted between 1987 and 2020, Zaandam *et al.* (2021) find that both formal and informal institutional factors shape the relative performances of founder and professional CEOs. Founders experience performance advantages across institutional settings characterized by high power distance, individualism, and low political and regulatory quality. These findings suggest that variations in managerial discretion may drive these systematic performance differences; specifically, founders' performance may improve when institutional conditions grant them the latitude necessary to implement new and innovative strategies (Zaandam *et al.*, 2021).

IV. Psycho-social Factors and Demographic Variables

Entrepreneurship quantity, as well as quality, is determined by a blend of numerous factors. Some of these are institutions that influence the experience, values, attitudes, and behaviors as well as resources in a given economy (Chowdhury and Audretsch, 2021; Vershinina *et al.* 2018); both personal characteristics and cultural context (Laskovaia *et al.* 2017); a psychological and social process (Smale, 2016); social practices (Vershinina *et al.* 2018) and religion and gender (Kutan *et al.*, 2021) and age (Chowdhury and Audretsch, 2021). Older individuals who experienced prolonged interactions with the institutional environment are more likely to be risk-averse, less innovative, and more proactive than the younger generation. Concerning resources, older individuals, because of their possession of financial and human resources, are more likely to

recognize and exploit opportunities than more youthful individuals (Chowdhury and Audretsch, 2021).

Kutan et al. (2021) point out that demographic elements such as religion and gender affect risk-taking tendencies. For instance, a Catholic-dominant society inclines more toward the debt market. In contrast, the Protestant-majority society prefers a stable corporate framework with less debt (Kutan et al., 2021) and more of the equity market (Kuivalainen *et al.* 2010). Male managers are identified with overconfidence, higher achievement, and more risk-taking behavior (Kuivalainen et al., 2010; Kutan et al., 2021). Both Smale (2016) and Laskovaia et al. (2017) argue that both personal characteristics and cultural context shape entrepreneurial decisions. The study by Smale (2016), conducted on 103,010 students from 759 universities in 34 countries, reveals that the relationship between culture and performance is affected by individual decision-making based on cognitive logic. Entrepreneurs' causal and effectual reasoning moderates the expected influence of culture on entrepreneurial performance. The study shows that expert entrepreneurs utilize effectual reasoning more than novice entrepreneurs (Laskovaia *et al.* 2017). In effectual reasoning, you have the means on the table and look for the proper outcome. The opposite is true with causal reasoning.

The dimension of entrepreneurship, particularly innovation, is a psychological (cognitive and behavioral) and social process. Understanding how national culture moderates cognition and behavior within the different stages of the innovation process is vital for success in innovation (Smale, 2016). Social practices and economy-related values can mediate the effect of culture on entrepreneurship (Vershina *et al.*, 2018). Collective reliance, social responsibility, enterprising, resource mobilization, and political philanthropy are salient Harambee values practiced in not-for-profit enterprises in Kenya and South African countries. Of these values, resource mobilization and value of enterprising are more likely to be associated with the increased perceived opportunity, entrepreneurial intention, and new business creation (Vershina et al., 2018).

Social responsibility based on collective reliance is also positively related to the social entrepreneurial behavior shaped by the value of collectivism – “me because of you.” This accords with the phrase, “I am because we are and since we are, therefore I am” (Mbiti, 1969, pp. 108-109; cited in Vershinina et al., 2018). So, the value of collectivism somehow penetrates both the

structure and stakeholders at the state, regional and local levels and is not always in the rendered position of entrepreneurship. Understanding the national and societal differences in cultural dimensions promotes the understanding and operationalization of entrepreneurship differences (Watson et al., 2019). Governments must attempt to develop circumstances that exhibit a greater focus on culture as an antecedent of both entrepreneurship and entrepreneurial performance and promote these cultural values to enhance entrepreneurial spirit (Watson et al., 2019).

V. IT Implementation and Acceptance: Across Culture

The perceptual and attitudinal faculties of individuals in accepting new technological innovations (Veiga et al., 2001), new product development (Nakata, & Sivakumar, 1996), and new operation strategies (Lee Park and Paiva, 2018) are all influenced by culture. The likelihood of technology acceptance remains under the influence of an individual's culturally induced belief system. Veiga et al. (2001) also argue that managers should design the IT implementation considering the cultural differences among countries. For instance, the pace of individual learning is low with high uncertainty avoidance, and social elites possess a greater power in the high-power distance. People from those countries characterized by high-power distance and uncertainty avoidance, such as South Africa, Brazil, Japan, Mexico, Greece, Spain, Argentina, France, and Belgium, are, thus, likely to be slow in accepting new IT and require more centralized direction to enhance acceptance. Conversely, people from countries with relatively low power distance and uncertainty avoidance, such as the UK, Australia, the Netherlands, the Republic of Ireland, Canada, Norway, Sweden, New Zealand, and the USA, are more likely to accept new technology and they have a greater need for participation in its development (Veiga et al., 2001).

A specific comparison can be made between the USA and Japan. Based on Hofstede's (1980) original findings, Japan scores significantly higher on uncertainty avoidance and power distance than the USA, while the USA scores much higher on individualism. Taken in combination, these cultural differences would suggest that the Japanese would be slower to adopt new IT than US managers. The most recent evidence about the rate of introduction of new IT in these countries bears this out. While the Japanese are moving towards a knowledge-intensive service economy, they are not moving as fast as the USA in IT adoption rates. For example, in 1993, Japan had 9.9 personal computers per 100 workers compared to 41.7 in the USA (McMillan, 1996; cited in Veiga *et al.*, 2001). Hence, one can say that the national culture influences not only the

development of innovative technologies but also the implementation as well as acceptance of these technologies by end users. Implementation approaches attuned to these effects are more likely to enhance perceived usefulness, ease of use, and attitudes towards use and, hence, increase technology acceptance (Veiga *et al.*, 2001). For example, the level of individualism/collectivism influences whether people are more likely to see new technology in the context of their tasks or the work of the group. Uncertainty avoidance affects not only the rate of IT learning but also the extent that implementation will benefit from employee participation by increasing the sense that technology is proven and reliable. Time orientation influences how new IT should be aligned with current or future work needs, traditional work practices, and strategic planning (Veiga *et al.*, 2001).

Moreover, the creation and execution of business and operational strategies are strongly influenced by country's culture. It has an impact on how various organizational departments are functionally integrated. Individualism vs. collectivism has an impact on how operation strategy is developed and implemented. Individualism is associated with less integration of strategies, while collectivism shows up more integration even in high power distance cultures like China and Korea (Lee Park and Paiva, 2018). On the other hand, more individualistic and formal processes are present in Germany, showing that the operation strategy process does not follow a “one-size-fits-all” approach. In new product development, the five dimensions of national culture (individualism, masculinity, power distance, and uncertainty avoidance) affect both the initiation and implementation stages. Individualism positively affects the initiation stage and negatively affects the implementation stage. Whereas masculinity, power distance, and uncertainty avoidance negatively affect the initiation stage and positively impacts the implementation (Nakata & Sivakumar, 1996). However, due to the size of companies, the effect of organizational culture and national culture could be converged. In a big company with a strong organizational structure, the impact of national culture can be overshadowed (Nakata, & Sivakumar, 1996).

2.4.3. Innovativeness and National Culture

The influence of culture, specifically, can be seen in businesses' innovativeness. Culture affects innovation performance in various ways, such as through organizational leadership (Anning-Dorson, 2018), perceptions, motivation, and expectations related to organizational learning and innovation (Beyene *et al.*, 2016), entrepreneurial learning capacity (Xia and Liu, 2021), formal

institutions connected to the labor market, and financial markets, level of economic activities, and innovation activities (Castellani, 2019). However, this influence can be moderated by pro-market institutions that include intellectual property protections (Bennett and Nikolaev, 2021; Lortie *et al.* 2019; Young *et al.* 2018) and economic growth (Castellani, 2019; Rauch *et al.* 2013) and groups of different ethnic-based firms (Tehseen *et al.* 2021). The studies also show that the influence of national culture at the organizational level could vary on the forms of innovation (Anning-Dorson, 2018), stages of new product development (Nakata and Sivakumar, 2021), and innovation process (Initiation and implementation stages) (Smale, 2016). It indicates that all cultural dimensions have a unique effect on innovation and the respective effect of the dimensions can vary based on the stages of the innovation process.

Anning-Dorson (2018) argue that the impact of national cultures, such as power distance on various forms of innovation (product, process, and market innovation), can be moderated by organizational leadership. They find that in two countries, India, and Ghana, which are high power distance cultures, organizational leadership makes a difference in their ability to innovate and attain competitive advantage. National culture, particularly power distance, has also significantly affected organizational leadership.

In addition to organizational leadership, organizational learning plays a significant role in innovation performance. Beyene *et al.* (2016) point out significant relationships among national culture, an organization's learning orientation, and product innovation performance. They argue that culture shapes the behavior of the members of an organization through its influence on their perceptions, motivations, and expectations, which in turn influences both the individual's and the group's attitude towards learning and innovation. In a developing country, the high-power distance and high uncertainty avoidance are against organizational learning and innovation performance (Beyene *et al.* 2016). A study of 82 countries also shows that power distance negatively influences entrepreneurial ability, including innovativeness (Çelikkol *et al.* 2019). One can conclude that power distance negatively influences firms' entrepreneurial abilities to innovate and stalls closer follow-up on the innovation process.

Also, individualism is a main national cultural dimension that significantly advances nations' innovation and firms' innovativeness (Castellani, 2019; Prim *et al.* 2017). The influence of individualism on innovation is moderated by pro-market institutions (Bennett and Nikolaev,

2021) and the entrepreneurial learning capacity of firms (Xia and Liu, 2021). The study on a cross-sectional sample of 84 countries, controlling for confounding variables such as income inequality, religion, geographic conditions & regional fixed effects, reveals that pro-market institutions and individualism are positively and significantly associated with innovation outputs (Bennett and Nikolaev, 2021). The extent to which pro-market institutions promote innovation depends on how individualistic a country is and vice versa. The least innovative nations are identified with low individualism and the Economic Freedom of the World (EFW) index.

Nevertheless, they also suggest that countries with high levels of the EFW index, which is used to measure pro-market institutions, but low levels of individualism can still achieve moderately high levels of innovation, but the same is not true of countries with high levels of individualism but low levels of EFW. Hong Kong and Singapore, for instance, are the two most economically free countries in the world, and both have relatively low levels of individualism. They are among the upper quartile of the most innovative countries (Bennett and Nikolaev, 2021). One can see from this that the least innovative countries need not necessarily be individualistic to be more creative but need pro-market institutions.

Moreover, an analysis conducted on several independent datasets of culture and innovation from 62 countries spanning more than two decades reveals that most measures of individualism have a strong, significant, and positive effect on innovation, even when controlling for major policy variables (Taylor and Wilson, 2012). Also, Prim et al. (2017), utilizing the global innovation index data of 72 countries, confirm that individualism is positively associated with both technological and creative outputs of innovation. Taylor and Wilson (2012) further argue that individualism generally helps (and collectivism generally hurts) rates of technology patenting and scientific research publication, even when controlling for wealth, military spending, trade openness, fuel exports, and education and R&D spending. They also argue that a particular form of collectivism (i.e., patriotism and nationalism) can foster innovation at the national level, while other types of collectivism (i.e., familism and localism) not only harm national innovation rates but may hurt progress in science worse than in technology (Taylor and Wilson, 2012). This could be why several countries with less individualistic values (e.g., Taiwan, South Korea, Finland, and India) have built up globally competitive high-technology industries (Taylor and Wilson, 2012).

Corroborating this, Xia and Liu (2021) find that in a collective society, controlling for a set of country-level, confounding factors, including the annual GDP per capita and GDP growth of a country, a highly rigorous regulatory framework may help to develop ‘sponsored’ trust which in turn enhances the positive impact of collectivism on entrepreneurial learning capacity. This trust and close interaction among people facilitate knowledge flows and enable entrepreneurs to access external knowledge. Therefore, collectivism cannot be labeled as bad for innovation, and it should be accepted and shaped in the form of nationalism and patriotism (Taylor and Wilson, 2012) to promote innovation. Also, during the implementation stages of the innovation process (Veiga *et al.*, 2001), there is a positive linkage between collectivism and innovation. A multi-level analysis of entrepreneurs from 19 countries between 2006 and 2011 suggests that entrepreneurial learning capacity serves as a mediator through which entrepreneurs maximize the innovation-related benefits of cultural values. The institutional pressures from cultural values affect the entrepreneurial learning capacity, which in turn impacts innovation activities (Xia and Liu, 2021). The entrepreneurial learning capacity (ELC) is an individual’s ability to acquire, assimilate and organize newly formed knowledge to exploit entrepreneurial opportunities (Xia and Liu, 2021).

The finding also shows that individualism provides strong incentives to innovate and thus boosts long-term growth. The culture affects the labor market, financial markets, and level of economic and innovation activities. Finding the suitable traits of culture for economic growth is easier said than done. Castellani (2019) argue that the biggest challenge for developing countries to promote economic growth is changing culture. In some Sub-Saharan African societies, individuals are not encouraged to pursue their private wealth and are expected to protect traditional order and find meaning in life. Also, many Native American cultures discourage individuals from distinguishing themselves as better than others. This kind of culture hinders any sort of innovative initiation and creativity. They suggest countries focus on the interaction of cultural traits and how much they interact and affect economic growth (Castellani, 2019).

In influencing innovation, there is a big role formal institutions play in rewarding or discouraging certain behaviors in a society regardless of cultural setups. Strong intellectual property protections motivate innovators and increase innovation rates in a country (Lortie *et al.*, 2019). Apart from informal institutions (cultural values), a nation's innovation type and form are determined by an arrangement of formal institutions. The formal institutions have a direct and

immediate effect in dictating the ability of entrepreneurial firms to own and protect their property, assess their tax burden, freely manage their labor requirements, acquire necessary funding, and start, operate, and close a business. These institutions also determine the market entry with innovative products & expansion decisions (Lortie *et al.* 2019). Based on the analysis of a cross-national survey across 40 countries from the GEM, Young *et al.* (2018) indicate that institutional arrangements that promote stability lead to more imitation, while institutions that promote flexibility foster more innovation. Furthermore, the following sub-sections discuss the effects of moderating variables that affect the relationship between culture and innovation, or innovativeness.

I. Innovation Stages and Culture

The influence of culture on innovation varies across stages of the innovation process (Smale, 2016; Nakata and Sivakumar, 2021; Veiga *et al.*, 2001). We can broadly categorize the innovation process into the initiation and implementation stages. The initiation includes engaging in and supporting new ideas, creativity, novelty, and experimentation processes that may result in new products, services, or technological processes (Lumpkin & Dess, 1996). The implementation stage encompasses the development, sale, and adoption of those new products, services, and processes to enter new or existing markets with new or existing products or services with the aim, in this context, of creating new value and wealth/prosperity. Innovation is a psychological (cognitive and behavioral) and social process. Hence, understanding how national culture and other socio-economic factors moderate cognition and behavior across stages of the innovation process is vital to strategizing and managing the innovation process. For instance, New Zealand's national culture comprises an array of cultural dimensions such as high affective autonomy, high individualism, and low uncertainty avoidance that favor the cognition and behavior associated with initiation. As a result, we can predict that it will be heavily biased toward initiating, which appears to be the case in practice. This bias may explain why i) the country spends less on research, science, and technology than most of the nations that it compares itself with; ii) it publishes science at twice the OECD average; and iii) it patents at one quarter the OECD average (OECD, 2010). New Zealand institutions are examples of high-level initiation not translating into innovation outcomes (Smale, 2016).

In the process of new product development, considering the culture of countries is nothing worthy. Some cultures are suitable for the project initiation stage, while others are for the implementation stage. Nakata and Sivakumar (2021) reveal that cultures whose strengths center on initiation (initiating cultures) are high in individualism, low in power distance, masculinity, and uncertainty avoidance. Hofstede's (1980) research indicates that these cultures include Australia, Canada, Denmark, Great Britain, the Netherlands, Norway, New Zealand, Sweden, and the United States. Cultures whose strengths center on implementation (implementing cultures) are low in individualism but high in power distance, masculinity, and uncertainty avoidance. Greece, Mexico, Pakistan, Peru, the Philippines, Taiwan, Thailand, Venezuela, and Japan fall in this category.

For the new product development process, therefore, they propose to either based on their stage-dependent strengths or to assemble multiple cultures within a new product team or program and keep the same members throughout the process (Nakata and Sivakumar, 2021). Rauch et al. (2013) argue that innovation implementation is a firm-level activity influenced by industry factors, national culture, and other country-level factors. They treat culture as a moderator variable for innovation, and the latter can occur in any culture, but the hurdles to be solved are culture-specific. The divergent context study on China, Germany, the Netherlands, Peru, and Russia, which took geography, socioeconomic systems, development, and cultural values into account, reveals that the innovation-growth relationship is universal across cultures and that innovation rates can predict country growth (Rauch *et al.* 2013).

The influence of culture on innovation is not only limited to the initiation and implementation of innovation but also affects innovation acceptance (Veiga *et al.*, 2001). The difference in national culture influences individuals' perceptual and attitudinal faculties in accepting new technological innovations. Technology acceptance is likely influenced by an individual's culturally induced belief system. Hence, I argue that cultural influence is not limited to developing innovative technologies but also to implementing and accepting these technologies by end users. Implementation approaches attuned to these effects are more likely to enhance perceived usefulness, ease of use, and attitudes towards use and, hence, increase technology acceptance (Veiga *et al.*, 2001). For example, the level of individualism/collectivism influences whether people are more likely to see new technology in the context of their tasks or the group's work.

Uncertainty avoidance affects not only the rate of IT learning but also the extent that implementation will benefit from employee participation by increasing the sense that technology is proven and reliable. Time orientation influences how new IT should be aligned with current or future work needs, traditional work practices, and strategic planning (Veiga *et al.*, 2001).

II. National Innovation Performance and Cultural Profile

Research has traditionally focused on the moderating role of a single cultural dimension to capture differences in how individual creativity is fostered across cultures, which could lead to misrepresenting the influence of culture (Yong *et al.*, 2020; Tian *et al.* 2021). Yong *et al.* (2020) propose that the moderating effect of culture is better understood by focusing on the configuration of cultural bundles. A cultural bundle can be defined as the set of cultural dimensions that characterize a given country and the strength of the norms enforcing these values. A mixed-method study, which combines a meta-analysis of 205 studies set in 38 different countries with fuzzy-set qualitative comparative analysis (fs/QCA), indicates that the configuration of a cultural bundle influences the effectiveness of efforts in fostering organizational creativity (Yong *et al.*, 2020). Their finding also implies that the moderating effect of culture cannot be fully understood by focusing on cultural dimensions in isolation. Focusing on a cultural dimension in isolation or on the interactive effect of a limited number of dimensions could lead to partial and even misleading conclusions about the moderating role of culture (Yong *et al.* 2020).

Moreover, Tekic and Tekic (2021) promote a view that some cultures are more conducive to innovation than others, thereby concurring with the theoretical assumptions of previous research (Taylor & Wilson, 2012). Tekic and Tekic (2021) postulate that a culture profile yields a high national innovation performance (NIP) if it is based on individualism complemented by either low power distance (Solution 1); a combination of high uncertainty avoidance and femininity (Solution 2); or the combination of long-term orientation and high uncertainty avoidance and (Solution 3). The culture profile based on collectivism, complemented by high power distance, masculinity, low uncertainty avoidance, and long-term orientation (Solution 4), has the same effect on NIP. Conversely, a culture profile based on collectivism influences low NIP if this dimension is complemented by high power distance and short-term orientation (Solution 5). From this, one can also see that the culture profile that enhances high NIP or low NIP is not symmetrically opposite (Tekic and Tekic, 2021).

Moreover, the impact of culture profile is not limited to domestic business but also the innovation ecosystem in international trade. The antecedents or drivers, outputs, and commercialization of innovation in global business desire and emanate from a proper cultural profile. Tian et al. (2021) argue that the influence of different cultural factors on innovation does not exist in isolation. For instance, uncertainty avoidance alone had a negative influence on all aspects of innovation but a positive impact when combined with either one of the other two cultural dimensions – individualism and masculinity. Their interaction may have a more complex effect on innovation output in international business than in domestic. Culture constitutes an integral part of the entire innovation ecosystem in the context of international trade (Tian *et al.* 2021).

III. Innovativeness, Culture, and Regional Difference

Tehseen et al. (2021) explain that the cultural variation within regions in a nation seems to defy the logic of Hofstede's National Culture. The findings from survey data of 450 small to medium-sized firms (SMEs) from three Malaysian ethnic firms (Malaysian Chinese, Indian, and Malays) indicate that indulgence, collectivism, and low power distance are prominent predictors of entrepreneurial innovativeness in SMEs. However, against the widely agreed terms, the other three cultural dimensions (long-term orientation, masculinity, and uncertainty avoidance) do not support innovativeness, and even distribution is observed across groups of different ethnic firms (Tehseen *et al.* 2021).

Those regions, thus, characterized by a high uncertainty avoidance, need to introduce legislation, or strengthen the existing legal framework to provide some minimum degree of protection from failure. Failure is an integral part of the innovation process because from failure comes learning, adaptation, and the building of new conceptual and physical models for new products or services through an iterative learning process (Xia and Liu, 2021). Those regions, or countries, that score low on individualism need to build a conducive formal institutional framework to compensate for the downside of collectivist norms and values and focus on the synergy between formal rules and informal constraints. Specifically, building a regulatory environment that prevents or weakens any power concentration in the hands of a few is a prime task of governments of collectivist societies. Also, entrepreneurial activities, including innovation, can be accelerated by promoting inter-organizational interactions and knowledge flows (Xia and Liu, 2021).

The following Table 2.11., portrays the relationship between innovativeness and national culture dimensions. Individualism, long-term orientation, and indulgence positively moderate innovation, whereas power distance and uncertainty avoidance negatively correlated to innovation. This effect of national culture dimensions on innovation is moderated by pro-market institutions, regional entrepreneurial culture differences, stages of innovation (initiation and implementation), and the configuration of cultural profiles.

Table 2.11. The Effect of Cultural Dimensions on Innovativeness

Dimensions	References	Participants	Findings
Individualism	Xia and Liu, (2021)	19 countries from 2006 - 2011	-ve influence
	Taylor and Wilson, (2012)	62 countries	+ve influence
	Prim et al., (2017)	72 countries	+ve influence
	Castellani, (2019)	97 studies	+ve influence
Power Distance	Anning-Dorson, (2018)	Two countries: India and Ghana	No significant effect
	Prim et al., (2017)	72 countries	-ve influence
	Beyene et al., (2016)	Ethiopia	-ve influence
	Çelikkol et al., (2019)	82 countries	-ve influence
Long-term orientation	Prim et al., (2017)	72 countries	+ve influence
	Çelikkol et al., (2019)	82 countries	+ve influence
Indulgence	Prim et al., (2017)	72 countries	+ve influence
	Çelikkol et al., (2019)	82 countries	+ve influence
	Tehseen et al., (2021)	1 country, Malaysia, 450SMEs	+ve influence
Uncertainty avoidance	Xia and Liu, (2021)	19 countries	-ve influence
	Prim et al., (2017)	72 countries	-ve influence
	Beyene et al., (2016).	Ethiopia	-ve influence

Source: Author's creation, 2022

2.4.4. Risk-taking and National Culture Dimensions

Risk-taking is one of the main salient features of entrepreneurship, and a dimension used to measure the essence of entrepreneurial-oriented firms. The national culture has been a decisive factor in determining the risk-taking appetite of decision-makers. Studies show that the effect of culture on risk-taking is mainly related to financial decisions such as cash holdings, long-term

investments, and acquisitions (Alipour, 2019), bank leverage decisions (Haq et al., 2018), portfolio choice (Breuer et al., 2014), debt-equity financing structure (Chukwuma-Nwuba, 2018), reliance on market information for trading volumes and volatility (Chui et al., 2010), venture capital investment (Gantenbein *et al.* 2019), higher level of investment, risk exposure, and growth (Kuivalainen et al., 2010) and other corporate risk-taking (Kuivalainen *et al.* 2010; Mihet, 2013). Some cultures are more creative than others. Firms in creative cultures tend to have a higher level of investment, risk exposure, and growth (Kuivalainen *et al.* 2010).

The national culture, fundamentally, stems from the psychological make-up of individuals. On the other side, the national culture molds individuals' psychological setups in decision-making. The psychological factors of decision-makers are rooted in national culture (Breuer *et al.* 2014). Individualism is the most spotted cultural dimension related to not only innovativeness but also the risk-taking behavior of decision-makers, especially in financial decisions (Breuer *et al.* 2014; Chui *et al.* 2010; Chukwuma-Nwuba, 2018; Gantenbein *et al.* 2019; Haq *et al.* 2018; Mihet, 2013). Individualism, which is associated with overconfidence and over-optimism, has a significant positive effect on the attitudes towards financial risk-taking, like portfolio choice, regardless of gender, age, income, and wealth (Breuer et al., 2014). Besides, Chui et al. (2010) associate individualistic culture with self-dependent, overconfidence, and self-attribution bias. A cross-cultural analysis shows that individualism is positively associated with the decision on trading volumes and volatility and maximizing momentum profits. Investors in highly individualistic societies rely on market information. In contrast, those in less individualistic or collectivistic cultures put less weight on market information and more weight on the consensus of their peers (Chui *et al.*, 2010).

Besides, individualism enhances venture capital investment (Gantenbein *et al.*, 2019), which tends to have higher returns and risk, and bank leveraging (Haq *et al.*, 2018). Controlling for economic conditions, the legal environment (the rule of law), and other cultural dimensions (power distance, uncertainty avoidance, masculinity, long-term orientation indulgence), the study on 88 countries from 1998 to 2014 reveals that individualism is positively and significantly related to venture-capital investments and explains 30% of cross-country variation. Individualism, which is intrinsically associated with values of individual freedom, personal responsibility, and reward, is a driving factor of entrepreneurial spirit and, thus, venture-capital

investments (Gantenbein et al., 2019). By analyzing data from a broad sample of 1701 listed local banks drawn from 79 countries from 2000 to 2013, Haq *et al.* (2018) reveal that banks in nations with high individualism are more leveraged while banks in countries with high power distance, long-term orientation, and indulgence are less leveraged.

Individualism positively influences risk-taking behavior, whereas power distance, long-term orientation, and indulgence negatively affect it. Haq et al. (2018) further interpret the result in an economic term that a one standard deviation increase in individualism (power distance) leads to a 1% (1.59%) increase (decrease) in bank leverage compared to its mean. However, the size of banks or organizations compromises or dilutes the possible effect of national culture on risk-taking. Large banks with more robust corporate governance and external monitoring tend to countervail the influence of national culture (Haq et al., 2018). However, individualism still plays an indispensable role in enabling individuals to make autonomous decisions based on their market information and make timely investment decisions with the appropriate leverage rate without being biased because of peer influence.

In a collectivistic culture, individuals allude that if their ‘significant others’ approve of their decision to become entrepreneurs, they would be more motivated to self-employment and feel capable of engaging in entrepreneurial activities (Chukwuma-Nwuba, 2018). The collectivistic culture seems to serve as the source of income for entrepreneurs in which family and friends become the primary funds for new venture creation. In this regard, collectivism positively influences entrepreneurship (Chukwuma-Nwuba, 2018). There is also a tendency for collectivism to build support for easing the lender-borrower risk burden as family & friends are involved in the process of loans and making risky investments. Collectivism lies a better ground for a debt-equity financing structure than individualism. Hence, it looks inappropriate to conclude collectivism is an all-time bad culture and individualism is all-time good culture. Regarding resource mobilization, collectivism creates a favorable condition for risk-taking. In contrast, individualism creates a favorable situation for risk-taking by giving individuals the freedom to make independent, evidence-based decisions.

Culture impacts risk-taking behavior directly through corporate individuals who make decisions and indirectly through the regulatory and legal framework. Mihet (2013) investigated the effects of national culture on firm risk-taking, using a comprehensive dataset covering 50,000 firms in

400 industries in 51 countries. The results indicate that culture impacts corporate risk-taking directly and indirectly through institutional frameworks. They argue that corporate risk-taking is higher in societies with low uncertainty avoidance, low tolerance for hierarchical relationships, and communities that value individualism over collectivism; this effect is more accentuated in communities with better formal institutions. Additionally, firms in countries ranking high in uncertainty aversion and low in individualism take significantly less risk in industrial sectors which are more informationally opaque (e.g., finance, IT, oil refinery, and mining), compared with firms in countries lower in uncertainty aversion and higher in individualism. Regarding the prevailing culture in subsidiaries, the study shows that the home culture of the firms dominates the host country's culture. This implies that a home-country culture plays a more extended role in subsidiaries than the host-country culture. These effects persist even after controlling for legal constraints, economic development, bankruptcy costs, and insurance safety nets. This also shows that any international business decision should consider the cultural distance between the host and the home country; otherwise, cultural collision is highly likely to happen, which could hamper performance.

The other important dimension of national culture that influences risk-taking is the society's attitude towards the long-term. The attitudes and decisions of financial managers related to cash holdings, long-term investments, and acquisitions are determined by their view toward long-term success. Targeting future returns initiates firms to spend their current wealth in favor of the future with some calculated risk. Alipour (2019) argues that given the influence of firm-, industry-and institutional-level factors, long-term orientation increase cash holdings to face the fear of unknown and unexpected setbacks. Although societal time orientation plays a significant role in firms' and individuals' long-versus short-term investments, there is not enough literature on the possible impacts of future-oriented societal practices and long-term orientation on long-term investments of firms (Alipour, 2019). A broader sample from 79 countries indicates that countries characterized by high long-term orientation have less bank leverage rates in current investment (Haq *et al.*, 2018). Supporting this, Kuivalainen *et al.* (2010) explain that societies with a short-term-oriented approach prefer to get immediate rewards, thrift, and consumption. This result implies that investments with only long-term returns will not be attractive in a short-term-oriented culture. In a long-term-oriented culture, investments with more focus on short-term gains will not be appropriate.

Next, the other dimension of culture that mainly goes along with long-term orientation is uncertainty avoidance culture. Societies with a high uncertainty avoidance exhibit fewer risky corporate decisions (Haq *et al.*, 2018; Kuivalainen *et al.*, 2010; Kreiser *et al.*, 2010). A broad-sampled study of 79 countries by Haq *et al.* (2018) reveals that the leveraging rate of banks is less in countries with high uncertainty avoidance. Consistently, studies have been conducted on several countries: by Mihet (2013) on 51 countries; Haq *et al.* (2018) on 79 countries; Gantenbein *et al.* (2019) on 88 countries; and Kreiser *et al.* (2010) on six nations, unfold that uncertainty avoidance is negatively associated with the risk-taking propensity of decision makers. The more people feel threatened about the future return on the investment, the less investment they make and the less risk they take related to future investment. As risk is related to uncertainty, societies or business decision makers from high uncertainty avoidance culture do not take risky decisions and need details and extra information to make decisions even in a normal circumstance.

Regarding the effect of the masculinity dimension of culture on risk-taking, the conflicting result is obtained by Gantenbein *et al.* (2019) and Haq *et al.* (2018). Gantenbein *et al.* (2019) conducted a study on 88 countries, from 1998 to 2014, concerning the masculinity of venture capital investment, which generally comes from well-off investors, investment banks, and other financial institutions to high-potential startups. They argue that masculinity is negatively related to risk-taking. In contrast, Haq *et al.* (2018) reveals a positive association between risk-taking and masculinity in the bank leveraging rates of 79 countries.

An overwhelming source of literature indicates the negative correlation between power distance and risk-taking behavior, e.g., Kreiser *et al.* (2010) on six nations; Haq *et al.* (2018) on 79 countries; Mihet (2013) on 51 countries; and Kuivalainn *et al.* (2010). A high-power distance culture is generally associated with keeping the hierarchical relationship and requires formal approval procedures throughout the chain of command. As the power is not decentralized, there is a high likelihood of delays and lack of flexibility in decision-making that could hold the decision-makers from taking a risky decision, no matter the opportunities that could be missed. Indulgence is another national culture dimension that molds EOs. Haq *et al.* (2018) argue that an indulgence culture favors risk-taking. In indulgent culture, individuals are free to decide based on their moods, easiness, and convenience. Despite the associated risks, there is a high possibility of experiencing and experimenting with new things.

In addition to the above-discussed cultural dimensions, religious views, and gender seem to affect the risk attitude. Catholic-majority countries incline toward the debt market. In contrast, the Protestant-dominant society focuses on investor protection and equity financing (Kuivalainen et al., 2010). The gender of decision-makers compromises the effect of culture on risky taking. Male managers are more opportunistic and exhibit a higher tendency towards achievement, overconfidence, and risk-taking behavior. In contrast, female managers are deemed moderate risk-takers and often avoid uncertainty (Kuivalainen *et al.* 2010).

Table 2.12. The Effect of Cultural Dimension on Risk Taking

Cultural Dimension	Reference	Participants/countries	Findings
Power Distance	Kreiser et al. (2010)	6 nations 1048 firms	-ve influence
	Haq et al., (2018)	79 countries	-ve influence
	Kuivalainen et al.,(2010).	Systematic review	-ve influence
	Mihet, (2013)	51 countries	-ve influence
	Kutan et al., (2021)	Systematic review	-ve influence
Uncertainty avoidance	Kreiser et al., (2010)	6 nations 1048 firms	-ve influence
	Mihet, (2013)	51 countries	-ve influence
	Haq et al., (2018)	79 countries	-ve influence
	Gantenbein et al., (2019)	88 countries from 1998 to 2014	-ve influence
	Kuivalainen et al. (2010)	Systematic review	-ve influence
Long-term Orientation	Haq et al., (2018)	79 nations	-ve influence
	Gantenbein et al., (2019)	88 countries from 1998 to 2014	+ve influence
	Kuivalainen et al., (2010)	Systematic review	-ve influence
Individualism	Haq et al. (2018)	79 nations over 2000–2013	+ve influence
	Gantenbein et al., (2019)	88 countries from 1998 to 2014	+ve influence
	Mihet, (2013)	51 countries	+ve influence
	Breuer et al., (2014)	2 countries	+ve influence
	Chui et al., (2010)	50 countries	+ve influence
Masculinity	Haq et al., (2018)	79 nations	+ve influence
	Kutan et al., (2021)	Systematic Review	+ve influence
	Gantenbein et al., (2019)	88 countries from 1998 to 2014	-ve influence
Indulgence	Haq et al., (2018)	79 countries over 2000–2013	+ve influence
	Kutan et al., (2021)	Systematic Review	+ve influence

Source: **Author’s Creation, 2022**

In summary, Table 2.12. shows power distance, uncertainty avoidance, and long-term orientation negatively influence risk-taking, whereas individualism, indulgence, and masculinity positively influence the same.

2.4.5. The Nexus Between Proactiveness and National Culture Dimensions

Proactiveness is one of the three essential components of entrepreneurially oriented firms. It refers to the ability of firms to foresee and seize opportunities in the market, which is associated with changes in demand, technology, and market structures. The culture of a society determines how far proactive firms are (Urbach *et al.* 2021; Kreiser *et al.* 2010), and proactiveness is also determined by the institutional arrangements in a given economy (Young *et al.*, 2018). Urbach *et al.* (2021) argue that cultural difference affects the individual's proactive work behaviors. They further commend that societal culture not only dictates whether individuals behave proactively and the extent of such behavior but also predicts why people are proactive, how they enact this behavior, and the potential costs of proactivity. Especially societal cultures such as individualism, future orientation, and uncertainty avoidance shape the cognitive schema of characteristics and behaviors of both followers and leaders (Urbach *et al.* 2021). Kreiser *et al.* (2010) found a negative relationship between proactive firm behaviors and uncertainty avoidance, power distance, and individualism across six countries in 1048 firms. Especially, uncertainty avoidance and individualism play a predominant role in shaping firms or individuals to be proactive. A high uncertainty avoidance culture deescalates entrepreneurs' aspirations for future changes and deters them from acting ahead. Whereas individualism seems to limit the ability of firms to act proactively due to a lack of synergies or broad views which could be obtained otherwise by involving others in the decision, and it also limits the source of information.

In addition to the informal institutions, the institutional arrangement in each economy determines the type and size of opportunities and how these opportunities are elicited (Young *et al.* 2018). The options available to proactive entrepreneurs would be either imitative or innovative, depending on the reliability of the institutions. The stability-promoting institutions allow for the development of imitative opportunities, while institutions promoting flexibility – thus supporting an entrepreneur's ability to respond to uncertainty by iterating – will foster more innovative opportunities (Young *et al.*, 2018). This implies that the proactiveness and knowledge of entrepreneurs in foreseeing and exploiting opportunities depend not only on societal culture but

also the institutional arrangements, given the biasedness of these institutions toward the societal culture where they operate.

2.4.6. The Nexus Among Business Performance, Entrepreneurship, and National Culture

Like national culture and entrepreneurship, the relationship between entrepreneurial orientation and business performance has long attracted attention in the literature. The three well know entrepreneurial orientation (EO) dimensions are:- innovativeness, risk-taking, and proactiveness (Ngoma *et al.*, 2017; Lumpkin and Dess, 1992; Ibidunni *et al.*, 2018). Generally, as shown by a meta-analysis of 177 studies, EO is associated with increased performance (Saeed *et al.*, 2014; Khadhraoui *et al.*, 2019). Nonetheless, how does each of these EO dimensions determine the business performance? Or has the effect of EO dimensions on performance been the same across diverse business environments, cultures, and formal institutions? These are some of the main questions in the literature to answer in the EO-performance relationship (Onwe *et al.* 2020; Khadhraoui *et al.* 2019; Laskovaia *et al.* 2017). Besides, in determining the effect of EO, the controversy on a type of measure of business performance is another factor for inconsistency. This section shows whether national culture acts as a catalyst or an inhibitor in the EO-performance relationship. Business performance is measured in both financial and non-financial terms such as internationalization (Ngoma *et al.* 2017); international entrepreneurial business venture performance (Kropp *et al.* 2006), sales growth, growth in profits, and market share growth (Watson *et al.*, 2019), return on investment that includes momentum profits (Chui *et al.* 2010) and customer satisfaction, profitability, and new product success (Ibidunni *et al.* 2018) or innovative entrepreneurial products.

Proactiveness has a significant effect on customer satisfaction. Risk-taking orientation has a substantial impact on profitability and new product success. Also, autonomy orientation has a very significant effect on customer satisfaction and further product success. This implies that entrepreneurial orientation and business performance have a robust causal-effect relationship (Ibidunni *et al.*, 2018). Ngoma *et al.* (2017) describe how EO dimensions can influence an entrepreneur's decision to go international, especially handling the internationalization process and its dynamics. The results reveal that all the components of entrepreneurship orientation (innovativeness, proactiveness, and risk-taking) significantly and positively correlated with internationalization. A significant and positive correlation between risk-taking and

internationalization implies that firms that take the risk of entering international markets with little certainty of the business culture, language, and market dynamics are likely to succeed because everyone else fears making the first move (Ngoma *et al.* 2017).

Among the factors impacting this EO-performance relationship, national culture has gained considerable momentum in the discussion. The inherited influence of culture is reflected in both EO and business performance (Khadhraoui *et al.*, 2019; Watson *et al.*, 2019); Kutan *et al.*, 2021; Laskovaia *et al.*, 2017). However, the effect of national culture on business performance may differ as per the type of business entity, industries, growth stage, and a sample of study subjects. The entrepreneurs' and societal attitudes toward Standalone nascent businesses, startups, subsidiaries, and spin-offs could vary with respective countries' national cultures. A positive correlation between entrepreneurial orientation and performance of spin-offs is observed across culturally diversified societies such as Tunisia, Canada, and Morocco (Khadhraoui *et al.*, 2019). Spin-off companies may be considered new ventures founded by individuals or groups who were part of parent organizations. Their entrepreneurial orientation positively affects spin-off performance independent of countries' economic circumstances.

They also suggest that, given the level of environmental hostility, to enhance performance, appropriate attention should be given not only to the main EO dimensions:- innovativeness, proactiveness, and risk-taking but also to autonomy and competitive aggressiveness (Khadhraoui *et al.* 2019). This result implies that regardless of cultural context, across nations, the EO of these firms can influence their business performance and we see no variation in the EO-performance relationship due to variation in culture. However, this does not consider the national cultural dimensions of Hofstede, and it only considers a small sample of three countries. The same result by Watson *et al.* (2019) implies that the dimensions of culture have a significant and positive influence on entrepreneurial performance, which is a blend of financial and non-financial parameters, including sales growth, profit growth, and market share growth. They categorized culture as internally and externally oriented, considering a single country. Hence, the sample size of the study subjects and other socio-economic variables are a very important to consider clarifying the influence of culture on EO-performance relationship.

Saeed *et al.* (2014) uncover how national cultural and macroeconomic drivers impact the EO-performance relationship. Their meta-analysis was built upon 177 studies with data from 41

countries. It addresses four major national cultural dimensions: uncertainty avoidance, power distance, in-group collectivism, and assertiveness as informal institutions; economic, political, and regulatory environments as formal institutions. The result reveals that EO is related to firm performance more strongly in national cultures characterized by low uncertainty avoidance, low power distance, high in-group collectivism (partly confirmed), high political stability, and when a country is a developing one. In contrast to Rauch *et al.* (2013), solid in-group collectivism strengthens the EO–performance relationship. A stronger connection between innovation and firm performance is observed in collectivistic settings (Saeed *et al.* 2014). Rauch *et al.* compare the effect sizes only among continents, finding no significant difference among them, while Saeed *et al.* (2014) studied many more non-Western countries and found more nuanced moderators at the national level to explain the EO–performance relationship.

2.4.7. Moderators of Culture and EO-performance relationship

Studies also reveal that the level of environmental hostility (Onwe *et al.* 2020), the psychological factors of decision makers (Laskovaia *et al.*, 2017), and organization-related factors such as market orientation and learning orientation (Kropp *et al.*, 2006), resources (Chowdhury and Audretsch, 2021), organizational culture (Knein *et al.*, 2020) and functional competition and cooperation (Schneider and Engelen, 2015; Knein *et al.*, 2020) are some of the main factors that affect EO-performance relationship and moderate the influence of national culture on this relationship. For instance, at an organizational level, firms' international focus like cross-border trade, investment, acquisitions, and mergers are molded not only by their entrepreneurial orientation but also by a learning orientation and market orientation. Considering 396 entrepreneurs and 143 senior managers from an early stage, growth-oriented firms in the Republic of South Africa, Kropp, *et al.* (2006) found that international entrepreneurial business venture performance (IEBV) is positively related to the innovativeness component of entrepreneurial orientation (EO), a market orientation, and a learning orientation. Early-stage IEBVs that are more innovative perform better than those less innovative. Innovativeness is strongly associated with the success of IEBVs. Early-stage IEBVs operating in dynamic and hostile environments seem to perform better where there is more communication element (Kropp *et al.* 2006).

Apart from cultural influence, the effect of EO on business performance seems to be environmentally sensitive. A hostile environment motivates firms to adopt an entrepreneurial

orientation and improve performance (Onwe *et al.* 2020). They argue that there is no significant relationship between entrepreneurial orientation and firm performance, while environmental hostility moderates this relationship positively. Environment hostility could be in numerous forms, such as changes in demands, technology, products, government laws, policies, and forces in the market (Covin and Slevin, 1989) and referred to as market dynamism. In the case of small businesses in Nigeria, environmental hostility displays a statistically significant and positive moderating influence on the EO-performance relationship (Onwe *et al.* 2020). However, the hostility of the environment could result in poor firm performance if firms cannot take advantage, and such shocks may force their exit. Onwe *et al.* (2020) Also, the strength and positive or negative direction of the EO-performance relationship depends upon environmental hostility. In a non-hostile or non-dynamic environment, an increase in EO would not increase, or there would not be a proportion increase in business performance (Onwe *et al.* 2020). Also, Khadhraoui et al. (2019) claimed that environmental hostility could enhance entrepreneurial orientation–performance link. It, therefore, is possible to shatter the status quo of businesses and boost their entrepreneurial orientation (innovativeness, proactiveness, and risk-taking) by initiating environmental hostility or market dynamism.

Internally, one’s way of thinking and reasoning moderates the effect of culture on performance. The causal-effectual reasoning of expert and novice entrepreneurs' cognitive logic catalyzes the culture-performance relationship (Laskovaia *et al.* 2017). Considering 3411 new ventures started by student entrepreneurs from 24 countries, Laskovaia *et al.* (2017) found that venture cognitive logic (casual reasoning and effectual reasoning) positively affects new venture performance and mediates the culture-performance relationship. Entrepreneurial reasoning is shaped not only by the cultural context but also by entrepreneurs' personal or psychological characteristics. The personal characteristics of entrepreneurs that encompass individuals' values, attitudes, and behaviors are detrimental to entrepreneurial growth (Chowdhury and Audretsch, 2021). Hence, to enhance business performance, it is paramount for firms to consider the influence of cultural context and how culture influences the cognitive logic of venture creation. Moreover, the effect of culture on EO independently or the EO-performance relationship is not always straightforward. For instance, it affects the way or the extent to which individuals process and use market information in investment decision-making (Chui *et al.* 2010); operation management that includes the formulation of operation strategy, execution, and improvement decision (Boscari *et*

al. 2018; Lee Park and Paiva, 2018), and cross-function coopetition (Knein *et al.* 2020) or cross-functional cooperation and competition (Schneider and Engelen, 2015).

Regarding market information processing, because of high reliance on peers and friends or family's thoughts, investors in less individualistic societies mainly do not rely on market information, resulting in missing colossal market opportunities and less business growth. Especially those entrepreneurs from collective cultures operating in non-stable and volatile industries are highly exposed to the side effects of these cultural traits because it takes time to convince or gather information from close friends or family before deciding. In the meantime, they could miss harnessing the best available opportunities in the market (Chui *et al.* 2010).

Moreover, the effect of national culture is not limited to the corporate leadership and management, but it also extends impact to the entire operation management functions. Operation management (OM) areas such as formulation of operation strategy, execution, and improvement decision are also found under national culture (Boscari *et al.* 2018). Cultural characteristics, such as institutional collectivism and uncertainty avoidance, shape companies' OM strategy, while OM strategy execution and improvement are exposed to a broader range of cultural traits. Because of the variety of tasks and activities in operation management, national cultural characteristics affect each functional area in quite a different way (Boscari *et al.* 2018).

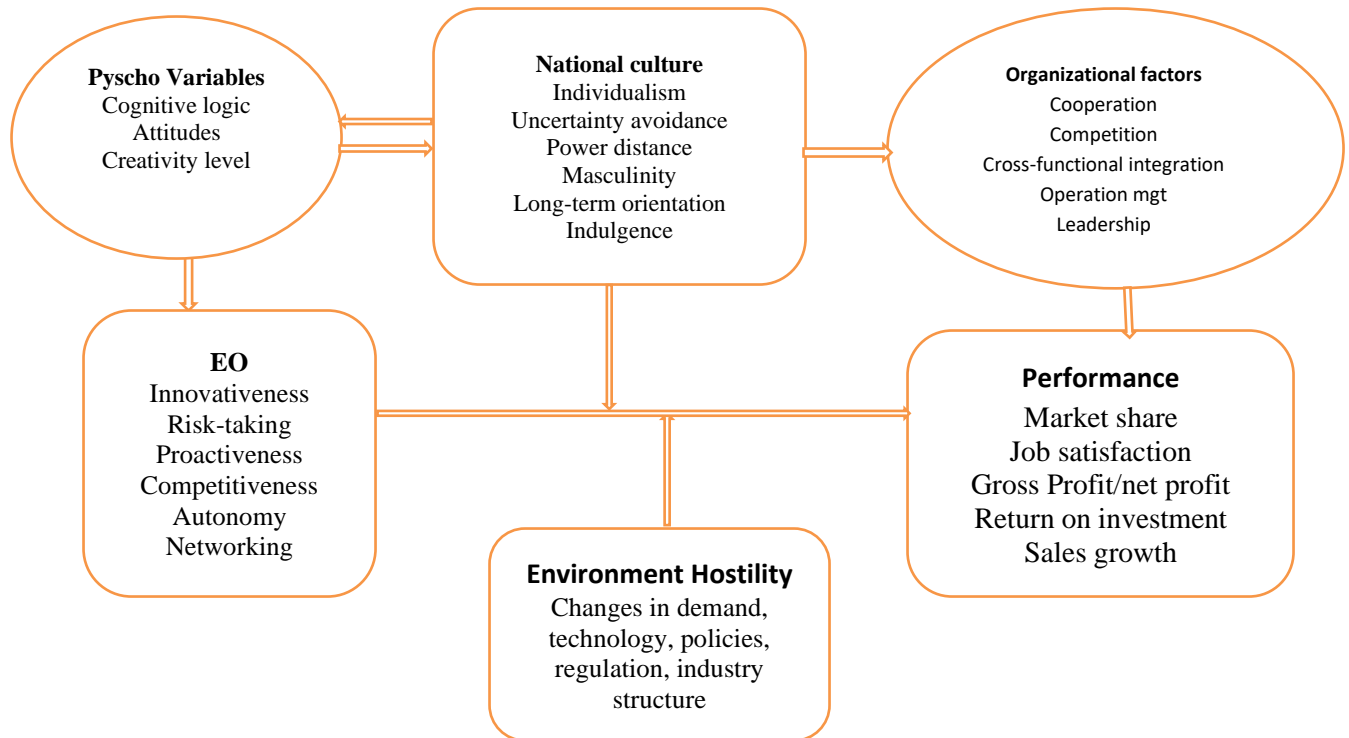
The investigation by Lee Park and Paiva (2018) on two Western and two Eastern countries with different industrialization and development backgrounds (Brazil, China, Germany, and South Korea) reveals differences in operation strategy and management processes across national cultures. They addressed Hofstede's elements (i.e., power distance, individualism vs. collectivism, uncertainty avoidance, and long-term vs. short-term orientation) on one side and the operation strategy process enablers (i.e., leadership for cross-functional integration and functional integration) and elements (i.e., manufacturing strategy linkage to corporate strategy and formulation of manufacturing strategy) on the other. Leadership for cross-functional integration and manufacturing strategy linkage to corporate strategy differs as per the levels of power distance, individualism vs. collectivism, and uncertainty avoidance. Functional integration and manufacturing strategy formulation also show variation as per the level of individualism vs. collectivism and long-term orientation. These findings augment previous research that the

national culture difference can go deeper into organizational strategy formulation, implementation, and cross-functional integration (Lee Park and Paiva, 2018).

To boost performance, organizations experience both cross-functional cooperation and competition. Moreover, nowadays, they also experience more cross-functional competition, which inculcates and signifies the joint occurrence of competition and collaboration (Schneider and Engelen, 2015; Knein *et al.*, 2020). In low-power-distant cultures, cross-functional competition and cooperation are most substantial (and positive) (Schneider and Engelen, 2015). Cross-functional competition is influenced by organizational and national cultures (Knein *et al.*, 2020). The study on the dataset of 646 companies from seven countries confirms that organizational cultural dimensions (group culture, development culture, hierarchy culture, and rational culture) directly enhance cross-functional cooperation. Besides, individualism and uncertainty avoidance cultural values have weakened the relationship between organizational culture and cross-functional competition (Knein *et al.* 2020).

This result also shows that organizational culture is not free from the influence of national culture, and the former's effect on any organizational variable could be compromised by the latter. The decentralization and removal of hierarchical barriers in communication, collaboration, and decision-making power in low-power-distant cultures increase the effectiveness of modes of interaction and seem to support (task) conflict and other "positive" forms of competition (Schneider and Engelen, 2015). On the contrary, in a high-power distance environment, the management at the top makes the decisions without considering employees' opinions and expertise, and formal communication channels don't tolerate free communication. Job satisfaction, creative thinking, proactiveness, and innovativeness are reduced or eliminated. The individualism dimension of national culture demonstrates a negative and non-significant relationship, neither for cross-functional cooperation nor cross-functional competition. However, Schneider and Engelen (2015) exhibit the positive impacts of the cultural dimension of power distance and individualism) on business performance, considering 846 firms from 9 countries. Figure 2.10 summarizes the inextricable link between EO, national culture, and performance and the moderators of their relationship.

Figure 2.10 The Nexus Between National Culture, Entrepreneurial Orientation, and Performance



Source: Author’s creation, 2022

2.4.8. Entrepreneurial Orientation, National Culture, and Economic Growth

I. Entrepreneurial Orientation and Economic Growth

Literature shows a causal-effect relationship between economic development and entrepreneurship. Economic growth can spur an increase in demand for entrepreneurial activity, which creates a demand for resources necessary for innovation (Chowdhury and Audretsch, 2021). Despite this, both formal and informal institutional variables play an important role in moderating this relationship. Studies show that formal institutions such as policies and regulations on education, corruption, and political freedom (Dheer, 2017), economic freedom (Facchini *et al.* 2021), the labor market, financial markets, the level of economic activities, and innovation activities (Castellani, 2019), and legal systems that are based either on French civil law or English civil law (Kreiser *et al.* 2010), play a decisive role in promoting entrepreneurship as well as economic growth. The informal institutions that, collectively named national culture according to Hofstede, encompass individualism, uncertainty avoidance, long-term versus short-

term orientation, power distance, masculinity, and indulgence are among the main actors in determining this relationship between entrepreneurship and economic growth (Mihet, 2013; Morales-Alonso *et al.* 2021; Çelikkol *et al.* 2019; Kreiser *et al.* 2010; Jaen, Fernandez-Serrano, and Linan, 2013).

The relationship between entrepreneurship and economic growth can also be positive or negative depending on the type of entrepreneurship which can be either pure profit-making business or social entrepreneurship, which primarily works on meeting social goals after raising funds (Almodóvar-González *et al.* 2020) and quality-based or high growth-oriented business versus generic entrepreneurship (Kedmenec and Strašek, 2017), development stages of countries (Kedmenec and Strašek, 2017), developed versus developing economies (Fernández-Serrano and Romero, 2012; Almodóvar-González *et al.*, 2020) and source of government income (Facchini *et al.* 2021). Peprah and Adekoya (2020), using data from the World Development Indicator for 10 African countries, find that entrepreneurship positively and significantly stimulates economic growth in Africa (Botswana, Morocco, Mauritius, Namibia, Nigeria, Rwanda, Senegal, Sierra Leon, South Africa, and Zambia). The findings remain the same after controlling for some important economic factors such as inflation, domestic investment, labor force participation, level of urbanization, and financial institution support. This implies that encouraging entrepreneurship holds the potential to contribute to building a resilient economy in Africa (Peprah and Adekoya, 2020).

They suggest, therefore, policymakers developing and implementing policies and programs that create and stimulate entrepreneurial activities among the youthful populace in Africa. Investment in entrepreneurial skills and education are strongly recommended as keys to acquiring entrepreneurial knowledge (Peprah and Adekoya, 2020). Nonetheless, Almodóvar-González *et al.* (2020) argue that boosting new businesses is not always appropriate in less developed countries if they aim to accelerate economic development. Their six-year study of 74 economies reveals that the roles of entrepreneurial activity vary depending on the level of development of a given economy. Also, the type of entrepreneurship in demand varies as per the economic development stage, and, for instance, generic entrepreneurship is found to be less effective and plays little role in the development of developing economies (Almodóvar-González *et al.*, 2020). This shows that developing countries can only benefit from their investment in entrepreneurship

if they choose quality-based or high-growth entrepreneurship instead of generic entrepreneurship, which simply promotes new per-capita businesses.

In line with this, the study also shows that the highest rates of entrepreneurial activities are generally found in developing economies, and the relationship between total entrepreneurial activity and per capita income seems to be curve-shaped. Thus, as an economy grows, nascent entrepreneurship declines while per capita income increases. That also results from an increase in the returns to wage work relative to entrepreneurial returns, and then owners and managers find they can earn more money working as employees. But the demand for entrepreneurship rises again in developed countries with opportunities created through sophisticated information access and resource availability (Fernández-Serrano and Romero, 2012). SMEs in highly developed areas tend to be more innovative, internationalized, and efficient than those in low-income areas. This further indicates that when considering the role of SMEs in regional development, it is not the number of entrepreneurs and SMEs in an economy that matters but their ‘quality’ or high-growth aspiration (Fernández-Serrano and Romero, 2012). Mainly, SMEs in low-income economies are less frequently involved in production cooperation, but they cooperate more in marketing, publicity, distribution, and sales. They are more functionally dependent on other areas since they tend to purchase their inputs from external suppliers and sell them in the internal market (Fernández-Serrano and Romero, 2012), which limits their growth potential. A low rate of new venture creation is exhibited in high-income countries, and GDP per capita significantly covaries with culture in shaping entrepreneurial activities (Dheer, 2017). Considering oil-dependent economies like the UAE, Facchini *et al.* (2021) also argue that the dominant economic activities and the source of income for the government determine the growth of entrepreneurship and entrepreneurial culture.

II. The Interaction of Entrepreneurial Orientation, National Culture, and Economic Growth

Culture and entrepreneurship are the two biggest predictors, accounting for 60% of the variation in GDP per capita. Thus, any entrepreneurial policy is expected to consider the influence of societal culture to stimulate economic growth through entrepreneurship (Jaen, Fernandez-Serrano, & Linan, 2013). However, economic development itself becomes a moderator of both culture and entrepreneurship. In addition to formal institutions, the relationship between culture

and entrepreneurship is influenced by a country's level of development (Morales-Alonso et al., 2021). In addition, a five-year study of 81 countries found that culture and economic development level are determinants of entrepreneurship, even though the former two do not interact directly (Mihet, 2013; see also Celikkol *et al.* 2019). The influence of Hofstede's cultural values, such as uncertainty avoidance (UAI), masculinity vs. femininity (MAS), and individualism vs. collectivism (IDV), is moderated by the development level of the country and the existing inequalities. The differences in total early-stage entrepreneurial activity (TEA) among countries with similar economic development can be attributed to differences in national culture (Morales-Alonso *et al.*, 2021). As a result of cultural changes when an economy develops, the level of development moderates the sizes and types of entrepreneurial activities. In developed countries, cultural assimilation and homogeneity exist due to high digital engagement and globalization, especially in the business environment.

On the contrary, the less developed countries are more conservative in their culture, at least in their entrepreneurial culture. For example, there are clear differences in individualism between developed and developing countries (Morales-Alonso et al., 2021). The former is more likely to be individualistic than the latter. A statistically significant difference is found among countries at different stages of development (factor-driven, innovation-driven, and efficiency-driven) in terms of power distance, individualism, and the long-term orientation of national culture. Short-term orientation and indulgence accelerate entrepreneurship, especially social entrepreneurship, in innovation-driven economies, while femininity is a factor in factor-driven economies (Kedmenec and Strašek, 2017). Long-term orientation, individualism, and indulgence have a positive impact on entrepreneurship rates, whereas masculinity has a negative impact, and other cultural dimensions appear to have no significant effect across 81 countries (Celikkol *et al.* 2019). In impacting entrepreneurship rates, an interaction is observed between cultural dimensions: individualism, masculinity, a long-term orientation, and economic development (Çelikkol *et al.* 2019). For instance, innovation, as an EO, is believed to explain economic growth; however, the relationship between the two is moderated by both national culture and the cultural orientation of owners. Culture influences innovations, which in turn influences economic development (Smale, 2016). Most commonly, dubious statements about the role of entrepreneurship in economic growth and the trilateral interaction of culture, entrepreneurship, and economic development

emanate from the units of analysis, which could sometimes be firms, entrepreneurs, individuals, or nations and entrepreneurship type.

Risk-taking, also as an EO, is the byproduct of the interactions of individual attitude, corporate strategy, institutional setup, economic development, and national culture (Mihet, 2013). The living standard of people molds their risk-taking and proactiveness. Both risk-taking and proactiveness vary based on the country's GDP per capita (Kreiser *et al.* 2010). GDP per capita, along with uncertainty avoidance national culture, determines the total early-stage entrepreneurial activity (TEA) rate (Hancıoğlu *et al.* 2014). Literature, thus, portrays evidence for an inherited trilateral relationship between national culture, economic development level, and entrepreneurship.

III. The Moderators in Tripartite Relationship of Culture, Entrepreneurship, and Economic Growth

Even though both culture and economic development levels determine entrepreneurship, they do not seem to have a linear relationship. The influence of culture is first reflected in business venture decisions, rules & regulations that govern and then extend to the economy in general. Moreover, individual and corporate decision-making at the micro level, diversification and concentration at the industry level, and institutional and economic development at the macro level are all influenced by culture (Mihet, 2013). This signals a deep-rooted interaction among culture, formal institutions, entrepreneurial activities, and economic growth in general (Rauch *et al.* 2013). Culture's influence on economic growth mainly goes along with or through formal institutions. The culture of a society molds and shapes the institutions, which in turn regulates the entrepreneurial activities that possibly result in economic growth. For instance, individualism positively moderates the effect of institutions on political freedom and education and negatively mediates the effect of corruption on entrepreneurial activities across nations (Dheer, 2017).

Corroborating this, Mihet (2013) argues that due to the difference in culture, the same institutional rules could produce different economic outcomes in societies, given the variance in income level and source. For an individualistic cultural framework, political freedom and individualism have an amplified synergistic effect on entrepreneurial activities as the former makes individuals feel safer and the environment predictable for business. But in a collectivistic society, the political freedom given to individuals may not significantly increase entrepreneurship rates since the

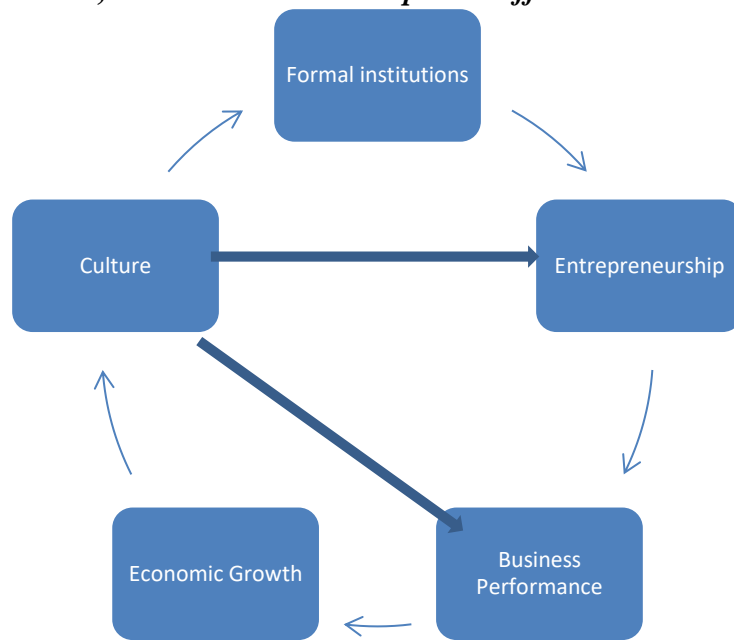
decisions are more likely collective (Dheer, 2017). The effect of corruption on entrepreneurship activities differs across nations and is shaped by their cultural context. In a collectivistic context, corruption, like paying bribes, could be considered to speed up new business creation. It helps to connect to the bureaucrats and circumvent the lengthy regulation that hinders the start of a new business. In individualistic cultures, corruption increases the perceived personal opportunity cost of starting a new business. Individuals in this culture are less interconnected or interdependent, which makes it not easy to pay bribes (Dheer, 2017). The quality of institutions and economic freedom is the sole heart for entrepreneurship to flourish (Facchini *et al.*, 2021). As institutions are essential for EO, clear rules and regulations can help reduce entrepreneurs' fear of risk and uncertainty that prevents exploiting opportunities. Establishing a culture of transparency and enforcement of laws equally and consistently in every (or almost every) instance can help establish trust in authorities who formulate policies (Chowdhury and Audretsch, 2021). This pinpoints formal institution's significance and moderation effect in three-way interaction of culture, entrepreneurship, and economic growth.

Furthermore, the relationship between informal institutions (culture) and entrepreneurship gets more complex because of the interactions of individual-level factors, economic growth, and formal rules driven by society's informal rules or norms. Countries with a smaller gross domestic product (GDP) are associated with higher risk-taking levels, moderate technological sophistication and political risk, and higher levels of economic trouble. Proactive firm behaviors are higher in countries with average levels of technological complexity and higher levels of financial and political risk (Kreiser *et al.*, 2010). In addition to economic policies and growth levels, the basis of countries' laws may enhance firms' proactiveness and risk-taking. Those countries whose legal systems are based on French civil law tend to display lower levels of both risk-taking and proactive behaviors. Thus, one can see a three-way interaction in which culture influences formal institutions, which then influences EO dimensions. The latter influences business performance and economic development, and the vicious circle continues.

As illustrated in Figure 2.11., I argue that culture directly affects entrepreneurship and entrepreneurial orientations: innovativeness, risk-taking, and proactiveness. It also indirectly affects entrepreneurship through formal institutions, including policies and regulations on property rights, education, economic freedom, investment, and business freedom. Moreover,

culture directly influences business performance measured by job satisfaction, market share and sales growth, and profitability because the satisfaction factors of both employees and customers are related to their culture. Its indirect effect on economic growth happens through firms' business performance, which is itself impacted by formal institutions and entrepreneurial orientation.

Figure 2.11. The Interrelationship of Culture, Formal Institutions, Entrepreneurship, Business Performance, and Economic Development Effect



Source: **Author's Creation, 2022**

2.5. Findings and Conclusion

The review was aimed at uncovering the relationship between national culture and entrepreneurship. It also considers the variables that moderate this relationship and their effect on business growth. Based on Tables 2.10, 2.11, and 2.12 above, I summarize the influence of national culture on entrepreneurship and some of its orientations, as shown in Table 2.14. Individualism, long-term orientation, and indulgence positively affect entrepreneurship in general, including creativity, attitudes, abilities, aspirations, total early-stage entrepreneurial activities, self-employment rates, and the adoption and implementation of new technologies. On the other hand, masculinity, high power distance, and uncertainty avoidance degenerate entrepreneurship. The main variables that moderate this relationship are the distribution of

entrepreneurial talents, the complementarity or configurations of cultural values, the institutional environment, psycho-social factors, demographic variables, implementation strategies, and the adoption of new technologies.

Table 2.14. The Effects of National Culture on Entrepreneurship and Its Orientations

Dimension of National Culture	Entrepreneurship In general	Innovativeness	Risk-Taking	Proactive
Masculinity	-	*	+	*
Individualism	+	+	+	-
Uncertainty Avoidance	-	-	-	-
Power Distance	-	-	-	-
Long-term orientation	+	+	**	*
Indulgence	+	+	+	*

N.B: * No enough evidence + Positive influence
 ** Indifferent - Negative influence

Specifically, the innovation aspect of entrepreneurship is positively influenced by individualism, long-term orientation, and indulgence, whereas power distance and uncertainty avoidance negatively impact it. Nonetheless, this effect is moderated by pro-market institutions, regional entrepreneurial culture differences, stages of innovation (initiation and implementation), and the configuration of cultural profiles. Like innovativeness, the tendency to take risks is negatively affected by avoiding uncertainty and being far from power, and positively by individualism and an indulgence culture. Masculinity positively influences risk-taking, but the effect of long-term orientation is indifferent. In a long-term-oriented culture, if the risk is associated with a future return, society becomes more risk-taking, and vice versa. Like innovativeness and risk-taking, proactiveness negatively correlates with uncertainty avoidance and power distance. Individualism, on the other hand, implicitly supports proactive behavior. Among the three EO dimensions, proactiveness is the least entertained topic in the literature entailing national culture, and it is negatively related to individualism, uncertainty avoidance, and power distance.

However, when investigating the impact of national culture on entrepreneurship, it is necessary to consider the prevailing contexts or moderating factors. The distribution of entrepreneurial talents and the dispersion of national culture vary across regions within a nation, which implies

a need for revisiting Hofstede's cultural framework. Also, how each cultural dimension affects entrepreneurship, business growth, and economic growth depends on how well they work together. This is called "cultural bundling." So, I argue that combining the pro-entrepreneurship national culture dimensions (individualism, long-term orientation, indulgence, femininity, low uncertainty avoidance, and low power distance) could create the best conditions for entrepreneurship in general and for innovativeness and risk-taking in particular. On the other hand, a combination of masculinity, high power distance, avoiding uncertainty, focusing on the short term, and a culture of restraint may discourage entrepreneurship and entrepreneurial traits like being innovative and willing to take risks. Based on this finding and Hofstede's national culture country comparison insight, I argue that the national culture of Ethiopia is not pro-entrepreneurship due to a high-power distance (70), very low individualism (20), high masculinity (65), high uncertainty avoidance (55), and low indulgence (47). It could inhibit SMEs' innovativeness, risk-taking, and proactiveness in the textile and furniture industries.

As shown in Figure 2.11. above, national culture moderates the EO-performance relationship along with environmental hostility, which refers to changes in demand, technology, policies, regulation, and industry structure. It affects EO by molding psychological variables (cognitive logic, attitudes, and creativity aspirations) and business performance by influencing organizational factors (cooperation, competition, cross-functional integration, operation management, and leadership). Moreover, as shown in Figure 4.2, culture indirectly affects economic growth through firms' business performance, which is itself impacted by formal institutions (such as rules, regulations, and economic policies) and entrepreneurial orientation.

Furthermore, the review reveals a virtuous circle among culture, formal institutions, entrepreneurship, business performance, and economic growth. It is also evidenced that economic growth measured by GDP per capita, or level of economic development, moderates the influence of national culture on entrepreneurship and business growth. As the level of economic development changes, there is a tendency to see changes in the type of entrepreneurship and national cultural dimensions. Entrepreneurial firms in high GDP per capita nations tend to be more growth-oriented, innovative, risk-taking, and proactive than those in low-GDP per-capita nations, which could be related to resource availability and institutional quality. They focus more

on opportunity-driven high-growth entrepreneurship, whereas developing countries are mainly identified with necessity-driven generic entrepreneurship, which is an increase in per-head businesses. Besides, higher levels of, for instance, individualism, indulgence, and femininity and more cultural homogeneity are depicted in these nations than in the developing ones. However, it is not evidence-based to conclude that a particular national cultural dimension is behind entrepreneurial growth and countries' economic development. A cultural profile or bundle does it, but not as an isolated dimension.

Theoretically, the current study contributes to the discourse on the relationship between entrepreneurship and national culture. It unveils how each national cultural dimension influences the entrepreneurial orientations: - innovativeness, risk-taking, and proactiveness of SMEs. Practically, it unfolds the proper bundling of cultural dimensions that can elevate entrepreneurial efforts so that a needed policy direction can be pursued in selecting entrepreneurship forms, implementing them, and enhancing entrepreneurial orientation: innovativeness, risk-taking, and proactiveness of firms.

2.6. Implications, Limitations, and Research Directions

Implications

The study implies that the proper bundling of the pro-entrepreneurship national culture dimensions: individualism, long-term orientation, indulgence, femininity, low uncertainty avoidance, and low power distance would yield maximum entrepreneurial growth. An individualistic culture that gives individuals more freedom to think and act independently and autonomously plays an indispensable role in entrepreneurial motivation, venture capital investment, innovation, and business creation. However, collectivism in the form of nationalism or patriotism can also positively influence entrepreneurial activities. Long-term orientation elevates entrepreneurial activities in various economic settings. Except in the initial stage of entrepreneurial decision-making, masculinity is negatively associated with the features of entrepreneurship. This indicates that not entrepreneurs' assertiveness, self-confidence, overambition, or high aim, but their consideration, customer care, and relationship with customers, which are feminine features, make a difference in entrepreneurial success.

Besides, high uncertainty avoidance and power distance are obstacles to entrepreneurial dimensions. Since entrepreneurship is associated with some risks and uncertainty, a certain degree of tolerance for deviance is expected. A high uncertainty avoidance culture makes people resist change and reduces entrepreneurs' risk-taking appetite, which was also shown in my previous work (Bate, 2022). It also reduces motivation to foresee and exploit opportunities and weakens firms' ability to innovate and grow. The indulgence culture implicitly upholds individual values, gives individuals the freedom to entertain, relax, adventure, and enjoy life, is open to changes and experiments, and tolerates mistakes and failures that unleash entrepreneurial potential. On the other hand, a cultural profile or bundle appears to be a novel concept that defines not only entrepreneurial orientations but also business growth and the country's economic growth (Yong et al., 2020; Tekic and Tekic, 2021; Tian et al., 2021). It is an intrinsic configuration of cultural values complementing each other. Based on the current review, maximum innovation performance can be attained in an individualistic culture complemented by or configured with low uncertainty avoidance, low power distance, long-term orientation, femininity, and indulgence. The same outcome can be expected from a collectivistic culture complemented with masculinity, high power distance, low uncertainty avoidance, and a long-term orientation if the innovation is at the implementation stage and if collectivism is associated with nationalism or country-belongingness, not localism or familism. From this, therefore, I argue that having pro-entrepreneurship cultural profiles in the right combination and at the right level of complementarity matters for innovation performance.

Practically, if other things remain constant, an individualistic culture, like France, positively promotes innovation if different cultural dimensions complement each other well. According to Hofstede cultural insights, French culture is an individualistic culture (71/100), which is complemented by long-term orientation (63), femininity/low masculinity (43), indulgence culture (48), high uncertainty avoidance (71), and high-power distance (68) (see Figure 6.1 below). The country ranked 11th among 132 in global innovation performance (WIPO, 2022). Almost the same outcome can be observed in China, which ranks 12th in the global innovation index. Chinese culture is based on collectivism or low individualism (20) and is complemented by masculinity (66), long-term orientation (87), high power distance (80), low uncertainty avoidance (30), and restraint culture (24) (see Figure 6.1). The cultural profile of China perfectly fits with solution 4 of Tekic and Tekic (2021) (i.e., discussed under section 2.4.3, sub-section II, page 51

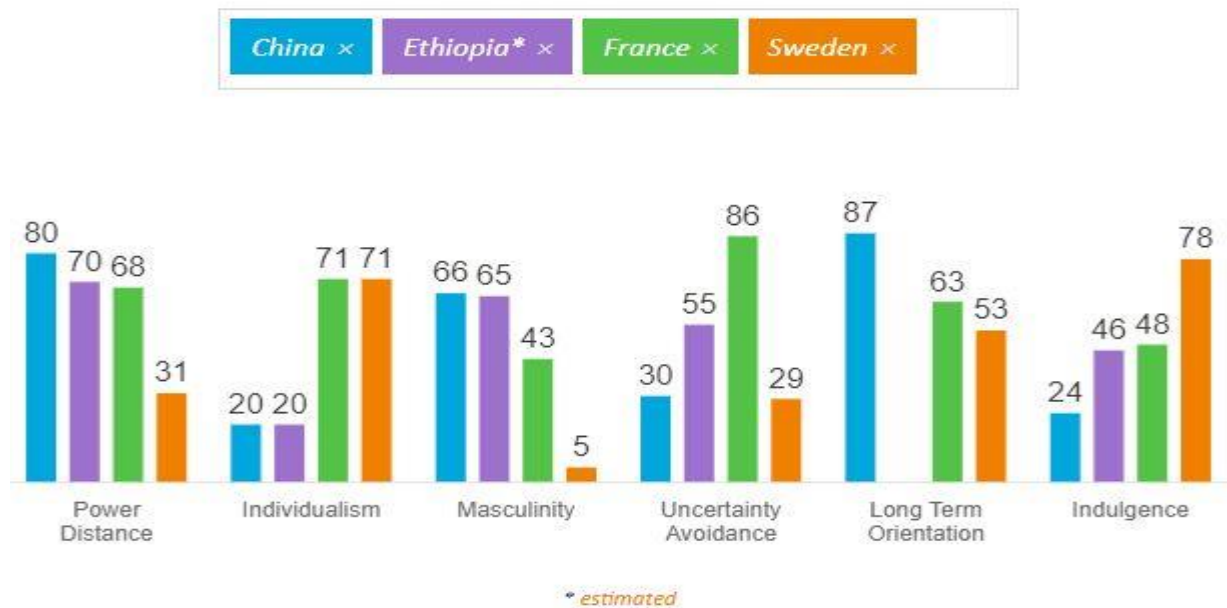
above), which bundles collectivism with high power distance, masculinity, low uncertainty avoidance, and long-term orientation to maximize innovation performance. On the other hand, the most innovative country, Sweden, ranks 2nd in the Global Innovation Index and demonstrates low power distance (31), individualism (71), high femininity or very low masculinity (5), low uncertainty avoidance (29), long-term orientation (53), and high indulgence (78), which exactly match the pro-entrepreneurship cultural dimensions identified in this study. The current study supports the findings by Tekic and Tekic (2021) in terms of upholding the concept of cultural bundling but extends objections in terms of the size of cultural dimensions in the bundle, in which they put only two or three cultural dimensions in their solutions 1, 2, 3, and 5 (i.e., is discussed under section 2.4.3, sub-section II, page 51 above).

Even though it won't be a quick fix or happen overnight, policymakers should look for and encourage the right mix of cultural profiles or values that can help entrepreneurs succeed. If a country's culture inclines towards being, individualistic, it should work to make sure that individualism is combined with a focus on the long term, indulgence, femininity, low uncertainty avoidance, and low power distance. In a collectivistic culture like Ethiopia's, the cultural bundling program should make sure that collectivism is paired and configured with masculinity, high-power distance, low uncertainty avoidance, long-term orientation, and restraint culture. Training in acculturation and deculturation should be given to SME owners or managers, employees, and societies as a whole so that entrepreneurial spirit, skills, and knowledge are spread throughout the culture. When making educational policies and programs, especially in business schools, it also needs to think about cultural issues. Still, putting in place well-intended policies and institutional changes that encourage entrepreneurship can be hard in some places, especially if they don't have a long-standing culture of entrepreneurship. Since the entrepreneurial culture isn't the same in every region, it would be best to consider regional cultures' differences when making policy (Lortie *et al.* 2019). When making strategies for innovation, managers or entrepreneurs must be aware of all the stages of the innovation process, their relative personal, organizational, and national strengths, and the effects of national culture (Smale, 2016) as well as formal institutions and the stages of economic development.

Limitations and future research direction

Focusing only on two databases with stringent selection criteria could limit the size of the studies. Further expanded database searches could probably provide more evidence and differential arguments. The review mainly focuses on innovativeness, risk-taking, and proactiveness; it does not separately address autonomy, competitive aggressiveness, and networking aspects of EO. Considering these aspects, further research can be done to determine the size and right combination of cultural profiles, or the level of complementarity of cultural dimensions, rather than focusing on a single cultural dimension that yields the maximum entrepreneurial returns. An empirical study that addresses national culture and entrepreneurship should consider the effects of formal institutions, talent distribution (business-related knowledge and experience), environmental hostility (the pace of changes in technology, demands, and policies), organizational factors (leadership and resource availability), and level of economic development. Furthermore, future research should also focus on the following questions: how can we nurture the pro-entrepreneurship national cultural dimensions? How many pro-entrepreneurship cultural dimensions should be bundled to the minimum to enhance the desired innovativeness, risk-taking, and proactive entrepreneurial behavior?

Figure 2.13 Cultural Dimensions of Randomly Selected Countries



Source: Extract from Hofstede Insight, 2022

CHAPTER THREE

3. Empirical Analysis of Entrepreneurial Orientation and Business Performance

3.1. Introduction

Since the 1990s, several studies (Venkataraman, 1989 and 1997; Shaver and Scott, 1991; Shane and Venkataraman, 2000) have been done on how to find and use entrepreneurial opportunities. Then, from the late 1990s, for almost the last three decades, researchers have given utmost attention to explaining the EO-business performance relationship and developing a conceptual framework with moderating variables (Covin and Slevin, 1989; Zahra, 2000; Wiklund, 1999; Zahra and Garvis, 2000; Wiklund and Shepherd, 2005; Awang *at el.* 2010; Gebremichael and Kassahun, 2014; Wales, Gupta, and Mousa, 2011; and Buli, 2017). In this thesis, research is done on the effects of EO on the business performance of small and medium enterprises (SMEs), considering the effects of financial capital, and market dynamism as moderating variables. It examines the EO-performance relationship in the context of a developing country, particularly Ethiopia.

This chapter analyzes the empirical data from Ethiopian small and medium enterprises (SMEs), especially those engaged in the textile, metal, and woodwork (furniture) industries. First, a scientific investigation is made of the main challenges related to EO and performance in the sampled SMEs in this country. Second, the assessment was made on the level of application of EO in the thriving SMEs in the country's manufacturing sector. Third, an analysis was made on the effect of EOs (innovativeness, pro-activeness, risk-taking, aggressive competitiveness, autonomy, and networking) on the business. Fourthly, the empirical analysis also uncovers how market dynamism and access to finance, as moderating variables in the country, have been affecting the practice of EO and its influence on SMEs' business performance.

The remaining sections subsequently present: an empirical literature review and hypothesis development, methodology, data analysis, and results, discussion and conclusion and implication, limitation, and future research direction.

3.2. Review and Hypothesis Development

This section presents the literature review for hypothesis development. It deals with how entrepreneurial orientation influences SME performance and hypothesizes the relationship to test it in a developing country context, Ethiopia. Since entrepreneurial orientation is a multilayer behavioral construct, sub-hypotheses are also crafted to test the relationship between its dimensions and business performance. The EO mean score is derived from the mean scores of its dimensions and each dimension influence business performance differently. Measuring a single dimension or some of them does not give a full picture of EO. In this dissertation, building upon the trend of previous empirical studies of Wiklund and Shepherd (2005), Awang et al. (2010), Wales, Gupta, and Mousa, (2011), Gebremichael and Kassahun (2014), Saha and Hajela (2015), Buli (2017), and Jianga, *et al.* (2018), I argue that to say firms are entrepreneurially oriented, they must be measured from six dimensions and proved innovative, risk-taker, proactive, aggressive competitors, autonomous, and networked, which forces us to develop sub-hypotheses as shown below.

3.2.1. Entrepreneurial Orientation and SMEs' Business Performance

Due to the high velocity of changes and turbulence in the business environment, firms, whether big or small and whatever their type may be, cannot survive if they simply lock a door and stay in and position themselves for defense only. It requires their planned efforts to either proactively or reactively respond to changes and face the challenges that arise while pursuing business interests. Firms' strategic decisions, related to entrepreneurial orientation, make a difference in their operations and positioning (Covin and Slevin, 1989). Entrepreneurial orientation (EO) refers to all the processes, practices, and decisions a firm undertakes to use entrepreneurial opportunities and create customer value (Lumpkin and Dess, 1996). The concept of EO was initially revealed by Miller (1983), and the model of EO was further developed by Covin and Slevin (1989) so that firms could adopt EO to respond to changes, challenges, and competition in an entrepreneurial manner (Covin and Slevin, 1989). Miller (1983) conceptualized that entrepreneurially oriented firms should be innovative, proactive, and risk-taking simultaneously. This conceptualization has been accepted as the uni-dimensional approach to EO study, and its scales are articulated by Covin and Slevin (1989).

EO has been defined differently by different scholars. Presently, there is no universally accepted single definition for EO. For Lumpkin & Dess (1996) and Boso *et al.* (2013), EO is an organizational decision-making process and practice that flourishes in entrepreneurial initiatives and strategies. Johan and Sven Åke (2007) defined it as a firm's notion to engage in and reinforce new ideas, experimentation, novelty, and creativity. EO is also viewed as policies, strategies, and visions that guide entrepreneurial decisions and actions and enhance competitive advantage (Rauch *et al.* 2009). Most scholars define EO in terms of its dimensions. Hence, it refers to the decisions, practices, and strategies that enable firms to be innovative, proactive, risk-takers, autonomous, and aggressive competitors in the marketplace (Lumpkin and Dess, 2001; Lumpkin, Cogliser, and Schneider, 2009; Johan and Sven ÅkeHörte, 2007; Rigtering *et al.* 2013; Buli, 2017; and Yimer *et al.* 2019). Regarding the dimensions of EO, from the first research works of Miller (1983) and Covin and Slevin (1989), the three EO dimensions are identified: innovativeness, pro-activeness, and risk-taking. These dimensions are coined as a "uni-dimensional approach" to the EO study. Later, Lumpkin and Dess (1996) added two more dimensions: autonomy and competitive aggressiveness. Then, the dominant version of EO with five dimensions came: innovativeness, pro-activeness, risk-taking, autonomy, and competitive aggressiveness (Lumpkin and Dess, 2001; Lumpkin, Cogliser, and Schneider, 2009; Johan and Sven ÅkeHörte, 2007; Buli, 2017; and Yimer *et al.* 2019). Yet, the argument on the constructs of EO has not been finalized, and scholars have discovered and intensely suggested networking as a hidden but essential construct of EO (Ramachandran and Ramnarayan, 1993; Kusumawardhani, McCarthy, and Perera, 2009; Saha and Hajela, 2015). EO shows whether firms are entrepreneurially oriented to perform most innovatively and competitively.

In line with this, the EO-performance relationship has been widely discussed in EO and strategic management studies. Various scholars found a positive contribution of EO to performance, and firms with higher EO levels outperformed those with lower levels (e.g., Wiklund, 1999; McGrath and MacMillan, 2000; Rauch *et al.* 2009; Lee and Lim, 2009; Lumpkin, Cogliser, and Schneider, 2009; Rigtering, *et al.* 2013; Laukkanen, *et al.* 2013; Buli, 2017). All these studies, including those by Wiklund and Shepherd (2005), confirm the positive relationship between EO and firm performance. EO can also be a source of competitive advantage (Lumpkin and Dess, 1996). It allows firms to identify and seize opportunities that make them different from the rival forces (Covin and Slevin, 1991). Studies show that an entrepreneurial firm performs better than its rivals

because it operates innovatively, uniquely, and proactively; it takes risks and exploits untapped entrepreneurial opportunities. Hence, I test the following hypothesis in the Ethiopian context, where scientific research is rarely found.

H1: The relationship between the overall EO and business performance of Ethiopian SMEs is positive and statistically significant.

The following sub-sections present EO dimensions and show the sub-hypotheses developed to test the relationship between separate EO dimensions and business performance.

3.2.2. Innovativeness and Business Growth of SMEs

Lumpkin and Dess (2001) and Lumpkin, Cogliser, and Schneider (2009) define innovativeness as the intention of firms to cultivate creativity and experimentation in introducing new products/services and novelty. Further, it can be defined as the predisposition or tendency of firms to engage in creativity and experimentation that enables them to introduce unique/new products or services to customers and increase perceived success (Lumpkin, Cogliser, and Schneider, 2009; Yimer, et al. 2019). Covin and Miles (1999) argued that innovativeness is the most crucial aspect of strategy; without it, entrepreneurship cannot exist. Also, extensive research works claimed a positive relationship between firm performance and innovativeness (e.g., Kusumawardhani, McCarthy, and Perera, 2009; Kraus, *et al.* 2012). Innovativeness goes along with creativity, a source of ideas that will lead to the innovation of products, services, processes, markets, or technology. Based on these, I empirically test the following hypothesis in the Ethiopian context: -

H1(a): Innovativeness as an EO dimension exerts a positive and statistically significant effect on the performance of Ethiopian SMEs

3.2.3. Risk-Taking and business performance of Firms

Because the business world is always changing, the race in business is not a straight line. Depending on the type of business, it can be full of many adventures. The risk involved and the expected return from a business are the two things that will always determine whether someone enters the business or exits it. Risk-taking engenders firms to initiate bold actions by venturing into the unknown, committing significant resources, and borrowing heavily from others to

establish a new business or successfully run the existing business in an uncertain environment (Lumpkin, Cogliser, and Schneider, 2009). The risk-taking behavior of EO is described as that of firms that are bold and aggressive in committing vast amounts of resources and owing heavy debt in pursuing opportunities (Lumpkin and Dess, 1996). Risk-averse firms are likelier to become weaker in their business performance (Kusumawardhani, McCarthy, and Perera, 2009). The association between business growth or success and risk-taking is significant in various studies (e.g., Yimer et al., 2019; Buli, 2017). This indicates that an increase in risk-taking will likely increase business growth. However, it does not mean all businesses that take risks will succeed in all cases. It may work for one but may not for others depending on firms' internal as well as external factors. Hence, I test the following hypothesis in Ethiopian manufacturing SMEs.

H1(b): Under the EO construct, risk-taking will have a positive and statistically significant effect on Ethiopian SMEs' performance

3.2.4. Pro-activeness and performance of firms

Pro-activeness is defined as the process of seeking opportunities, looking forward to introducing new products, and going ahead of rivals to beat the competition in anticipating future demands (Lumpkin, Cogliser, and Schneider, 2009). Previously, Lumpkin and Dess (1996: 146) defined proactivity as "taking the initiative by anticipating and pursuing new opportunities related to future demand and by participating in emerging markets."Coulthard (2007) suggests that pro-activeness is a critical factor for firm growth, especially at the embryonic or infant stage when firms enter the market. However, its contribution is not limited to the earliest stage of firm development; it is undoubtedly crucial for all ongoing and growth-oriented businesses. It calls for the reconfiguration of knowledge and other resources within a firm to exploit new business opportunities (Buli, 2017). A positive relationship is found between the predictor variable, pro-activeness, and the dependent variable, business success (Yimer et al., 2019). More often, the terms "pro-activeness" and "competitive aggressiveness" are seemingly used interchangeably. Lumpkin and Dess (1996) attempted to distinguish between them, suggesting that pro-activeness represents a firm's reaction to opportunities in the marketplace, whereas competitive aggressiveness refers to a firm's response to a competitor's challenges (Kusumawardhani, McCarthy, & Perera, 2009). Hence, I test the following hypothesis in the Ethiopian context:

H1(c): Pro-activeness has a considerable positive association with Ethiopian SMEs' performance.

3.2.5. Competitive Aggressiveness and Business Performance

Besides the three earlier EO constructs (innovativeness, pro-activeness, and risk-taking), competitive aggressiveness and autonomy are the later developments contributed by Lumpkin and Dess (1996). Competitive aggressiveness refers to a firm's stance to directly and intensely challenge its rival forces to make an entry into or improve its existing market position by outperforming competitors (Lumpkin and Dess, 1996; Buli, 2017). While pro-activeness targets customers' latent demand, aggressive competitiveness is intended to beat or overact competitors. Lumpkin and Dess (2001) explain aggressive competitiveness as a strong offensive posture intentionally directed at overcoming competitors. It is not only offensive but also includes defensive measures against market rivals. It is also reviewed as the intensity and head-to-head posturing that new entrants need to compete with existing rivals (Frishammar and Hörte, 2007). They also believe that it is more relevant for newly established firms to penetrate the market. But also, it intensely contributes to existing firms reacting to their recently appearing products. For example, if an existing firm intentionally cuts the price of its product when a competitor introduces a new product to the target market, it is aggressively competing against competitors (Lumpkin and Dess, 1996). Based on the facts, I propose and hypothesize as follows:

H1(d): Competitive aggressiveness exhibits a positive and significant relationship with Ethiopian SME performance.

3.2.6. Autonomy and Business Performance of Firms

Even though Lumpkin and Dess suggested the inclusion of autonomy as a construct of EO in 1996, only a few EO studies, so far, have examined autonomy as a primary element of EO. This less attention to autonomy might have occurred for two reasons: First, autonomy is not among the "original" dimensions of EO identified by Miller (1983) and was considered an antecedent of entrepreneurial behavior, not a component of EO. Second, the absence of convincing scales to measure autonomy made it misused or missed to use (Lumpkin, Cogliser, and Schneider, 2009). Autonomy is an independent action of a team or individual to bring forth a business idea or vision and pursue its completion (Kanter, 1983; Lumpkin and Dess, 1996; Frishammar & Hörte, 2007).

Autonomy at all levels, including individual, team, and firm levels, is paramount to promoting creativity and experimentation with new ways of doing or new products (Frishammar & Hörte, 2007; Yimer, *et al.*, 2019). It is also referred to as an ability of a team that allows them to solve problems with self-determined means of having control over the ends (Yimer, *et al.*, 2019). Entrepreneurship has flourished because of independently-minded people and thinkers, who got to think, act, and react with more discretionary power to bring a business idea into reality (Lumpkin and Dess, 1996; Lumpkin, Cogliser, and Schneider, 2009). Usually, there is a misconception between autonomy and centralization. Even though it seems complicated to differentiate the two clearly, they must be seen separately. Autonomy refers to how much decision-making authority or freedom a person, team, position, or organization possesses.

In contrast, centralization refers to the concentration of decision-making power at a single point or distributed throughout the organization (Lumpkin, Cogliser, and Schneider, 2009). Even in a centralized or flat organization where only a general manager oversees, autonomy can exist at the individual and team levels. It is found to increase perceived business success (Yimer, *et al.*, 2019), and giving independence to all players in the organization will undoubtedly motivate them to act entrepreneurially and improve firm performance (Kusumawardhani, McCarthy, & Perera, 2009). Based on the above facts, it is proposed and hypothesized as follows:

H1(e): Autonomy of EO demonstrates a positive and significant relationship with Ethiopian SME performance

3.2.7. Networking and Business Performance

Limited resource availability, lack of knowledge, and accessibility of market information put SMEs under pressure to look for someone who owns these things and gets connected in formal and informal networks. Also, their access to domestic and international markets depends on their networks (Ramachandran and Ramnarayan, 1993; Kusumawardhani, McCarthy, & Perera, 2009). From their systematic review, Pittaway *et al.* (2004) reveal multifaceted benefits of networking that include: sharing risks, pooling complementary skills, getting access to external knowledge and new markets and technologies, and safeguarding property rights in the absence of binding contracts. Saha and Hajela (2015) argue that networking is an inherent construct of entrepreneurial orientation and a fundamental predictor of the entrepreneurial behavior of firms,

especially in international business expansion. The pent dimensions of EO have also been criticized as insufficient to explain whether firms are entrepreneurially oriented or not in globalized markets (Kusumawardhani, McCarthy, and Perera, 2009; Saha and Hajela, 2015). Even for domestic trade, especially for SMEs in developing countries where there is a high shortage of resources like finance, establishing good networks is crucial for business success (Kusumawardhani, McCarthy, & Perera, 2009) and a means of raising resources and enterprise creation (Ramachandran and Ramnarayan, 1993). It is realized that effectively managed networks may serve as a source of competitive advantage that leads to superior performance against rivals (Kusumawardhani, McCarthy, and Perera, 2009), and it is positively related to firm survival (Watson, 2007).

H1(f): Networking shows a positive and statistically significant relationship on the performance of Ethiopian SMEs

3.2.8. The Configurative Effects on the EO–Performance Relationship

The configurational approach refers to a set of variables that fits together including internal aspects (e.g., financial capital) as well as the external environment/context (e.g., market dynamism). For instance, it assumes that parts of an organizational system take their meaning from the whole and cannot be understood in isolation. Those parts are believed to be mutually supportive.

In EO research, most studies found that firms with a higher EO perform better. But others have yet to see this positive relationship. This poses the issue of whether EO can always be an appropriate strategic orientation; or if the EO-performance relationship is more complicated. The EO-performance relationship varies with the types of businesses. A firm's internal and external factors may moderate the relationship between EO and performance (Lumpkin and Dess, 1996). Empirically, the extant literature has found that the effect of EO on performance may vary in different types of environments (i.e., external factors), especially where there is dynamism (e.g., Zahra, 1993; Wiklund and Shepherd, 2005). Internally, studies have also indicated that implementing entrepreneurial orientations requires substantial financial resources or access to finance to be effective (e.g., Covin and Slevin, 1991; Wiklund and Shepherd, 2005; Venkatraman, 1989). Financial barriers and difficulties in accessing finance negatively moderate the effects of EO on SMEs' growth (Zarrouk *et al.*, 2020). Hence, merely relying on the impact of EO on

performance without considering one or two extraneous variables (two-way interaction) institutes misunderstanding of the EO-performance relationship of small business performance. Also, Wiklund and Shepherd (2005) strongly recommend that a more incredible experience can be gained by the concurrent or concomitant consideration of EO, access to capital, and market dynamism (i.e., three-way interaction), which is here referred to as a configurative approach.

In developing countries like Ethiopia, SMEs' access to finance is limited due to collateral requirements, high risk of business failure, information asymmetries, small credit transactions, particularly of rural households, and the distance between lender-borrowers (Bigsten, 2003). Fatoki and Smit (2011) categorize the problems related to access to finance of South African SMEs as internal and external. Internally, the SMEs lack business intelligence, collateral, networking, and managerial competencies; and externally, they deal with the legal environment, crime and corruption, ethical perceptions, and other macro-economic factors. Consistent with this, the studies on the SMEs of Tanzania (Olomi and Urassa, 2008) and Ethiopia (The World Bank Group, 2015; Endris & Kassegn, 2022) demonstrate a low level of knowledge and skills in fundraising, lack of support culture in business, intermingled nature of business and personal/family interests, credit history, and unavailability financial services or programs, which all hamper access to finance. In addition, Osano & Languitane (2016) identified the structure of the financial sector, the SMEs' awareness of funding, collateral requirements, and small business support as the main factors impeding access to finance in Mozambique. In this regard, as hypothesized in H3, below, in firms with better access to capital, applying EO results in higher business performance.

Market dynamism, also known as hostility, refers to different forms of changes in the market such as changes in demands, technology, products, rivals, and business laws and policies in the market (Covin and Slevin, 1989). Market hostility or dynamism is believed to play a significant positive moderating role in strengthening the EO-performance relationship (Khadhraoui *et al.*, 2019; Onwe *et al.*, 2020). It has shown a statistically significant and positive moderating influence on the EO-performance relationship (Onwe *et al.* 2020). This dynamism, however, could result in better performance if firms can take advantage of it, and the shocks may force them to exit. There is a curve linear relationship between market dynamism and EO and the extreme effect of the former is softened only if the SMEs have absorptive capacity. On the other hand, in a non-hostile

or non-dynamic environment, an increase in EO would not increase, or there would not be a proportional increase in business performance (Onwe *et al.* 2020). Based on the above facts, the following hypotheses are developed and tested from the Ethiopian manufacturing SMEs context:

H2: The relationship between EO and small business performance is moderated by market dynamism. Small business performance increases with EO but at a faster rate for those in the dynamic market.

H3: The relationship between EO and small business performance is moderated by access to financial capital. Small business performance increases with EO but at a faster rate for those having greater access to financial capital.

H4: (a) Small business performance is significantly explained by the configuration of EO, access to capital, and market dynamism (three-way interaction). (b) Small business performance is higher among firms with a higher degree of EO, greater access to financial capital, and dynamic environments than other configurations. (c) Small business performance is lower among firms with a high EO, insufficient access to finance, and a stable environment than for other configurations.

3.3. Research Design and Methodology

Both quantitative and qualitative approaches are applied in this research. Besides, the empirical analysis was done by using both descriptive and inferential statistical tools. This section displays the road map of the research design that includes a description of the study population.

3.3.1. Description of the Study Population

The empirical part of the research was conducted on manufacturing sector SMEs in Ethiopia, the second-largest country in Africa and home to more than an estimated 125 million population with 10 administrative regions. Its economy is primarily based on agriculture, and the government has been following an agriculture development-led industrialization policy (ADLI). The manufacturing sector has become the prime agenda for the country's economic transformation. Most firms in the country are SMEs, consisting of 99% of all firms. This study focuses on manufacturing sector SMEs, which account for about 40% of the total SMEs. The country seems to have a good policy to develop manufacturing SMEs as it claims to provide free industrial

cluster zone up to 50 hectares, production facilities or sheds, access to utilities, duty-free materials import, capital lease options, income tax exemption for up to six years, and so on. The country's Development Bank oversees the supply of finance in collaboration with commercial banks, microfinance institutions, and capital goods supply agents established in each region.

However, as reported by Federal Small and Medium Manufacturing Industries Development Agency (FSMMIDA) (2018), the country's manufacturing SMEs face numerous challenges. Some of these are entrepreneurs' misperception of manufacturing business opportunities and their higher tendency towards less complicated merchandise businesses, lack of integrated administrative system from the federal to the local level, skill gaps, shortage of materials, shortage of working capital, and poor record management and intelligence system. As a result, the growth of manufacturing SMEs has been declining and Ethiopia's manufacturing output for 2021 was \$5.12B, a 10.25% decline from 2022; for 2020 was \$5.71B, a 6.41% increase from 2019; for 2019 was \$5.37B, a 9.26% increase from 2018; for 2018 was 4.91B, a 2.92% decline from 2017 (World Bank, 2022). Moreover, in 2022, 446 manufacturing industries halted production due to a shortage to finance, and infrastructure, a lack of skilled manpower, and an absence of coordinated support from the government (Ministry of Industry, 2022). Due to these and the two-year-long lasted civil war, currently, the Ethiopian manufacturing industries produce at only 50% capacity.

I believe that industrial development and entrepreneurship are two sides of a coin. Entrepreneurship encompasses promoters, government, and financial institutes. Hence, it is essential to develop entrepreneurship and enhance entrepreneurial orientation for firms to survive and operate in such a hostile environment and revive the industry. This study, specifically, targets those manufacturing SMEs engaged in the textile and metal and wood (furniture) industries, which are among the country's top five prioritized industries for economic transformation with considerable job opportunities. The study does not include micro-enterprises and large businesses.

3.3.2. Data Types and Sources

Both secondary and primary data sources were accessed for the analysis. The secondary sources are the three-year annual reports from the Ethiopian SME sectoral offices and peer-reviewed articles published in leading journals, collected using a SLR methodology. Web of Science and

business-related databases, including Business Premier Source, and Academic Search Complete, are utilized to search for studies. Some studies obtained through a SLR methodology were also used for the empirical analysis. Using the key informant approach, the primary data were collected from the SMEs' CEO, owners, or managers through a standardized questionnaire for empirical analysis. Besides, the unpublished documents and reports from the manufacturing SMEs' sectoral offices are used to augment the analysis and discussion.

3.3.3. Sampling Design and Techniques

The SMEs in textile, metal, and woodwork, leather and leather products, meat and dairy processing, and food and beverage are highly growth-oriented, have higher domestic consumption, and tendency to internationalize. To ensure deeper focus, the data were collected only from the textile, metal, and woodwork SMEs. A multistage sampling technique was adopted. First, the judgmental/purposive sampling technique was employed to incorporate those top-prioritized manufacturing SMEs by the government. Based on this, two industries were selected out of five. Second, based on geographical proximity, the firms were grouped. Then, using a cluster sampling technique, the regions of respondents were selected. Some of these areas are Wolaita Sodo, Arbaminch, Hosana, Halaba, Hawasa, Shashemene, and Addis Ababa, which are all zonal or regional, or capital cities where a high concentration of SMEs are found. The list of the SMEs was obtained from the respective regional or zonal offices. Finally, applying the simple random sampling technique, respondent firms were contacted to fill up the questionnaires and collect the required data. A prior appointment for questionnaire filling was made via phone with those randomly selected respondents in the cluster. A total sample of 191 SME owners or managers were contacted in person by the researcher and four data collection assistants. No questionnaire was sent through mail or email, and all questionnaires were filled in the presence of the researcher or the assistants; hence, there was no missing or void questionnaire.

3.3.4. Data Collection Tools and Scales

I. Entrepreneurial Orientation

The entrepreneurial orientation (EO) of firms has been assessed by several researchers in uni-dimensional as well as multi-dimensional aspects. The former includes only innovativeness, risk-taking, and proactiveness; while the latter encompasses two more measures: autonomy and

aggressive competitiveness. The multi-dimensional approach is preferred for this study and the data collection too is adapted from the work of Saha, *et al.* (2017), Boso *et al.* (2013), Hughes and Morgan (2007), Jambulingam *et al.* (2005) and Covin and Slevin (1989). The original multidimensional EO scale was devised by Covin and Slevin (1989) after Miller introduced the unidimensional aspects in 1983. Their work has been highly cited (see section II, Appendix 5) and their survey instrument has been adopted by several scholars including Boso *et al.* (2013), and Hughes and Morgan (2007). Following the work of Boso *et al.* (2013), Saha *et al.* (2017) have made subsequent series of content adequacy tests. First, they garnered over 16 research papers targeted the multidimensional approach of EO and assessed them all based on the number of citations in databases (Web of Science & google scholar) and ranks of journals taking into the data of publication.

Finally, the research conducted by Hughes and Morgan (2007) and Boso *et al.* (2013) are identified as the most cited in the selected databases (section II, Appendix 5). Then, they used experts' suggestions to make the selection decision from the two, and Boso *et al.* (2013) were selected as a source of pool items for content adequacy tests. Before the successive adequacy tests, Saha *et al.* (2017) made the appropriate reliability and validity tests on the Constructs and measurement items of Boso *et al.* (2013). The two subsequent series of test studies well demonstrated the adequacy of the contents of the instrument. In addition to the large size of citation and reliability and validity tests of the instrument, a country-context similarity between India and Ethiopia, in which both countries are labeled as developing, is an additional reason for this study to opt for and adapt this instrument. Since the content adequacy test was done in the former country, its application in the latter one will not likely result in a significant deviation. To measure "autonomy", Boso *et al.* (2013) and Saha *et al.* (2017) used only three items, but Hughes and Morgan (2007) used five items with clear and easy-to-understand terms. Thus, three items are adapted and added from the latter's work. Since EO is a firm's behavioral construct, several types of research on EO adopt a 5-or 7-point Likert scale (e.g., Boso *et al.* 2013; Kusumawardhani, McCarthy, and Perera, 2009; Hughes and Morgan, 2007; Covin and Slevin, 1989). Hence, a 5-point Likert scale is adapted for this study.

Moreover, a Cronbach alpha, which helps to measure how closely related a set of items are as a group, is used to test and speculate each measurement scale's internal consistency and reliability

with list-wise deletion of missing cases. Even if the scales have been found reliable in previous research, a new Cronbach's alpha test was applied to all scales using multiple items. A Cronbach alpha above 0.70 is generally preferable (see Nunnally, 1970). The Cronbach alpha values for all EO dimensions, market dynamism, access to finance, and business performance satisfactorily meet this criterion. The reliability analysis result is shown below in Table 3.1. Further details on the sources of the scale can be seen in Section II (Appendix 5).

II. Networking

Networking is a newly added EO dimension in this study. Despite its importance and recommendations to use, networking has rarely been used in EO research. It has become one of the most powerful assets for firms' success since it provides access to information, power, knowledge, capital, and technologies (Elfring and Hulsink, 2003; Inkpen and Tsang, 2005). Based on the nature and source of the relationships, networks can be distinguished into two broad categories: (1) personal networks or informal networks, and (2) business networks or organizational networks (Kusumawardhani, McCarthy, and Perera, 2009). The former refers to informal relationships that involve relatives, friends, and acquaintances, it is also called *social network ties* (Shane and Cable, 2002). The latter addresses the degree of relationships between actors that undertake business activities, such as customers, distributors, suppliers, competitors, and government (Kusumawardhani, McCarthy, and Perera, 2009). To gauge the networking of firms, I follow the work of Shane and Cable (2002), Lau and Bruton (2011), and Tajeddini, Martin & Ali (2020). To measure, specifically, personal networks or informal networks, the researcher adopts the three-item scale suggested by Shane and Cable (2002). Whereas, to assess *business network ties*, they borrowed the four-item scale recommended by Lau and Bruton (2011) and used by Tajeddini, Martin, and Ali (2020). Based on these authors' experience, the respondents of this study are required to answer on a five-point Likert scale from strongly disagree (1) to strongly disagree (5). Further details on the sources of the scale can be seen in Section II (Appendix 5).

III. Market dynamism

Market dynamism represents an external environment, which refers to the industry where a respondent's company operates. Hence, market dynamism in this study should be understood from the context of the industry environment. It is an independent variable that is expected to

moderate the EO-performance relationship. The dynamism of a business environment is manifested by the intensity of unpredictability of change in customer demands, production or service technologies, and modes of competition in the firm's principal industries. To measure the market dynamism of the SMEs, I relied on the work of Miller (1987), Wiklund and Shepherd (2005), Frank, Kessler, and Fink, (2010), Kraus, et al. (2012), and Tajeddini, Martin, and Ali (2020). The items are built on four of Miller's opposing statements: change in growth opportunities, demand, technology, entry and exit of rivals, decrease/increase in the rate of innovation, and change in R&D activities. His work was further operationalized by Frank, Kessler, and Fink (2010), Kraus *et al.* (2012), and Tajeddini, Martin, and Ali (2020), and a total of 9 items are used to measure environmental dynamism. To keep the uniformity of the response and reduce the ambiguity of respondents, the researcher does not put Miller's two opposing statements on the continuum of response scale but capitalizes on the positive statement and gives choices to respondents ranging from strongly disagree (1) to strongly agree (5). Further details on the sources of the scale can be seen in Section II (Appendix 5).

IV. Access to Finance

Access to finance is not equivalent to the ownership of the financial capital but access to it. Hence, most studies use subjective statements to assess firms' access to financial capital (e.g. Cooper, Gimeno-Gascon, and Woo, 1994; Wiklund, and Shepherd, 2005; Hair et al. 2006). Following Cooper, Gimeno-Gascon, and Woo (1994) and Wiklund and Shepherd (2005), I measure access to finance. An item that measures the entrepreneur's level of satisfaction with his/her access to finance was taken from Wiklund and Shepherd (2005). It reflects whether access to finance is 'insufficient and a great impediment for our development' or 'fully satisfactory for the firm's development' (Wiklund and Shepherd 2005). I also adopted four subjective items from Cooper, Gimeno-Gascon, and Woo (1994). For example, entrepreneurs were asked to indicate "how much it is easy to access finance to support their business operations?" and "How much business operations are better financed than our key competitors' operations?" This was measured on a five-point scale with anchors ranging from strongly disagree (1) to strongly agree (5). Further details on the sources of the scale can be seen in Section II. Appendix 5.

V. Business Performance

The previous studies indicate that the results of the relationship between EO and performance can be influenced by the choice of indicators to measure business performance (Lumpkin and Dess 1996; Hughes and Morgan, 2007; Kraus *et al.* 2012). Wiklund (1999) recommended that a scale measurement for SME business performance should have key growth and financial performance indicators. Since the terms “business growth” and “business performance” are used interchangeably in EO research, I use the term business performance in this study. The performance measures suggested by Wiklund and Shepherd (2005) include sales growth rate, employment growth, cash flow, and profitability. These measures are chosen for this study because of their reliability and broader use in the literature (Kraus *et al.* 2012) and all four areas are subjectively measured. I subjectively measured the respondents’ perception of their business performance because of the following reasons: *first*, business owners usually do not give correct figures about their profit, sales, and employment growth because of fear of additional tax burden; *second*, the absence of statutory financial statements such as income statements and balance sheets make it difficult to objectively assess the financial performance of SMEs in the country. Small firms are not under strict laws to track and present financial records; *third*, the subjective, or the reflective performance scale, which is based on the perceptions of key informants (in this study-managers and owners or senior employees), has been used by several researchers (e.g., Poudel *et al.* 2018; Alvarez-Torres *et al.* 2019; Tajeddini and Mueller, 2018).

The scale assessed executives’ perceptions of their firm’s performance against the key competitors’ performance in their industries. In this scale, there are five indicators to capture perceived business performance: sales growth rate, employee growth, gross margin, profitability, and cash flow, and a 5-point Likert-type scale ranging from “very poor performance”(1) to 5 “excellent performance(5). Nonetheless, in my previous publication (Bate, 2015), relying on Kaplan and Norton (1992), I argue that the measurement of business performance is balanced if it contains customers' perspectives, internal business processes, learning and growth, and financial perspectives. Therefore, I do not claim that the above measurement is the best suited to measure business performance because improvement in customer satisfaction and internal business process are not considered. Also, no EO research article claims to have measured these non-financial perspectives. Further details on the sources of the scale can be seen in Section II. (Appendix 5).

3.3.5. Treatment of the Study Variables and Control Variables

Business performance is a criterion variable to be predicted, whereas EO, market dynamism, and access to capital are the explanatory variables or predictors. To figure out how the interaction effect of EO influences business performance, the role of market dynamism and access to finance as moderators are looked at. The robustness of the models is further tested by sensitivity analysis by incorporating human capital as a moderator, an independent variable, and a control variable. Firm age, size, managerial experience, and industry type are well-known control variables in organizational studies. These variables are commonly emphasized in EO research as they influence firms' resource base and behavior (Zahra and Garvis, 2000; Kraus *et al.* 2012; Frank, Kessler, and Fink, 2010; Wiklund and Shepherd, 2005). For the current study, to calculate firm age, respondents are asked for the founding year of their firms. To control the size of firms, the study incorporates only those SMEs enlisted in the country's database enterprise. In scaling managerial experience, respondents were asked for service years as a manager or owner both inside and outside the current organization.

3.3.6. The Reliability Tests

As shown below, in Table 3.1., except for competitive aggressiveness, one of the EO dimensions that slightly deviates, all other constructs, independent and dependent variables are adequately fit for the goodness of fit test based on Friedman's test and Tukey's test for non-additivity, which show the significance of the variance in the inclusion and exclusion of a variable.

Table 3.1. The Reliability Results of the Scales

Variables	Alpha Value	Significance based on Friedman's Test and Tukey's test for non-additivity
Autonomy	0.65	0.00
Risk-taking	0.77	0.03
Innovativeness	0.68	0.00
Competitive aggressiveness	0.56 (stnd=5.73)	0.00
Proactiveness	0.64	0.00
Networking	0.84	0.00
Total EO	0.88	0.00
Market Dynamism	0.74	0.00
Access to Finance	0.69	0.00
Human Capital	0.84	0.00
Business Performance	0.83	0.00

Source: **Own Survey, 2022**

3.3.7. The Presentation and Analysis of Data

The data processing and analysis were done using SPSS version 20. Both descriptive and inferential statistics are implemented. Descriptive statistics, such as mean, standard deviations, frequency, and percentage, are used. The presentation of results and figures is supported by tabulation, histograms, pie charts, and bar graphs. Inferential statistics, such as correlation coefficients, ANOVA, multiple regressions, and hierarchical linear regression, were utilized to predict the strength, direction, and effects among IVs and DV. Moreover, to single out the moderation effect of market dynamism and access to finance on the EO-performance relationship, PROCESS Macro moderation model 3 and model 2 (Hayes, 2012) were utilized.

3.4. Research Paradigm and Model Development

A research paradigm is a method, model, or pattern for conducting research and a set of ideas and beliefs within which theories and practices can function. The study pursues an interpretivism or constructivism paradigm, which predicates the existence of numerous realities rather than a single reality. The configurational approach of this study shares the salient features of the constructivism paradigm in which both argue that the individual components of a social entity take their meaning from the whole and cannot be understood in isolation. The two perspectives of the configurational approach: organizational change and methodological, are described as follows:

3.4.1. The Organizational Perspective of the Configurational Approach

This research pursues the configurational approach over the conventional main-effect-only and contingency approaches. The configurational approach of the dissertation is both philosophical and methodological. In organizational philosophy, the main-effect approach merely deals with the linear relationship between independent variables and dependent variables. However, the contingency approach, which considers the interaction effect of two variables, has become dominant in change management literature since the 1980s. However, to resolve its limitation in analyzing the three-way interaction, the configurational approach has been introduced in organizational analysis. The latter perspective is associated with the “holistic” stance—an assertion that parts of an entity take their meaning from the whole and cannot be understood in isolation. It is a multidimensional constellation of components creating a coherent pattern, generally pertaining to the influence of a dominant coalition (Meyer, Tsui, and Hinings, 1993). It also

supports the view that organizations are made up of mutually supportive and interdependent components and that the essence of each component is best understood by referring to the entire configuration (Miller and Friesen, 1984). The contingency approach adopts a reductionist mode of inquiry, while configurational analysis is synthetic. “Rather than trying to explain how order is designed into the parts of an organization, configurational theorists try to explain how order emerges from the interaction of those parts as a whole” (Meyer, Tsui, and Hinings, 1993, p. 1178).

Miller and Friesen (1984), building on the idea of a pattern or archetype, describe two kinds of change that were happening at the time: a revolution and momentum. A "revolution" is a rare, relatively short-lived period of big reversal changes that gives birth to a new setup and configuration. In contrast, "momentum change" refers to a long period of incremental adjustments that maintain or reinforce the existing configuration. During momentum change, there is a convergent, small, and piecemeal change, and the organization initiates a change to remain the same, do more of the same, or do the same thing more efficiently. Also, organizations are highly inertial, changing at a plodding pace and refining their strategic orientation, but they do not reorient. On the other hand, revolutionary change is a coordinated, divergent, and large-scale reorientation that destroys the old way things were. In this case, organizations may take a U-turn or do something significantly different at a rapid pace. Momentum or revolution is mainly caused by two things: how quickly things change and how much they change at the same time. Also, the type of change depends on whether it comes from the top down or the bottom up. Miller and Friesen say that reorientation, or "revolution," is a planned process that usually starts at the top and works its way down. On the other hand, momentum is characterized by a stable executive team assisted by middle management responsible for implementing incremental adjustments that fine-tune the existing strategic orientation.

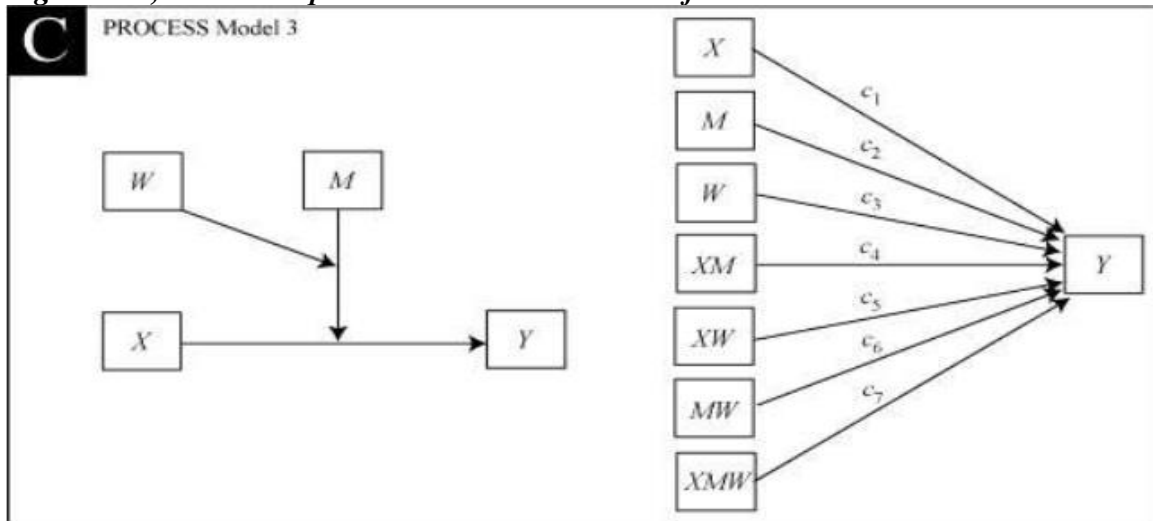
To conclude, the proponents of radical or revolutionary change consider it a change of configuration. A configurational perspective on change matches with radical change or transformation, starting from the premise that organizations can be conceived as archetypes—congruence of tightly integrated elements (Miller and Friesen, 1984). It accounts for the inherited relationships among elements or items encapsulating multiple domains (Frank, Kesser, and Fink, 2010). Controlling for the firms' type, size, ownership form, and managerial experience, this research assesses the configuration of key strategic variables such as EO, access to capital, human

capital, and market dynamism. EO is primarily related to a strategic posture of an organization, and it mainly emanates from top-down decisions. This research adopts a configurational approach, especially the revolutionary change of firms, given the lack of concord on the time interval, the intensity of change, or the degree of simultaneity. This approach, perhaps, is commensurate to the complementarity theory of economics, in which the economic variables complement each other to enhance the desired business performance. Besides, since the results of the study are expected to elevate productivity and raise economies of scale of firms, it feeds supply-side economics, which focuses on boosting producers' capacity to increase economic growth.

3.4.2. The Methodological Perspective of the Configurational Approach

The configurational model in organizational analysis refers to the interlinked concurrent causation of independent variables against the outcome variable/s. The configurational approach gives a multivariate description, not a bivariate. Relationships among variables or components are reciprocal and non-linear. In other words, having more of one factor cannot compensate for having less of another (Meyer, Tsui, and Hinings, 1993). This study relies on the argument that having more access to finance does not compensate for having less EO or human capital or market dynamism and vice versa. Moderation analysis is applied to test whether the magnitude of an independent variable's effect on an outcome variable of interest depends on a third variable or set of variables (Hayes, 2012). Figure 3.1., below, shows that the EO of SME, the main interest independent variable (**X**), directly influences the perceived business performance success and the implicit interaction effect. However, the magnitude of its effect changes with the level of access to finance and its interaction with market dynamism. The impact of EO (**X**) on business performance (**Y**) can also depend multiplicatively on access to finance (**M**) and market dynamism (**W**). This situation could be called moderated moderation, commonly known as the three-way interaction. The effects of these three variables cannot be understood alone or in additive combinations but only consider interactional and conditional effects.

Figure 3.1., The Conceptual and Statistical Models for Moderated Moderation



Source: Hayes (2012)

The three-way interaction would be tested by including the products of X, M, and W, along with those of M and W: -

$$Y = i + c_1X + c_2M + c_3W + c_4XM + c_5XW + c_6MW + c_7XMW + e_y \dots (1)$$

Three-way interaction (moderated moderation) is present if c_7 is statistically different from zero (Hayes, 2012). Re-expressing equation 1 by grouping terms involving X and then factoring out X, as follows: -

$$Y = i + (c_1 + c_4M + c_5W + c_7MW) X + c_2M + c_3W + c_6MW + e_y \dots (2)$$

It shows that the conditional effect of X on Y is a multiplicative function of M and W: $c_1 + c_4M + c_5W + c_7MW$. The conditional nature of the effect of X on Y can be understood by selecting various combinations of M and W of interest, deriving the conditional effect, and conducting a hypothesis test for the conditional effect at those combinations.

An alternative approach focuses on the conditional nature of the XM (EO & Access to finance) interaction moderated by W (market dynamism). The conditional interaction between X and M can be derived from equation 1 by grouping terms involving XM and then factoring out XM:

$$Y = I + c_1X + c_2M + c_3W + c_5XW + c_6MZ + (c_4 + c_7W) XM + e_y \dots (3)$$

Thus, the conditional two-way interaction between X and M is $c_4 + c_7W$. The inference is undertaken by selecting values of W and testing whether the conditional effect of the interaction between X and M is statistically different from zero at those values.

3.5. Data Presentation and Analysis of Results

3.5.1. Introduction

This section presents data analysis and the expected results from the empirical part of the dissertation. In the first subsection, the descriptive statistics related to the demographic variables of the respondents are presented. Next, the service years in and outside of the firms, and firm-related variables such as the form of ownership and type of industries, size of employees, and perceived growth rate are described. In the subsequent sections, following the descriptive statistics, the model tests the main study variables: entrepreneurial orientations, access to capital, environmental dynamism, and business performance are analyzed.

3.5.2. Demographic Characteristics of the Respondents

The frequency distribution of the respondent's gender, age, and education level are depicted in Table 3.2. below. As shown in the Table, 74% of the respondents are males. This result is expected possibly because of two reasons: first, the sectors under study, especially the wood and metal industries, are mainly occupied by male employees and run by male managers or owners. Second, since the data were collected from the executives or owners of firms, few female executives or owners are assuming leadership positions. More than half of the firms, 55%, are managed by middle-aged people from 30-40 years old, but there are also youngsters, about 25%, aged 20-30.

Regarding respondents' educational level, only 36.6% attained vocational training in colleges, while significant others, 43.5%, attained only high school or below. This shows that the sectors are mainly occupied by people who are experienced but not educated or trained in colleges. The other reason could be that these sectors are mainly attracted by people who do not want to study further education but are pushed by economic necessities to engage in easily accessible jobs. However, the respondents acquired good work experience as 64% have worked in managerial positions for three years and above, and 72% have worked in other companies either as employees or managers.

Table 3.2. Demographic Variables of the Respondents

Variables	Frequency (191)	Percentage (100%)
Gender		
Male	141	73.8
Female	50	26.2
Age		
Between 20 to 30 Years	47	24.6
Between 30 and 40 Year	105	55.0
Between 40 and 50 Years	32	16.8
Over 50 Years	7	3.7
Educational Level		
Secondary school and below	83	43.5
Some College (Certificate/ Diploma)	70	36.6
University (bachelor's degree)	33	17.3
Masters	5	2.6
Managerial experience inside the current firm		
Below one year	27	14.1
Between 1 to 3 years	41	21.5
Between 3 and 5 years	44	23.0
Above 5 years	79	41.4
Managerial experience outside of the current firm		
Below one year	38	19.9
Between 1 to 3 years	34	17.8
Between 3 and 5 years	23	12.0
Above five years	96	50.3

Source: **Own survey data, 2022**

3.5.3. Descriptive Statistics Related to Firm Characteristics

In Table 3.3., most firms (75%) have been operating for more than three years. Regarding their legal ownership, 69 % work as a partnership or jointly owned family business. Only 27% of them are owned and operated by sole proprietors. This is related to the country's enterprise development policy, which entertains business creation based on kin relationships and professional interests. The study mainly considers small and medium enterprises, which account for about 77%, and those transitioning from micro to small businesses (22%). The study emphasizes two government-prime-aimed industries: textile and wood and metal. Among the sampled firms, 34% are textile SME related, and 65% are from the wood and metal industries. An attempt was made to proportionate the sampling as per the size of the enterprises since the latter has a broader category and coverage.

Table 3.3. Factors Related to the Study SMEs

Variables	Frequency (191)	Percentage (100%)	Cumulative %
No. of years of firms			
Below 1 year	12	6.3	6.3
Between 1 to 3 years	35	18.3	24.6
Between 3 and 5 years	54	28.3	52.9
Above five years	90	47.1	100.0
Legal ownership form of firms			
Sole Trader / Single Owner	52	27.2	27.2
Private Limited Company	6	3.1	30.4
Partnership/ Jointly Owned	132	69.1	99.5
Company or corporation	1	.5	100.0
Category of firms' size			
Micro	43	22.5	22.6
Small	90	47.1	70.0
Medium	56	29.3	99.5
Large	1	.5	100.0
Types of firms			
Textile	65	34.0	34.0
Wood and Metal (furniture)	125	65.4	100

Source: **Own survey data, 2022**

3.5.4. Descriptive Statistics on the Perception of Capital Growth of Firms and Industries

It is assumed that owners or managers of SMEs may not accurately reflect their initial or current capital balance. The lack of effective taxation and asset management system makes it more challenging to know how much capital is invested or raised. Table 3.4. and Table 3.5. portray the capital growth of firms and comparison of both firm and industry growth, respectively, based on the respondents' perceptions. To solicit the best possible answers, questions are designed with choices of the amount interval. Most SMEs (74%) start a business with a capital of less 100,000Birr (approx..2000\$), 60% of them currently owe money of more than 100,000 Birr, and about 22% of them have accumulated capital worth more than 500,000Birr (9,626.81\$) and less than 5,000,000Birr (96,268.07\$). As replied by 74% of the respondents, the annual sales growth is not less than 100,000 Birr (approx.2000\$), which might have been affected by political instability in the country on top of COVID-19.

Table 3.4. Initial Capital, Current Capital, and Business Growth

Amount In Birr	Initial capital		Current Capital		Annual sales growth	
	Frequency	%	Frequency	%	Frequency	%
Below 100,000	142	74.3	77	40.3	141	73.8
100,001 – 500,000	40	20.9	69	36.3	34	17.8
500,001 – 1,000,000	5	2.6	10	5.2	11	5.8
1,000,001 – 2,000,000	4	2.1	22	11.5	5	2.6
2,000,0001-5,000,000		0	6	3.5	0	0
Over 5,000, 000		0	7	3.7	0	0

Source: **Own survey data, 2022**

The respondents' general impressions of the last three years (2019-2021) were assessed to describe both firm and industry growth. Most of them, 71% and 72% agree that both industry (71%) and firms (72%) have been growing, which is related to expansions and new startups in the market, in the last three years.

Table 3.5. Perception of Industry and Firm Growth of the SMEs

Scales	Industry Growth Perception 3yrs		Firm Growth Perception of 3yrs	
	Frequency	%	Frequency	%
Highly declining	6	3.1	6	3.1
Declining	17	8.9	17	8.9
Stagnant (no decline, no growth)	32	16.8	31	16.2
Growing	130	68.1	133	69.6
Highly growing	6	3.1	4	2.1

Source: **Own survey data, 2022**

3.5.5. Descriptive Statistics on the Diversity of Customers and Suppliers

Categorization is made based on customers and suppliers' geographical location- whether from within the country from different regions or outside of the country to examine the diversity of customers and suppliers and the level of networking of the SMEs. Both Table 3.6. and Table 3.7. present this diversity, including future potential for the international market. Table 3.6 shows that over 91% responded that there are no suppliers or customers outside the country. Also, the

same-size respondents replied that they do not have any sales revenue from export. Moreover, 44.5% and 54% said there are no customers and suppliers, respectively, even from outside their regions within the country. Most of the remaining respondents said that only up to 10 % of customers and suppliers come to buy or supply from other regions within the country. It implies that the operational area of the SMEs is limited, and they do not have access to a broader market within or outside of the country, which also limits their ability to learn from others.

Table 3.6. Customers and Suppliers of the SMEs

Scales	Customers from different regions within the country		Customers from outside of the Country		Suppliers from different regions within the country		Suppliers from outside of the country		net sales from direct export over the last three years	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Freq	%
0%	85	44.5	174	91.1	103	53.9	179	93.7	173	90.6
Upto 10%	67	35.1	15	7.9	44	23.0	6	3.1	17	8.9
Up to 25%	23	12.0	0	0	13	6.8	4	2.1	1	.5
Up to 50%	13	6.8	0	0	18	9.4	1	.5	0	0
Over 50%	3	1.6	2	1.0	13	6.8	1	.5	0	0

Source: Own survey data, 2022

The managers' or owners' perception of their export potential was evaluated to assess future growth and expansion. A significant percentage, 61%, believe that they have no potential or less potential to further expand business outside of the country, while 32.5% think that they can do it. This shows that SMEs in the textile and wood and metal industries are not capacitated or exposed to growth opportunities outside the country. Their operational capacity is limited regarding economies of scale, the capital paid in, and the employees engaged. The average of employees, including owners working in these enterprises, is 9, with a standard deviation of 7. Out of the total employees, 60 % of enterprises hire up to 10 contractual employees. In addition, Table 3.8. below elaborates on the challenges.

Table 3.7. The Export Potential of the SMEs

		Potential for exports			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No potential	83	43.5	43.5	43.5
	Less potential	34	17.8	17.8	61.3
	Enough potential	62	32.5	32.5	93.7
	High potential	12	6.3	6.3	100.0
	Total	191	100.0	100.0	

Source: **Own survey data, 2022**

3.5.6. Descriptive Statistics on the Challenges of SMEs

The possible challenges and their intensity in hampering the performance of the textile and furniture industries in Ethiopia are displayed in Table 3.8. More than half of the respondents believe that human capital (job-related skills and experience) and infrastructure like roads are not problems. On the other hand, 66.5% and 57% replied that lack of sufficient financial capital and political instability, respectively, are the main problems affecting these SMEs' performance. A significant portion of them, 46.5% and 44.4%, also believe that lagging in technology and a shortage of power supply remain their considerable challenges. This result pinpoints that these industries' business performance and growth are severely affected: first, by a lack of sufficient financial capital; second, by political instability; third, by a lack of modern technologies; fourth, by the disruption of power supply; and fifth, by a lack of market integration or networks.

Table 3.8. Facets of Challenges of the SMEs

Challenges of the SMEs		Scales				
		Not a problem(% of 191)	Somewhat a problem (% of 191)	A moderate problem (% of 191)	A big problem (% of 191)	A huge problem (% of 191)
Lack of human capital		52.4	25.1	10.5	10.5	1.6
Lack of financial capital		7.3	7.9	17.8	43.5	23
Lack of market networks		11	22	26.7	30.9	9.4
Inadequate infrastructure	Electricity	19.4	15.7	20.9	24.1	19.4
	Roads	51.8	17.8	17.8	7.3	4.7
Lagging in technology		18.3	15.2	20	32.5	14
Political instability		2.6	28.3	12	35.6	21

Source: **Own survey data, 2022**

However, the challenges facing SMEs are not limited to the factors mentioned above. In the modern era of information, businesses need real-time data for their operations. Engaging in social

media platforms is required to understand how customers perceive brands. In connection with this, an investigation was made on how much the SMEs in Ethiopia are involved in social media (see Table 3.9). The overwhelming majority, over 80%, of the respondents are not engaged in any social media, such as Instagram, Twitter, YouTube, Pinterest, or Telegram, and have no company websites. Besides, 50 percent do not even use Facebook or have no business-related Facebook accounts. These problems could be associated with a lack of internet access, a lack of awareness, or a misperception of the advantages of social media engagement.

Table 3.9 Social Media Engagement of the SMEs

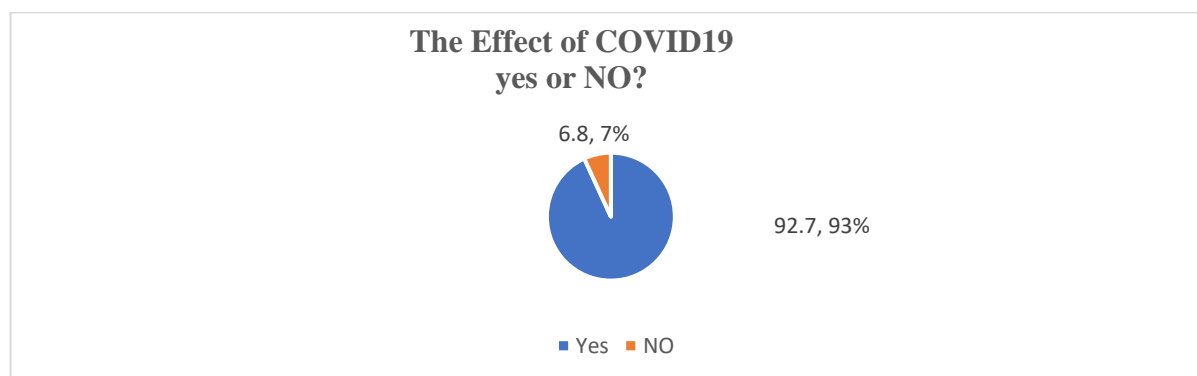
Social Media	Scales				
	Not all (% of 191)	Rarely (% of 191)	Sometimes (% of 191)	Usually (% of 191)	Always (% of 191)
Facebook	51.3	9.4	19.9	12	7.3
Instagram	83.8	1.6	7.3	6.8	0.5
Twitter	85.9	1	5.8	7.3	0
Youtube	84.3	2.1	5.8	7.3	0.5
Website of Company	85.3	0.5	5.8	7.9	0.5
Pinterest	84.5	0	6.8	8.4	0
Telegram	80	0.5	9.4	8.9	1

Source: **Own survey data, 2022**

3.5.7. Descriptive Statistics on the Influence of COVID-19

Apart from the above the mentioned challenges, the Pandemic, COVID-19, has affected most aspects of human life, including the business environment. Figure 3.2 shows that 93% of the sampled SME owners in Ethiopia confirmed that COVID-19 had affected their businesses.

Figure 3.2. The Effect COVID19 on the SMEs



Source: **Own survey, 2022**

The effect of COVID-19 has been felt in every operational area of business. As shown in Table 3.10, most of the respondents replied that COVID-19 has significantly or severely affected sales and distribution, market share and customers, and profit after tax (61%, 69%, and 67%, respectively). Moreover, about half (48%) testified that a significant number of their employees were forced to lay off. COVID-19 has hugely disrupted their innovation and investment activities and expansion and growth plans. Compared to the pre-COVID period, the SMEs have lost, on average, 42% of their revenues with a standard deviation of 19.

Table 3.10. The Effect of COVID on Business Operations of the SMEs

Areas of performance or growth	Not Affected at all (% of 191)	Slightly Affected (% of 191)	Moderately Affected (% of 191)	Significantly Affected (% of 191)	Severely Affected (% of 191)
Sales & distribution	19.4	5.2	14.7	44.5	16.2
market share/customers	7.3	4.7	18.3	51.8	17.8
Profit after tax	5.8	5.2	22	49.7	17.3
Size of employees	26.2	15.7	9.4	28.3	20.4
Innovation and investment	20.4	12.6	12	47	7.9
Expansion & growth	15.2	13.6	11	48.7	11.5

Source: **Own survey, 2022**

3.5.8. Descriptive Statistics on the IVs and Business Performance

Table 3.11 shows the average scores and standard deviations for entrepreneurial orientations (EO), access to capital, market or environment dynamics, human capital, and perceived business performance. The average score of the overall EO is only 3.4, which is a moderate level. In particular, the textile and furniture industries do better in terms of autonomy (3.7), innovativeness (3.6), and proactiveness (3.6) than they do in terms of risk-taking, competitive aggressiveness, and networking, where the SMEs perform poorly. The table also displays that the mean score for access to finance is only 2.6, which shows that there is low access to capital, especially financial resources, for these industries in Ethiopia. The average score for human capital is 3.5, which seems reasonable enough if not yet the best. But they have the human capital (knowledge, skills, and experience) they need to run a business normally. The average score for market dynamism is 3.6, which also shows that there is enough market turbulence and products, and customer needs

often change. An assessment was made to determine the overall perceived business growth for three years, and the study result shows that the business growth is stagnant (3.0).

Table 3.11. Descriptive Statistics on the Main Variables

Descriptive Statistics			
	N	Mean	Std. Deviation
Autonomy	191	3.7552	.65592
Competitive aggressiveness	191	3.337	.7624
Innovativeness	191	3.5916	.76216
Proactiveness	191	3.602	.7515
Risks taking	191	2.632	1.0070
Networking	191	3.244	.6709
EO of firms	191	3.360	.5088
Accesses to Finance	190	2.549	.7174
Market dynamism	191	3.659	.5418
Human Capital	191	3.521	.5336
Business Performance	191	3.079	.6090
Valid N (listwise)	190		

Source: **Own survey, 2022**

3.5.9. Model Specifications and Hypotheses Testing

There are three main ways to look at how independent variables affect each other and how well a business performs: the main-effects-only approach, the contingency approach, and the configuration approach (Frank, Kesser, and Fink, 2010; Shirokova et al., 2016; Wiklund and Shepherd, 2005). The main-effect approach is straightforward. It shows the one-way relationship between the independent variables and business performance and assumes that the variables don't affect each other. The equation in Models 2 and 3 below depicts the main-effect approach. It also postulates that if variables are not incorporated into the analysis, they have no impact, and the relation between the independent variables and performance is valid under all circumstances (Frank, Kesser, and Fink, 2010).

In contrast, the contingency approach stands a step further from the main-effect approach and considers two-way interactions between variables. It also assumes that the extent and direction of an independent variable's impact on a dependent variable will vary when coupled with and decoupled from another variable. It enables us to see both the main-effect approach and the

bilateral effect resulting from independent variables that are contingent on one another. Model 4 below illustrates this approach. Advancing on a contingency approach, the configuration approach accounts for the "relationships among elements or items representing multiple domains" (Frank, Kesser, and Fink, 2010). The configuration approach of the analysis uses the main-effect and contingency approaches as the building blocks to illustrate and single out the effect of the further three-way interaction of variables (Cohen *et al.* 2003).

Accordingly, the hypothesis testing was performed in five steps or blocks: first, all control variables (firm type and size) were included in the model (Model 1), then the main-effects approach was applied by entering EO and other independent variables: market dynamism, access to finance and human capital (Model 3), followed by the inclusion of two-way interaction effects (Model 4) and a three-way interaction effect (Model 5). The restricted and more conventional models (Models 1-3) were compared with the unrestricted model (Model 4 and Model 5) by observing variations in the R^2 change. A significant interaction effect is detected when it contributes significantly to the direct effect (Wiklund and Shepherd, 2005; Frank, Kesser, and Fink, 2010; Shirokova *et al.*, 2016).

In addition to PROCESS Macro of Hayes (2012), following the highly cited work of Wiklund and Shepherd (2005), Frank, Kesser, and Fink (2010), Shirokova *et al.* (2016), and Huang, Huang, and Soetanto (2022), hierarchical linear regression analysis is applied to determine whether the main effects, or contingency, or configurational model are the best fit in explaining the business performance. In each step of the hierarchical analysis, we add the next higher order of interaction and examine the increment on R^2 and F-tests for statistical significance. An interaction effect exists if the interaction term yields a significant contribution over and above the direct effects of the independent variables (Frank, Kesser, and Fink, 2010). It is presumed that the simultaneous or concurrent consideration of market dynamism and access to capital would better contribute to how EOs affect business performance. The further portrayal of the model is depicted below:

Whereas:-

Control Variables		Mian Variable(IV)	Independent	Moderating Variables (MID)	Independent
Firm type	= FT	Entrepreneurial Orientation	=EO	Market Dynamism	=MD
Firm Size	=FS				
Managerial Experience	=ME	Dependent Variable (DV)Business Performance	= BP		
Human Capital	= HC				
error term	=ε				

$$BP = b + \beta_1 FT + \beta_2 FS + \beta_3 ME + \beta_4 HC + \epsilon \dots \dots \dots \text{Model 1 (Controlling Variable) (1)}$$

$$BP = b + \beta_1 (FT + FS + ME + HC) + \beta_2 EO \dots \dots \text{Model 2, a bivariate model of 1 DV \& 1 IV (2)}$$

$$BP = b + \beta_1 (FT + FS + ME + HC) + \beta_2 EO + \beta_3 MD + \beta_4 AF + \epsilon \dots \dots \dots \text{Model 3, the main-effect approach (3)}$$

$$BP = b + \beta_1 (FT + FS + ME + HC) + \beta_2 EO + \beta_3 MD + \beta_4 AF + \beta_5 (EO * MD) + \beta_6 (EO * AF) + \beta_7 (MD * AF) + \epsilon \dots \dots \dots \text{Model 4, the contingency approach model(4)}$$

$$BP = b + \beta_1 (FT + FS + ME + HC) + \beta_2 EO + \beta_3 MD + \beta_4 AF + \beta_5 (EO * MD) + \beta_6 (EO * AF) + \beta_7 (MD * AF) + \beta_8 (EO * MD * AF) + \beta_9 (EO * MD * AF) + \epsilon \dots \dots \dots \text{Model 5, the configuration model of three-way interaction(5)}$$

3.5.10. Analysis of the Correlation Coefficient of EOs and Business Performance

There is no multicollinearity issue among the entrepreneurial orientation dimensions, in which the r values of all variables are less than 0.7, as shown in Table 3.12. All the EO dimensions have a positive and significant correlation with a significance level of 0.01. Also, there is a statistically significant positive correlation ($r = .192^{**}$, $p = .008$) between the general EO and business performance. Among other EO dimensions, innovativeness and proactiveness show a relatively higher correlation with business performance. Autonomy and risk-taking do not significantly correlate with perceived business performance success.

Table 3.12. Analysis of the Correlation Coefficient of EO Dimensions and Business Performance

		Correlation Coefficients								
Independent Variables		1	2	3	4	5	6	7	8	
1	Autonomy	Pearson Correlation	1							
2	Competitive aggressiveness	Pearson Correlation	.180*	1						
3	Innovativeness	Pearson Correlation	.271**	.388**	1					
4	Proactiveness	Pearson Correlation	.210**	.326**	.446**	1				
5	Risks taking	Pearson Correlation	.256**	.259**	.176*	.288**	1			
6	Networking	Pearson Correlation	.343**	.347**	.548**	.531**	.378**	1		
7	Perceived Business Performance Success	Pearson Correlation	.037	.138	.156*	.174*	.041	.247**	1	
		Sig. (2-tailed)	.616	.057	.031	.016	.572	.001		
8	Average points of EO of firms	Pearson Correlation	.539**	.627**	.693**	.696**	.648**	.772**	.192**	1
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.008	
		N	191	191	191	191	191	191	191	191
*. Correlation is significant at the 0.05 level (2-tailed).**. Correlation is significant at the 0.01 level (2-tailed).										

Source: **Own Survey, 2022**

3.5.11. Hypothesis Testing of Correlation between EO and Performance

Based on the results in Table 3.12., a statistically significant and positive relationship between EO and performance is observed. Hence, it supports H1. Innovativeness, proactiveness, competitive aggressiveness, and networking are positively and significantly correlated with the perceived business performance of SMEs. Thus, it supports H1a, H1c, H1d, and H1f. Whereas risk-taking and autonomy positively correlate with the SMEs' business performance, the strength of the correlation, however, is insignificant. Therefore, H1b and H1e are rejected. The Table 3.13. below depicts the results.

Table 3.13. Hypotheses Test Result of EO Dimensions

No.	Hypothesis	Result	Decision
H1	H1: <i>There is a positive and statistically significant relationship between overall EO dimensions and business performance</i>	<i>+ and significant</i>	<i>Accept</i>
	H1(a): <i>Innovativeness as a dimension of EO exerts a positive and statistically significant effect on the performance of SMEs in the sector</i>	<i>+ & significant</i>	<i>Accept</i>
	H1(b): <i>Under the EO construct, risk-taking will have a positive and statistically significant effect on SMEs' performance.</i>	<i>+ but insignificant</i>	<i>Reject</i>
	H1(c): <i>Pro-activeness has a strongly significant and positive association with SMEs' performance</i>	<i>+ & significant</i>	<i>Accept</i>
	H1(d): <i>Competitive aggressiveness exhibits a positive and significant relationship with SME performance.</i>	<i>+ & significant</i>	<i>Accept</i>
	H1(e): <i>Autonomy of EO demonstrates a positive and significant relationship with the performance of SMEs</i>	<i>+ but insignificant</i>	<i>Reject</i>
	H1(f): <i>Networking exerts a positive and statistically significant effect on the performance of SMEs in the sector.</i>	<i>+ & significant</i>	<i>Accept</i>

Source: **Own Survey, 2022**

3.5.12. Hierarchical Linear Regression Analysis Results of EO and Performance

Networking is a newly postulated dimension of EO, which significantly affects business performance. The hierarchical linear regression analysis with two blocks is done to assess the effect of conventional multidimensional constructs of EO on the business performance of SMEs and networking separately. In the first block, the EO dimensions: proactiveness, risk-taking, innovativeness, competitive aggressiveness, and autonomy were inserted into the model, and then, in the second block, networking was added to the model as an additional dimension. The result from model 1 shows that the existing EO model has an insignificant effect on business performance. When combined with networking in a new model, a significant impact on R-square change is observed (R square=7.3%, p=0.016), Table 3.14. Besides, none of the conventional EO dimensions independently show a considerable influence on the business performance but networking only. Hence, the result indicates that incorporating networking in the EO dimension will substantially explain and enhance business performance.

Table 3.14. The Modal Summary of EO and Performance including Networking

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.207 ^a	.043	.017	.6038	.043	1.659	5	185	.147
2	.269 ^b	.073	.042	.5959	.030	5.892	1	184	.016
a. Predictors: (Constant), Autonomy, Competitive aggressiveness, Risk-taking, Proactiveness, innovativeness									
b. Predictors: (Constant), Autonomy, Competitive aggressiveness, Risk-taking, Proactiveness, innovativeness, Networking									

Source: **Own Survey, 2022**

3.5.13. The Pearson Correlation Coefficients of Variables

Also, Table 3.15 shows that there is no multicollinearity between the EO of firms, market dynamism, access to financial resources, and human capital. All the IVs are positively correlated with business performance. The business performance of SMEs has a positive and statistically significant correlation with EOs ($r = 0.19$, $p = 0.008$) and access to finance ($r = 0.233$, $p = 0.001$), but the correlation remains weak. The result also shows that human capital ($r = 0.55$, $p = 0.00$) and market dynamism ($r = 0.57$, $p = 0.00$) are statistically significant and positively associated with the SMEs' EO with a moderate level of strength; however, they do not have a significant correlation with business performance.

Table 3.15. The Pearson Correlation Coefficients of all IVs and DV

		The Pearson Correlation coefficients					
		1	2	3	4	5	
1	Business Performance parameters	Pearson Correlation	1				
		Sig. (2-tailed)					
		N	191				
2	EO of firms	Pearson Correlation	.192**	1			
		Sig. (2-tailed)	.008				
		N	191	191			
3	Market dynamism	Pearson Correlation	.101	.537**	1		
		Sig. (2-tailed)	.166	.000			
		N	191	191	191		
4	Accesses to Finance	Pearson Correlation	.233**	.104	.056	1	
		Sig. (2-tailed)	.001	.153	.440		
		N	191	191	191	191	
5	Human Capital	Pearson Correlation	.096	.553**	.491**	.114	1
		Sig. (2-tailed)	.188	.000	.000	.116	
		N	191	191	191	191	191
		**. Correlation is significant at the 0.01 level (2-tailed).					

Source: Own Survey Result, 2022

3.5.14. Hierarchical Linear Regression Model of IVs and DV

As shown in the IVs and DV regression model summary in Table 3.16, an assessment was made to discover the best predicting variables of the criterion variable, business performance. Out of the five models that were tested, the first three were the best at predicting how well SMEs would do in business. Model 1, which consists of the following control variables: the legal ownership form of the enterprises, the types of industries to which SMEs and firms belong, the managerial experience of owners or managers, and the category of company size, or SMEs, explains only a 5% variation in the business performance. In the second model, besides the control variables, the EO is added, and a significant R-squared change is observed (sign. F change = 0.006, R squared = 0.086). In Model 3, besides control variables and EO, access to finance is entered into the model, and a significant R-square change is shown. It predicts a 12.1% variation in the business performance of SMEs. Retaining model 3, in models 4 and 5, market dynamism and human capital are added, respectively, but no further predictive power is revealed against business performance.

Table 3.16. The Modal Summary of IVs, DV, and Moderators

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.217 ^a	.047	.027	.6024	.047	2.294	4	185	.061
2	.293 ^b	.086	.061	.5916	.039	7.804	1	184	.006
3	.348 ^c	.121	.092	.5818	.035	7.235	1	183	.008
4	.348 ^d	.121	.087	.5834	.000	.001	1	182	.975
5	.348 ^e	.121	.082	.5849	.000	.056	1	181	.814
a. Predictors: (Constant), Legal Ownership Form of the enterprises, Types of industries where SME/firms belong to, The managerial experience of owners or managers, Category of Company size or SMEs									
b. Predictors: (Constant), Legal Ownership Form of the enterprises, Types of industries where SME/firms belong to, The managerial experience of owners or managers, Category of Company size or SMEs, EO of firms									
c. Predictors: (Constant), Legal Ownership Form of the enterprises, Types of industries where SME/firms belong to, The managerial experience of owners or managers, Category of Company size or SMEs, EO of firms, Accesses to Finance									
d. Predictors: (Constant), Legal Ownership Form of the enterprises, Types of industries where SME/firms belong to, The managerial experience of owners or managers, Category of Company size or SMEs, EO of firms, Accesses to Finance, Environmental or market dynamism									
e. Predictors: (Constant), Legal Ownership Form of the enterprises, Types of industries where SME/firms belong to, The managerial experience of owners or managers, Category of Company size or SMEs, EO of firms, Accesses to Finance, Environmental or market dynamism, Human Capital									
f. Dependent Variable: Average of Business Performance parameters									

Source: **Own Survey, 2022**

In all the models, the business performance of SMEs can be positively and significantly predicted by the experience of the firm's owners or managers and by their access to capital and EOs. In the ANOVA of the regression of IVs and DV, all models significantly predict the DV, but there is no unique contribution or difference between Model 4 and Model 5 (Table 3.17). Hence, we can ignore Model 5, which incorporates human capital, to estimate the three-way interaction among EO, access to finance, and market dynamism against business performance. So, even though Model 4 isn't very good at predicting, I can think of it as a better predictor by controlling, especially for the managerial experience of owners or managers, and treating the EO of firms, access to finance, and market dynamism as independent variables. Further hierarchical linear regression modeling and PROCESS Macro-based configurational analysis were done on model 4, which considers the EO of firms, access to finance, and market dynamism as IVs, along with control variables, in the following sections.

Table 3.17. ANOVA of IVs and DV

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.329	4	.832	2.294	.061 ^b
	Residual	67.127	185	.363		
	Total	70.456	189			
2	Regression	6.061	5	1.212	3.463	.005 ^c
	Residual	64.395	184	.350		
	Total	70.456	189			
3	Regression	8.510	6	1.418	4.190	.001 ^d
	Residual	61.946	183	.339		
	Total	70.456	189			
4	Regression	8.510	7	1.216	3.572	.001 ^e
	Residual	61.946	182	.340		
	Total	70.456	189			
5	Regression	8.529	8	1.066	3.116	.003 ^f
	Residual	61.927	181	.342		
	Total	70.456	189			

a. Dependent Variable: Average of Business Performance parameters

b. Predictors: (Constant), Legal Ownership Form of the enterprises, Types of industries where SME/firms belong, The managerial experience of owners or managers, Category of Company size or SMEs

c. Predictors: (Constant), Legal Ownership Form of the enterprises, Types of industries where SME/firms belong, The managerial experience of owners or managers, Category of Company size or SMEs, Average points of EO of firms

d. Predictors: (Constant), Legal Ownership Form of the enterprises, Types of industries where SME/firms belong to, The managerial experience of owners or managers, Category of Company size or SMEs, Average points of EO of firms, Average scores of Access to Finance

e. Predictors: (Constant), Legal Ownership Form of the enterprises, Types of industries where SME/firms belong to, The managerial experience of owners or managers, Category of Company size or SMEs, Average points of EO of firms, Average scores of Access to Finance, Average scores of Environmental or market dynamism

f. Predictors: (Constant), Legal Ownership Form of the enterprises, Types of industries where SME/firms belong to, The managerial experience of owners or managers, Category of Company size or SMEs, Average points of EO of firms, Average scores of Access to Finance, Average scores of Environmental or market dynamism, Average scores of Human Capital

Source: **Own survey, 2022**

3.5.15. The Hierarchical Linear Regression on Main-effect, Contingency, and Configurational Model

Variance Inflation Factor (VIF), a measure that quantifies a correlation between an independent variable and other independent variables, was calculated for each predictor to check the multicollinearity of IVs. The VIF values perfectly fit and are all above 1, far below the recommended value, of 10 (Frost, 2020). The notion of investigating the synergistic effects of moderating variables and the primary independent variable on the dependent variable led to moderation analysis that gives birth to contingency and configurational models. Except for the managerial experience of the owners or managers of the SMEs, none of the other control variables are significant across the models. Access to finance and the interaction between access to finance and EO remain substantial moderators in the contingency model against business performance. As shown in Table 3.18., The R² change from the main effect to the contingency model is

significant and explains a 15.5% ($R^2=0.155$, $p=0.07^*$) variation in business performance. However, the R^2 change between the contingency and configurational model is insignificant. The result, thus, indicates that the three-way interaction of EO, market dynamism, and access to finance does not always guarantee maximum business performance. The moderated moderation (three-way interaction) was not seen because c_7 , which refers to the coefficient of $EO*MD*AF$ ($\beta_1=0.14$, $p=0.6$) below, is not statistically different from zero (see section 3.4.2., $Y= i+ c_1X + c_2M+c_3W+c_4XM+c_5XW+c_6MW+c_7XMW+ey.... (1)$).

Table 3.18., Business Performance: Main-effect, Contingency, and Configuration Model (n=191)

	Control Variables		Main-effect model		Contingency Model		Configuration Model	
	β_1	sign	β_1	sign	β_1	sign	β_1	sign
Firm size	0.056	0.398	0.025	0.741	-0.021	0.75	-0.02	0.77
Legal Ownership	0.03	0.502	0.00	0.99	-0.091	0.70	-0.091	0.715
Firm type	0.026	0.417	0.025	0.42	0.02	0.99	0.04	0.19
Human capital	0.128	0.128	-0.024	0.81	-0.063	0.55	-0.068	0.52
ManExp	-0.14	0.003**	-0.117	0.013**	-0.12	0.012**	-0.12	0.12**
EO			0.22	0.045**	0.54	0.5	-0.92	0.77
AF			0.17	0.008**	-1.02	0.03**	-2.9	0.455
MD			0.01	0.91	0.71	0.31	-0.54	0.84
EO * MD					-0.27	0.17	0.11	0.89
EO* AF					0.29	0.08*	0.84	0.47
MD & AF					0.07	0.625	0.54	0.59
EO*MD*AF							-0.14	0.6
R2 (Significance of F-change)	$R^2=0.06$, $p=0.044^{**}$		$R^2=0.12$, $p=0.006^{**}$		$R^2=0.155$, $p=0.07^*$		$R^2=0.156$, $p=0.64$	

Source: Own survey, 2022

3.5.16. The PROCESS Macro Moderation Analysis

As shown in Table 3.19 (see Appendix 4), among control variables, the managerial experience of owners or managers of the SMEs significantly predicts the business performance level (SUMEXP, $b= -0.12$, $t(177) = -2.20$, $p= 0.03$). Firm size does not considerably predict in this model because all the sampled respondents from the SMEs have a somewhat similar size. Also, the legal ownership form and firm type or the industry category do not predict the performance

in this study. Most of the subjects of the SMEs have joint ownership or partnership rights, and there is a similarity in the industry context. Human capital was also considered as the control variable. It, however, does not significantly predict because the studied industries (textile and wood and metal) do not have a considerable shortage of required human capital. They are mainly occupied by the same type of workers, who are less educated but have job experience and can easily be found in the market. Conforming to this, the descriptive statistics above also show that human capital is not among the SMEs' main problems.

Among the IVs, only EO significantly predicts business performance ($b = 0.31, t(177) = 2.17, p = 0.03$). No two-way or three-way interaction of IVs significantly explains the variation in performance, except EO and access to finance which marginally predicts ($b = 0.29, p = 0.08$). In a sensitivity analysis with PROCESS Macro model 2, however, an interaction effect between EO and AF significantly explains performance ($b = 0.34, t(179) = 2.06, p = 0.04$), which supports H3 of the current study. The same sensitivity analysis was done for EO and MD, but no significant interaction effect was observed, leading us to reject H2. Though weak, the configurational model significantly influences and explains 15% of the variation in business performance. The conditional interaction effect of market dynamism and access to finance on the EO-business performance (BP) relationship is displayed below in Table 3.20.

Table: 3.20. The Conditional Effect of the Interaction of MD and AF on EO-performance: the Configuration Model

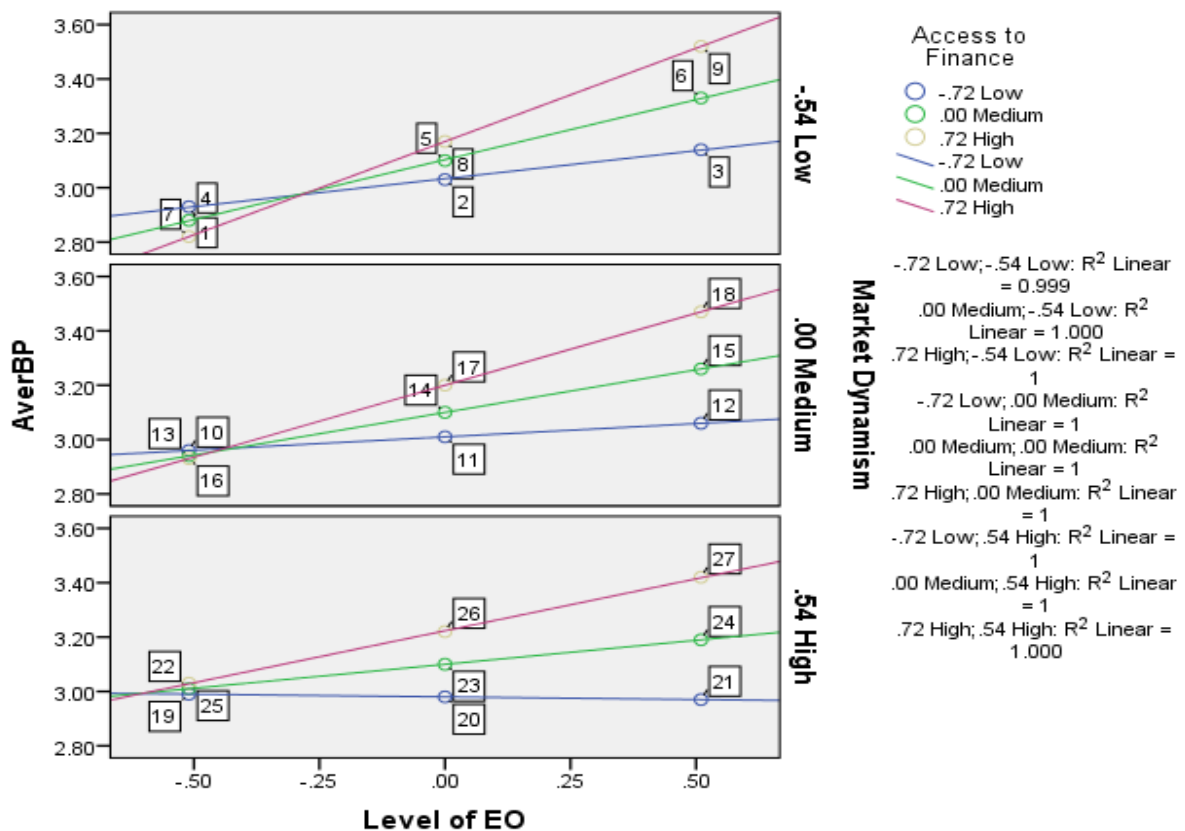
Market Dynamism	Access to Finance	What happened with the effect of EO on BP?
Low	Low	EO does not significantly predict
Low	Average	EO significantly predicts BP
Low	High	EO significantly predicts BP
Average	Low	EO does not significantly predict
Average	Average	EO significantly predicts
Average	High	EO significantly predicts
High	Low	EO does not significantly predict
High	Average	EO does not significantly predict
High	High	EO does not significantly predict

Source: **Own survey result, 2022**

As shown in Table 3.20., in a less dynamic environment, with low access to capital, the EO does not significantly contribute to business performance. If access to finance is low, even if there is

a high market dynamism, the effect of EO on business will still be insignificant. If there is a moderate level of market dynamism, whether the level of access to finance is middle or high, EO significantly influences the business performance of SMEs. On the other hand, even if there is a low market dynamism and moderate or high access to finance, business performance can be significantly predicted by the SMEs' EO, which supports H3. The configuration model, including the three-way interaction of EO, market dynamism, and access to finance, has a positive influence, all upward slope, on the SMEs' performance, which supports 10(a). The Table also shows that an increased market dynamism and high access to finance is not a guarantee for a higher effect of EO on business performance, which leads us to reject H4 (b). On the other side, low financial capital and low market dynamism could weaken the effect of EO on business performance, which supports our H4 (c) as illustrated in Figure 3.3.

Figure 3.3. The Visualization of the Three-way Interaction of IVs and DV



Source: **Own Survey Result, 2022**

As shown in Figure 3.3 above, business performance increases as the EO of the firms increases almost in all scenarios. Despite the level of market dynamism and access to capital, there is a

positive association between EO and business performance. As one can see from the top slice of the diagram, despite the low level of market dynamism, an increase in EO leads to maximum business performance if there is high access to capital. Besides, the bottom slice of the diagram shows that the effect of EO on business performance gets decreased if there is a high market dynamism and low access to financial capital.

3.5.17. Hypothesis Testing Result of Moderation and Conditional Effects

Based on the hierarchical linear regression results and PROCESS Macro moderation analysis, the testing results of H2, H3, H4a, H4b, and H4c are presented in Table 3.12.

Table 3.21. Hypothesis Testing Results of the Moderation Effects

No.	Hypothesis	Result	Acceptance
H2	<i>The relationship between EO and small business performance is moderated by market dynamism. Small business performance increases with EO but is at a faster rate for those in dynamic environments.</i>	<i>Not supported</i>	<i>Reject</i>
H3	<i>The relationship between EO and small business performance is moderated by access to financial capital. Small business performance increases with EO but is faster for those with greater access to financial capital.</i>	<i>supported</i>	<i>Accept</i>
H4	<i>H4 (a) Small business performance is explained by configurations of EO, access to capital, and market dynamism (Three-way interaction).</i>	<i>Not supported</i>	<i>Reject</i>
	<i>H4 (b) Small business performance is higher among firms with a higher degree of EO, greater access to financial capital, and dynamic environments than other configurations.</i>	<i>Not supported</i>	<i>Reject</i>
	<i>H4 (c) Small business performance is lower among firms with a high EO, little access to financial capital, and a stable environment than other configurations.</i>	<i>Supported</i>	<i>Accept</i>

Source: **Own survey result, 2022**

3.6. Discussion

This section presents a discussion of the empirical analysis. The discussion first summarizes the main challenges of manufacturing SMEs in Ethiopia. Next, it addresses the level of the practice and application of EO. Then, the last subsections present the relationship between EO and performance and the moderation analysis of the access to finance and market dynamism in the EO-performance relationship. Sections 3.6.1, 3.6.2., 3.6.3. and 3.6.4 reflect 2nd, 3rd, 4th, and 5th objectives, respectively.

3.6.1. The Challenges of Manufacturing SMEs in Ethiopia

The SMEs have only 10 percent of customers and suppliers who come to buy or supply from other regions within the country. This implies that the operational area of the SMEs is minimal, and they do not have access to a broader market within or outside of the country. As a result, the firms operate locally at the district or zone level, and, as testified by 61% of respondents, they perceive that they have no or less potential to expand business outside the country further. Their operational capacity is limited regarding economies of scale, the capital paid in, and the employees engaged. Besides COVID-19, the SMEs suffer from the following challenges, which are ranked based on severity: 1st, lack of sufficient financial capital; 2nd, political instability; 3rd, lack of modern technologies; 4th, disruption of the power supply; 5th, lack of market integration or networks. This shows the SMEs in Ethiopia are, in fact, the missing middle because their access to capital comes neither from microfinance institutions nor commercial banks. Next, as the country has been in a civil war (2019–2022), the instability in the political environment shattered the SMEs' regular business operations.

Moreover, there is very poor social media engagement for business purposes. As indicated by over 80% of the respondents, the SMEs do not engage in social media such as Instagram, Twitter, YouTube, Pinterest, or Telegram and have no company websites. But only 50% of them indicated that they use Facebook. These problems could be associated with a lack of internet access, a lack of awareness, or a misperception of the advantages of social media engagement. On the other hand, as indicated by 93%, the business operations of SMEs, including expansion, marketing, and distribution, have been severely affected by COVID-19. The SMEs lost over 42 percent of their revenue during COVID-19 compared to the previous year. This loss of revenue, coupled with the fear of the unknown, has significantly affected the practices of EOs of SMEs and their

business performance in the last almost three years. Since most of the above challenges are structural, the sectoral government needs concrete actions and considerable resources to mitigate them.

3.6.2. Assessing the Level of EOs in Manufacturing Sector SMEs in Ethiopia

The factors mentioned above may have directly or indirectly affected the entrepreneurial orientation of SMEs. The SMEs in Ethiopia's textile, wood, and metal industries are not strongly entrepreneurially oriented. The study reveals a moderate level of entrepreneurial orientation. They, relatively, perform better in being innovative, proactive, and autonomous, but they are weak in risk-taking, not aggressive in competition, and poorly networked. As the item analysis shows, they lag, especially in risk-taking propensity (2.6/5), which is mainly related to avoiding uncertainty or lacking confidence in venturing into the unknown.

Besides, there is a moderate level of competitive aggressiveness and networking among them. The intermediate level of competitive aggressiveness is associated with taking a less offensive posture when dealing with competitors regarding price reduction, introducing new products, promotion, and sales strategies. A lack of or less engagement in social media to interact with customers and suppliers, insufficient market integration by the sectoral office, poor connections with influential persons in the industries, informal social clubs (e.g., playing tennis), and a lack of automated logistics and tracking systems all contribute to a moderate level of networking. Also, as discussed in the descriptive section, lack of market integration or failure to create SMEs' digital platforms are among the primary causes of poor networking. The moderate level of EOs, coupled with a low mean score of access to finance, political instability, lack of modern technologies, power-supply disruption, and lack of market integration or networks, has yielded stagnant business growth in the last few years.

3.6.3. The Relationship between EO and Business Performance

All the EO dimensions have a positive and significant correlation with each other, with a significance level of 0.01. This means that EO dimensions, including networking, significantly support and interact with each other. Hence, their respective effects on business performance are not mutually exclusive. This result is consistent with the previous argument that the impact of risk-taking on performance is conditional on the level of innovativeness and vice versa.

Proactiveness contributes to performance through its positive effect on the level of risk-taking (Putniņš and Sauka, 2019). Also, as shown in Table 3.12, a statistically significant and positive correlation ($r = .192^{**}$, $p = .008$) between the general EO and business performance supports H1. It indicates that when the level of EO increases, the perceived business performance of SMEs increases; hence, it reaffirms a universally positive EO-performance relationship. Various scholars revealed this positive contribution of EO to performance, and those firms with a higher EO level outperformed those with a lower level of EO (e.g., Wiklund, 1999; McGrath & MacMillan, 2000; Rauch et al. 2009; Lee and Lim, 2009; Lumpkin, Cogliser, and Schneider, 2009; Rigtering, Kraus, Eggers, and Jensen, 2013; Laukkanen et al., 2013; Buli, 2017; Shirokova et al., 2016).

Specifically, innovativeness, proactiveness, competitive aggressiveness, and networking are positively and significantly correlated with the perceived business performance of SMEs; thus, H1a, H1c, H1d, and H1f, respectively, are supported and accepted. Similarly, numerous researchers have claimed a positive relationship between firm performance and innovativeness (e.g., Kusumawardhani, McCarthy, and Perera, 2009; Kraus, Rigtering, Hughes, and Hosman, 2012); proactiveness and exploiting business opportunities (Buli, 2017); and business success (Yimer et al., 2019). Whereas H1b and H1e are rejected because risk-taking and autonomy, respectively, show a positive correlation with the SMEs' business performance, the strength of the correlation is weak. This result indicates that a significant increase in a risky investment may not yield a proportional rise in the return on the investment. Likewise, a substantial increase in boosting employees' autonomy in decision-making does not significantly increase performance, even though there is a positive contribution.

Networking, as a newly introduced dimension of EO, shows a positive and significant effect on business performance. Previous studies such as Saha and Hajela (2015) have also argued and established the same facts. The hierarchical linear regression analysis with two blocks is conducted to assess the effect of conventional multidimensional constructs of EO on SMEs' business performance and network separately and to single out the latter's effect. The result from Model 1 shows that the existing EO model has an insignificant effect on business performance. Whereas combined with networking in a new model, a significant effect on R-square change is observed (R square = 7.3%, $p = 0.016$), see Table 5.5. This result supports the argument that the

pent dimension of EO (innovativeness, risk-taking, proactiveness, competitive aggressiveness, and autonomy) is insufficient to explain whether firms are entrepreneurially oriented or not in globalized markets (Kusumawardhani, McCarthy, and Perera, 2009; Saha and Hajela, 2015). In developing countries, like Ethiopia, networking helps reduce the shortage of financial resources and can be a competitive advantage (Kusumawardhani, McCarthy, and Perera, 2009). It is positively related to superior performance and firm survival (Watson, 2007). Hence, incorporating networking into the EO dimension will significantly enhance SMEs' business performance. This study, therefore, emboldens the established link and commends incorporating networking in further EO research against business performance.

3.6.4. The Moderation Effects of Access to Finance and Market Dynamism in EO-performance

As shown in the Pearson correlation result, Table 3.15., EO of firms, market dynamism, and access to finance are all positively correlated with the business performance of the sampled SMEs in Ethiopia. Though there is a weak correlation, the EOs and access to finance are positively and significantly correlated with business performance. This result, additionally, signifies that a higher level of business performance can be achieved if the SMEs are given adequate access to finance and practical training on how to become entrepreneurially oriented. It is consistent with the results of Zarrouk *et al.* (2020). In an inter-factor analysis, human capital and market dynamism are statistically significant and positively associated with the EOs. This indicates that the EO of firms can be boosted if there are well-trained, skilled, and experienced workforces and if there are changes in technologies, customer needs, and the market in general. Nevertheless, SMEs' market dynamism and human capital do not directly and significantly correlate with business performance but only through EO.

In an assessment made to unveil the best predicting variables of the criterion variable, business performance, as shown in Table 3.16. above, among five hierarchical linear regression models tested, the first three significantly predict SMEs' business performance. Notably, the managerial experience of the firm owners or managers, the EOs, and access to finance positively and significantly predict the SME business performance across the models. Model 1 consists of control variables: legal ownership form of the enterprises, types of industries to which SMEs belong to, the managerial experience of owners or managers, and category of company size or

SMEs. In the second model, the EO is added, and a significant R-Square change is observed besides the control variables. In Model 3, besides control variables and EO, access to finance is entered into the model, and a significant R-square change is shown. It predicts a 12.1% of the variation in the business performance of SMEs. On top of model 3, in model 4 and model 5, market dynamism and human capital are, respectively, added to the models. But no further predictive power is revealed against the business performance. The correlation analysis has also shown the same result. From this result, the most prominent predictors to explain the variation in business performance are the managerial experience of owners or managers, the access to finance, and the EO of firms.

Furthermore, the hierarchical linear regression on main-effect, contingency, and configurational models and PROCESS Macro moderation analysis were done on Model 4, which considers the EO of firms, access to finance, and market dynamism as IVs along with control variables. The contingency and configurational models are mainly utilized to investigate the synergistic effects (Hayes, 2012) of market dynamism, access to finance, and EO on business performance. As shown in Table 3.18. above, except for the managerial experience of the owners or managers of the SMEs, none of the other control variables are significant across the models. In both the main-effect and contingency models, access to finance and the interaction of access to finance and EO remain important moderators of business performance. This shows that access to finance has a direct and indirect moderating effect, along with EO in enhancing higher performance. Providing SMEs with access to financial capital can boost their performance. A higher performance, moreover, can be achieved if access to finance and EO are enhanced and applied together. Therefore, we accept H3, which states that access to financial capital moderates the relationship between EO and SME performance. Supporting this, Zarrouk *et al.* (2020) argued that access to financial resources has significantly mediated EO's effect on SMEs' performance. Hence, we conclude that the textile and furniture SMEs' business performance increases with EO, but at a faster rate for those with greater access to financial capital, which was also claimed by Wiklund and Shepherd (2005) and Frank, Kessler, and Fink (2010).

Market dynamism, however, does not significantly contribute to business performance across models. I guess this implies that market dynamism, changes in customer demand, or technological changes may not be required for improved performance, at least in developing countries like

Ethiopia. Due to continuous urbanization, population growth, and economic growth, the market is always dynamic across industries in developing countries. It could also be related to the argument that if SMEs have a higher level of EO, they can create dynamism in the market by themselves and shift the market from equilibrium to disequilibrium (Kirzner, 1973). Since the SMEs mainly operate locally, industry-level dynamism may not always bother me. As a result, we reject H2, which states that the relationship between EO and small business performance is moderated by market dynamism and that small business performance increases with EO but at a faster rate in dynamic environments. On the contrary, EO can improve small business performance even in less dynamic or stable market environments. Literature shows mixed results concerning this. Wiklund and Shepherd (2005) obtained a similar finding from their longitudinal study in Sweden that shows EO better influences performance where the market environment is predictable. In contrast, Khadhraoui *et al.* (2019) and Onwe *et al.* (2020) argue that dynamism significantly moderates the EO-performance relationship. Onwe *et al.* (2020), considering further argued that in a non-dynamic environment, an increase in EO would not increase, or there would not be a proportional increase in business performance. More comparative research on developed and developing countries is required to address this disparity and clearly define market dynamism.

Moreover, in the hierarchical linear regression, the R² change from contingency to a configurational model that incorporates the interaction of market dynamism, access to finance, and EO is insignificant. This result hints that the three-way interaction of EO, high market dynamism, and access to finance do not always guarantee significant improvement in business performance. It is not always necessary to have a dynamic market, EO, and financial access to obtain higher business performance. Due to the limitations of hierarchical linear regression, we cannot see the conditional interaction effect of access to finance and market dynamism on SME performance when the dynamism is low, average, or high. Hence, PROCESS Macro is adopted for further interaction analysis.

Like hierarchical linear regression, the PROCESS Macro moderation analysis (see Table 5.19 in see Appendix 4) also reveals that, among control variables, the managerial experience of owners or managers of the SMEs significantly predicts the business performance. Since the sampled respondents from the SMEs have somewhat similar sizes, the firm's size does not considerably

predict the model. Also, the legal ownership and firm type, or the industry category, do not predict the performance in this study because most of the participating SMEs have joint or partnership rights, and there are similarities in the industry context. The human capital was also considered a control variable. It, however, does not significantly predict because the studied industries (textile, wood, and metal) do not show an acute shortage of the required human capital. They are mainly occupied by the same type of workers, who are less educated but have job experience and can easily be found in the market. Also, human capital was not rated as a significant problem in the descriptive statistics results above.

Similar to hierarchical linear regression, PROCESS Macro Model 3 reveals that the EO of SMEs significantly predicts business performance, which is supported by previous research (Shirokova *et al.* 2016; Laukkanen *et al.* 2013; Buli, 2017). The contingency model significantly predicts the performance variation, especially the two-way interactions between access to finance and EO. Also, a sensitivity analysis using PROCESS Macro Model 2 shows a significant interaction effect of EO and access to finance in explaining performance ($b = 0.34$, $t(179) = 2.06$, $p = 0.04$), and it additionally supports H3. The same sensitivity analysis was done for EO and MD, but no significant interaction effect was observed, which is additional evidence to reject H2. A previous study in Sweden supports this (Wiklund and Shepherd, 2005); they say the effect of EO on performance is even higher in a stable environment, and I think it is associated with a common saying, “Necessity is the mother of invention.”

Both hierarchical linear regression and PROCESS Macro results do not prove the significant effect of the three-way interaction (access to finance X market dynamism X EO) on the SME business performance, which gives robust reason to reject H4 (a) that states SME business performance is moderated by the three-way interaction. Though weak in strength, the configurational model, which includes this three-way interaction significantly explains a 15% variation (R-squared, in business performance (Table 5.19 in see Appendix 4). Therefore, this gives a hint of the conditional interaction effect and we need to investigate the conditional effect of EO on business performance when the level of market dynamism and access to finance changes (refer to Table 3.20 & Figure 3.3., above).

Based on PROCESS macro-outputs, the EO does not significantly contribute to business performance in a less dynamic environment with low access to capital. If access to finance is low,

even if there is high market dynamism, the effect of EO on performance will still be insignificant, which is supported by the study findings from Austria (Frank, Kessler, and Fink, 2010). In a highly dynamic and turbulent market, firms are advised to look inward and increase efficiency instead of engaging in risky investment and innovation; otherwise, with a high EO, they can easily be hit by market shocks (Wiklund and Shepherd, 2005). If there is a moderate level of market dynamism and if the level of access to finance is average or high, EO significantly influences the SMEs' business performance.

On the other hand, even if there is a low market dynamism, if there is moderate or high access to finance, business performance can significantly be predicted by the EO of the SMEs, which, evidently, supports H3. Notwithstanding, a high market dynamism and high access to finance are not a guarantee for a higher effect of EO on business performance, which leads us to reject H4 (b). This result was strongly advocated by Wiklund and Shepherd (2005) in the case of Sweden considering general SMEs. Nevertheless, the opposite was true in the study by Frank, Kessler, and Fink (2010) conducted in Austria-Electronic and Electrical industry firms, Shirokova et al. (2016) in Finland and Russia-general SMEs, and Hosseini and Eskandari (2013) in Iran in the agricultural sector. This inconsistency may be related to the study units and places. There is no scientific research found from developing countries to compare with. However, it may need further country-based and industry-focused comparative studies regarding the role of market dynamism in the EO-performance relationship.

On the other side, conforming to H4 (c), a low market dynamism, if coupled with inadequate financial capital, could weaken the effect of EO on business performance. In a developing country like Ethiopia, it can be presumed that there is always dynamism in the market because of the continuous growth of population, industrialization, and urbanization. Firms, hence, need more internal strength and resources like access to finance than market dynamism. From the above scenarios, I conclude that market dynamism is not an issue for SMEs in a developing country. If they have adequate access to capital and if they are entrepreneurial-oriented, i.e., innovative, risk-taker, proactive, aggressively competitive, autonomous, and networked, they can achieve higher business performance and be the main actors in creating market dynamism.

3.7. Summary of the Findings

Ranking based on the intensity, Ethiopia's SMEs in the textile and furniture industry firms suffer from 1st, insufficient access to financial capital; 2nd, lack of political stability; 3rd, shortage of modern technologies; 4th, power-supply disruption; and 5th, lack of market integration or networking. Besides, the country's SMEs in Ethiopia's textile and wood and metal industries are not strongly entrepreneurial-oriented. The study also shows a moderate level of EO, hence, to scale up the overall, considerable focus is required to improve all its dimensions: innovativeness, risk-taking, proactiveness, autonomy, competitive aggressiveness, and networking. The study re-boosts the existing positive and statistically significant relationship between overall EO and business performance of the manufacturing SMEs in Ethiopia, conforming to the study's H1. Hence, SMEs with a higher EO level outperform others by innovating new products and processes, discovering, and exploiting opportunities, implementing offensive marketing strategies, making risky investments, and networking with other partners. Also, market dynamism has a positive correlation with EO, and it moderates the EO-performance relationship. The PROCESS macro model 2 analysis, however, indicates a high market dynamism could negatively influence investing in EO to increase performance. High EO in Volatile market situations such as changes in demands, product design or type, inflation, and cut-throat competition from rivals may result in irrecoverable loss.

Therefore, the small business performance increases with EO but not at a faster rate for those in a dynamic environment, which is against H2. In the conditional interaction effect analysis, a high market dynamism weakens the role of access to finance and makes the effect of the EO on business performance insignificant (see Table 3.20 & Figure 3.3). If adequate access to capital and a moderate level of EOs, SMEs can achieve a higher business performance even in a less dynamic environment. Since access to finance positively moderates, in supporting H3, I conclude that small business performance increases with EO but at a faster rate for those having greater access to financial capital. From PROCESS Macro configurational analysis, against the study H4(a) & H4(b), I argue that the small business performance is higher among firms with a higher degree of EO, greater access to financial capital, and less or moderate dynamic environments than other configurations. And business performance gets decreased if there is a configuration of high market dynamism and low access to financial capital.

CHAPTER FOUR

4. CONCLUSION OF THE DISSERTATION

The dissertation has been organized into three research themes. The first theme dictates the influence of national culture on entrepreneurial orientation and answers the following research questions: How does the national cultural influence entrepreneurship and entrepreneurial orientation (EO) of firms? Do the practices of EO vary based on national culture, and how does it affect the EO dimensions of SMEs in Ethiopia? The second theme discusses the application and significance of EO in different industries with a focus on manufacturing-sector SMEs and answers the following questions: What are the main challenges facing manufacturing SMEs that affect their EO and business performance? How much EO is practiced in these SMEs? How does EO affect their business performance? In the third theme, the effect of EO on the business performance of manufacturing SMEs, along with moderating variables, is addressed, and the following question is answered: How does the configuration of market dynamism, access to capital, and EO affect the business performance of Ethiopian SMEs?

Entrepreneurial orientation (EO), the main independent variable, is an emerging trend in entrepreneurship and strategic management literature; however, little has been known about developing countries. Besides, the inextricable influence of EO on business performance has been widely debated. Nevertheless, the results have remained equivocal due to the influence of national culture, internal factors (e.g., financial capital), and external factors (e.g., market dynamism). The way national culture induces entrepreneurship and business growth remains contestable in the literature, and there is a considerable void concerning how national culture influences entrepreneurship in different countries. Thus, for the first research theme, the SLR methodology was employed to investigate national culture's influence on entrepreneurship. Besides, for the second and third themes, an empirical investigation was conducted on the EO-performance relationship, considering access to finance, and market dynamism in Ethiopian manufacturing SMEs. The configurational approach is pursued to achieve the research objectives of the thesis. Survey data were analyzed using hierarchical linear regression and PROCESS Macro moderation models to uncover the moderating role of market dynamism and access to finance on the EO-performance relationship.

In addressing the first theme's questions, related to the study objective 1, the review reveals that individualism, long-term orientation, indulgence, feminism, low uncertainty avoidance, and a low power distance culture are positively associated with entrepreneurship across countries (Configuration 1). I propose them as a set of pro-entrepreneurship cultural dimensions and argue that bundling these cultural dimensions, not an isolated effect of individual dimensions, makes a difference in entrepreneurial performance. Since the configurational approach accommodates equifinality – which refers the idea that different forms can be equally effective, based on the SLR, I argue that the same outcome can be expected from a collectivistic culture complemented with masculinity, high power distance, low uncertainty avoidance, and a long-term orientation if collectivism is associated with nationalism or country-belongingness, not localism or familism (Configuration 2). The effect of both configurations can be moderated by income level, distribution of entrepreneurial talents, the institutional environment, demographic variables, and exposure to new technologies. With a high degree of power distance, very low individualism, high masculinity, high uncertainty avoidance, and low indulgence, Ethiopia's national culture is not pro-entrepreneurship. It plays an inhibiting role in the SMEs' innovativeness, risk-taking, and proactiveness. Therefore, I recommend developing a Pro-entrepreneurship national culture configuration (PNCC) Program, which goes beyond the usual entrepreneurial attitude training. There is no clear distinction between developing and developing regarding national culture influence on EO and the configurations can work in any national or regional context.

In response to the second research theme's questions, related to the study objectives 2,3 & 4, the empirical survey shows that Ethiopia's small and medium-sized enterprises (SMEs) in the textile and furniture (wood and metal) industries are hurt by a lack of financial capital, political instability, a lack of modern technologies, power supply disruption, and a lack of market integration or networks. Respondents ranked these problems in order of how bad they are. Therefore, appropriate actions should be taken accordingly. Besides, the Ethiopian manufacturing SMEs show a moderate level of EO. Since SMEs are not strongly entrepreneurially oriented, industry-specific EO training should be given to the SMEs owners or managers on how to become innovative, risk-takers, aggressively competitive, proactive, autonomous, and networked. As EO shows a statistically significant and positive effect on business performance, I recommend SMEs keep improving their EO to achieve higher business performance, including market share, size of employees, and profit growth.

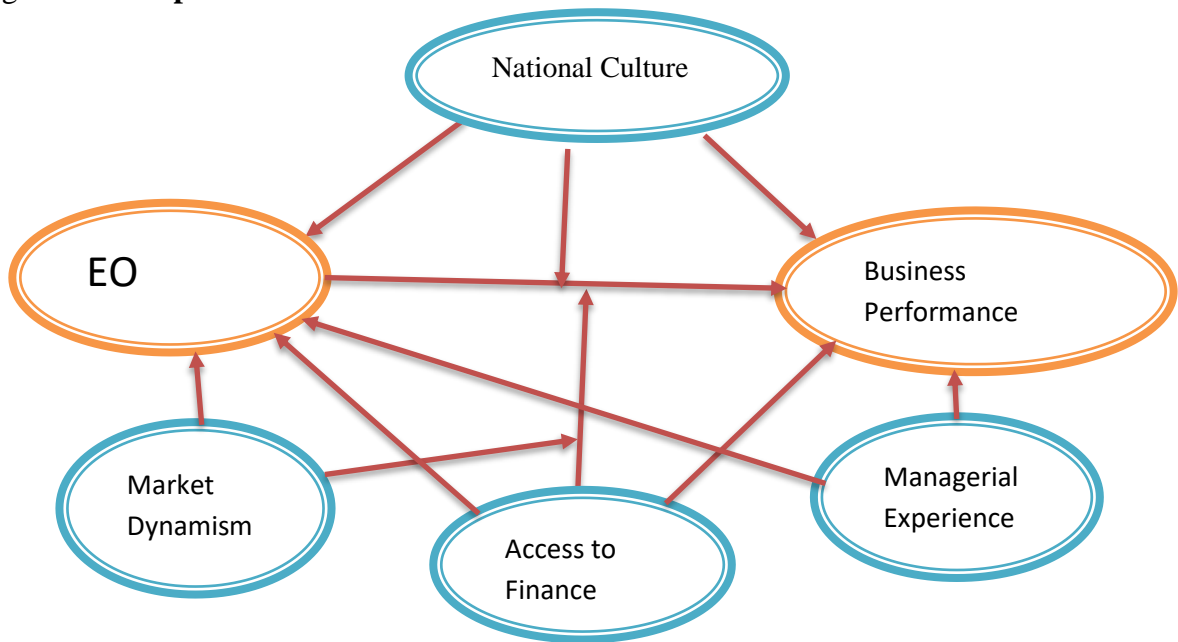
In the third theme, achieving study objective 5, controlling for the SMEs' type, size, ownership form, human capital, and managerial experience, this research assessed the configuration of key strategic variables such as EO, access to capital, and market dynamism. In two-way interaction, the combination of sufficient access to finance and moderate EO results in a significant performance level. Market dynamism significantly correlates with EO. However, in moderation analysis, high market dynamism negatively affects the role of access to finance in the EO-performance relationship. Firms cannot achieve a significant performance level in a highly dynamic market with a weak EO even if there is moderate or high access to finance (Configuration 3). If the SMEs have adequate access to capital and a moderate level of EOs, they can achieve a significant level of business performance in both stable and moderately dynamic market (Configuration 4). Therefore, the configuration of high market dynamism, access to finance, and EO is not required to achieve the desired business performance. I recommend maintaining a moderate-, if not low-, level of market dynamism that can be predicted for fully applying EO, which includes setting plans proactively, taking a calculated risk, competing aggressively, and introducing innovative solutions.

Across models, access to finance positively moderates and strengthens the relationship between EO and small business performance. Small business performance improves with EO but at a faster rate for those who have more access to financial capital. This shows that by controlling the above-mentioned control variables and market dynamism, adequate access to capital coupled with firms' higher EOs could lead to better performance (configuration 5). Access to finance remains the key determinant for EO and business growth. Notably, all EO dimensions need resources to implement; hence, there should be adequate access to finance. Innovativeness needs experiments and R&D; risk-taking goes with making risky investments that may cost enormous resources and require loan applications; proactiveness is associated with conducting market need assessments and consumer surveys; competitive aggressiveness entails taking an offensive position, including price and quantity discounts and various promotions; autonomy involves employee training, practice on self-decision, and information accessibility; and networking costs commission, membership, and subscription fees, internet bills, and may need hiring additional IT-oriented staff.

In a nutshell, as shown in Figure 4.1, I forward the following propositions for further discourse. National culture influences both EO and business performance independently and moderates their

two relationships. Access to finance directly influences both EO and business performance and shapes their relationship as a key determinant. Even though market dynamism positively correlates with EO, a high level of market dynamism negatively affects the role of access to finance in the EO-performance relationship. Managerial experience is a control variable, which can also be a moderator, that significantly influences entrepreneurial orientation and business performance. I propose that the best-predicted model in the EO-performance relationship should at least consider the roles and configuration of national culture, access to finance, market dynamism, and SME owner-managers and entrepreneurs' experiences along with the above control variables.

Figure 4.1: **Proposed Model**



Source, **Author's Creation, 2023**

In the end, the study offers invaluable contributions: theoretically, in advancing the discourse on EO-performance with moderating variables and inculcating networking as a new EO dimension; contextually, by uncovering the challenges of SMEs and shedding light on how to improve the EO and business performance of the SMEs in Ethiopia; methodologically, on top of descriptives, applying hierarchical linear regression and PROCESS macro model 3 for configurational analysis is a new methodological approach that helps to get robust results and increase the reliability of the results. Furthermore, below, chapter five displays policy implications, the theoretical, methodological, and contextual contributions, limitations, and future research directions.

CHAPTER FIVE

5. IMPLICATIONS, LIMITATIONS, AND FUTURE RESEARCH DIRECTION

5.1. Policy Implications

To boost the SMEs' business performance and thus economic growth, as the study implies, I recommend the following actions to be taken by the government or concerned agents: promote pro-entrepreneurship national cultural bundling program; prioritize the challenges of the SMEs affecting EO and performance; provide extensive support to enhance EOs including networking; provide continuous technical capacity building program; increase the access to finance for SMEs; reform administrative structure; and maintain the moderate level of Market dynamism.

1) Initiate Regional and National Pro-entrepreneurship Cultural Bundling Program

A cultural profile or bundle has become a groundbreaking concept that needs attention as it significantly defines not only entrepreneurial orientations but also the business and economic growth of countries (Yong *et al.* 2020; Tekic and Tekic, 2021; Tian *et al.* 2021). Cultural bundling is an intrinsic configuration of cultural values complementing each other. I recommend establishing a cultural bundling program to supplement the entrepreneurship development program at an industry or national level. Based on the review findings, I propose two sets of cultural bundling. First, in the case of an individualistic culture, the cultural bundling program should ensure that it is configured with and complemented by low uncertainty avoidance, low power distance, long-term orientation, femininity, and indulgence culture. Second, in the case of collectivistic cultures, like Ethiopia, the bundling should ensure whether it is configured with and complemented by masculinity, high power distance, low uncertainty avoidance, long-term orientation, and restraint culture. The findings also implied collectivism associated with patriotism, nationalism, or country-belongingness, not localism or familism, positively correlated to entrepreneurship. Thus, I claim that it is not being individualistic or collectivistic that matters in promoting entrepreneurship, but the right combination or bundling and complementarity of the cultural dimensions. Hence, any study that addresses the influence of national culture on entrepreneurship or EO should no longer focus on a single cultural dimension but instead on a bundle of cultural dimensions.

SME owners or managers, employees, and societies need to undergo acculturation and deculturation training to make their culture absorb entrepreneurial spirit, skills, and knowledge. It also needs to consider cultural aspects while designing educational policies and programs, especially in business schools. Nevertheless, implementing well-meant policies and institutional reforms that foster entrepreneurship can be challenging in regions lacking an entrepreneurial culture developed and nurtured over generations. Therefore, since the entrepreneurial culture is not evenly distributed across regions, I suggest addressing the regional cultural variation in formulating policy. While designing innovative strategies, I suggest that managers or entrepreneurs must be fully aware of all the stages of the innovation process, their relative personal, organizational, and national strengths and biases, and the implications of national culture on them.

II) Prioritize the SME challenges affecting EO and Business performance

As shown in the empirical part of the study, challenges are identified and ranked based on severity: insufficient financial capital; political instability; a lack of modern technologies; power-supply disruption; and a lack of market integration or poor networking. To increase the SMEs' business performance, the government should primarily provide sufficient access to finance by establishing more microfinance institutions and lowering the collateral requirements and procedures for loans. Access to finance can also be facilitated through formal financial institutions or other government funding programs that encourage high-potential innovators. Notably, financial barriers and difficulties in accessing finance weaken the effect of EO on SMEs' growth (also see V, below). The next main problem is the political instability in the country, which disrupts the supply and distribution of goods and services. In a stable political environment, EO enormously improves business performance. The government should maintain law and order and ensure the safety and security of the business owners and their properties. I suggest expanding more property and health insurance services with affordable costs in insecure countries like Ethiopia so that business owners can confidently invest. Besides, the government should provide the required modern technologies, like sewing machines for the textile business and dynamic 2D and 3D woodworking machines for the furniture industry, that consume less energy. In relation to this, an acute power supply disruption affects the daily operations of SMEs. It needs to establish more power stations and increase the power supply in the study areas.

III) Support and Train to Enhance EOs including Networking

Since the SMEs are not strongly entrepreneurially oriented, adequate industry-specific EO training should be given to the SMEs' owners or managers. The emphasis should be given to all dimensions of EO: innovativeness, risk-taking, proactiveness, autonomy, competitive aggressiveness, and networking. In their business nature, both textile and furniture SME industries are fashion-oriented, which could be why the SMEs perform better in innovativeness (creating new designs and processes) and proactiveness (foreseeing and exploiting business opportunities). However, there could be more autonomy-entrusting employees for decision-making. Employee autonomy is crucial for intrapreneurship, which is internal entrepreneurship within the framework of a given firm. Intrapreneurship enhances a conducive atmosphere for employees and empowers them to develop a process or complementary product for their employers. For example, if we observe some high-tech, Gmail is an intrapreneurial technology that emerged from Google's policy that mandates employees spend 20% of their time developing side projects. Also, Amazon Web Services, introduced as an internal project to help Amazon scale its systems circa 2000, has become the world's most prominent cloud infrastructure company (Glassdoor, 2019).

SMEs also show a big difference in their willingness to take risks, such as taking out a loan to make a risky investment with a high return, being aggressive in competition by using different sales and promotion strategies and networking with others. Since EO has a statistically significant and positive effect on business performance and a correlation with it, SMEs should keep improving their EO to increase their market share, the number of employees, and profits. Furthermore, SMEs with a higher EO level outperform others by innovating new products and processes, discovering, and exploiting opportunities, implementing offensive marketing strategies, making risky investments, and networking with other partners. I, hence, strongly recommend that SMEs improve networking to increase the general level of EO, reduce the shortage of financial resources, attain superior performance, and enhance and maintain competitive advantage. The operational areas of the SMEs are locally limited because of a considerable gap in market integration or networking. This problem is associated with SME owners' or managers' low social media engagement and the government's failure to create market integration.

Hence, the government should expand internet access and develop digital platforms where buyers and sellers can meet from a distance. More comprehensive networking creates more opportunities for business expansion. It can also take the form of any partnership, joint venture, cooperation, or association that formally as well as informally involves customers, suppliers, agents, competitors, and/or government bodies and yields some business-oriented results. Moreover, I strongly suggest establishing digital platforms, or websites, which may be regionally monitored, that especially connect buyers and sellers in the respective industries, help them promote their products, and make a deal online in their local languages.

IV) Provide Continuous Technical Capacity Building Program

The textile, wood, and metal SMEs have sufficient human resources to undertake the business operation. Skilled and semi-skilled workers occupy these industries with closely related skill sets; they have job experience but are less educated and can easily be found in the market. However, new entrants in SMEs still need technical and vocational training, especially in machine operation, maintenance, and repair. Additionally, it was seen in the reports from most of the studied regions in the country that there is a shortage of skilled workforce, engineers, and technicians, to control and fix problems with machines being used by the SMEs.

V) Increase the Access to Finance for SMEs

In the overall lending portfolio of the country, SMEs account for only 7%, which is very low compared to other developing countries (16%) (The World Bank, 2015). Moreover, access to finance is a crucial element of the business performance of SMEs. It directly affects business performance by limiting the scales of economies or production and indirectly by limiting the capacity to innovate, act proactively, make risky investments, network, make autonomous decisions, and compete aggressively. To address the financial capital void of the "missing middle," which is SMEs, microfinance institutions should upscale their services to small businesses, and commercial banks should downscale their services to medium-sized businesses. In addition to expanding the existing finance-leasing and hire-purchase leasing options, collateral-free loan options such as credit scoring, financial statement-based loaning, factoring, and venture capital enabling policies should be established. I examined Ethiopian SME financing and suggested alternative financing options based on the study findings and other countries' models (China and India), as shown in Table 5.1 below (see Appendix 4). Further, I recommend

reforming the SME structures since most are established and/or owned by family members or friends, and they lack the necessary financial management skills.

VI) Reform the Administrative Structure

First, the manufacturing SME sectoral offices from the federal to local level need to be reformed and filled up with experienced and motivated support staff and furnished with the necessary equipment. Then, reform the SMEs' internal money and material management system. It also needs to check the formation of the SMEs. Since most Ethiopian SMEs are jointly owned based on familial relationships, a dominant family member decides and others follow him with no right to vote, which makes the business inefficient and insolvent to pay debt. The SMEs do not have a formal decision-making process or an administrative hierarchy for control and supervision. Also, there is no way to ensure that all members proportionally benefit from the profit. The SMEs lack the necessary skills to raise and mobilize financial resources and to keep financial records. Hence, to mount skill sets, increase their financial leverage, and elevate their economies of scale, the minimum number of members or employees to run the SMEs should be increased and diversified. Currently, for small-sized businesses, the minimum requirement is six employees or members with an initial capital of 100,001 Birr, which I suggest here making it 11 and 200,001 Birr, respectively. For medium-sized businesses, the minimum is 31 employees with an initial capital of 1,500,001 Birr, which I suggest here making it 41 and 2,000,001, respectively. I argue that the smaller the SMEs, the more they are exposed to bankruptcy due to shocks, and vice versa.

VII) Maintain a Moderate level of Market Dynamism

Policymakers should consider the market dynamism level in applying EO. It affects both those who seek access to finance(SMEs) and those who provide it (financers). High market dynamism negatively affects or weakens the role of access to finance in the EO-performance relationship. It may even expose SMEs to external shocks and result in bankruptcy. With adequate access to capital and a moderate level of EOs, SMEs can achieve a higher business performance even in a less dynamic environment. The SMEs can create dynamism in the industry by influencing customers' demand, and price and introducing new products if there is access to finance to fund their business activities and if they are entrepreneurial-oriented, i.e., innovative, risk-taker, proactive, aggressively competitive, autonomous, and networked. Entrepreneurial-oriented SMEs, like entrepreneurial individuals, can shift the market from equilibrium to disequilibrium

by discovering unnoticed profit opportunities and filling the demand gaps in the market, supporting the Kirznerian view (Kirzner, 1973). I recommend that SMEs and industries should ensure the configuration of a moderate or less (not high-level) market dynamism and sufficient access to finance to get maximum outputs from their EO efforts. Market dynamism can be controlled by taking anti-inflationary measures, controlling industry entry and exit barriers, pace of technology transfer and innovation rate, disseminating knowledge from R&D activities, and increasing networking capacity.

5.2. The Theoretical, Contextual, and Methodological contribution

The dissertation offers the following theoretical, contextual, and methodological contributions: -

- I) **Theoretically:** - the study unveiled the inextricable relationship between national culture and entrepreneurship. Now, researchers can have better views of how national culture influences entrepreneurship. The analysis upholds and advances the recently conceived concept of national cultural bundling and proposes pro-entrepreneurship national cultural bundling initiatives. Besides, it uncovers the determinants that moderate the influence of national culture on entrepreneurship and business growth. Also, the study re-boosts the ongoing discourse of incorporating networking as a dimension of EO. Hence, networking needs to be considered in studies measuring the level of EO and its aggregate effect on business performance. The study also claims to have significantly contributed to strategic management and entrepreneurship literature by unfolding the magnitude of the importance of access to finance, market dynamism, and EO in enhancing better business performance.
- II) **Contextually:** - the study contributes to the development of EO from the developing country perspective, Ethiopia, which is less addressed in the literature. Since the data were from a developing country, the study sheds better light on how EO is practiced in developing countries' contexts. Besides, since the manufacturing industries selected are among the top five ones designed for the country's industrialization, the study findings add significant value in transforming the sector by making the SMEs more entrepreneurial-oriented and suggesting alternatives to solve challenges.
- I) **Methodologically:** - on top of descriptives, applying both hierarchical linear regression and PROCESS macro model 3 for configurational analysis is a new

methodological approach that helps to get viable results and increase the reliability of the results. The two statistical models work better together. For example, in moderation analysis, hierarchical linear regression couldn't show the effect of access to finance on the EO-performance relationship while market dynamism changes from low to moderate and then to the high level, but PROCESS macro helped to solve this limitation and showed the interaction effect when the level of dynamism changes. Besides, the use of a systematic approach to the literature review process contributed to whittling down the divergent views in the literature regarding the influence of national culture on entrepreneurship.

5.3. Limitations and Future Research Direction

- I) For the SLR, focusing only on two databases (Web of Science and EBSCO) with stringent selection criteria could limit the size of the relevant studies. Further expanded database searches could probably provide more evidence and differential arguments.
- II) The systematic review uncovered pro-entrepreneurship cultural dimensions as well as moderators of the relationship between national culture and entrepreneurship. However, the following questions remain to be answered by future research: how can we nurture the pro-entrepreneurship national cultural dimensions? How many pro-entrepreneurship cultural dimensions should be bundled, at a minimum, to enhance the desired level of innovative, risk-taking, and proactive entrepreneurial behavior? And how does the level of economic development moderate the relationship between national culture and entrepreneurship?
- III) In addition, the main limitation of the empirical part of the study is related to COVID-19. Since the data were collected during the COVID-19 peak period, an attempt is made to assess three years' situations, including a year prior to the pandemic (2019–2021). However, the strategic focus, including the entrepreneurial orientation of the SMEs, was under the influence of unprecedented, extraordinary situations that increased the level of uncertainty and decreased performance. Hence, the results might be different from what could be in a normal situation.

- IV) Next, the study concentrated only on two SME industries: textiles and furniture. The result, therefore, is limited to these SMEs, and any generalizations to other sectors should consider the industry dynamics. Future research should at least consider other fast-growing SMEs in industries such as leather and leather products, food and beverage, and agro-processing to compare and show the variation in the SMEs' EO and performance, considering market dynamics and access to capital in each industry.
- V) The area covered by the study is another limitation. Due to civil war and violence in the northern, Eastern, and Western parts of the country, the study covered only Addis Ababa (the capital city), Sidama, SNNPR, and Oromia regions. Future studies may also consider the remaining areas to analyze the geographical differences and locational advantages in EO-business performance.
- VI) Since market dynamism significantly affects EO, I expected to see a significant effect on business performance, but this is not the case. Further, I expected to see a significant effect of EO on business performance when there is high market dynamism and high access to capital, but the result is otherwise. The significance of market dynamism for EO needs to be discovered more. Hence, future studies should answer these questions: do we need market dynamism to accelerate the EO of firms? If yes, what level of market dynamism (low, medium, or high) is required to maximize the positive outcomes from the EO? Does the effect of market dynamism on the EO-performance relationship differ based on the industry type and countries' development (developing versus developed)? Most importantly, future research should address the effect of market dynamism on access to finance from financiers' perspectives.

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Appendices

Appendix 1.

Table 2.3. RQ1 Search Queries (*First Attempt Testing*)

<p>A. (“Entrepreneurial AND orient* OR dimension*”) AND (Innovat* OR creative* OR novel* or “new Product*” OR “invest* in R&D”) AND (“Risk AND tak* OR accept*” OR avoid*” OR avert*”) AND (Network* OR partner* OR “Domestic market” OR “international market”) AND (“pro-active*” OR “proactive measure*” OR “response to compet*”) AND (“Aggressive competitive*” OR “overact*” or “outperform* competitor*”) AND (developing* AND econom* OR countr* or world) AND (SME* OR “Small business” AND “business growth” OR employment OR growth OR profitability OR “market share” OR productivity OR Performance OR Success OR Achievement))</p>
<p style="text-align: center;">• <i>No records were found in both Web of Science Core collection databases and EBSCO</i></p>
<p>B. (“Entrepreneurial AND orient* OR dimension*”) AND (Innovat* OR creative* OR novel* or “new Product*” OR “invest* in R&D”) AND (“Risk AND tak* OR accept*” OR avoid*” OR avert*”) AND (Network* OR partner* OR “Domestic market” OR “international market”) AND (“pro-active*” OR “proactive measure*” OR “pursu* new opportunit*” OR “response AND compet* OR Market”) AND (“Aggressive competitive*” OR “overact*” or “outperform* competitor*” OR defensive OR “offensive AND action OR measure”) AND (“Independent decision*” OR “self-determination” OR “control over operation”) AND (developing* OR “Less developed” OR “third-world” AND econom* OR countr* or world) AND (SME* OR “Small business” AND business growth OR employment OR growth OR profitability OR “market share” OR productivity OR Performance OR Success OR Achievement))</p>
<p style="text-align: center;">• <i>Too much irrelevant records (17,413,840 from 1990-2020) were found in EBSCO while No records found in Web of Science collection (advanced search option)</i></p>
<p>C. (“Entrepreneurial AND orient* OR dimension*”) AND (Innovat* OR creative* OR novel* or “new Product*” OR “invest* in R&D”) AND (“Risk AND tak* OR accept*” OR avoid*” OR avert*”) AND (Network* OR partner* OR “Domestic market” OR “international market”) AND (“pro-active*” OR “proactive measure*” OR “pursu* new opportunit*” OR “response AND compet* OR Market”) AND (“Aggressive competitive*” OR “overact*” or “outperform* competitor*” OR defensive OR “offensive AND action OR measure”) AND (“Independent decision*” OR “Decision making authority” OR “self-determination” OR “control over operation”) AND (“National culture”) OR (individual* OR collective* OR “group OR individual decision making”) AND (uncertainty avoidance OR “fac* uncertainty” OR “investing OR saving” AND “long-term” or “short term”) AND (“power distance” OR “hierarch* of society” OR “power distribution among society” OR “power centralization or decentralization” OR “respect for authority”) AND (“masculinity OR femininity”) AND (indulgence OR restricted OR free lifestyle) AND (SME* OR “Small business” AND “business growth” OR employment OR growth OR profitability OR “market share” OR productivity OR Performance OR Success OR Achievement))</p>
<p style="text-align: center;">• <i>No Search Results in Web of Science and about 848 search results were found in EBSCO but all irrelevant based on the topics</i></p>

Table 2.4. Search Queries and Results (the 2nd attempt *REVISED*)

SQ.	Research Question (RQ1)	WOS		EBSCO (ASC, BSP, SD)			
		Total	Selected	Total		Selected	
A	((("Entrepreneurial orient*" OR "entrepreneurial dimension*")) AND TOPIC: ((Innovat* OR creative* OR novel* or "new Product*" OR "invest* in R&D")) AND TOPIC: ((developing* AND econom* OR countr* or world)) AND TOPIC: ((SME* OR Small business AND business growth OR employment OR growth OR profitability OR "market share" OR productivity OR Performance OR Success OR Achievement))	204	50	2719	11	2739	61
B	((("Entrepreneurial orient*" OR "entrepreneurial dimension*")) AND TOPIC: ((Network* OR partner* OR "Domestic market" OR "international* market")) AND TOPIC: ((developing* AND econom* OR countr* or world)) AND TOPIC: ((SME* OR Small business AND business growth OR employment OR growth OR profitability OR "market share" OR productivity OR Performance OR Success OR Achievement))	74	15	2129	11	2203	26
C	((("Entrepreneurial orient*" OR "entrepreneurial dimension*")) AND TOPIC: ((("pro-active*" OR "proactive measure*" OR "response to compete*" OR "driving market" OR "leading market" OR "pursu* opportunity")) OR TOPIC: (autonomy OR "indepdent decision" OR "control over operation" OR "control over management" OR "decision-Making authority")) AND TOPIC: ((developing* AND econom* OR countr* or world))AND TOPIC: ((SME* OR Small business AND business growth OR employment OR growth OR profitability OR "market share" OR productivity OR Performance OR Success OR Achievement))	2012	15	63	12	2075	30
D	((("Entrepreneurial orient*")) AND TOPIC: ((Innovat* OR creative* OR novel* or "new Product*" OR "invest* in R&D")) AND TOPIC: ((("National culture" AND individual* OR collective* OR "group decision" OR "individual decision")) AND TOPIC: ((SME* OR "Small business" AND "business growth" OR employment OR growth OR profitability OR "market share" OR productivity OR Performance OR Success OR Achievement))	30	8	1143	11	1173	19
E	((("Entrepreneurial orient*")) AND TOPIC: ((("National culture" OR "uncertainty avoidance" OR "fac* uncertainty" OR "investing OR saving" AND "long-term" or "short term"))AND TOPIC: ((SME* OR "Small business growth" OR employment OR growth OR profitability OR "market share" OR productivity OR Performance OR Success OR Achievement))	47	9	727	10	774	19
F	((("Entrepreneurial orient*")) AND TOPIC: ((Autonomy OR "Independent decision*" OR "Decision making	21	2	764	11	785	13

	authority" OR "self-determination" OR "control over operation") AND TOPIC: (("national culture" OR individual* OR collective* OR "group OR individual decision making")) AND TOPIC: ((SME* OR "Small business growth" OR employment OR growth OR profitability OR "market share" OR productivity OR Performance OR Success OR Achievement)).							
G	("Entrepreneurial orient*" AND TOPIC: ((Innovat* OR creative* OR novel* or "new Product*" OR "invest* in R&D")) AND TOPIC: ((Risk AND tak* OR accept* OR avoid* OR avert*)) AND TOPIC: (("national culture" OR "masculinity OR femininity")) AND TOPIC: ((SME* OR "Small business growth" OR employment OR growth OR profitability OR "market share" OR productivity OR Performance OR Success OR Achievement))	8	3	1209	12	1217	15	
	Sub Total for RQ1	2396	102	8754	78	10968	183	
	After removing duplicate						118	
	Reference search of selected articles						61-23(duplicates)	41
	Total for RQ1						159	

Where:- ASC-Academic Search complete, SD-Science Direct, BSP-Business Source Premier, WOS- Web of Science

Table 2.5. The Research search query and preliminary screening result

(Final search result)

SQ.	Research Question (RQ1)	WOS		EBSCO (ASC& BSP)	
		Total	Selected	Total	Selected
A	("Entrepreneurial orient*" OR "entrepreneurial dimension*") (Topic) and (Innovat* OR creative* OR novel* or "new Product*" OR "invest* in R&D") (Topic) and (developing* AND econom* OR countr* or world or Africa*) (Topic) and (SME* OR Small business AND business growth OR employment OR growth OR profitability OR "market share" OR productivity OR Performance OR Success OR Achievement) https://www.webofscience.com/wos/woscc/summary/b0805ef5-533c-4cd2-99ec-55cff0aa2f6a-03638de4/relevance/1	314	30	1,311	20
B	("Entrepreneurial orient*" OR "entrepreneurial dimension*") (Topic) and (Innovat* OR creative* OR novel* or "new Product*" OR "invest* in R&D") (Topic) and (("national culture" OR "masculinity OR femininity")) (Topic) or (individualism OR collectivism OR Indulgence OR Restraint OR long-term orient* OR Short-term Orient*) (Topic) and ((SME* OR Small business AND business growth OR employment OR growth OR profit* OR "market share" OR productivity OR Performance OR Success OR Achievement)) (All Fields) and DEVELOPING COUNT* OR AFRICA https://www.webofscience.com/wos/woscc/summary/3ced6e5e-562a-4c69-b5f3-7ba38886a1d4-0363e220/relevance/1	25	25	250	20

C	("Entrepreneurial orient*" OR "entrepreneurial dimension*") (Topic) and (("pro-active*" OR "proactive measure*" OR "response to compet*" OR "driving market" OR "leading market" OR "pursu* opportunity" OR "overact or outperforming competit*" OR "defensive or offensive action" OR "response to competit*" OR "domestic market network*" OR "international* business")) (Topic) and ((developing* AND econom* OR countr* or world OR Africa)) (Topic) and ((SME* OR Small business AND business growth OR employment OR growth OR profit* OR "market share" OR productivity OR Performance OR Success OR Achievement)) https://www.webofscience.com/wos/woscc/summary/56208dbe-fbb6-4c93-a007-4240462f7c05-0363998c/relevance/1	24	24	484	20
D	("Entrepreneurial orient*" OR "entrepreneurial dimension*") (Topic) and (("pro-active*" OR "proactive measure*" OR "response to compet*" OR "driving market" OR "leading market" OR "pursu* opportunity" OR "overact or outperforming competit*" OR "defensive or offensive action" OR "response to competit*" OR "domestic market network*" OR "international* business")) (Topic) and ((developing* AND econom* OR countr* or world OR Africa)) https://www.webofscience.com/wos/woscc/summary/c6e924ce-87f7-4d14-bf60-abc31eb66b26-0363a52e/relevance/1	26	26	490	20
E	("Entrepreneurial orient*" OR "entrepreneurial dimension*") (Topic) and ((Innovat* OR creative* OR novel* or "new Product*" OR "invest* in R&D")) AND (("National culture" AND individual* OR collective* OR "group decision" OR "individual decision")) (Topic) and ((developing* AND econom* OR countr* or world OR Africa)) (Topic) and ((SME* OR Small business AND business growth OR employment OR growth OR profit* OR "market share" OR productivity OR Performance OR Success OR Achievement))	12	12	653	20
F	("Entrepreneurial orient*" OR "entrepreneurial dimension*") (Topic) and (("National culture" OR "uncertainty avoidance" OR "fac* uncertainty" OR "investing OR saving" AND "long-term" or "short term")) (Topic) and ((developing* AND econom* OR countr* or world OR Africa)) (Topic) and ((SME* OR Small business AND business growth OR employment OR growth OR profit* OR "market share" OR productivity OR Performance OR Success OR Achievement)) (Topic)	28	28	468	20
G	("Entrepreneurial orient*" OR "entrepreneurial dimension*") (Topic) and (("National culture" OR "uncertainty avoidance" OR "fac* uncertainty" AND "investing OR saving" OR "long-term" or "short term")) (Topic) and ((developing* AND econom* OR countr* or world OR Africa)) (Topic) and ((SME* OR Small business AND business growth OR employment OR growth OR profit* OR "market share" OR productivity OR Performance OR Success OR Achievement)) https://www.webofscience.com/wos/woscc/summary/58af4a40-412c-42a8-a5d5-e41dba6e90bf-0363bf01/times-cited-descending/1	38	30	820	20

H	("Entrepreneurial orient*" OR "entrepreneurial dimension*") (Topic) and ((Innovat* OR creative* OR novel* or "new Product*" OR "invest* in R&D")) OR TOPIC: ((Risk AND tak* OR accept* OR avoid* OR avert*) (Topic) and (("national culture" OR "masculinity OR femininity")) https://www.webofscience.com/wos/woscc/summary/d83c4483-4ff0-4b75-83a2-9496c9ac2ef2-0363cf77/times-cited-descending/1	25	25	520	20
I	("Entrepreneurial orient*" OR "entrepreneurial dimension*") (Topic) and Innovat* OR "Risk-taking*" OR Proactive* (Topic) and (("national culture" OR "masculinity OR femininity" OR "power distance" OR "uncertainty avoid*" OR individualism OR Collectivism OR Indulgence OR Restraint AND Culture)) (Topic) or "Africa countr*") https://www.webofscience.com/wos/woscc/summary/11ffba19-9c9f-4b59-9478-37f47a5fe906-03641d0b/date-descending/1	572	30	14,264	20
J	TS=((innovat* OR "Risk taking*" OR Proactive* AND firm* OR entrepreneur*)) AND TS=(((("national culture" OR "masculinity OR femininity" OR "power distance" OR "uncertainty avoid*" OR individualism OR Collectivism OR Indulgence OR Restraint OR "Long term orient" OR "short term Orient*" AND Culture))) https://www.webofscience.com/wos/woscc/summary/d7181cf7-16a3-4692-bc39-6f27ef4cfc60-036437b3/times-cited-descending/1	834	30	199	20
	Sub Total for RQ1	1326	260	19,759	200
	After removing duplicates		101		106
	Total Records from two databases:	1326	+	19759	= 21,085

Source: Author's creation, 2021

Appendix 2

Table 2.8. The Quality Assessment tool, and Scale of the study

Element	Scales				
	0- Absence	1- Low	2 – Medium	3 – High	Not Applicable
3. Research Questions/Objectives clarity	The article does not have clear objective	There is objective but it's not clearly defined	The objective is defined and stated but hard to understand, it could've been modified	The objective is attractive, well defined and stated	The objective/RQ is not found in the article
4. Theory Robustness	The article does not provide enough information to assess this criterion	Weak development of theoretical insights and limited awareness of prevailing literature.	Basic development of theory & use of concepts garnered from existing literature	Good use of theory, including the novel & provocative development of concepts.	This element is not relevant to the study

3. Methodology. Data supporting arguments.	The article does not contain clear research design and sampling section	Research design and sample are weak	Research design and sampling procedures are stated even if few of methodology components are missing	Research design and sampling procedures are clearly stated	This element is not relevant to the study
5. Implication for practice	The article does not provide enough information to assess this criterion	Hard to use the concepts and ideas in pragmatic problem solving	The studies findings and observations have potential utility for businesses and policy makers	The utility for practitioners is clear	This element is not relevant to the study
5. Relevance of Findings to the current study	The article does not provide enough information to assess this criterion	Only tangentially relevant. provocative but linked to 'line of flight'	Broadly relevant – perhaps in one of the areas, or applied in different disciplinary field	High level of relevance across findings, methods and theoretical constructs/ concepts	This element is not relevant to the study

Source: Adopted from Dixon-Woods et al. (2006), Littell et al. (2008), and Pittaway et al., (2004)

Table 2.9. The Critical Appraisal of the Study Quality (demo)

Study Id	Research Question/Objectives	Theory Robustness/RQ or RO clarity	Methodology, Data accessibility & availability	Relevance of findings/results	Implication for practice	Average
Study01	4	2	3	4	3	3.2
Study02	2	4	4	4	3	3.4
.						
.						
.						

Source: Author's Creation, 2021

Table 2.10. The codebook for Data Extraction (Nodes)

Name	Description	Sources	References
Aim or Research questions		60	65
Characteristics of studies		60	178
Country	The country where the study conducted	0	0
Discipline	The field of study which the article affiliates		
Applied Psychology		5	-
Economics		15	-
Entrepreneurship		17	-
Management		22	-
funding sources	The sources findings of the studies	6	6

Journals	The journal in which the study published	55	61
Keywords	The keywords identified by authors	48	48
the study period	The period when a study conducted or published	53	61
Limitations and future research direction	The limitations and future research directions of a study	36	53
Research Methodology		4	5
database source	The database from where studies collected data	26	53
Model	The statistical model used for a study	33	59
Number of participating countries	Countries where a study is conducted	43	55
Sample size	The sample size of study subjects	23	31
Study design		33	40
Study subjects or participants	Business Students, Adults 19-65, Entrepreneurs & non-entrepreneurs with entrepreneurial intention, and Countries	9	9
Study's Findings or Results		0	0
business performance (BP), Entrep and NC	The association between entrepreneurship, national culture and business performance	14	63
Control variables	Those variables could probably alter the effect	6	10
Mediator variables	Those variables could cause more effective and act as links between IV and DV	6	9
National culture as moderator	National culture as a moderator for the relationship between Entrep and BP	3	10
Economic growth, Entrep and NC	The Influence economic Development in the Relationship between Entrepreneurship and National Culture	20	68
Control variables		5	17
dependent variables	The outcome or predicted variables	8	9
Economic growth as a moderator or mediator	Economic growth as a moderator or mediator of the relationship between national and entrepreneurship	7	27
Independent variables	The predictors or explanatory variables	9	19
another moderator and mediator	Other mediating and moderating variables along with economic development	5	9
Entrepreneurship and Culture	The dimensions of national culture and its effect on entrepreneurship growth	28	110
Control variables	Contributing factors that are fixed or eliminated to identify the r/ship between IVs & DV	11	35

Dependent variable	Culture	19	33
Independent variable	Entrepreneurship	21	62
Indifferent relationship		1	6
mediating and moderating variables		7	18
Innov and NC	R/n & effect between Innovativeness & National culture (NC)	20	112
Control variables		2	8
Innov and Individual	Innovativeness and individualism versus collectivism culture	7	18
Innov and long versus short term	Innovativeness and long term versus short term orientation	1	1
Innov and Masculine	The relationship between Innovativeness and masculinity versus femininity culture	2	3
Innov and Power distance	The relationship between innovativeness and power distance culture	5	14
Innov and restraint	innovativeness and restraint versus Indulgence culture	0	0
Innov and UA	Innovativeness and uncertainty avoidance culture	3	4
Moderators and mediators	Moderating and mediating and control variables of innovativeness and national culture	4	6
Proactive and national culture dimensions		2	6
Control variables		0	0
Moderators and mediators	Moderators and mediators in the relationship between proactiveness & National culture dimensions	0	0
Proactive and Individualism	Proactive and Individualism versus collectivism	0	0
Proactive and Indulgence	Proactiveness and Indulgence versus restraint culture	0	0
Proactive and long term	Proactive and long term versus short orientation	0	0
Proactive and masculism	Proactiveness and masculinism versus feminism national culture	0	0
Proactive and power distance	The relationship between proactiveness and national culture dimensions	0	0
Proactive and UA	Proactiveness and uncertainty avoidance culture	0	0

Risk taking and National culture	R/n & effect between Risk taking & National culture dimensions	8	42
Control variables		3	6
Moderators and mediators	Moderating and mediating and control variables of risk-taking and national culture	1	2
Risk and Individualism	Risk taking and individualism versus collectivism culture	6	21
Risk and Indulgence	Risk taking and indulgence versus restraint culture	0	0
Risk and Long-term	Risk taking and long- and short-term orientation	1	7
Risk and Masculine	Risk taking and Masculinism versus femininity culture	0	0
Risk and Power distance	Risk taking and power distance culture	1	1
Risk and UA	Risk taking and Uncertainty avoidance culture	2	5
Study Id		0	0
Title		60	61

Source: Author's creation, 2022

Appendix 3

Table 2. 2. The proportion of studies on national culture and entrepreneurial orientation as per the discipline

Nodes	The aggregate number of coding references	Number of sources coded
Nodes\\Charactx of studies\\Discipline\\Applied Psychology	3	6
Nodes\\Charactx of studies\\Discipline\\Economics	7	15
Nodes\\Charactx of studies\\Discipline\\Entrepreneurship	6	17
Nodes\\Charactx of studies\\Discipline\\Management	9	22
Nodes\\Charactx of studies\\Discipline	27	60

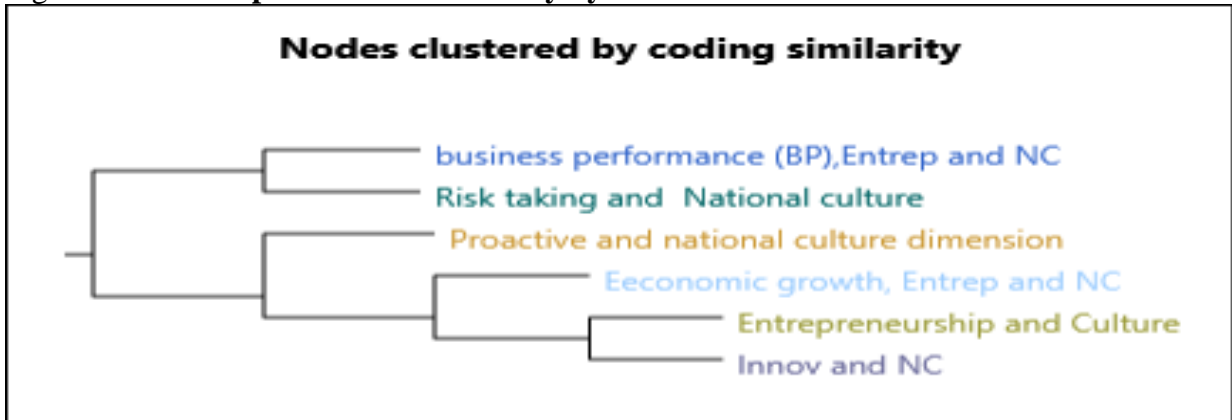
Source: **Own analysis result, 2021**

Table 2.3. The data source of the studies

Category	Size	Proportion
One database	10	16.7
Two databases	11	18.3
Three databases	8	13.3
Total of only database-based	29	48.3
Either Survey only or both survey & database	21	35.0
Literature Review	10	16.7
Total of studies	60	100.0

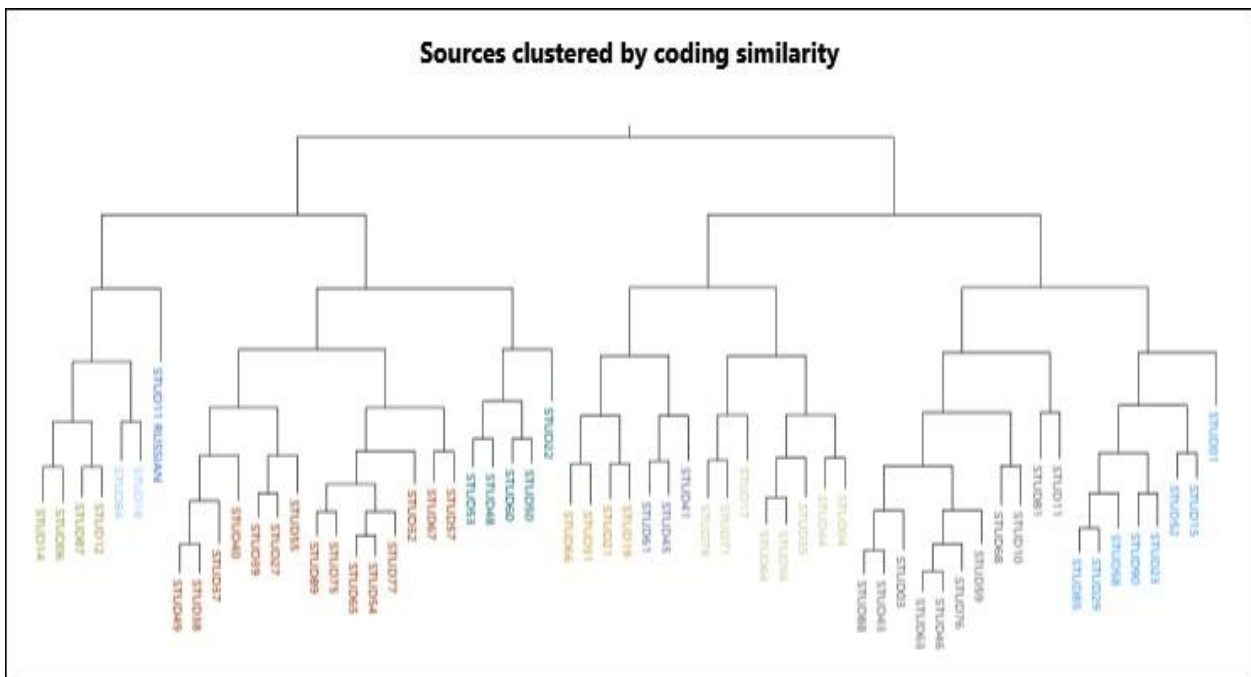
Source: Own analysis result, 2021

Figure 2.4. The Topic Model of the Study by NVivo



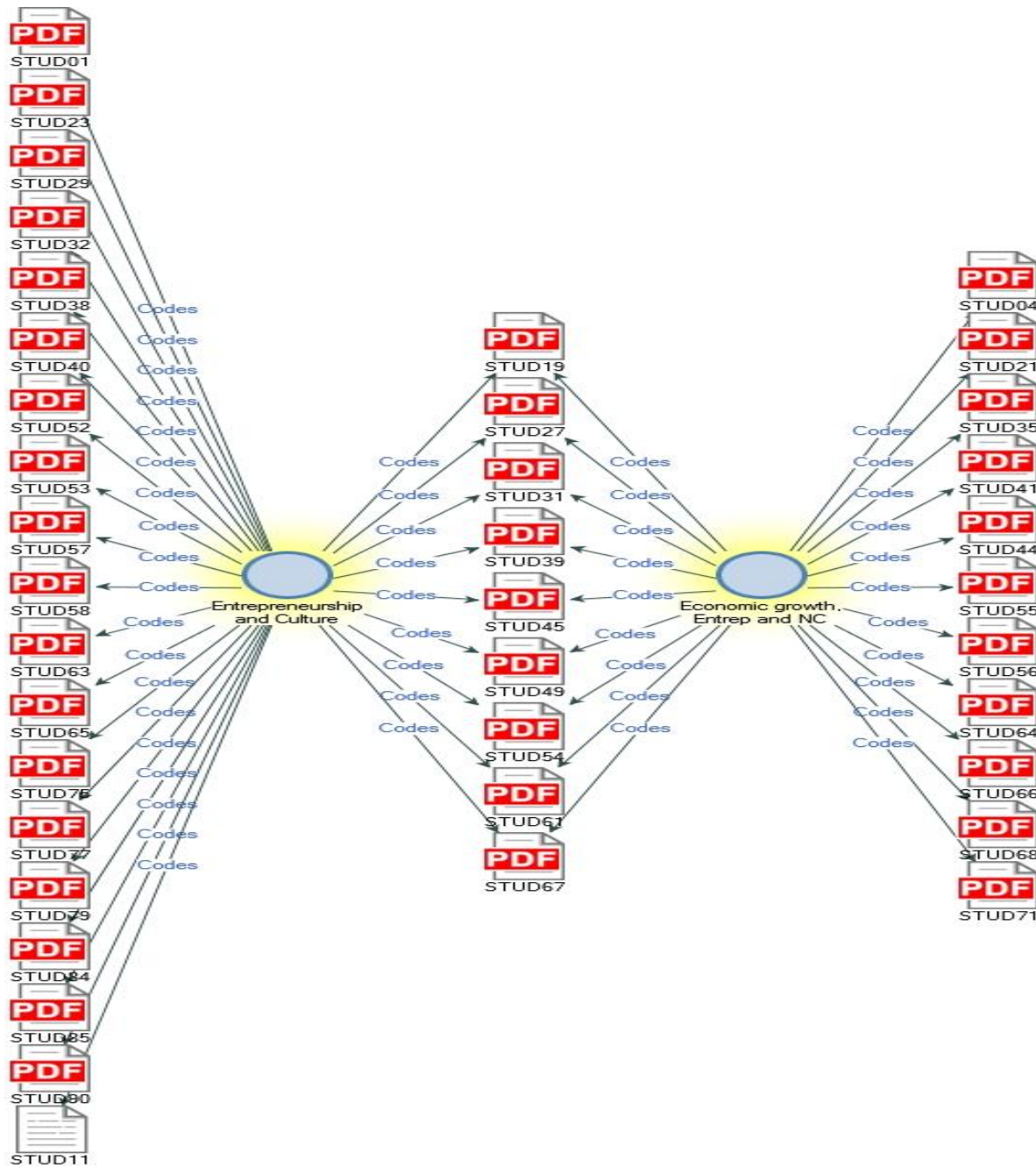
Source: Own review NVivo output, 2021

Figure 2.5. Sources (studies) Clustered by Coding Similarity



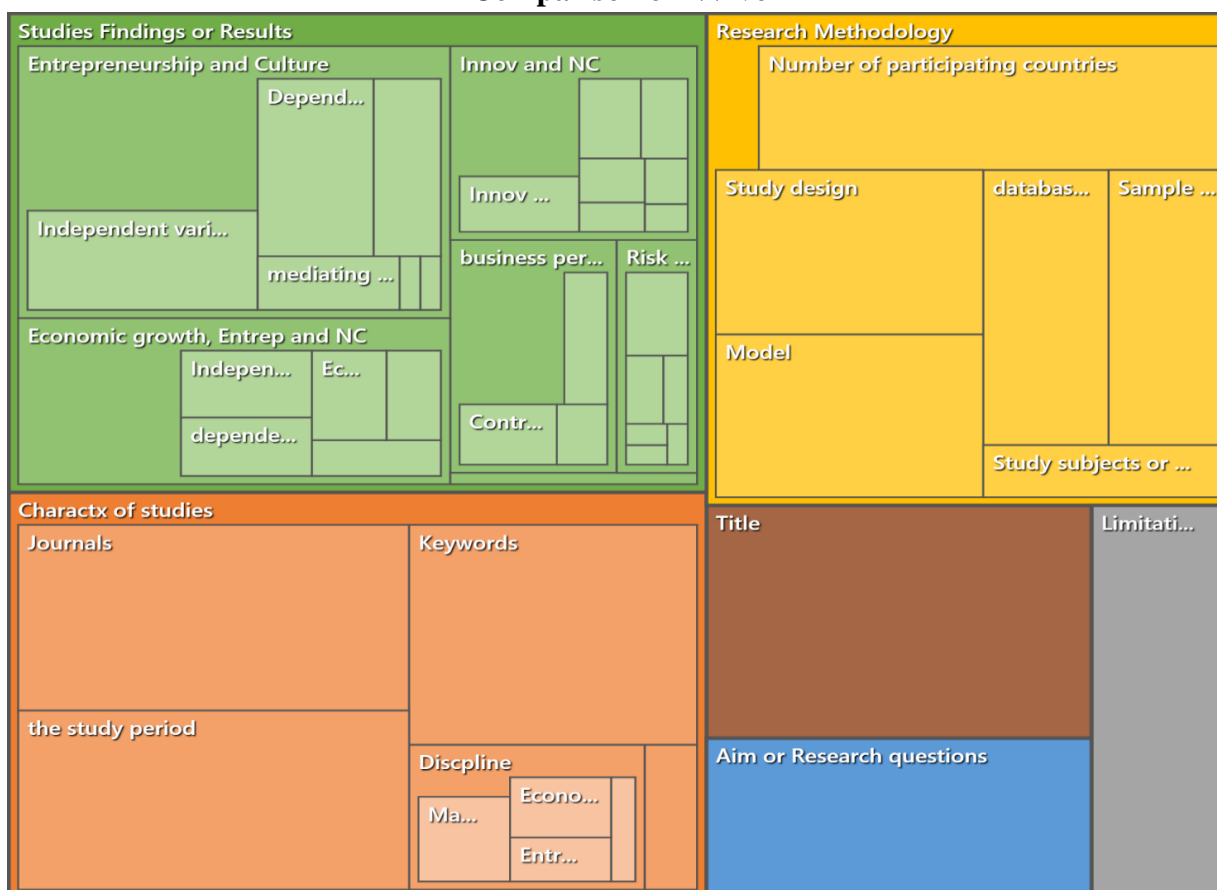
Source: Own review NVivo result, 2022

Figure 2.6. The Nexus Among Entrepreneurial Orientation, National Culture, Business Performance, and Economic Growth



Source: Own Review NVivo result, 2021

Figure 2.7., The Portfolio of the Coding Process and Nodes using Hierarchical Comparison of NVivo



Source: Own review NVivo outputs, 2021

Table, 2.5. The software program mainly applied

No.	Softwares	Sources
1	STATA	e.g. Çelikkol et al., (2019)
2	software R	e.g. Lortie et al., (2019)
3	SPSS, SPSS 20.00, SPSS 21.00	e.g. Hancioğlu et al., (2014) & Khadhraoui et al., (2019)
	SPSS 21.0 using specially developed macros	e.g. Laskovaia et al., (2017)
	SPSS 21 software	e.g. Morales-Alonso et al(2021)
	SPSS AMOS 23 data analysis software package	e.g. Munyanyi, et al. (2018)
	Andrew Hayes' Simultaneous Entry on SPSS 23.0 and PROCESS 3	e.g. Onwe et al., (2020)
	IBM® SPSS Statistics software	e.g., Lee Park and Paiva, 2018)

Source: Own review NVivo outputs, 2021

Appendix 4

Table 3.19. The moderated moderation model of the three-way interaction

```

Model = 3
  Y = AverBP
  X = AverEO
  M = AverAF
  W = AverMD
Statistical Controls:
CONTROL= FIRMTYPE AverHC   Q11FirmS Q7LegOwn SUMEXP
Sample size
      190
*****
**
Outcome: AverBP

Model Summary
      R      R-sq      MSE      F      df1      df2      p
      .39      .15      .34      2.94     12.00     177.00     .00

Model
      coeff      se      t      p      LLCI      ULCI
constant      3.59      .60      6.03      .00      2.42      4.77
AverAF          .13      .09      1.43      .15      -.05      .31
AverEO          .31      .14      2.17      .03      .03      .60
int_1           .30      .24      1.24      .22      -.18      .78
AverMD          .00      .13      -.01      .99      -.25      .25
int_2          -.24      .20     -1.22      .23      -.64      .15
int_3           .07      .21      .33      .74      -.34      .48
int_4          -.04      .32     -.13      .89      -.68      .59
FIRMTYPE        .04      .04      1.19      .24      -.03      .11
AverHC          -.07      .14     -.47      .64      -.34      .21
Q11FirmS       -.02      .07     -.28      .78      -.17      .12
Q7LegOwn        .00      .06      .00      1.00     -.11      .11
SUMEXP        -.12      .05     -2.20      .03     -.22     -.01

Product terms key:

int_1  AverEO  X  AverAF
int_2  AverEO  X  AverMD
int_3  AverAF  X  AverMD
int_4  AverEO  X  AverAF  X  AverMD

R-square increase due to three-way interaction:
      R2-chng  F(1,df2)      df2      p
int_4      .00      .02     177.00     .89

```

Table 3.20. Conditional effect of EO(X) on Business performance(Y) at values of the moderator(s)

```

Conditional effect of X on Y at values of the moderator(s):
      AverMD  AverAF  Effect      se      t      p      LLCI      ULCI
      -.54   -.72    .21     .27     .80    .43    -.31     .74
      -.54    .00    .45     .19    2.33    .02     .07     .82
      -.54    .72    .68     .37    1.82    .07    -.06    1.42
      .00   -.72    .10     .17    .57    .57    -.24    .43

```

.00	.00	.31	.14	2.17	.03	.03	.60
.00	.72	.53	.27	1.95	.05	-.01	1.07
.54	-.72	-.02	.20	-.09	.93	-.42	.39
.54	.00	.18	.17	1.07	.28	-.15	.52
.54	.72	.38	.25	1.51	.13	-.12	.88

Values for quantitative moderators are the mean and plus/minus one SD from mean.

Values for dichotomous moderators are the two values of the moderator.

Conditional effect of X*M interaction at values of W:

AverMD	Effect	se	t	p	LLCI	ULCI
-.54	.32	.36	.89	.37	-.39	1.04
.00	.30	.24	1.24	.22	-.18	.78
.54	.28	.22	1.29	.20	-.15	.70

Table 5.1. Proposed Financing Options for SMEs in Ethiopia

No.	SME Financing Options	Availability & Accessibility	Level of Difficulty	Time for Action	Responsible	Suggestion
1.	Finance Leasing	Available but less accessible	Low	Less	Micro-Finance & Banks	Lower the initial deposit as low as possible.
2.	Capital leasing	Available but less accessible	Medium	Long	Development Banks & capital goods supply agents	Reduce the lead time and equity contribution from 25% to 20%, machinery lease initial deposit from 20% to 15%, and interest rate from 9-12% to 8-10%
3.	Collateral based loan	Available but less accessible	High	Medium	Commercial Banks and Microfinance	Provide options for both moveable & immovable property.
4.	Financial statement-based	Not available	Low	Less	Commercial Banks and Microfinance	Consider at least 3-6 months' statements and lend
5.	Credit scoring	Not available	High	High	Commercial Banks and Microfinance	Provide a centralized system showing credit history of the SMEs.
6.	Factoring	Not available	Medium	Medium	Government, Banks, Buyers, Investment agencies or Financiers	Enact supporting laws e.g., Indian-Trade Receivable Discounting System (TREDS)
7.	Equity Market Equity crowdfunding	Not available	High	Long	Government National & Commercial Banks	Open Equity market & enlist companies for public trading
8.	Small Business Development Trust Fund	Not available	Low	Less	Government Development Bank	Establish a Dedicated Fund that guarantees banks on loan to SMEs. Grants
9	Venture Capital	Not available	Medium	Medium	Government Intermediary mutual fund	Enact laws for venture capital
10	Non-equity Crowdfunding	Not available	High	Long	Private agencies Government	Enact supportive laws Encourage, Motivate & Train Entrepreneurs how to do campaign on online platform like e.g., Kickstarter, INDIEGOGO, GoFundMe, KIVA
11.	Traditional Source: -family & friends Angel or seed investors	Yes but needs to work on more	less	less	Family members, friends, Relatives, private investors, SME Owners or entrepreneurs	Train SME owners how to raise funds, do bargaining or negotiate. Facilitate the involvement of angel investors

Appendix 5

Section I. Questionnaire

University of Pecs
Faculty of Business and Economics
Department of Management Science
International Ph.D. program in Business Administration

Questionnaire to be filled by Managers or owners or executives of companies

ጥያቄ መጠይቁ ከአማርኛ ትርጉም ጋር፣ እባክዎን ይህንን የአማርኛ ትርጉም እያነበቡ በሌላው በእንግሊዘኛው መጠይቁ ላይ ያስጥሉ

Part I. General Information

Please read each question carefully and follow the respective instructions. Please give a single answer to questions by circling the number in the box that best describes your answer.

Q1. Please indicate your gender (ጾታ)

	1	Female	2
Male			

Q2. Please indicate your age (ዕድሜ)

Range of Years (Please encircle One)			
Between 20 to 30 Years	1	Between 30 and 40 Year	2
Between 40 and 50 Years	3	Over 50 Years	4

Q3 To date, what has been your highest education qualification? (Please circle one box only)(ት/ት ደረጃ)

Level of Education (Please encircle one)			
Secondary school and below	1	Some College (Certificate/ Diploma)	2
University (bachelor's degree)	3	Masters	4
Doctorate Degree	5		

Q4 Please indicate the number of years this firm has been operating (Please encircle one)(የድርጅቱ እድሜ)

Below 1 years	1	Between 1 to 3 years	2
Between 3 and 5 years	3	Above 5 years	4

Q5. How many years of managerial experience do you have in this firm? (Please encircle one)(በድርጅቱ ውስጥ በሃላፊነት ቦታ የሰሩበት አመት)

Below 1 years	1	Between 1 to 3years	2
Between 3 and 5 years	3	Above 5 years	4

Q6. How many years of managerial experience do you have in this firm and outside of this firm, altogether? (Please encircle one) (በድርጅቱ ውስጥና ከድርጅቱ ውጭ በሃላፊነት ቦታ የሰሩበት አመት አንድላይ)

Below 1 years	1	Between 1 to 3years	2
Between 3 and 5 years	3	Above 5 years	4

Q7. What is the legal ownership form of your firm or company? (Please encircle one)(የድርጅቱ የባሌቤትናት ሲያሜ)

Sole Trader / Single Owner(የግል)	1	Private Limited Company	2
Partnership/ Jointly Owned(የማህበር/የሽርክና)	3	Company or corporation (4
If others, please mention			

Q8. What is the number of employees (both part time and full time) who are currently working in your Organization? **ጠቅላላ ሰራተኛ**

Q9. How many permanent(full-time) employees do you have? (Please encircle one) **ቋሚ ሰራተኛ ብዛት**

No of Employees (Please Circle)			
1– 10	1	11–50	2
51 –200	3	>200	4

Q10. How many people are temporarily employed (**contractual workers**) in this business? (Please encircle one)**ጊዛዊ ሰራተኛ**

No. of Employees (Please Circle)			
1 – 10	1	11 – 50	2
51 – 200	3	>200	4

Q11. In which category does your company belong to? (Please encircle one) የድርጅቱ ምድብ

Micro(ጥቃቅን)	1	Small(አነስተኛ)	2
Medium(መካከለኛ)	3	Large(ከፍተኛ)	4

Q12. Please indicate the category of industry where your company belongs to? (Please encircle one)

Textile(ጨርቃ ጨርቃ)	1	Meat and dairy product	2
Leather (የቆዳ ውጤቶች)	3	Wood and metal(እንጨትና ብረታ ብረት)	4
Food and beverage	5	Construction and Chemical inputs	6

Q13. How much did it cost you to set up your business in Birr? (Please encircle one) መነሻ ካፒታል

Below 100,000	1	100,001 – 500,000	2
500,001 – 1,000,000	3	1,000,001 – 2,000,000	4
2,000,0001-5,000,000	5	Over 5,000,000	6

Q14. How much is your total capital as of the current fiscal year in Birr? (Please encircle one) አሁን ያለው ጠቅላላ ካፒታል

Below 100,000	1	100,001 – 500,000	2
500,001 – 1,000,000	3	1,000,001 – 2,000,000	4
2,000,000-5,000,000	5	Over 5,000,000	6

Q15. What range best describes your annual Sales in Birr? (Please encircle one) አመታዊ ሺያጭ

Below 500,000	1	500,001 -1,000,000	2
1,000,001-2,000,000	3	2,000,000-3,000,000	4
3,000,001-4,000,001	5	Above 4,000,000	6

Q16. How do you assess the **general growth** of the industry to which your firm belongs to in the last three years (Please circle one)? ጠቅላላ እድገት በኢንዱስትሪ ደረጃ

Highly declining	1	Declining	2
Stagnant (no decline, no growth)	3	Growing	4
Highly growing	5		

Q17. How do you assess the **general growth** of your own firm in the last three years?(Please circle one) ጠቅላላ እድገት በዚህ ድርጅት ደረጃ

Highly declining	1	Declining	2
Stagnant (no decline, no growth)	3	Growing	4
Highly growing	5		

Q18. What proportion of your customers exist outside of your zone or region within the country? ከዞን/ከክልል ውጭ ያለው ደንበኛ

0%	1	Only 10%	2
25% of customers	3	50% of customers	4
>50%	5		

Q19. What proportion of your suppliers exist outside of your zone or region within the country? ከዞን/ከክልል ውጭ ያለው አቅራቢ

0%	1	Only 10% of suppliers	2
25% of suppliers	3	50% of suppliers	4
>50%	5		

Q1.20. What proportion of your customers live or reside outside of your country? ከአገር ውጭ ያለው ደንበኛ

0%	1	Only 10%	2
----	---	----------	---

25% of customers >50%	3	50% of customers	4
--------------------------	---	------------------	---

Q21. What proportion of your suppliers exists outside of your country? ከአገር ውጭ ያለው አቅራቢ

0%	1	Only 10% of suppliers	2
25% of suppliers	3	50% of suppliers	4
>50%	5		

Q22. What percentage of your net sales is from direct export over the last **three** years? ወደ ውጭ የሚላክ ሲያጭ በመቶዎች

0%	1	< 10%	2
11-25% of suppliers	3	25- 50% of suppliers	4
>50%	5		

Q23. How do you assess the potential of your business' products/services to be sold abroad? ወደ ውጭ የመላክ አቅም

No potential	1	Enough potential	3
Less potential	2	High potential	4

Q24. How do you evaluate the following challenges for the growth of your business? Please encircle one

Items	Not a problem(1)	Somewhat a problem(2)	A moderate problem(3)	A big problem (4)	A very big problem(5)
A. Lack of adequate human capital ባለሙያ እጥረት	1	2	3	4	5
B. Lack of sufficient financial capital የገንዘብ እጥረት	1	2	3	4	5
C. Lack of market networks የገበያ ትስስር እጥረት	1	2	3	4	5
D. Inadequate infrastructure Electricity መብራት	1	2	3	4	5
Roads	1	2	3	4	5
E. Lagging in technology(ኋላ ቀር ተክኖሎጂ)	1	2	3	4	5
F. Political instability(የፖለቲካ አለመረጋጋት)	1	2	3	4	5
If others, please mention.....					

Q24.1, Please kindly put in rank the ITEMS under Q24 based on their severity and frequency of problems(just write letters A to F):(ከላይ ያሉትን በቅደም ተከተል) 1st 2nd 3rd 4th 5th 6th

Q25. How often does your company use the following online means or social media to engage with customers ? ማህበራዊ ሚዲያ አጠቃቀም

	Not all (1)	Rarely(2)	Sometimes (3)	Usually(4)	Always(5)
Facebook	1	2	3	4	5
Instagram	1	2	3	4	5
Twitter	1	2	3	4	5
Youtube	1	2	3	4	5
Webiste of company	1	2	3	4	5
Pinterest	1	2	3	4	5
If others, please mention -----					

Q 26. Did Covid 19 affect your business negatively?

Yes	1	No	2
-----	---	----	---

Q27. If yes for Q26, how much has it affected your company business?

Areas of performance	Not Affected at all(1)	Slightly Affected(2)	Moderately Affected(3)	Significantly Affected(4)	Severely Affected(5)
Sales & distribution (የሰርጭት መቀነስ) market share/customers(ደምበኛ መቀነስ)	1	2	3	4	5
Profit after tax(ከግብር በኋላ ያለው ትርፍ)	1	2	3	4	5
Size of employees(የሰራተኛ ቅንሳ)	1	2	3	4	5
Innovation and investment (አዳዲስ ምርቶችን ማስገባት ላይ)	1	2	3	4	5
Expansion & growth(ማስፋፍያ ላይ)	1	2	3	4	5

Q28. If yes for Q26, by how much percent your revenue is decreased this year comparing to the last year? (ከበለፈው ዓመት አንጻር ሲታይ ዘንድ ገቢ ከመቶ በስንት እጅ ቀንሷል)

Part II. Entrepreneurial Orientation

Where: 1= strongly disagree 2= disagree, 3=neutral, 4=agree, 5= strongly agree

1፣ በጣም አልስማማም፣ 2፣ አልስማማም 3፣ ለመወሰን ይከብዳል/እርግጠኛ መሆን አይችልም/እንጂ 4፣ እስማማለሁ 5፣ በጣም እስማማለሁ

No.	Entrepreneurial Orientation Constructs and Items	Scale				
		1	2	3	4	5
I) Autonomy						
Aut01	Employees are given freedom and independence to decide on their own how to get the work done(ለሰራተኛ በራሳቸው መንገድ እንዲሰሩ ነጻነት ይሰጣል)	1	2	3	4	5
Aut02	We approve employees to independently develop business ideas and carry them throughout completion. (የንግድ ሃሳቦችን እንዲያፈልቁና ሰርተው እንዲያሳዩ ይበረታታል)	1	2	3	4	5
Aut03	We encourage employees to be self-directed in pursuit of business opportunities in target markets.(በራሳቸው በኩል ገበያን እንዲያመጡና እድሎችን እንዲያጠኑ ይደረጋል)	1	2	3	4	5
Aut04	We give employees access to vital information related to finance, technology and company’s vision and objectives (ገቢ ወጭን ጨምሮ ወሳኝ መረጃዎችን ሁሉ ለሰራተኛ ግልጽ እናደርጋለን)	1	2	3	4	5
II) Competitive Aggressiveness						
Comp01	We typically adopt an “outperform-the-competitor” response in our target markets.(በቡዙ ነገሮች በአፈጻጸም ከተፎካካሪዎች የተሻልን ነገን ብለን እናስባለን)	1	2	3	4	5
Comp02	We adopt more of an offensive posture when dealing with our competitors in price reduction and introduction of new products(ዋጋ በመቀነስና በየጊዜው አዳዲስ ምርቶችን በማምጣት ተፎካካሪዎችን እንቀድማለን)	1	2	3	4	5
Comp03	Our actions toward competitors can be termed as aggressive in terms of promotion and sales strategies.(ለየት ያሉ የማስታወቂያ ስራዎችንና የሺያጭ ዜዳዎችን በመቀየስ እንቀድማለን)	1	2	3	4	5
III) Innovativeness						
Inno01	We promote new, innovative products/services in our business(ሁሉ አዳዲስ ምርት/ዲዛይን/አገልግሎት በማሰታወቅ ላይ እናተኩራለን)	1	2	3	4	5
Inno02	Our business provides technological leadership in developing new products/services.(አዳዲስ ምርትና አገልግሎት ለማምረት በሚያስችሉ ቴክኖሎጂ አጠቃቀም ላይ እናተኩራለን)	1	2	3	4	5
Inno03	We constantly experiment with unique new processes and methods of production to seek unusual, novel solutions(ፈጣንና ቀለል ያሉ ዜዳዎችን/የምርት ህድዳዎችን እንከተላለን)	1	2	3	4	5
IV) Proactiveness						
Pro01	We seek to exploit anticipated changes in future market conditions(ገበያ ላይ ሊመጡ ያሉትን ለውጦችን(የምርት/የአገልግሎት/የዲዛይን) ቅደም ብለን እንገምታለን እንዘጋጃለንም)	1	2	3	4	5

Pro02	We look forward with initiatives to seize opportunity whenever possible in our target market operations(ሁል ጊዜ መልካም አጋጣሚዎችን(ለምሳሌ፡ጩረታን) ለመጠቀም ጥረት እናደርጋለን	1	2	3	4	5
Pro03	We act opportunistically to shape the business environment in which we operate(በንግድ ዘርፋችን የደምበኞችን ፍላጎት በማርካት ተሻለንና በጎ ተጽዕኖ ፈጣሪዎች ለመሆን ጥረት እናደርጋለን)	1	2	3	4	5
V)	Risk Taking					
Risk01	Our business, in general, tends to invest in high-risk projects (with chances of high returns). ብዙ ጊዜ ትርፋማ እንደምያደርግ እርግጠኛ ባልሆንንበት ጉዳይ ገንዘብን በድፍረት አውጥተን እናውቃለን)	1	2	3	4	5
Risk02	Our business shows a great deal of tolerance for venturing into the unknown.(ከተለመደው ቢዝነስ ስራዎቻችን ውጭ ሌሎች ስራዎችን እንሰራለን)	1	2	3	4	5
Risk03	Our business strategy is characterized by a tendency to commit resources into projects with uncertain outcomes.(አዋጭነታቸው ባልተረጋገጡ ስራዎች ወይም ፕሮጀክቶች ላይ በጀት ምደባን እናውቃለን)	1	2	3	4	5

VI)	Networking					
I	Business network ties					
BNT1	Customers:(ከደምበኞች ጋር) 1. My company’s customers trust and make open communication with the company including giving feedback (ከደምበኛ ጋር ጥሩ መታማመንና መግባባት አለን አስተያየት እንጠይቃለን) 2. My company keeps the details of customers and contacts them easily for promotion or anything else (የደምበኞቻችን ሙሉ መራጃ ጽፈን እንይዛለን) 3. We adequately engage on social media to get customers feedback and gives immediate response(በማህበራዊ ሚዲያ የደምበኞችን አስተያየት እንቀበላለን ምላሽንም እንሰጣለን)	1	2	3	4	5
		1	2	3	4	5
		1	2	3	4	5
BNT2:	Suppliers: (ከአቅራቢዎች ጋር) 1. My company’s suppliers trust and make regular communication through different means email, phone, social media, etc.(ከአቅራቢዎች ጋር ጥሩ መታማመንና መግባባት አለን አስተያየት እንጠይቃለን) 2. My company has established long lasting relationship with suppliers(ለረዥም ጊዜ ለምሳሌ 4ና 5 ዓመት የቆየ አቅራቢ አለን)	1	2	3	4	5
		1	2	3	4	5
BNT3:	Competitors:(ከተፎካካሪዎች ጋር) 1.My company identifies and knows all its competitors(የተፎካካሪዎችን ሁሉንም ምርታቸውንና ዋጋቸውን ጭምር እናውቃለን) 2.My company shares important information or resources with competitors if needed(አስፈላጊ ሰሆን ከተፎካካሪዎች ጋር አንዳንድ ነገሮችን እንዋዋሳለን)	1	2	3	4	5
		1	2	3	4	5
		1	2	3	4	5

	3. My company is a key member of a trade association or industry policy committee (ድርጅታችን ከተፎካካሪዎች ጋር በሚኖረን የጋራ መድረክ ንቁ ተሳታፊ ነው)					
BNT4:	Distributors:(ከአካፋዮች ጋር)	1	2	3	4	5
	1. My company has an automated logistics and tracking systems(ፈጣንና ቀልጠፋ የትራንስፎርት አገልግሎት ለደምበኞች እንሰጣለን) 2. My company established strong relationship with distributors and they trustworthy to the company(ምርቶቻችን ከሚያከፋፍሉ ጋር መልካምና ረዥም ጊዜ የቆየ ግንኙነት አለን)	1	2	3	4	5
II	Social or Personal networks					
SN1	I can obtain information about my industry from my network of contacts faster than competitors can obtain the same information. (ከተፎካካሪዎች በተሻለ ፍጥነት መራጃ የሚያደርሱልን የውስጥ አዋቂዎች አሉን)	1	2	3	4	5
SN2:	I have a professional relationship with someone influential in my industry(በቢዝነስ ስራ ዘርፋችን ድጋፍ ከሚሰጡ ባለሙያዎች ጋር ጥሩ ግንኙነት አለን).	1	2	3	4	5
SN3:	I have engaged with someone influential in my industry in informal social activity (e.g., playing tennis)(በሰፈር ህበረት ሊሆን ይችላል በስፖርት ማዘወተሪያ ቦታዎች ጠቃሚ መራጃዎችን የሚያደረሱ ሰዎች አሉን)	1	2	3	4	5

Part III. The Dynamism of Market(በኢንዱስትሪ ውስጥ ያለው ተለዋዋጭነትና የለወጥ ፍጥነት)

Selecting '1' indicates that you strongly disagree with the statement, selecting a five indicates that you strongly agree with the statement, and selecting 3 indicates neutrality – neither nor disagree 1፣ በጣም አልስማማም፣ 2፣ አልስማማም 3፣ ለመወሰን ይከበዳል/እርግጠኛ መሆን አይችልም/እንጂ 4፣ እስማማለሁ 5፣ በጣም እስማማለሁ

Statement		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
3.1	Products, services and processes in the industry change very quickly. (ምርቶችና አገልግሎቶች ቶሎ ቶሎ የመቀያየር ባህሪ አላቸው)	1	2	3	4	5
3.2	Products, services and processes in the industry become obsolete very quickly. ((ምርቶችና አገልግሎቶች ቶሎ ቶሎ ከመቀያየር ጋር ተያይዞ የዱሮዎቹ ብዙ አይፈለጉም)	1	2	3	4	5
3.3	In the Industry consumer demands and tastes change very frequently (የደምበኛ ፍላጎትና ምርጫ ቶሎ ቶሎ ይቀያየራል)	1	2	3	4	5

3.4	Firms in the Industry must frequently change their business strategy to keep in pace with the market (ድርጅቶች በየጊዜው አዳዲስ ዜዳዎችን መማርና መሰልጠን ይጠበቅባቸዋል)	1	2	3	4	5
3.5	Customers in the industry are quite diverse in their demands and buying habits (ደምበኞቻችን የተለያዩ ናቸው(መንግስት መስሪያ ቤቶች፣ግል ድርጅቶችና ግለሰቦችን ያካታታል)	1	2	3	4	5
3.6	The industry, products and lines are considerably diverse (ብዙ ዓይነት ምርት እናመርታለን ጠሬጴዛ፣ አልጋ፣በሮች፣ወዘተ)	1	2	3	4	5
3.7	In the industry, changes in customer preferences for product features are not easy to predict (ደምበኞች ፍላጎት ከመቀያየሩ ጋር ተያይዞ ለመገመት ያዳግታል)	1	2	3	4	5
3.8	Technologically, your company sector is a sophisticated industry with high rate of innovation (በዘርፉ ላይ በየጊዜው አዳዲስ ምርቶችና ግኝቶች የተለመዱ ናቸው)	1	2	3	4	5
3.9	Your company exists in extremely research and development-oriented industry (በዘርፉ በተለያዩ ጊዜያት ጥናቶችና ምርምሮች ይሰራሉ)	1	2	3	4	5
3.10	The decision & strategies of competitors are quite unpredictable. (የተፎካካሪዎች ውሳኔና ዜዳዎችን ለመገመት ከባድ ነው)	1	2	3	4	5

Part IV. Access to Finance (የገንዘብ አቅርቦት)

Where: 1= strongly disagree 2= disagree 3=neutral 4=agree 5= strongly agree

1፣ በጣም አልስማማም፣ 2፣ አልስማማም 3፣ ለመወሰን ይከበዳል/እርግጠኛ መሆን አይችልም/እንጂ 4፣ እስማማለሁ 5፣ በጣም እስማማለሁ

No.	Items	1	2	3	4	5
AF1	The access to finance has been fully satisfactory for the firm's development(ለድርጅታችን በቅ የገንዘብ አቅርቦት አለን)	1	2	3	4	5
AF2	My company's business operations are better financed than our key competitors' operations(ለድርጅታችን ከሌላው የተሻለ የገንዘብ አቅርቦት አማራጮች አሉን)	1	2	3	4	5
AF3	My company has easy access to finance and can get the required loan from financial institutions without unnecessary	1	2	3	4	5

	delay(ከብድር ሰጭ ተቋማት ያለ ብዙ መንገዳት ብድር ማግኘት እንችላለን)					
AF4	There procedures and requirements to get finance is not complicated (የብድር ማግኛ ህደቶችና መስፍርቶች ብዙ የተወሰሱ አይደሉም)	1	2	3	4	5
AF5	My company has adequate financial service providing institutions like banks, investment agencies, venture capitalists, etc.(በአካባቢያችን በቅ ብድር ሰጭ ተቋማት አሉ)	1	2	3	4	5
AF6	My company engages in and raises fund from crowd sourcing or donors or using other traditional means of saving and investment(ከብድር ሰጭ ተቋማት ውጭ በቀላሉ ከዳደሮች፣ከዘመድና ከሌሎች ምንጮች ገንዘብ ማግኘት ይቻላል)	1	2	3	4	5

Part VI. Human Capital (የሰው ሃብት)

Where **Where: 1= strongly disagree 2= disagree 3=neutral 4=agree 5= strongly agree**

1፣ በጣም አልስማማም፣ 2፣ አልስማማም 3፣ ለመወሰን ይከበዳል/እርግጠኛ መሆን አይችልም/እንጂ 4፣ እስማማለሁ 5፣ በጣም እስማማለሁ

No.	Experience (ልምድ)	1	2	3	4	5
EXP1	We utilize the experience of our employees in seeking opportunities in domestic and foreign markets(የሰረተኞቻችን ልምድ በአገረ ውስጥም ሆነ በውጭ ገበያ ተወዳዳሪ ያደርገናል)	1	2	3	4	5
EXP2	Our employees well understand the company’s business and are experienced in spreading information and attracting markets (ሰረተኞቻችን ስለስራው በቅ መራጃ አላቸው ያንንም መራጃ ሌሎች ያካፍላሉ)	1	2	3	4	5
EXP3	The business experiences of our employees assist us when we enter new markets or develop new products.(ከ ሰረተኞቻችን ልምድ የተነሳ በቀላሉ አዳዲስ ነገሮችን መቀበል/ማሳደግና ገበያ ላይ ማስተዋወቅ እንችላለን)	1	2	3	4	5
EXP4	Our employees are well familiar to the business process, procedures, culture, products and service of the firm (ሰረተኞቻችን የድረጅቱን ስራ ህደት፣ባህልና ምርቶችን በሚገባ ይረዱታል)	1	2	3	4	5
EXP5	Our employee’s business experience assists us to accept and manage risks in uncertain and changing environment(የሰረተኞቻችን ልምድ በመተማመን አንዳንድ ውሳኔዎችን በድፍረት እንወስናለን)	1	2	3	4	5
EXP6	We consider our employees as a source of competitive advantage against our competitors ((የሰረተኞቻችን ልምድ ከተገናኝተው ተሽላን እንድንገኝ ምክንያት ይሆናል)	1	2	3	4	5
Education (ትምህርት ደረጃ)						
EDU1	Most of our employees have the required educational degree/diploma((ሰረተኞቻችን ለሰራው የሚያስፈልግ በቅ ት/ት ዝግጅት አላቸው)	1	2	3	4	5

EDU2	Our employees' level of education enables us to enter new markets or develop new product easily(ሰረተኞቻችን ት/ት ደረጃ አዳዲስ ነገሮችን ለመጥከር እንደተጨማሪ ግባዓት ሊወስድ ይችላል)	1	2	3	4	5
EDU3	Our employees don't need close supervision and they can autonomously decide by themselves because of their good knowledge about the job(ሰረተኞቻችን የቅርብ ክትትል ሳያስፈልጋቸው በራሳቸው መስራት ይችላሉ)	1	2	3	4	5
EDU4	Our employees can immediately embrace technological changes prevailing in the markets.(ሰረተኞቻችን ገበያ ላይ ያለው የቴክኖሎጂ ለውጥ በቀላሉ መቀበልና መማሪያ ይችላሉ)	1	2	3	4	5
EDU5	Educated potential employees can easily be found and hired from the labor market to fill the job vacancy(የተማሩ ባለሙያተኞች በቀላሉ ከገበያ ሊገኙ ይችላሉ)	1	2	3	4	5
Skills(ክህሎት)						
SKI1	Our employees do have good customer management and communication skills (ሰረተኞቻችን በቅ ደምበኛን የመያዝና የተግባቦት ክህሎት አላቸው)	1	2	3	4	5
SKI2	Our employees do have good analytical and problem-solving skills(ሰረተኞቻችን በቅ ችግርን የመፍታት ክህሎት አላቸው)	1	2	3	4	5
SKI3	Our employees do have good machine operating and maintaining skills (ሰረተኞቻችን በቅ ማሽኖች የመጠቀምና የመጠገን አቅም አላቸው)	1	2	3	4	5
SKI4	Our employees do have good computer and software skills for business operation (ሰረተኞቻችን በቅ ኮምፕተር ክህሎት)	1	2	3	4	5

Part V. Business Performance

1 “extremely bad performance”(እጅግ በጣም መጥፎ) 2=bad performance(መጥፎ) 3 =fair performance(መካከለኛ) 4=good performance(ጥሩ) 5=excellent performance'(እጅግ በጣም ጥሩ አፈጻጸም)

No.	Items	1	2	3	4	5
1	My company's sales growth rate has been increasing in the last three years(የድርጅቱ ጠቅላላ ሽያጭ ያለፈውን 3 ዓመታት እየጨመረ መጥቷል)	1	2	3	4	5
2	My company's gross margin (profit after Cost of goods sold) has been increasing in the last three years(የድርጅቱ ያልተጣራ ትርፍ ያለፈውን 3 ዓመታት እየጨመረ መጥቷል)	1	2	3	4	5
3	My company's profitability (net income after tax) has been increasing in the last three years(የድርጅቱ የተጣራ ትርፍ ያለፈውን 3 ዓመታት እየጨመረ መጥቷል)	1	2	3	4	5

4	My company's cash inflow has been steadily increasing as planned in the last three years ((የድርጅቱ የጥሬ ገንዘብ ፍሰት ያለፈውን ያለፈውን 3 ዓመታት እየጨመረ መጥቷል)	1	2	3	4	5
5	My company has significantly increased hiring both part- and full-time new employees in the last three years((የድርጅቱ የሰራተኛ ቁጥር ያለፈውን 3 ዓመታት እየጨመረ መጥቷል)	1	2	3	4	5


Section II. Sources of the items and scales of the variables

No.	Variables	Authors	Journal	Citation
				Google scholar
1.	Networking	Shane and Cable (2002)	<i>Management Science</i>	1932
		Lau, C.M., Bruton, G.D., (2011)	<i>Journal of World Business</i>	101
		Tajeddini, Martin &, Ali (2020)	<i>International Journal of Hospitality Management</i>	-*
2.	Entrepreneurial Orientation	Boso et al. (2013)	<i>Journal of Business Venturing</i>	466
		Hughes and Morgan (2007)	<i>Industrial Marketing Management</i>	1379
		Saha and et al.' (2017)	<i>Journal of Business Venturing Insights</i>	10
		Covin and Slevin (1989)	<i>Strategic Management Journal</i>	7104
3.	Industry Environment or market Dynamism	Miller, D., 1987.	<i>Strategic Manage. J</i>	1283
		Frank, Kessler & Fink, (2010)	<i>Small Business Research</i>	307
		Wiklund, Johan and Dean Shepherd (2005),	<i>Strategic Management Journal</i>	3444
		Tajeddini, Martin &, Ali., (2020)	<i>International Journal of Hospitality Management</i>	-
		Kraus S. et al.(2012)	<i>Review of Managerial Science</i>	419
4.	Access to Finance	Cooper, Gimeno-Gascon, and Woo (1994)	<i>Journal of business venturing</i>	3181
		Wiklund, and Shepherd (2005)	<i>Journal of Business Venturing</i>	3444
		Hair et al. (2006)	<i>Multivariate Data Analysis</i>	2212
5.	Control Variables	Kraus et al.' 2012	<i>Review of Managerial Science</i>	419
		Frank, Kessler & Fink, 2010	<i>Small Business Research</i>	307
		Wiklund and Shepherd (2005)	<i>Journal of Business Venturing</i>	3444
6.	Business Performance	Wiklund and Shepherd,(2005)	<i>Journal of Business Venturing</i>	3444
		Kraus et al.' 2012	<i>Review of Managerial Science</i>	416
		Wiklund (1999)	<i>Entrepreneurship theory and practice</i>	2051
7.	Human Capital	Ahmad Dar Ishaq & Mishra Mridula (2019)	<i>Global Business Review</i>	5*
		Brush, C. G., Greene, P. G., & Hart, M. M. (2001)	<i>The Academy of Management Executive</i>	1341
		Mention, A. L., & Bontis, N. (2013).	<i>Journal of Intellectual Capital</i>	192
		Nieves, J., & Haller, S. (2014).	<i>Tourism Management</i>	212
		Singh, R., & Nayak, J. K. (2016).	<i>Global Business Review</i>	5*

Appendix 6

Support letters and few of site pictures from Textile and furniture SMEs in Ethiopia

በኢ.ፌ.ዴ.ሪ ሳይንስ እና ከፍተኛ ትምህርት ሚኒስቴር የወላይታ ሶዶ ዩኒቨርሲቲ
F.D.R.E. Ministry of Science & Higher Education Wolaita Sodo University



በዝነሰና ኢኮኖሚክስ ኮሌጅ
College of Business & Economics

ቁጥር/Ref COBE 560 / 203
ቀን /Date 08/30/2021

To : University of Pecs
Faculty of Business and Economics
: - Stipendium Hungaricum Scholarship office
: - Immigration office
Hungary

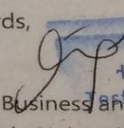
Subject: - Confirmation on Ph.D. dissertation data collection progress


Our staff, by name Adisu Fanta, is a Ph.D. Candidate at the University of Pecs, Hungary. Currently, he is undertaking his dissertation on Small and Medium Manufacturing Enterprises in Ethiopia.

Hereby, we would like to confirm you that Adisu Fanta has been collecting both primary and secondary data from various sources in the country in a close connection with the faculty of Business and Economics during his stays at our Institution, Wolaita Sodo University, Ethiopia. We would also like to notify that due to existing security situation some regions in the country are not safe for travel and that may possibly delay the completion of data collection.

Hence, we would like to appreciate for considering his situation and any sort of support you may render to him.

With Regards,

CC:  ተሰፋሁን ተገኝ ሰርሳ
College of Business and Economics
Wolaita Sodo University, Ethiopia
Adisu Fanta



መልሱን ሲጻፉን የእኛን ቁጥር ይጥቀሱ::
in replying, please quote our ref. number

138 251-46-5514635
Website: www. wsu. edu. et Fax 251-46-5515113



ቢዝነስና ኢኮኖሚክስ ኮሌጅ
College of Business & Economics

ቁጥር/Ref COBE 470/2021
ቀን /Date 14/03/2021

To Whom It May Concern

Subject: - **Request for Cooperation**

Our staff, by name Adisu Fanta, is a Ph.D. Candidate at the University of Pecs, Hungary. Currently, he is undertaking his dissertation in Small and Medium Manufacturing Enterprises in Ethiopia and collecting both primary and secondary data from various sources.

Hence, we kindly request all the concerned offices to cooperate in providing the required data and would like to appreciate in advance any sort of support you may render.

With Regards,



Tesfahun Tegegn Sorsa
ተስፋሁን ተገኝ ሶርሳ
የቢዝነስና ኢኮኖሚክስ ኮሌጅ ጸ/ቤ
Dean, College of Business
and Economics



አካ/ጉ/ም/ፕ/ጽ/ቤት
Vice President for Academic Affairs

ቁጥር/Ref.No: WSU/15/09/533
ቀን/Date: 10/09/2019

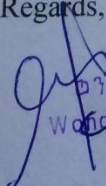
**To: University of Pecs
Stipendium Hungaricum Scholarship Coordination Office
Pecs, Hungary**

**From: Wolaita Sodo University
Academic Affairs Vice President Office
Wolaita, Ethiopia**

Subject: - About Mr. Adisu Fanta's Research work

Mr. Adisu Fanta is one of our staff members at the Faculty of Business and Economics, Wolaita Sodo University, who has been studying his PhD in Business Administration at the University of Pecs, Hungary. Currently, he has come back to Ethiopia and in contact with our University for the issues related with data collection for his dissertation work. Meanwhile, he informed us that he needs to be there at your University before the mid of Sept. 2019 for the scholarship contract renewal. Herewith, we would like to inform you that he would be late to come because of some administrative issues here at the University and he would probably be there at the end of Sept. 2019. Hence, we kindly request your cooperation with regard to scholarship allowance release and other related things.

With Best Regards,


ወንጀም ወልደ ካሁ (ዶ/ር)
Woldemariam Wolde kassu (PhD)
የአካ/ጉ/ም/ፕ/ጽ/ቤት
V/President for Academic
Affairs



CC

- Academic Affairs V/President office
- Mr. Adisu Fanta

WSU



Date: 02. May, 2019

To Whom it May Concern

Letter of Recommendation

Mr. Adisu Fanta is one of PhD students under my guidance at Faculty of Business and Economics, University of Pecs, Hungary. His PhD dissertation proposal titled: **Entrepreneurial Orientation, National Culture and Business Performance of manufacturing sector Small and Medium Enterprises (SMEs) in Ethiopia: Configurative approach**, has been accepted for further thesis work. While this work requires further development, it is promising and I recommend for any financial support to Adisu Fanta as per the research demand.

Sincerely, yours,



Dr. László SZERB
Professor,
Head of Department of Management Sciences
Editor, Journal of Small Business Economics



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Department of Management Science
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+36 72 501 599/ 23125 | szerb@ktk.pte.hu



Transforming Small Dreams into Great Success Stories



Figure 1 Some of SME industrial zones or Production sites



Figure 2. Some of the pictures from selling stores during data collection