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**The Role of Institutional Support in Influencing SME
Growth: The Case of Saudi Arabia**

by

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**A thesis submitted in partial fulfilment of the Manchester Metropolitan
University for the degree of Doctor of Philosophy**

Faculty of Business and Law

Department of Economics, Policy and International Business

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This thesis is dedicated with the deepest love and respect to those whom truly believed in me and encouraged me all the way: my parents, sisters, brothers, Heba and Wafa. A special dedication is extended to my heroes Shoug and Nouf.

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Abbreviations

SME: Small and Medium Enterprise.

SMEA: Small and Medium Authority in Saudi Arabia.

GDP: General Domestic Production.

GCC: Gulf Corporation Countries, including Saudi Arabia, Kuwait, Oman, Bahrain, United Arab of Emirates and Qatar.

SAMA: Saudi Arabia Monetary Authority, which is the central bank of Saudi Arabia.

GEM: Global Entrepreneurship Monitor, which provides data and reports about entrepreneurship for more than 100 countries.

VAT: Value-added Tax.

MOL: Ministry of Labour in Saudi Arabia.

SAR: Saudi Arabian Riyal, the local currency in Saudi Arabia.

BOS: Bristol Online Survey, an online survey tool that helps design and distribute questionnaires electronically.

SPSS: Statistical Package for the Social Sciences, a platform offering statistical analysis.

OPEC: Organization of Petroleum Exporting Countries.

R&D: Research and Design.

STC: Saudi Telecommunications Company.

Abstract

In most advanced countries, SMEs contribute as much as 70% to GDP. However, Saudi SMEs are not yet major contributors; accounting for less than 20% of GDP in 2015 compared with developed countries. Saudi Arabia has taken considerable steps towards developing an entrepreneurship ecosystem and supporting SMEs to tackle fundamental issues in the Saudi economy; namely, a non-diversified economy and unemployment. From the entrepreneurship ecosystem perspective, the environment in Saudi Arabia is at the institutional level, that is, institutions in the private and government sectors are responsible for supporting SME growth through enabling resource access. This study argues that analysing SME's growth should consider the level of the entrepreneurship ecosystem. Therefore, this study aims to analyse the role of institutional support in influencing SME growth in Saudi Arabia by providing a unique application from an entrepreneurship ecosystem perspective. To this end, analysis of the role of entrepreneurs' social networks arguably enables resource access at the collective level (institutions in the private and government sectors). The study then examines the relationship between various factors in the entrepreneurship ecosystem and SME's growth. These include: 1) institutional support, whose measurement is based on resource access via government and private institutions; 2) environmental factors, such as economic, political, legal, local cultural, and technological factors; and 3) other factors that might influence SME's growth such as entrepreneurs' characteristics and SME's characteristics.

Secondary data was used to present an overview of the entrepreneurship ecosystem in Saudi Arabia (2015-2017). In addition, I conducted a survey to analyse the role of institutional support in influencing SME's growth through approximately 400 electronic questionnaires sent to entrepreneurs in Saudi Arabia, with 140 responding accordingly. Since all variables are not normally distributed, data were analysed by applying non-parametric statistical tests. In general, the study found the entrepreneurship ecosystem in Saudi Arabia to be healthy on the institutional, environmental and individual levels, but that further enhancements were required to develop the ecosystem, from the institutional to the enterprise level. This can be done by focusing on and develop the weakest pillars at the environmental level; namely, technology, innovation, competitiveness and internationalisation. In other words, the focus must be on supporting SME by enabling access to technology and innovation through institutional support to enhance the competitiveness of the SME in the local and international market. In addition, the study found that institutional support plays a crucial role in influencing SMEs growth positively through enabling resource access via private and government institutions.

However, further enhancement is required, especially when it comes to what deters entrepreneurs from accessing resources. We found that institutional support was primarily available to the manufacturing sector, which might indicate that institutional support concentrates more on those sectors that might generate more job opportunities and help diversify the Saudi economy. Accordingly, other sectors such as technical and innovation industries need to

be supported more through enabling entrepreneurs to access innovation and technology. In addition, we found that not all entrepreneurs have accessed institutional support due to a lack of awareness, or their not considering it for several reasons, such as avoidance of debt, trust issues, already being supported or insufficient support regarding time and cost. Therefore, policy-makers need to consider these issues when forming policy to support and develop the SME sector in Saudi Arabia.

Analysing other factors that might influence SME growth from an entrepreneurship ecosystem perspective, the study also found that the majority of entrepreneurs stated that local culture and technology have certainly influenced business growth positively. However, 43% of SMEs were influenced negatively by the political atmosphere, most likely due to political conflicts with a number of neighbouring countries. In addition, the economic situation affected SME growth negatively to 61% of SMEs, because of a decrease in oil prices and the reformation of the economy in Saudi Arabia. Legal factors also have a negative impact on SME growth to around half of SMEs. As mentioned in the literature, many entrepreneurs and investors believe that business regulations and incorporation policies in Saudi Arabia, such as business establishments are inefficient and deter investment, while the legal framework does not provide enough support or transparency for resolving contract disputes and bankruptcies. Furthermore, different factors have influenced SMEs growth positively; for instance, entrepreneurs' characteristics can influence how the entrepreneur will identify an opportunity, seize it and then react to it. Another factor influencing growth positively is SME characteristics such as age and

strategies, as these can present the abilities of the business to go through this entrepreneurship process.

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Chapter 1: Introduction

1.1. Introduction and Background

This introductory chapter outlines the problem statement and the research rationale, before moving on to an overview of the central findings, arguments, context and approach of the thesis. This research provides a unique application in analysing the role of institutional support in influencing Saudi Arabian SME growth from an entrepreneurship ecosystem perspective. This research was triggered by the economic reforms and changes that support SME's growth as a tool to tackle the fundamental issues in the Saudi economy, namely non-diversification and unemployment. From an entrepreneurship ecosystem perspective, the ecosystem in Saudi Arabia is at the institutional level; meaning institutions in private and government sectors are responsible for supporting SMEs and entrepreneurs. Thus, the research focuses more on how institutional support and resource access along with other environmental factors can influence SME's growth from an entrepreneurial ecosystem perspective. This study argues that entrepreneurship can be defined based on the process that entrepreneurs go through to identify an opportunity, seize this opportunity and then react to it accordingly. It assumes that the entrepreneurship process should be part of how SMEs grow and contribute to the economy through generating job opportunities and adding to GDP. Therefore, this study claims that what influence entrepreneurship process might influence SMEs growth. The first is institutional support that is

measured by resource access at collective level plays a role, in that having access to financial, human, information, knowledge, training and education resources is valuable. Second, environmental factors, such as economic and political situations, technology, legal procedures and local culture can influence entrepreneurship processes as external dynamics over which entrepreneurs have no control but which nevertheless influence business growth. Third, entrepreneur characteristics, since their personal traits might influence how they identify an opportunity, evaluate it and react to it. Finally, SMEs' characteristics are important, as they reflect the capabilities of the business to act on an opportunity. Accordingly, this research aims to analyse the role of institutional support in influencing SME's growth, by providing practical evidence from Saudi Arabia from the entrepreneurship ecosystem perspective. To achieve this aim, this study uses network analysis to examine the role of institutional support in enabling resource access and influencing SME's growth. In details, this study starting by analysing the role of institutional support in enabling resource access, by scrutinising entrepreneurs' social networks at the collective level, in terms of their size and density, i.e. the number of institutions that provide access to different resources, and the frequency of communication with these institutions in this regard. Second, this study looks at the role of resource access, entrepreneurs' characteristics, SME characteristics and environmental factors in influencing SME growth, by conducting an online survey questionnaire.

As mentioned, this research was triggered by the economic reforms that support SME's growth as a tool to tackle the fundamental issues in the Saudi economy, namely non-diversification and unemployment. Saudi Arabia is one of the most oil-rich countries in the world and the largest oil producer, as it produces an average output of almost 9.8 million barrels of crude oil per day, which is around 30% of daily oil production in OPEC members (Fantin, 2016). The country took early advantage of the competitiveness of the international oil market and has received high revenues for over 40 years. As such, the oil industry is considered the primary engine of the country's economic development (Albassam, 2015), and since the 1980s, the industry has contributed to half of the total Gross Domestic Product (GDP), based on GDP statistics in the annual statistics provided by the Saudi Monetary Authority (SAMA, 2016). Although the oil industry has contributed significantly to economic development, the country's reliance on it has created significant problems for the economy, in that non-diversification has emerged and resulted in unsustainable development and a weak private sector. Private sector contributed only 10% to total GDP between 2004 and 2013 (Al-Darwish et al., 2015b), and contributed 17% to GDP in 2016 after the economic reforms in 2015 (Bhatia, 2017).

Additionally, the private sector cannot generate high-skilled job opportunities; instead, the majority of jobs are low-skilled and low-pay and have resulted in an increase in foreign workers in this sector of up to 50% (Khorsheed et al., 2014) comparing with job opportunities in the

government sector, oil sector and related industries that were the most supported by the government. Around 57% of jobseekers in Saudi are highly educated, they consider jobs that require high qualifications, not low-skilled jobs. In addition, the private sector does not provide the necessary training programmes to enhance skills and productivity – and thus engage local workers (De Bel-Air, 2014). Based on a survey carried out by Najat et al. (2016), more than 30% of Saudis found it challenging to work in the private sector, due to long working hours and low payments, and 21% felt that jobs in this area of the economy did not suit them. Others stated that some businesses in the private sector do not want to employ nationals, and so finding a suitable job might require having good contacts. A diversified economy, however, would assist in achieving sustainable growth away from the oil industry through the strengthened productivity and contribution of the private sector (Aldarwish et al., 2015). Consequently, diversifying the economy is necessary to decrease the risk of volatility and uncertainties in the international oil market that could cause on-going issues (Walker, 2015), as well as to help generate suitable job opportunities in the private sector.

In the circumstances, how far have the Saudi government's policies to enhance entrepreneurship ecosystem strengthened the private sector and contributed to the achievement of diversification? In other words, has the increasing ease with which business can be set up, that is, reducing the required time to start as well as costs, provided institutional support for divergence? Additionally, how far have implementation procedures that

make it easier to register businesses and strengthen investor protection, together with institutional support for SMEs that provide financial and technical support, such as the Kafalah programme¹, been effective in changing the entrepreneurship ecosystem? In most advanced economies, SMEs contribute as much as 70% to GDP. Saudi SMEs, however, are not yet a major contributor, accounting for less than 20% of GDP in 2015 compared with other developed countries (MOL, 2016). Although there are numerous enhancements in the Saudi entrepreneurship ecosystem, SMEs still need further support through funding, as fewer than 5% of commercial loans are provided to SMEs in Saudi, which is less than the global average (MOL, 2016).

In addition, many entrepreneurs and investors believe that business regulations and incorporation policies, such as access to funds and business establishment, are inefficient and deter investment, while the legal framework does not provide enough support or transparency for resolving contract disputes and bankruptcies. Saudi Arabia ranks last among advanced countries in resolving insolvency issues. Cultural attributes can also inhibit start-up businesses, because entrepreneurs have very few examples to follow. The businesses most familiar to Saudis are large government-controlled enterprises (MOL, 2016), and as a result, youths entering the workforce favour large businesses for their prestige, stability

¹ The SMEs Loan Guarantee Programme was set up to support SMEs in Saudi Arabia by providing access to financial resource in partnership with the Saudi Industrial Development Fund, thereby achieving diversification and generating job opportunities.

and promising career path (Najat et al., 2016). According to Mohammad and Ahmed (2013), the leading features of Saudi culture might deter entrepreneurial activities; for instance, in regard to business, they favour a large size company and avoiding taking risks, while in regard to jobs they favour the government sector, as it is oriented toward security. For these reasons, these features should be considered within development policies to enhance the entrepreneurship ecosystem by first creating an entrepreneurial culture, since entrepreneurship can play a significant role in job creation and not just contribute to GDP.

Based on the evaluation made by Khan (2016) of the Saudi Arabia entrepreneurship ecosystem (2013-2015), it is at the institutional level. Meaning that different institutions, such as government and non-governmental institutions, are responsible for promoting SMEs by providing institutional support, which in turn helps in accessing different resources, providing training and education support and facilitating cooperation, in order to develop an entrepreneurship ecosystem and to move to the next level, namely the enterprise level. At this level, business owners are responsible for developing their skills and supporting their businesses, with institutional support taking a different role in support than in the previous level, such as providing consulting services, access to technology and technology transfer and incubators (Khan, 2016). Therefore, any effort to enhance the ecosystem in Saudi Arabia needs to be applied in five areas: sector development, financing, capability and

resources, the business environment and entrepreneurship culture (MOL, 2016).

Accessing resources is considered a significant challenge and an essential element in SME growth. For Singer, the GEM² conceptual framework gives us insights into “*the interaction of an individual’s perception of an opportunity and capacity (motivation and skills)... and the distinct conditions of the respective environment in which the individual is located*” (Singer et al., 2015a, P20). Other analysts have suggested cluster analysis (Delgado et al., 2010; Kasabov, 2015; Rauch, 2013), innovative systems (Da Gbadji et al., 2015; De Clercq et al., 2015), ecosystem environmental analysis (Spigel, 2015b; Shepherd and Patzelt, 2011) and social capital and network analysis (Ozdemir et al., 2014; Pollack et al., 2015; Semrau and Werner, 2014; Sullivan and Ford, 2014) as more appropriate for examining SMEs.

On the whole, these perspectives stress three main resources that contribute to a business’s growth and success. First, government policies and universities play a significant role in supporting businesses by removing obstacles to entrepreneurs accessing resources (Spigel, 2015b). Second, shared social awareness and a supporting business environment can engender business cooperation and facilitate access to resources (Rauch, 2013). Third, social networking creates pathways for spreading and sharing resources such as knowledge spill-overs between businesses and universities, and it connects entrepreneurs with resources (Ozdemir et al.,

² (GEM) the Global Entrepreneurship Monitor.

2014). The following sections of the introductory chapter provide an overview of the problem statement, conceptual arguments, context, and the approach of the thesis.

1.2. Problem Statement

There is increasing interest in SME growth among researchers and policymakers, due to the roles played by SMEs (Blackburn & Schaper, 2012) in economic and social development, such as job creation, fostering economic growth, improving competitiveness and regional development, and yet limited evidence supports the notion that SMEs create jobs. In the case of Saudi Arabia, the insignificant role of SMEs (Thompson et al., 2012; Mohammad & Ahmad, 2012) refers to the lack of an entrepreneurial culture, a lack of required skills to manage business and a focus on financial support to increase the number SME establishments rather than their quality (Khorsheed et al., 2014). Accordingly, promoting motivations and removing obstacles to SMEs could require providing institutional support that creates an entrepreneurial environment. In addition, it would require concentrating on SMEs that have more potential to grow (Levie & Autio, 2013), since they reflect individuals, business and environmental characteristics.

Different contributors discuss from different perspectives how environmental factors might influence SME growth. These include the institutional perspective (Bosma et al., 2018; Acs et al., 2018), social capital and network analysis (Ozdemir et al., 2014; Semrau & Werner, 2014; Sullivan & Ford, 2014; Pollack et al., 2015), the ecosystem perspective

(Spigel, 2015a; Shepherd & Patzelt, 2011, Malecki, 2018), cluster perspective (Kasabov, 2015; Rauch, 2013; Delgado et al., 2010).

Overall, these perspectives stress three main resources that contribute to business growth and success. First, government policies and universities play a significant role in supporting businesses by removing obstacles to entrepreneurs accessing resources (Spigel, 2015). Second, shared social awareness and a supporting business environment can engender business cooperation and facilitate access to resources (Rouch, 2013). Finally, social networking creates pathways for spreading and sharing resources such as knowledge spill-overs between businesses and universities, and connect entrepreneurs with resources (Ozdemir et al., 2014).

As this research argues that SMEs growth can be influenced on what influence entrepreneurship process, this means this research is related to the domain of entrepreneurship, where different contributions are made by diverse disciplines, namely economics, business, social science and individual behaviour (Carlsson et al., 2013). In addition, within these disciplines, researchers have searched and analysed entrepreneurs at different levels, such as the individual level, firm level and macroeconomic level, taking into consideration various factors such as institutional support, entrepreneurship ecosystem, network and environmental factors. Accordingly, it is important to have a conceptual framework of what is meant by entrepreneurship and how is it related to SMEs growth, and how it can be developed, if we are to understand the role it plays in the economy.

In general, entrepreneurship in the literature is defined based on three perspectives. First, from an economist's perspective (Carlsson et al., 2013; Parker, 2004; Casson, 2003; Hébert and Link, 1989), the main concepts include risk uncertainty, perception and change, as well as innovation. Second, entrepreneurship from a behavioural scientist's perspective (Landström, 2005; Shane & Venkataraman, 2000a) is viewed from the perspective of the psychological factors involved in defining it, in order to understand the reasons why some individuals start a business and others do not do so. Third, entrepreneurship is seen as a process discussed by business researchers (Bygrave and Hofer, 1991; Gartner et al., 1992) using mainly a process-oriented definition to understand how entrepreneurship can be developed. Based on the above discussion, I intend to follow Shane and Venkataraman's contribution (2000a) in defining entrepreneurship, as well as Schumpeter's contribution. Therefore, entrepreneurship is a "correspondence act" or process for inventing technology, products, methods, industries or markets (Ndhlovu and Spring, 2009). As such, the entrepreneur is an inventor who discovers and evaluates an opportunity and then reacts to it by inventing new products, new methods or new markets, thereby contributing to the economy (McDaniel, 2002). Consequently, this involves studying certain characteristics of those who go through the whole process of discovering, evaluating and reacting to opportunities (Shane & Venkataraman, 2000).

The notion of how entrepreneurship can be developed to explain the role that is played by institutional support in the former's development has been discussed from three different approaches: social capital, network analysis and SME growth. In general, social capital theory examines certain relations among actors in society, who are seen as having resources over which they have some control and in which they have an interest. Thus, the whole idea of social capital seems clear, as well as the idea that an investment in social relations brings straightforward returns (Coleman, 1994; Gedajlovic et al., 2013).

Clearly, there is a need for a richer and more in-depth analysis of SME growth by examining different aspects. From the ecosystem perspective, SME growth can be affected by different actors, identified based on the level of entrepreneurship ecosystem (Khan, 2016; Szabó, 2006). Since the entrepreneurship ecosystem in Saudi Arabia is at the institutional level (Khan, 2016), adopting aspects of social capital and network analysis will be useful in analysing the role of institutional support in enabling SME growth in Saudi Arabia (resource access and social network analysis at the collective level). In addition, since different factors can influence SME growth, such as environmental, SME and entrepreneurial characteristics, these should be considered in analysing the growth of SMEs in Saudi Arabia.

1.3. Knowledge Contribution

This research makes four contributions to knowledge. First, it provides a unique viewpoint of Saudi Arabia on how institutional support influences SME growth from entrepreneurship ecosystem perspective. As it provide practical analysis of SMEs growth in Saudi Arabia from an entrepreneurship ecosystem after reforming and changes in Saudi Arabia to strengthen the SMEs sector to tackle some of the fundamental issues in Saudi Arabia, namely non-diversification and unemployment. Accordingly, this research consider an entrepreneurship ecosystem perspective in analysing SMEs growth to present an outlook of the ecosystem first, then examine how several factors in the ecosystem influence SMEs growth. In addition, it consider the level of the ecosystem in Saudi Arabia in designing this research, which is the institutional level, meaning institutions might play significant role in supporting SMEs sector through enabling resource access, thus resource access at collective level is considered, which guide us to the second contribution.

Second, this research considers network analysis at collective level to examine how institutional support enables resource access. This involves examining how network size and density of entrepreneurs influence resource access on the collective level. As mentioned the level of entrepreneurship ecosystem is considered in this study, thus entrepreneurs' network is analysed on the collective level. Meaning, since institutions are the main actors in the entrepreneurship ecosystem in Supporting SME sector in Saudi Arabia, thus network analysis need to consider the ties

between these institutions and entrepreneurs to examine how network size and density influence resource access.

Third, this research considers several factors in examining how institutional support affects SME growth in Saudi Arabia. These factors include what influence entrepreneurship process, namely, resource access, environmental factors, entrepreneur characteristics, and firm characteristics. Finally, this research contributes to knowledge by conducting a survey that considers the quantitative analysis of data collection and analysis and also adopts a resource generator as one of the developing approaches. The resource generator method is developed to meet the requirements of the conceptual and empirical framework and the levels of analysis, as well as address the Saudi context. Meaning, changes has been made on the questions of the resource generator to measure resource access at collective level and the design was tested by pilot study to increase the validity and reliability of the measurement.

1.4. Research Objectives and Questions

This study aims to analyse the role of institutional support in influencing SME growth in Saudi Arabia from an entrepreneurship ecosystem perspective. To achieve this goal, it seeks to achieve the following fundamental objectives:

1. Present an outlook of the entrepreneurship ecosystem in Saudi Arabia.

2. Analyse the role of institutional support in enabling resource access in Saudi Arabia:

- Explain the main features of entrepreneurs' social networks at the collective level (social network size and density).
- Examine the relationship between the main features of entrepreneurs' social networks and resource access at the collective level.

3. Analyse to what extent institutional support influences SME growth in Saudi Arabia:

- Establish to what extent resource access influences SME growth.
- Analyse the impact of environmental factors on SME growth.
- Test the relationship between entrepreneurs' characteristics and SME growth.
- Examine the relationship between SME characteristics and SME growth.

To investigate and analyse the role of institutional support in influencing SME growth in Saudi Arabia, the following initial questions need to be addressed:

1. What are the main features of the entrepreneurship ecosystem in Saudi Arabia (2015-2017)?
2. What is the role of institutional support in enabling resource access at the collective level in Saudi Arabia?

- Who are the actors in entrepreneurs' social networks can provide institutional support at collective level?
 - What is the link between entrepreneurs and these actors who provide institutional support at the collective level?
 - What are the main features of entrepreneurs' social networks at the collective level?
 - What is the relationship between the main features of entrepreneurs' social networks and resource access at the collective level?
3. How much does institutional support influence SME growth in Saudi Arabia?
- What is the relationship between accessing resources at the collective level and SME growth?
 - What is the relationship between entrepreneur characteristics and SME growth?
 - What is the relationship between firm characteristics and SME growth?
 - What is the relationship between environmental factors and SME growth?

1.5. Definitions

Several concepts need to be clarified, to provide the empirical evidence for each question. These are as follows:

Entrepreneurship ecosystem: a set of dynamic factors such as networks, institutions, culture, economic, political, legal, technology that combine and interact in complex ways that influence entrepreneurship and SME's growth.

Institutional support: the support that is provided from government and private sectors to SMEs through enabling resource access.

Entrepreneurship: the process that entrepreneurs go through when identifying an opportunity, seizing this opportunity and then reacting to it, which they can do by inventing new products, techniques or markets.

SMEs: small-and medium-sized enterprises that can be defined based on employment and annual revenue levels. Microbusiness includes businesses with 1-5 employees and 0-3 million SR annual revenues; small enterprises include businesses with 6-49 employees and 3-40 million SR annual revenues, and medium enterprises include businesses with 50-249 employees and 40-200 million SR annual revenues.

SME growth: change in employment and annual revenue levels.

Network analysis: analysing entrepreneurs' social capital at a collective level, meaning the main features of the network between entrepreneurs and who provides institutional support.

Social network actors: refer to those with whom entrepreneurs interact at the collective level (private and government institutions) to access different resources.

Relational ties: refer to the links between actors seeking to access resources that are weak, such as business and work-related.

Social network: refers to the relationship between different actors, as this network can be defined based on two features, namely network size and density.

Social network at the collective level: the relationship between entrepreneurs and institutions in the private and government sectors.

Social network size: the total number of actors with whom entrepreneurs interact to gain access to resources at the collective level.

Social network density: the average frequency of communication between entrepreneurs and social network actors at the collective level.

Resource access: number of resources accessed via institutions in the private and government sectors.

Entrepreneur characteristics: refer to the need to achieve, self-confidence, risk-taking, experience, innovativeness and a locus of control.

Firm characteristics: include firm age, location and strategies that include marketing, training, competitiveness, R&D and adopting new technology.

Environmental factors: include political, economic, legal, local culture and technology factors.

1.6. Research Methodology

This research is an explanatory in nature and aims to present an explanation of the pattern in a particular phenomenon (De Vaus, 2014). Thus, it follows the main assumption of the positivist approach, which combines deductive logic (reasoning builds and tests hypotheses) with

precise empirical observations (inductive reasoning leads to tentative generalisation) (Hallebone & Priest, 2009) to discover and confirm a set of assumptions to explain individual patterns in relation to particular phenomena (Neuman, 2000). In terms of ontology, reality exists independently of individuals, and it can be defined objectively (Hallebone & Priest, 2009); thus, reality is empirically evident (Neuman, 2000). In terms of epistemology, a hypothesis formed from a theoretical position can be confirmed or refuted based on a linear process (Hallebone & Priest, 2009). Accordingly, the methodology is nomothetic, in that any explanation relies heavily on causal laws and interrelations to create and qualify general findings by using empirical data and testing hypotheses formed from theory, while the researcher operates as a dispassionate outsider (Hallebone & Priest, 2009; Neuman, 2000). Thus, the main method utilised to collect and analyse data is quantitative (Creswell, 2014; Bryman, 2012; Tuli, 2010; Black, 1999).

This research conducts a survey for two reasons. The first is to produce statistics, i.e. quantitative or numerical descriptions of the role of entrepreneurs' social networks at the individual and collective levels in enabling resource access, and the relationship between resource access along with other factors, and SME growth. Second, this is the only way to meet the research needs for data that are not available elsewhere, as well as meeting the analysis needs. A special-purpose survey, in this research, is the only method to ensure the collection of all the data needed for the desired analysis. In addition, this research uses secondary data from the

Global Entrepreneurship Index of Saudi Arabia (2015-2017) to present the main features of the entrepreneurship ecosystem in there. This index uses three levels to measure entrepreneurship, each with its own pillars and variables. These levels are individual level, institutional level, and environmental level. However, due to the lack of data regarding individual and institutional level, we only used the total score of these levels.

1.7. Organisation of the Thesis

The first chapter, namely the introductory chapter, presents the background and problem statement, how this research contributes to knowledge, research questions and objectives, definitions and the methodology. Chapter 2 discusses previous studies on this topic and provides the main theoretical and empirical contributions. Chapter 3 represents the conceptual and empirical framework of this research in detail. Chapter 4 presents an overview of the Saudi economy, whereby the main challenges and important policies employed to tackle these fundamental issues, as well as the Saudi Vision 2030, are explained. Chapter 5 explains the research design and approach and discusses and justifies the philosophical stance. In addition, it explains the data collection plan and how quantitative data will be analysed. Chapter 6 presents the data analysis and discusses the results of the questionnaire data to explain the role of entrepreneurs' social networks at the collective level in enabling resource access, as well as the role of resource access, along with other factors, in influencing SME growth. Finally, Chapter 7 provides the thesis summary, limitations and implications.

1.8. Conclusion

To conclude, this chapter started by presenting the background to this study by discussing entrepreneurship in Saudi Arabia and some of the main features of the Saudi economy regarding policies employed to develop entrepreneurship. Next, the chapter discussed the problem statement regarding the notion of social networks, resource access and SME growth, before moving on to explain how it will contribute to knowledge empirically and conceptually, followed by outlining the main objectives and questions. Thereafter, the main concepts of the study were clarified and defined based on the conceptual and empirical framework. Finally, a summary of the study methodology and philosophical stance was presented, and then the structure was outlined.

Chapter 2: Conceptual and Empirical Review

2.1 Introduction

Since the main focus of this research involves analysing the role of insitutional support in influencing SMEs growth in Saudi Arabia, and it is arguable that the concept of SMEs has been used in the literature to refer to entrepreneurship. Different arguments have been applied to establishing whether or not entrepreneurship and SMEs are considered as different concepts, alternative concepts or complementary concepts. Therefore, entrepreneurship needs to be defined first, then discuss SMEs growth and institutional support.

Defining entrepreneurship and the boundaries of related research can be difficult, as there different contributions reside in different disciplines, namely economics, business, social sciences and individual behaviour (Carlsson et al., 2013). In addition, within these disciplines, researchers have explored and analysed entrepreneurs at different levels, such as at the individual level, firm level and macroeconomic level, by taking into consideration various factors such as the environment, clusters, networks and location. Accordingly, it is important to have a conceptual framework to illustrate what is meant by entrepreneurship and how it can be developed, if we are to understand the role it plays in the economy.

Throughout history, there have been many changes in the entrepreneurship research field. Going back to the roots of this topic, it was discussed only by economics scholars, such as such as Say (1971), Kirzner (1973); and Schumpeter (2017) who were interested in the entrepreneurial function rather than entrepreneurs as individuals (Carlsson et al., 2013). Thereafter, entrepreneurship gradually changed into a research area within other disciplines and was concerned with explaining the role of the entrepreneur and what could lead to the development of entrepreneurship. This shift seems to be related to the worldwide structural changes in society during the 1970s and 1980s, such as world economies, politics, technology and globalisation (Landström, 2005). All of these changes created significant and innovative ventures, as uncertainty and disequilibrium led to discovering new business opportunities. Thus, there was increasing interest in SMEs – as significant contributors to the economy and society – by policymakers and academic researchers, which led to research on entrepreneurship from different levels, i.e. different disciplines making it difficult to define the boundaries of the entrepreneurship domain.

Several matters need to be considered if we are to understand the role SMEs play in the diversification of the Saudi economy. Since the concepts of entrepreneurship and SMEs are used in the literature differently, sometimes as an alternative and in other cases not, this matter needs to be discussed. Accordingly, this chapter will start by discussing whether entrepreneurship and SME are different, alternative or complementary concepts. Entrepreneurship will be discussed from the viewpoints of

different disciplines to define what we mean by it and how it is related to SME. These include the economist's perspective, defining it from the behavioural scientist's perspective and defining it from a management studies perspective. After that, SME's growth will be discussed regarding the main measurements and what can influence SME's growth from different perspectives, such as entrepreneurship ecosystem, institutional support and cluster theory. Finally, this chapter presents the researcher's point of view on how entrepreneurship is defined; how it is related to SME; and SME's growth from an entrepreneurship ecosystem focusing on the important role institutional support can play in influencing SME's growth through facilitating resources.

2.2 Unpacking Entrepreneurship and SMEs

2.2.1 What do we mean by the terms 'Entrepreneurship' and 'SMEs'?

2.2.1.1 The economist's perspective

Cantillon, in 1755, was the first person to analyse the entrepreneurship concept, claiming that entrepreneurs were one of the three initial actors in the economy: 1) property owners, who were the main consumers, 2) entrepreneurs, who lived on an uncertain income, and 3) employees (Brown & Thornton, 2013). This means that entrepreneurs aim to meet property owners' desires, and since the latter are the main consumers in the economy, the former play a significant role in economic development (Carlsson et al., 2013; Brown & Thornton, 2013). Thus, they are clearly the supply side. Furthermore, they are risk-takers in the face of uncertainty

surrounding demand and price (Carlsson et al., 2013). In this regard, an entrepreneur is an investor aiming to sell goods and products (Brown & Thornton, 2013), and so this definition is broadly applicable, though it differs greatly from other viewpoints, such as that of Schumpeter and Say.

Say claimed in 1855 that entrepreneurs are the heart of an economy, as they contribute by managing production factors. Based on his contribution, entrepreneurs are business builders, since their main role is to make a profit by combining and coordinating various production factors (Parker, 2004; Say, 1964). He distinguished three economic activities in entrepreneurship as production factors: generating research knowledge, using this knowledge to create new methods of production, and manufacturing and producing (Carlsson et al., 2013). Therefore, entrepreneurship exists in the context of a new business establishment, and successful entrepreneurship requires personal characteristics to manage production factors by overcoming unexpected problems and exploiting (although not developing) existing knowledge (Parker, 2004).

This view has been criticised by different researcher such as Hébert and Link (1989) for considering entrepreneurs as business manager, and Casson (2003) have presented different statement of Say's contribution that includes the main concepts of entrepreneurship, namely risk, uncertainty, perception and change (Carlsson et al., 2013). Other researchers, specifically Hebert and Link (1989) and Casson (1982), argue that entrepreneurship is related to how entrepreneurs react and make decisions

on opportunities and what might have an impact on the business, such as location and resources.

On the other hand, according to Schumpeter, innovation is a critical function for entrepreneurship, as the entrepreneur is an inventor, who discovers and evaluates an opportunity and then reacts to it by creating a new product, a new method or a new market. Therefore, Schumpeter defined entrepreneurship as a “correspondence act” or a process for inventing technology, products, methods, industries or markets (Ndhlovu and Spring, 2009; McDaniel, 2002; Carlsson et al., 2013). Based on this definition, Schumpeter determined five “innovation” activities (McDaniel, 2002) that act as mechanisms for economic development (Carlsson et al., 2013; Parker, 2004), as some of these activities will initially affect the supply of products, while others may initially influence the consumer or demand for products (McDaniel, 2002).

However, Schumpeter’s view has been criticised for considering entrepreneurs as being driven by instinctive motives and for claiming that they bear no risk, as he did not consider profit as a return on production; instead, profit is considered a residue (Parker, 2004). Kanbur (1980), for instance, criticised Schumpeter for distinguishing between entrepreneurs and capitalists, and for ignoring the fact that entrepreneurs make a profit of operating ventures (Parker, 2004).

In contrast to Schumpeter's view, Kirzner defined the entrepreneur not as an inventor but as an opportunist, i.e. a person who takes advantage of imbalances in the economy and reacts to it by managing resources effectively (Kirzner, 1973). Therefore, according to him, entrepreneurship is about recognising opportunities and acting upon the most profitable options – essentially, the role of an arbitrageur (Ahmad and Seymour, 2008; Kirzner, 1973).

2.2.1.2 The behavioural scientist's perspective

Since Schumpeter, society's attention has moved away from trying to explain entrepreneurship toward developing it, due to the global changes such as economic, political, globalisation and technological changes that have caused uncertainty and led to discovering different opportunities (Landström, 2005). Thus, entrepreneurship has gained increasing interest from policymakers and academic researchers, since it can play a significant role in developing a nation's economy and society. Accordingly, an important question has been raised: since entrepreneurship plays a significant role in economic development, why do some individuals become entrepreneurs and others do not, which depends on having certain qualities that others lack? Economists cannot provide useful contributions in explaining and identifying certain qualities of entrepreneurs, and so attention has moved to behavioural science researchers to develop theoretical ideas on entrepreneurs' qualities.

One of the most influential contributions in this respect is made by David McClelland in his book “*The Achieving Society*” (1961), in which he suggests that the economic development of a nation is linked to its need for achievement (McClelland, 1967), as considering this need for achievement is the main quality of entrepreneurs. In this respect, certain characteristics are required to be an entrepreneur, including the need for achievement, self-confidence, a locus of control and moderate risk-taking (McClelland, 1967). Since then, an increasing number of studies have investigated entrepreneurs’ characteristics, based mostly on McClelland’s contribution. However, studies in this area have been criticised on both conceptual and methodological bases, as it has been difficult to link any specific characteristics to entrepreneurship, except for the need for achievement (Landström, 2005). In addition, defining entrepreneurship in terms of individual characteristics has generated incomplete definitions ignoring the process of identifying and evaluating opportunities and reacting to these opportunities (Shane & Venkataraman, 2000).

2.2.1.3 Business management perspective

During the 1990s, entrepreneurship research gained increased interest from management researchers seeking to clarify entrepreneurship development, which requires a more process-oriented definition. A significant contribution was made by William Bygrave and Charles Hofer (1991), who defined entrepreneurship based on the process of identifying opportunities and establishing businesses as a reaction to identifying these opportunities. However, this raised an issue among researchers regarding what should

form the focus of perceived opportunities and organisation creation, which in turn led to two different streams of interest: the emergence of new organisations and the emergence of opportunities (Landström, 2005). On the emergence of a new organisation, the process starts by making a decision to establish a business, and it ends when the business is established (Gartner et al., 1992). On the other hand, on the emergence of opportunities, the research question is the key to defining entrepreneurship (Landström, 2005). According to Venkataraman (1997), the central pillar of entrepreneurship should be concerned with why, when and how to discover opportunities, by whom and with what economic, psychological and social consequences (Shane & Venkataraman, 2000). This framework is much broader than the emergence of new organisations, since it can include venture creation as well as deal with existing ventures (Landström, 2005).

Since the main focus of this research is analysing SMEs in Saudi Arabia, and it is argued that the SME concept has been used in the literature to refer to entrepreneurship, there are different arguments as to whether the two concepts are considered different, alternative or complementary. The following sections will argue these points.

2.2.1.4 Entrepreneurship and SMEs are alternative concepts

Both entrepreneurship and SMEs are considered significant contributors to an economy by generating jobs opportunities and achieving economic growth (Inyang and Enuoh, 2009). In addition, they are affected by the same

factors, such as certain factors affecting their growth and failure. One of these factors is accessing resources, which is considered a significant challenge and a key element in an SME's success. For Singer, the GEM conceptual framework can give us insights into "*the interaction of an individual's perception of an opportunity and capacity (motivation and skills)... and the distinct conditions of the respective environment in which the individual is located*" (Singer et al., 2015, p.20).

Other analysts have suggested cluster analysis (Delgado et al., 2010; Kasabov, 2015; Rauch, 2013), innovative systems (Da gbadji et al., 2015; De Clerq et al., 2015), ecosystem environmental analysis (Spigel, 2015; Shephard & Patzelt, 2011) and social capital and network analysis (Ozdemir et al., 2014; Pollack et al., 2015; Semrau & Werner, 2014; Sullivan & Ford, 2014) as more appropriate for examining SMEs and entrepreneurship growth.

Overall, these perspectives highlight three main resources that contribute to business growth and success. First, shared social awareness and a supporting business environment can engender business cooperation and facilitate access to resources (Rouch, 2013). Second, social networking creates pathways for spreading and sharing resources such as knowledge spill-overs between businesses and universities, and it connects entrepreneurs with resources (Ozdemir et al., 2014). Finally, government policies and universities play a significant role in supporting businesses by removing obstacles to entrepreneurs accessing resources (Spigel, 2015).

2.2.1.5 Entrepreneurship and SMEs are different concepts

However, both concepts of entrepreneurship and SMEs might differ considerably in many areas and therefore need to be considered and clarified. Olusegun (2012) discussed how these concepts differ in different ways. First, in terms of a definition, entrepreneurship can be defined as the process of SME creation, whereby SMEs are business ventures. Second, in terms of purpose, entrepreneurship seeks to discover business opportunities, and then exploit these business opportunities, whereas SMEs are concerned with managing a business. Third, in terms of risk degree, entrepreneurship has a higher degree of risk than SMEs, due to creativity and innovation. Finally, in terms of key attributes, there is a greater need for achievement, creativity and innovation and growth.

In addition, SMEs are defined globally in different ways, such as employment, asset value and annual revenue (Olusegun, 2012), since different countries have different criteria in this regard (Hertog, 2010; Olusegun, 2012; Katrinli, 2016). For example, the SME definition adopted by the United Nations Industrial Development Organisation (UNIDO) is based on employment levels, which, in micro enterprises, are fewer than 10, in small enterprises between 10 and 49 and in medium enterprises between 50 and 249 (Plans, 2004). The SME definition according to the European Union is based on employment and sales. Employment levels in micro, small and medium enterprises are <10, <50 and <250, respectively,

and sales are <\$3million, <\$13million and <\$67million,³ respectively (Katrinli, 2016).

In Saudi Arabia, different definitions are used by several institutions. For example, the Saudi Arabian General Investment Authority classifies small enterprises based on employment numbers below 60 employees, and medium businesses between 60 and 100 employees. Other institutions, such as the Saudi Industrial Development Fund, use levels of sales to define and classify SMEs. In general, SMEs are enterprises with up to 20 million Saudi Riyals (\$5.3million) in exports or sales (Hertog, 2010). The Small and Medium Enterprises Authority defines SMEs based on employment and annual revenues. Micro businesses have 1-5 employees and generate 0-3 million SR in annual revenue, small enterprises have 6-49 employees and 3-40 million SR in annual revenues and medium enterprises have 50-249 employees and 40-200 million SR in annual revenues (SMEA, 2017).

2.2.1.6 Entrepreneurship and SMEs are complementary concepts

Entrepreneurship and SMEs can be complementary concepts when defining the former in terms of SME creation and growth. This means that entrepreneurship is a “correspondence act” or process for inventing technology, products, methods, industries or markets (Ndhlovu and Spring, 2009) to establish SMEs, and this process involves identifying opportunities and evaluating them (Shane & Venkataraman, 2000). As such, the

³ Based on 1 Euro= \$1.34.

entrepreneur is an inventor, who goes through this process to contribute to the economy by producing a new product, a new technique, a new industry or a new market (McDaniel, 2002). Accordingly, entrepreneurship and SMEs are complementary concepts, not just alternative or different concepts. In other words, when defining entrepreneurship, one should consider different aspects such as the process, individual characteristics and the nature of the venture and how it might contribute to the economy and society by increasing economic development and generating job opportunities. The process involves 1) identifying an opportunity, 2) evaluating this opportunity based on environmental factors and business resources, 3) managing and adopting strategies and 4) contributing to the economy and society by increasing economic development and generating job opportunities. SMEs go through these steps, and entrepreneurs own SMEs. In defining the size of small and medium enterprises, we can use the Small and Medium Enterprise Authority's categorisation in terms of employment and annual revenues, details of which will be provided later. The following sections discuss in more detail the concept of SME growth, how it can be measured and what might influence it.

2.2.2 SME Growth

2.2.2.1 Concepts and measures of SME Growth

Firm growth is conceptualised and measured in several ways. The term 'growth' is used in two different ways: one to represent changes in assets, sales or employment (Davidsson & Wiklund, 2006b; Wang, 2016; Sarwoko & Frisdiantara, 2016; Cressy, 2006), and the other to represent

development in business size or quality (Achtenhagen et al., 2010; Wang, 2016). The first is considered the dominant concept in SME studies, since sales growth is considered the best growth measure, because without increasing sales it seems unlikely that growth in other dimensions, such as employment and assets, will occur (Davidsson & Wiklund, 2006b).

Although sales growth has a high level of generality, it can be criticised for its lack of robustness, because some SMEs might seek to minimise their reported sales to avoid VAT⁴. Therefore, researchers have adopted alternative measurements, such as employment and asset growth (Cressy, 2006), albeit the researcher should be aware of the problem of asset growth as a measure in the service sector. For example, it can be difficult to measure asset growth in the service sector, as collecting data can be problematic (Davidsson & Wiklund, 2006b). Accordingly, choosing the suitable aspect of growth depends on the unit of analysis, which, as mentioned before, includes individual, activity or governance structure.

According to Davidsson and Wiklund (2006b), sales and asset indicators are more suitable, and employment is the least suitable indicator when the analysis is on the individual level, and yet all of these indicators are suitable if the government structure is studied. If the activity is used as the unit of analysis, employment and asset indicators have limited suitability. Storey and Greene (2010) identified eight measures of growth, namely sales, employment and a number of other measures. The sales growth measure,

⁴ VAT is the value-added tax.

for instance, is one of the more commonly utilised measures among entrepreneurs, since it is easy to use, whereas the employment growth measure is most commonly used by researchers, since it reflects the resource base of a business. However, employment and sales data have disadvantages as growth measures, as each measurement might not reflect real growth; for example, sales growth may be influenced by price changes (inflation) over time, while employment growth can be influenced by the structure of sectors. Therefore, to provide richer information and a full picture on the growth and performance of a business, it is better to apply more than one measurement of growth (Davidsson & Wiklund, 2006b; Storey & Greene, 2010). Since the main focus of this study is on analysing SME growth in Saudi Arabia, categorised based on employment and annual revenues, changes in employment and annual revenues will therefore reflect growth from two perspectives. To analyse SME growth in Saudi Arabia in depth, factors that might influence this aspect should be considered, and so the following section discusses what might influence SME growth based on previous studies, in order to build the theoretical and empirical frameworks of this study.

2.2.2.2 What influences SME growth?

There is increasing interest in the notion of SME growth due to the important role they play in the economic development, as being a significant tool for job creation and contributing to GDP development. Different theoretical and empirical contributions searching the factors might influence SME growth

and this section focus on discussing the main conceptual contributions in this regard.

One contribution by Storey (1994) suggests three different factors that might influence SME growth, based on a review of more than 25 studies (Davidsson & Wiklund, 2006a; Storey, 1994). The first of these factors is the reason for starting business, meaning what motivates entrepreneurs to start a business. The second is the characteristics of the business itself, such as location, age and legal form. The third factor is related to the firm's strategy in relation to competition, the workforce and management training. However, this framework neglects an important factor, which is the external environment and how it influences the firm's growth.

Other studies have considered different factors influencing SME growth. Firm characteristics such as size, location, age and strategies (Sarwoko and Frisdiantara, 2016) might affect the effectiveness and capabilities of resources such as finance, human resources and knowledge. Entrepreneur characteristics (Wang, 2016; Sarwoko & Frisdiantara, 2016; Al-Damen, 2015) such as age, gender, education, work experience and personality (need for achievement, self-confidence and risk-taking) might influence SMEs. In addition, external factors such as competition, resources, labour market, politics, the economy and laws factors might influence SME growth as well (Wang, 2016; Sarwoko & Frisdiantara, 2016).

Different studies discuss from different perspectives how environmental factors might influence SME growth. These include the cluster perspective (Kasabov, 2015; Rauch, 2013; Delgado et al., 2010), the ecosystem perspective (Spigel, 2015a; Shepherd & Patzelt, 2011; Malecki, 2018) the institutional perspective (Bosma et al., 2018; Acs et al., 2018) social capital and network analysis (Ozdemir et al., 2014; Semrau & Werner, 2014, Sullivan & Ford, 2014; Pollack et al., 2015).

Regarding clusters, four theoretical schools of thought exist. First, we find studies focusing on the influence of localised industries on SME growth, as these businesses will take advantage of interlinked activities to enable cooperation and ensure resources flow easier and thus benefit the SME (Marshall, 2009; Rocha, 2004). However, this perspective has its limitations. First, this argument neglects other actors with whom SMEs can interact and from which they can benefit, such as institutions in government and the private sector (Ingstrup et al., 2009). Second, innovation and technology allow SMEs to interact and network with actors that are geographically distant, thereby challenging the localised industries assumption. In addition, although the main factor from the author's perspective is taking advantage of interrelations and networking, it does not provide any explanation regarding network analysis and how it influences the growth of SMEs.

Another study emphasises the importance of four factors in clusters that might influence SME growth. These include production factors, demand conditions, related supporting industries and firm strategies. It is claimed that these factors influence SME productivity in a positive way, and thus

enable them to grow (Porter, 1998; Raines, 2002). However, Porter's study has attracted significant criticism from academics, due to its theoretical basis (Martin & Sunley, 2003) and methodological issues (Rocha, 2004; Markusen, 1999).

The innovative milieu, another study in cluster theory, assumes that within a given geographical area, relationships develop naturally and generate a localised dynamic process of collective learning that reduces uncertainty in the innovative networking system. According to Spigel (2015a), combinations of social, political, economic and cultural elements within a region support the development and growth of innovative businesses and encourage entrepreneurs and other actors to take the risk to start, find, and assist high-risk ventures. However, these models do not include socio-cultural factors, so the emphasis is on knowledge, socio-cultural, political, institutional and governmental agency networks to encourage innovative activities (Audretsch, 1998; Spigel, 2015a) and enhance business performance and economic development (Ingram & Roberts, 2000). In addition, this study can be applied in developed countries but not in developing countries, where other factors need to be considered, namely government policies and the ecosystem of entrepreneurship. This has led to generating a new direction of academic interest in searching for the impact of entrepreneurial ecosystem and how the ecosystem encourages SME growth.

An ecosystem involves a set of actors or players, such as institutions, systems and mechanisms, cultures and networks, in an economy that work together to support SMEs (Malecki, 2018; Acs et al., 2018; Brush et al., 2018; Khan, 2016). According to Spigel (2017), an entrepreneurship ecosystem is a set of dynamic factors, such as networks, institutions, culture, economic, political, legal, and technology that combine and interact in complex ways that support entrepreneurship and SME's growth. This support can take different forms, depending on the entrepreneurship ecosystem level (Khan, 2016). Khan (2016) and Szabó (2006) explain these levels as follows. First is the strategic level, where policymakers are responsible for supporting SMEs by enhancing legal matters and providing supporting programmes. The second level is the institutional level, where institutions are responsible for and the key factors in supporting SMEs by enabling resource access, networking, cooperation and innovation. The third level is the enterprise level, where entrepreneurs and businesses are responsible for supporting SMEs through incubators, by providing consultant and guidance services, access to innovative technology, networking and awareness programmes.

Institutional support is one of the main factors that can influence the SME's growth, as institutions can play a significant role in structuring and developing a community (Blumer, 1954). This means that policy makers can adopt certain policies to develop institutional support to influence entrepreneurship and SME growth. Other scholars, namely Olsen (1996), has discussed how developing countries can use modern productive

knowledge to develop their community and economy. Evidence for this can be seen in how South Korea grew dramatically as a result of adopting better economic policies and institutions that enable them to use modern productive knowledge to support their business. Another contribution by Thelen (2009) considers how institutions evolve and change over time, as he explained how actors find ways to bend institutions and reinterpret the rules to fit their interests and goals. Accordingly, policy makers can reform policies to develop institutional support to enhance and develop SMEs and entrepreneurship, which can take different forms such as enabling resource access and cooperation. This is similar to what happened in the Silicon Valley, how the government played a significant role in shaping policies and legalisation regarding the support of innovation and entrepreneurship and improved resources through institutions (Lee, 2000).

According to the Global Entrepreneurship Index, “entrepreneurial ecosystems are composed of sub-systems (pillars) that are aggregated into systems (sub-indices) that can be optimised for system performance at the ecosystem level” (Acs et al., 2017, p. 13). Accordingly, the ecosystem can be analysed on the individual, institutional, and environmental levels. Each level considers different measurements and indicators that can be presented as a total score. For example, the environmental level considers the following pillars: opportunity perception, start-up skills, risk acceptance, networking cultural support, opportunity start-up, technology absorption, human capital, competition, product innovation, process innovation, high growth, internationalisation, and risk capital. Table (2-1) illustrates the

definitions of these pillars as explained by the Global Entrepreneurship Index.

2- 1 the description of the Global Entrepreneurship Index pillars

| Pillar name | Description |
|------------------------|--|
| Opportunity Perception | It refers to the entrepreneurial opportunity perception potential of the population and weights this against the freedom of the country and property rights. |
| Start-up Skills | It captures the perception of start-up skills in the population and weights this aspect with the quality of education. |
| Risk Acceptance | It captures the inhibiting effect of fear of failure of the population on entrepreneurial action combined with a measure of the country's risk. |
| Networking | This pillar combines two aspects of networking: (1) a proxy of the ability of potential and active entrepreneurs to access and mobilise opportunities and resources and (2) the ease of access to each other. |
| Cultural Support | This pillar combines how positively a given country's inhabitants view entrepreneurs in terms of status and career choice and how the level of corruption in that country affects this view. |
| Opportunity Start-up | It captures the prevalence of individuals who pursue potentially better quality opportunity-driven start-ups (as opposed to necessity-driven start-ups) weighted with the combined effect of taxation and government quality of services. |
| Technology Absorption | It reflects the technology-intensity of country's start-up activity combined with a country's capacity for firm-level technology absorption. |
| Pillar name | Description |
| Human Capital | It captures the quality of entrepreneurs as weighing the percentage of start-ups founded by individuals with higher than secondary education with a qualitative measure of the propensity of firms in a given country to train their staff combined with the freedom of the labour market. |
| Competition | It measures the level of the product or market uniqueness of start-ups combined with the market power of existing business and business groups as well as with the effectiveness of competitiveness regulation. |
| Product Innovation | It captures the tendency of entrepreneurial firms to create new products weighted by the technology transfer capacity of a country. |
| Process Innovation | It captures the use of new technologies by start-ups combined with the Gross Domestic Expenditure on research and |

| | |
|-----------------|---|
| | Development and potential of country to conduct applied research. |
| High Growth | It is a combined measure of (1) the percentage of high-growth businesses that intend to employ at least ten people and plan to grow more than 50% in five years (2) the availability of venture capital and (3) business strategy sophistication. |
| Internalisation | It captures the degree to which a country's entrepreneurs are internationalised, as measured by business' exporting potential weighted by the level of economic complexity of the country. |
| Risk Capital | It combines two measures of finance: informal investment in start-ups and a measure of the depth of the capital market. Availability of risk capital is to fulfil growth aspirations. |

Source: The Global Entrepreneurship Index (2017).

Overall, these perspectives (clusters, ecosystems and institutions) highlight three main resources that contribute to a business's growth and success. First, shared social awareness and a supporting business environment can engender business cooperation and facilitate access to resources (Rouch, 2013). Second, social networking creates pathways for spreading and sharing resources such as knowledge spill-overs between businesses and universities, and connects entrepreneurs with resources (Ozdemir et al., 2014). Finally, government policies and universities play a significant role in supporting businesses by removing obstacles to entrepreneurs accessing resources (Spigel, 2015).

One school of thought considers that investment in social capital will generate returns for businesses (Lin, 1999; Halpern, 2005; Portes, 1998; Burt, 1997), since social capital can take the form of a network, a cluster of norms, values and expectancies that are shared in a community (Halpern, 2005). One can argue that entrepreneurs can use one of the social capital forms, namely the network, to access resources, support their business and

understand their roles and regulations (Burt & Celotto, 1992). Using networks can therefore potentially increase a firm's chances of success and growth and lower the risk of failure (Watson, 2010), because networks can facilitate the flow of information that provides the entrepreneur with useful knowledge about opportunities and choices. In addition, networks can ease resource access through connecting entrepreneurs with important actors who own valued resources (Lin, 1999).

Another school of thought considers how different internal and external factors might influence SME growth. Internal factors are under the control of business owners, such as strategies and capabilities, whereas external factors are not controlled and might be a threat or an opportunity in the market. First is resource availability, such as finance and qualified human resources (Gupta et al., 2013). Second is adopting different strategies in a business, such as marketing and competitiveness strategies. Third is entrepreneur motivation, since it might reflect in their actions. Finally, we have entrepreneurs' experience in managing a business and dealing with managerial problems (Davidsson & Wiklund, 2006b). According to Gupta et al. (2013), SME growth might be affected by business strategies and capabilities in relation to business financing, operations, marketing and techniques and methods. In addition, external environmental factors might influence SME growth by creating opportunities or threats to business, such as a political situation, the economy, technology, local culture and legal rules and procedures.

Another significant study by The Global Entrepreneurship Monitor (GEM) assumed that the process of entrepreneurship is affected by numerous factors that have a direct influence on how entrepreneurs make decisions on identifying and seizing an opportunity and then reacting to these opportunities. In addition, certain business characteristics can affect growth, including main business drivers, high-growth expectations, a new product-oriented market and an international-oriented market. First, the main drivers refer to reasons for starting a new business, such as a business opportunity, having no better choice or increasing one's income. Second, high-growth expectations can be identified based on generating more job opportunities or creating new products and services for at least some customers. Finally is a consideration of the foreign and international customer (GEM, 2017; Singer et al., 2015b). Therefore, this study assumes that certain characteristics of business influence potential growth, as well as environmental factors that influence the decision-making of entrepreneurs. However, this concept ignores important factors such as entrepreneur characteristics that influence decision-making, namely personal traits, and firm characteristics such as location and strategies, as it only focuses on the early stages of business, whereas entrepreneurship should be a continuous process. Empirical evidence from different school of thoughts on what might influence SME growth are discussed in the next section to define the gap and explain the conceptual and empirical framework of this research.

2.3 Empirical Studies and Defining the Gap

Empirical studies on SME growth have been criticised as somewhat limited, meaning that any researcher setting out to contribute meaningfully to this line of empirical research has a number of challenges to address, due to a paucity of generalizable knowledge. According to Davidsson and Wiklund (2006b), the major challenge in empirical studies on SME growth is the lack of longitudinal design, where growth is a process that needs to be studied over time. Thus, studies in this area are usually based on secondary data, survey data or case studies.

The first option (secondary data) serves the purpose of testing theoretical propositions or estimating empirical relationships, and therefore it cannot be used to develop conceptually richer theories. The second alternative (survey data) can be used if we need data from a large number of cases to explain attitudes and insights on particular phenomena. Case studies, on the other hand, are sometimes longitudinal in the sense of firms' growth followed in real time, where these studies are valuable in developing hypotheses and yet might never suffice for making generalisations about relationships. Accordingly, although longitudinal data can examine and develop theoretical and conceptual assumptions, this could require more time and more funds to collect the data.

Another challenge the researcher might face while conducting an SME growth study is the complex nature of the firm's growth, because it involves economic, social and cultural factors, i.e. different conceptions (Audretsch et al., 2014) such as characteristics, environmental clusters and networks

(Wang, 2016; Sarwoko & Frisdiantara, 2016; Yeboah, 2015). Further challenges concern choosing the suitable growth measurement differentiations between defining and measuring growth (Achtenhagen et al., 2010).

Therefore, Davidsson and Wiklund (2006b) suggested ways to overcome the challenges of conducting SME growth studies. The first step is to develop a satisfactory basic research design, and second, develop and apply a conceptual framework of growth by considering firm and academic perspectives on the subject. Third, match this conceptual and empirical growth framework with the purpose of the study. In order to follow these suggestions, we first need to discuss different empirical studies regarding SME growth, to define the gaps and develop a research design that matches the study's purpose.

Empirically, there is increasing interest in SME growth among academics and policy-makers; due to the role they play (Blackburn & Schaper, 2012; Sarwoko & Frisdiantara, 2016; Wang, 2016) in economic and social development, such as job creation, fostering economic growth, improving competitiveness and regional development. However, only limited evidence supports the notion that SMEs create many jobs. In the US, Canada and the UK, a minority of 20% to 30% account for the workforce (Carroll et al., 2000), whereas in other countries such as Denmark and Germany, 46% and 51%, respectively, of SMEs employ workers (Cowling, 2003). The literature has identified several growth barriers that can enhance or hinder the

survival and growth of SMEs (Wang, 2016; Sarwoko & Frisdiantara, 2016; Yeboah, 2015; Caves, 1998). In Saudi Arabia, SMEs contribute 28% of the total national economic activity and employ about 40% of all workers (Hertog, 2010).

First, motivation drivers such as desire, the need for additional income and socialising are often cited as important factors in starting a business and maintaining its growth (Vik & McElwee, 2011; Sarwoko & Frisdiantara, 2016), because motivational drivers can affect the ability to compete in the market and achieve business growth (Sarwoko & Frisdiantara, 2016; Al-Damen, 2015). Second, some entrepreneur and firm characteristics have influenced SME growth, such as qualifications and business size (Yeboah, 2015). Third, environmental factors might influence SME growth in the form of institutional support, such as training and coaching (Vik & McElwee, 2011). In addition, cultural and organisational aspects, such as competition and innovation, strengthen businesses and industries (Williams & Vorley, 2014; Mayer, 2013). Moreover, technology, markets and diversity, as environmental factors, provide the greatest impact on growth, due to their ability to produce competitive products, leverage technology and create diversity of products (Sarwoko & Frisdiantara, 2016). Another environmental factor is accessing different resources, which is considered a key determinant of SME growth. There is evidence showing that accessing financial resources is considered the most significant obstacle hindering SME growth in developing countries (Wang, 2016).

A further environmental factor is the network at the individual and collective levels, which have an influence on SME growth. Different evidence exists in the literature on how network features such as density, size and access to resources (in terms of strong and weak ties) influence SME growth. Strong ties refer to emotional intensity and frequency, such as friends and family, whereas weak ties refer to infrequent, irregular contacts such as work and business relations (Memon, 2016; Seibert et al., 2001; Brüderl & Preisendörfer, 1998). First, network density, measured by an entrepreneur's effective commitment to a networking group (Pollack et al., 2015), the frequency of interaction (Hansen, 1995; Watson, 2007), or by the degree of centrality and structural-hole (Tan et al., 2015). Network density has a significant impact on different SME growth measurements, for example revenue generation (Pollack et al., 2015), venture growth and survival (Hansen, 1995; Watson, 2007; Aldrich & Reese, 1994; Lee & Tsang, 2001) and the performance of new start-ups (Johannisson, 1996; Erçek & Saritemur, 2017). Evidence also shows that high network density has a negative impact on a firm's innovation performance (Tan et al., 2015), sales growth (Stam & Elfring, 2008), entrepreneur performance (Batjargal, 2007) and profit growth (Batjargal, 2003).

Second, network size, namely the number of weak and strong ties in entrepreneurs network (Sullivan & Ford, 2014), influences SME growth as well as venture survival (Hansen, 1995; Raz & Gloor, 2007), and yet there are no significant impacts on revenues (Batjargal, 2007), the performance of nascent entrepreneurs (Johannisson, 1996) or business survival (Aldrich

& Reese, 1994). Third is resource access, involving establishing whether an individual can reach and access certain resources, using a set of connections with another actor in the social network (Hanneman, 2014, 2016). Fourth is network overlapping, as networks can be analysed based on the type of network, including nodal (individual nodes), dyadic (pairwise nodes), and triadic (triads nodes) (Tichy et al., 1979). The dyadic approach is summarised in terms of pair distance, meaning the relationship and ties between two actors. The triadic approach measures the triad relationships in industrial networks. Evidence shows that SME interactions with other actors in dyadic and triadic ways have benefited their business, especially in marketing and the adopted strategies in SMEs (Qureshi, 2016).

Since entrepreneurs rely on their network on the individual and collective levels to access different resources (Ozdemir et al., 2014), resource access is expected to provide considerable advantages to SME growth (Sarwoko & Frisdiantara, 2016; Zhou & de Wit, 2009). First, access to financial resources (Semrau & Werner, 2014) can play a significant role in this regard (Zhou & de Wit, 2009), since financial resources allow entrepreneurs to enhance and develop their business through innovation, entering new markets and generating jobs (Bellinger & Fletcher, 2014). Second, access to information and knowledge involves information that is useful to starting and managing a business (Jenssen & Koenig, 2002), helping with legal and registration procedures, easing business establishment and protecting business owners' rights (Klapper et al., 2010). SMEs owners can use

information and knowledge to manage the operation and identify opportunities (Levy et al., 2005) by using their social networks to discover opportunities (Carter et al., 2007) and to attain management improvement (Capó-Vicedo et al., 2011). Therefore, access to information and knowledge can play a significant role in SME growth.

Third is access to human resources, i.e. an academically qualified and experienced workforce. Human resources can influence SME growth, as investment in the knowledge, skills and ability of human resources influence SME outcomes, such as in growth and performance (Rotefoss & Kolvereid, 2005; Klyver & Schenkel, 2013; Rauch et al., 2005), and SMEs might rely on human resources as their primary mode of production (Quader, 2007; Rauch et al., 2005). Finally, access to training and education resources to develop skills has been found to be a major influence on SME growth and survival (Bouazza et al., 2015). There is evidence showing that a lack of these resources will affect SME growth (Njoroge & Gathungu, 2013), because they could have an impact on the development and enhancement of an individual's productive capacity (Levy et al., 2005) and thus SME growth and survival. However, other evidence shows conflicting results, whereby most business rely heavily on prior knowledge and experience more than education and training on the influence on their business growth (Simpson et al., 2004).

Previous studies have used different methods to capture resource access, such as resource generator, position generator and name generator. First,

the name generator represents a very detailed social network of an individual based on name interpretation questions (Lin & Erickson, 2010; Van Der Gaag & Snijders, 2005). Second, the position generator captures access through presenting a hierarchically modelled society network formed based on job prestige (Lin & Erickson, 2010), and yet it has limited use. Third, the resource generator measures resource availability based on the strength of social network ties between actors, namely entrepreneurs and institutions, or family and friends. Although this method can be administrated quickly and result in valid and easily interpretable network analyses, it is limited, since it only presents the role of social ties based on the strength of these ties and thus which resources are accessed (Kobayashi et al., 2013; Webber & Huxley, 2007). In addition, it is theoretically designed and based on a specific culture (Foster & Maas, 2016).

As such, improvements and changes need to be considered in this measurement – as suggested in the literature. On the one hand, validate for a different population, due to differences in cultural and research contexts (Webber & Huxley, 2007; Van Der Gaag & Snijders, 2005; Foster & Maas, 2016; Kobayashi et al., 2013). Changes have been made to the resource generator items and instruments, as suggested by Van Der Gaag and Snijders (2005), in different studies for application in different countries, namely in the UK (Webber & Huxley, 2007), USA (Foster & Maas, 2016) and Japan (Kobayashi et al., 2013). On the other hand, this measurement only analyses social capital at the individual level, whereas other units of

analysis such as institutions and agents on the collective level need to be included, as suggested by Van Der Gaag and Snijders (2005), Foster and Maas (2016) and Álvarez and Romani (2017). It is worth mentioning that the majority of studies in the literature using the resource generator to measure resource access have mostly been conducted in health (Kobayashi et al., 2013; Webber & Huxley, 2007) and social research (Foster & Maas, 2016). Therefore, applying this measurement required changes to meet the purpose of the current research, as well as the research context.

As mentioned previously, SMEs might have the capacity to improve the economy (Storey & Greene, 2010; Landström, 2005), as they could play a positive role in innovation (Acs & Audretsch, 1989), job creation potential (Allen, 1989; Storey & Greene, 2010) and regional development (Storey & Greene, 2010). From the resource-based perspective, resource access is considered a significant challenge and a key element in SME growth, and where entrepreneurs rely on their networks (individual level) to access different resources (Ozdemir et al., 2014), resource access is expected to provide considerable advantages. On the other hand, resource access might be at the collective level, i.e. institutional, along with other governmental entities that work to support SMEs through providing three main resources that contribute to business growth and success. First, shared social awareness and a supportive business environment can engender business cooperation and facilitate access to resources (Rauch, 2013) within a community. Second, social networking can create pathways

for spreading and sharing resources, such as knowledge, finance, education, training and human resources (Ozdemir et al., 2014). Finally, these communities are governed by certain norms set up to support business and remove obstacles to entrepreneurs' access to resources (Spigel, 2015b).

From the cluster perspective, evidence shows that networks influence positively SME survival, productivity and growth, as they enhance competitiveness and thus stimulate economic development in different developing countries in Asia (Foghani et al., 2017). Further evidence from Europe, by Camagni and Capello (2000) and explained in Keeble and Wilkinson (2017), shows that networks in high-technology clusters have a positive impact on the productivity and innovation of localised SMEs. From the ecosystem perspective, different empirical studies have been conducted by analysing different factors in the entrepreneurial ecosystem, such as institutional support (Acs et al., 2018; Bosma et al., 2018), as being an important factor in supporting entrepreneurship and thus economic development.

Mention has also been made that different actors in the ecosystem can support SME growth (Malecki, 2018; Acs et al., 2018; Brush et al., 2018; Khan, 2016), as the level of ecosystem can define who are the actors and what constitutes the type of support (Khan, 2016). Since this study is conducted in Saudi Arabia, knowing the level of the entrepreneurship ecosystem would help in analysing the factors and main actors affecting

SME growth. According to Khan (2016), the ecosystem level in Saudi Arabia is at the institutional level, whereby different institutions, such as government and non-governmental bodies, are responsible for providing different types of support such as education and training, thus enabling entrepreneurs to access different resources to ease establishing a business. It is worth mentioning that the ecosystem and the environmental factors are changeable regarding the level of the entrepreneurship ecosystem over time. This change might rely heavily on government policies; for example, when Saudi Arabia was on the strategic level, the government focused on adopting policies that established institutions, encouraging starting businesses. Then when the entrepreneurship ecosystem developed the institutional support, the government adopted policies that focused on how institutions in the private and government sectors can enable entrepreneurs to access different resources and facilitate corporation. To develop the ecosystem to the enterprise level would require adopting policies that focused on creating clusters, corporations between universities and the private sector, and enabling entrepreneurs to access to technology and innovation.

These perspectives (cluster, ecosystem and institutions) highlight three main resources that contribute to business growth and success. First, government policies and universities play a significant role in supporting businesses by removing obstacles to entrepreneur accessing resources (Spigel, 2015). Second, shared social awareness and a supporting business

environment can engender business cooperation and facilitate access to resources (Rouch, 2013). Second, social networking creates pathways for spreading and sharing resources such as knowledge spill-overs between businesses and universities and connect entrepreneurs with resources (Ozdemir et al., 2014).

Clearly, a richer and more balanced analysis of SME's growth incorporates an entrepreneurship ecosystem and network analysis to investigate the role of institutional support in influencing SME's growth by facilitating resources. Thus, based on the network and ecosystem perspectives, there is a need to analyse and test the role of institutional support in enabling SME growth in Saudi Arabia, by analysing different factors, namely resource access at the collective level, environmental factors, and the characteristics of SMEs and entrepreneurs. The next section explains the researcher's point of view regarding what is meant by entrepreneurship; how it is related to SME; and SME's growth from an entrepreneurship ecosystem focusing on the important role institutional support can play in influencing SME's growth through facilitating resources.

2.4 Researcher's Point of View

This study argues that entrepreneurship can be defined based on the process that entrepreneurs go through when identifying an opportunity, seizing this opportunity and then reacting to it, which they can do by inventing new products, techniques or markets. Thereby contributing to the

economy through innovation, which in turn allows SMEs to grow and contribute to the economy by generating more job opportunities and increasing GDP. This study assumes that entrepreneurship should be part of the SME⁵ process. Therefore, we claim that what influences entrepreneurship in turn affects the growth of SMEs. This study argues that an entrepreneurship ecosystem can play a significant role in influencing SMEs' growth and supporting entrepreneurship and SMEs. Thus, analysis of SMEs' growth should consider an entrepreneurship ecosystem perspective. This study defines an entrepreneurship ecosystem as a set of dynamic factors such as networks, institutions, culture, economic, political, legal, and technology that combine and interact in complex ways that influence entrepreneurship and SMEs' growth. In addition, the level of entrepreneurship ecosystem should be considered. Since the study is conducted in Saudi Arabia, the ecosystem level is at the institutional level, meaning that institutions in the government and private sector are responsible for supporting entrepreneurs and SMEs. This means institutional support can be defined in this study as the support provided by the institutions in the government and private sector to facilitate resource access.

Accordingly, the following factors are considered in analysing SMEs' growth in Saudi Arabia. First, institutional support involves gaining access to finance, information and knowledge, training and education resources.

⁵ Small and medium enterprises (SMEs) are defined in this study based on the classification of employment and annual revenue levels mentioned by the Small and Medium Enterprises Authority in Saudi Arabia.

Second, environmental factors, such as economic and political situations, technology, legal procedures and local culture, are external factors over which entrepreneurs have control but can nonetheless influence business growth. Third, entrepreneurs' characteristics, since they go through this process, and thus personal traits might influence how they identify the opportunity, evaluate it and react to it. Finally, SME characteristics reflect the capabilities of the business in relation to acting on an opportunity. Accordingly, this research aims to analyse the role of institutional support in influencing SME growth, by providing practical evidence from Saudi Arabia from entrepreneurship ecosystem perspective. To achieve this goal, this study uses network analysis to examine the role of institutional support in enabling resource access in influencing SMEs' growth. First, this study starting by analysing the role of institutional support in enabling resource access, by analysing entrepreneurs' social networks at the collective level in terms of size and density. In other words, we seek to establish the number of institutions providing access to different resources and frequency of communication with these organisations. Second, this study analyses the roles of resource access, entrepreneur characteristics, SME characteristics and environmental factors in influencing SME growth, which is achieved through a survey.

2.5 Conclusion

To conclude, this chapter discussed three main areas in entrepreneurship research, since defining entrepreneurship and the boundaries of the entrepreneurship research can be difficult, as there are different studies in

from different disciplines, namely economics, business, social sciences and individual behaviour. Therefore, this chapter started by arguing how entrepreneurship can be defined from different schools of thought, including from economists' perspectives, behavioural scientists' perspectives and business management researchers' perspectives. Next, this chapter explained how entrepreneurship and SMEs are complementary concepts, and later it discussed what might influence entrepreneurship and SME growth by discussing the concept of the latter and how to measure it, as well as what might influence it from different perspectives, namely, entrepreneurship ecosystem, institutional support and cluster theory. The chapter then discusses empirical studies regarding SMEs' growth and the factors that might influence this development to identify the gap in the literature. Finally, this chapter presents the researcher's point of view on how entrepreneurship is defined; how it is related to SME; and SMEs' growth from an entrepreneurship ecosystem focusing on the important role institutional support can play in influencing SMEs' growth through facilitating resources. The next chapter will discuss the conceptual and empirical framework utilised to conduct this study.

Chapter 3: Conceptual and Empirical Framework

3.1 Introduction

This chapter explains how this research will achieve its fundamental objectives, by discussing its conceptual and empirical background. Thereafter, it will explain the conceptual and empirical framework of this research by discussing the main concepts and how they can be measured to illustrate the chief assumptions and answer the foremost questions. Accordingly, we present the theoretical and empirical frameworks to answer the three main questions concerning: the role of the social network at the collective level in enabling resource access, as well as the relationship between resource access, along with other factors and SME growth. First, the 'what' element of our questions refers to the main factors and concepts explaining the phenomena. Second, 'how' refers to an explanation of the causal relationships between these factors, or variables that will help find patterns in this regard. Third, the 'why' element refers to the core of a theory and provides logic and justifications for the first and second questions, in addition to generating new insights, challenges and a deeper understanding of the phenomena in question (Crane et al., 2016; Whetten, 1989).

3.2 Conceptual and Empirical Literature Review

This study aims to analyse the role of institutional support in influencing SME growth in Saudi Arabia from an entrepreneurship ecosystem perspective. To achieve this goal, this study seeks to achieve the following fundamental objectives by answering the following questions:

1. What is the role of institutional support in enabling resource access at the collective level in Saudi Arabia?

- Who are the actors in entrepreneurs' social networks that provide institutional support at the collective level?
- What is the link between entrepreneurs and these actors who provide institutional support at collective level?
- What are the main features of entrepreneurs' social networks at the collective level?
- What is the relationship between these main features and resource access at the collective level?

2. How much does institutional support influence SME growth in Saudi Arabia?

- What is the relationship between entrepreneurs' characteristics and SME growth?
- What is the relationship between firms' characteristics and SME growth?
- What is the relationship between resource access at the collective level and SME growth?

- What is the relationship between environmental factors and SME growth?

To address these questions, several concepts need to be clarified, to provide empirical evidence for each question. Mention has been made of the main assumption that social capital is easy and basic, and it is assumed that individuals can gain returns from investment in social relations.

We can argue that networks, as a form of social capital (Halpern, 2005), are formed on individual level (family and friends ties) or collectively (institutions' ties) to enhance the outcomes (SME growth) (Lin, 1999). By considering social capital as an asset in social networks (Lin, 1999) and assuming that individuals interact and network to enhance outcomes (Gedajlovic et al., 2013), we intend to co-operate some of the network analysis into the development of SME growth factors. SME growth is more likely when the network is more developed (Martin et al., 2016), because social networks create pathways for spreading and resource access (Ozdemir et al., 2014) on the individual and collective levels. Other SME factors include characteristics of their owners and the business (Yeboah, 2015), as well as environmental factors (Vik & McElwee, 2011; Williams & Vorley, 2014; Mayer, 2013; Sarwoko & Frisdiantara, 2016; Wang, 2016), based on the resource-based perspective.

Several key concepts are part of social network analysis, namely social network actors and the relational tie between these actors, relationships and

networks. The first concept, actors, involves the people with whom individuals interact (Wasserman & Faust, 1994), though not all of these actors in the social network are of the same type or level (Leenders, 2002), such as the individual and collective levels. Therefore, the actors in this thesis can be at the individual and the collective level. The individual level involves personal contacts such as family and friends, while the collective level involves private and government institutions and business-related contacts, who help access different resources.

Second, relational ties refer to the links between actors. The defining feature of a tie can be employed in network analysis, such as the transfer of material resources and formal relations (Wasserman & Faust, 1994). Thus, relational ties in this thesis refer to the link between the individual and the collective level that allows entrepreneurs to access resources, whereas the collection of these relational ties defines the relational concept. In other words, entrepreneurs can access resources through a variety of ties: 1) strong ties, such as family and friends on the individual level, and 2) weak ties, such as business and work-related on the collective level. Strong ties include emotionally intense and frequent contacts, whereas ties that extend outside of one's social network are likely to be weak, that is, infrequent and business-related (Memon, 2016).

Finally, the social network consists of sets of actors and the relations defining them, meaning the defining feature of a social network depends on

the presence of relational information (Wasserman & Faust, 1994). Therefore, the social network can be analysed based on its features on the individual and collective levels (Memon, 2016; Seibert et al., 2001; Brüderl & Preisendörfer, 1998). Accordingly, we can say that entrepreneurs can use strong relational ties in their social networks, such as family and friends, to access different resources, but also use their weak relational ties in the collective social network, such as government and private institutions, in this regard.

The social network can be analysed based on its size and density on both the individual and the collective level. First, network size refers to the total number of actors with whom entrepreneurs interact in order to access resources on the individual and collective levels (Hoang & Antoncic, 2003). Second, network density is the social network feature that can be defined as the average frequency of communication between entrepreneurs and social network actors on the individual and collective levels (Tan et al., 2015). Social networks can facilitate resource access and availability, which in turn can reduce transaction costs for SMEs and thereby help them engage better and enhance trust among network actors, thus supporting their business (Lin, 1999). This indicates that the higher the density network, the more communication and interaction between social network actors (Tan et al., 2015). Social network size (number of ties) can influence access to resources, as increasing the number of ties with whom entrepreneurs interact for resource access also increases the frequency of business relations interactions positively associated with accessing resources

(Sullivan & Ford, 2014) and thus influences SME growth (Sarwoko & Frisdiantara, 2016; Zhou & de Wit, 2009). This occurs because the size of an entrepreneur's network may be helpful in organising and expanding available opportunities (Memon, 2016). The density of a network may give insights into the speed at which entrepreneurs access resources through weak and strong ties (Hanneman, 2014) and thus influence the growth of their businesses, since SMEs are more likely to grow in a developed network.

In addition, entrepreneurs might rely on their social network (on the individual and collective levels) to access different resources (Ozdemir et al., 2014), such as finance (Semrau & Werner, 2014), to fund their business development and enhancement through innovation (Zhou & de Wit, 2009), enter new markets and generate new job opportunities (Bellinger & Fletcher, 2014). Second, they may seek access to information and knowledge on starting and managing a business (Jenssen & Koenig, 2002; Klapper et al., 2010), identifying opportunities (Levy et al., 2005; Carter et al., 2007) and management enhancements (Capó-Vicedo et al., 2011). Third, they may wish to access human resources, in order to ensure an academically qualified and experienced workforce, and to invest in the knowledge, skills and abilities of human resources that influence SME outcomes such as growth and performance (Rotefoss & Kolvereid, 2005; Klyver & Schenkel, 2013; Rauch et al., 2005; Quader, 2007). Finally, access to training and education resources helps develop skills that enable growth and survival (Bouazza et al., 2015; Njoroge & Gathungu, 2013; Vik & McElwee, 2011),

because training and education do affect an individual's productivity (Levy et al., 2005) – and thus SME growth.

Accordingly, the size and density of an entrepreneur's social network are positively associated with resource access and thus SME growth. The resource generator measures resource access based on the strength of relational ties between actors in a social network and can indicate resource availability. This instrument can be administrated quickly (Van Der Gaag & Snijders, 2005), and yet improvements and changes need to be considered in this measurement, as suggested in the literature (Webber & Huxley, 2007; Van Der Gaag & Snijders, 2005; Foster & Maas, 2016; Kobayashi et al., 2013), in that it needs to be validated for different sections of the population, since it is designed to address certain cultures and contexts. Thus, applying this measurement required changes to meet the purpose of this research, as well as its context.

SMEs are defined in this thesis based on employment and annual revenues. Microbusiness include those with 1-5 employees and from 0-3 million SR annual revenues, small enterprises include businesses with 6-49 employees and 3-40 million SR annual revenues, and medium enterprises include business with 50-249 employees and 40-200 million SR annual revenues (SMEA, 2017). To measure the growth of SMEs, two indicators will be applied to provide richer information and a full picture of business performance from different aspects, which is better than a single indicator (Davidsson & Wiklund, 2006b; Storey & Greene, 2010). Accordingly,

employment and annual revenues will be applied, since SMEs are defined based on these elements.

Other factors that might affect SME growth should be considered during the analysis of SME growth. These factors include entrepreneurs' characteristics, firm's characteristics and environmental factors (Sarwoko & Frisdiantara, 2016). Entrepreneurs' characteristics, such as a need for achievement, self-confidence, risk-taking, education and experience (Yeboah, 2015; Sarwoko & Frisdiantara, 2016; Al-Damen, 2015; Islam et al., 2011), innovativeness and locus of control (Gürol & Atsan, 2006) might influence SME growth, because an entrepreneur's character can be an indicator of how the business is managed (Ciavarella et al., 2004) and the entrepreneur might tend to conduct a business based on particular strengths (Bouazza et al., 2015). Firm characteristics include elements such as marketing, training and competitive strategies, R&D⁶ (Williams & Vorley, 2014; Mayer, 2013; Islam et al., 2011) and adopting new technology (Sarwoko & Frisdiantara, 2016; Bouazza et al., 2015; Yeboah, 2015), because firm characteristics can reflect the degree of effectiveness and capability with which business resources are required, organised and transformed into sellable products and services through organisational practices (Zhou & de Wit, 2009). In addition, environmental factors, such as political, economic, legal, local culture, technology and resource access (Sarwoko & Frisdiantara, 2016; Chittithaworn et al., 2011), might have an impact on SME growth. Environmental factors are external factors beyond

⁶ R&D is the research and design.

the control of entrepreneurs, and so they can provide opportunities or threats in equal measure (Gupta et al., 2013).

Accordingly, we present the theoretical and empirical frameworks of this thesis to answer the main three questions – what, how and why – to understand two topics: the role of the social network at the collective level in enabling resource access, as well as the relationship between resource access, along with other factors, and SME growth. First, ‘what’ refers to the main factors and concepts explaining the phenomena. Second, ‘how’ explains the causal relationships between these factors or variables, to find a pattern of relations. Third, ‘why’ refers to the core of a theory that provides logic and justification for the first and second questions, in addition to generating new insights, challenges and a deeper understanding of the phenomena (Crane et al., 2016; Whetten, 1989). The next section discusses the conceptual and empirical framework of this study based on the above discussion.

3.3 Conceptual and Empirical Framework of the Research

To answer the fundamental questions of this study, this section will explain the theoretical framework by explaining the main concepts necessary to analyse the role of institutional support in enabling resource access and influence SMEs growth. In addition, it will explain the causal relationships between these variables or factors, to find a pattern and to form the main assumption of this study. These assumptions should be formed based on logic, and be justified, for a deeper understanding of the study.

3.3.1 The role of institutional support in enabling resource access

3.3.1.1 The main concepts

In order to analyse the role of institutional support in enabling resource access, entrepreneurs' social networks at the collective level need to be examined. In order to achieve this goal, several concepts need to be defined and explained, in order to outline how each one can be measured. These concepts include the main actors in entrepreneurs' social networks at the collective level, the relational ties between these actors, the main features of these networks and resource access. Social network actors herein refer to those with whom entrepreneurs interact at the collective level (private and government institutions) to access different resources. Relational ties refer to the weak links between actors, such as business and work-related bonds. Accordingly, the social network consists of sets of actors and the relationships defining them, resulting in the defining features network size and density.

Social network size relates to the total number of actors with whom entrepreneurs interact, while social network density is the average frequency of communication between entrepreneurs and social network actors at the collective level. Resource access in this study means the number of resources accessed via institutions in the private and government sectors. Accordingly, social network features and resource access can be measured based on these definitions. In other words, to measure social network size, entrepreneurs will be asked about how many institutions they

can contact, to access different resources. Social network density can be measured by asking about how often entrepreneurs contact these institutions, while resource access can be measured by the resource generator method, after adding changes to meet the aim of this study and the Saudi context. Therefore, entrepreneurs will be asked about eight different matters regarding resource availability and accessing these resources (financial, human, information and knowledge and training and education) via government and the private sector.

3.3.1.2 The main assumptions and justifications

This research assumes that network size and density are related positively to resource access. In other words, the more institutions in an entrepreneur's social network, the more access to resources, because the size of this network may help organise and expand available opportunities. In addition, the strength of weak ties is related positively to resource access, which indicates that the more entrepreneurs contact these institutions, the more they gain access to resources. As the density of a network may give insights into the speed at which entrepreneurs access resources through weak ties, social networks can facilitate resource access, which in turn can reduce transaction costs for SMEs to engage better and enhance trust among network actors and thus, support their business. This indicates that the higher the density of a network, the more communications and interactions between the network's actors.

3.3.2 To what extent does institutional support influence SME growth?

3.3.2.1 The main concepts

In order to analyse to what extent institutional support influences SME growth, several concepts need to be defined and explained based on the main argument of this study. These include entrepreneurs' characteristics, firms' characteristics, environmental factors and SME growth. Entrepreneurs' characteristics in this research refer to their abilities regarding the need for achievement, self-confidence, risk-taking, experience, innovativeness and a locus of control. Firm characteristics include age, location and strategies that include marketing, training, competitiveness, R&D and adopting new technology. Environmental factors in this study include political, economic, legal, local culture and technology factors. SMEs can be defined based on employment and annual revenue levels. Microbusiness are classed as those with 1-5 employees and from 0-3 million SR in annual revenues, small enterprises include business with 6-49 employees and 3-40 million SR annual revenues, and medium enterprises include businesses with 50-249 employees and 40-200 million SR annual revenues. Accordingly, SME growth can be measured based on changes in employment and annual revenues levels.

3.3.2.2 Main assumptions and justifications

Regarding SME growth, this research makes several assumptions. First, it assumes that entrepreneurs' characteristics are associated positively with SME growth, because an entrepreneur's character can influence how the

business is managed in line with their strongest traits. In addition, these characteristics influence all aspects of the entrepreneurship process, from identifying opportunities and evaluating and reacting to them, to adopting suitable strategies and managing resources. Second, firms' characteristics are associated positively with SME growth because they can reflect business ability, namely identifying a process, evaluating opportunities, analysing the internal and external environments, adopting required strategies and managing resources through organisational practices. To explain this notion, certain locations might not have as many opportunities as other locations, as well as, marketing and competition strategies can strengthen business position in the market – and thus growing and expanding. In addition, this research assumes that resource access via institutions in the private and government sectors influences SME growth positively, since resources are necessary for all business activities to develop and grow through business strategies, adopting new technology and employing qualified employees. Finally, environmental factors are external factors beyond the control of entrepreneurs, but they can provide opportunities or threats to business and influence the growth of SMEs. Thus, this research assumes that these factors influence SME growth positively.

3.3.3 Conceptual and empirical framework

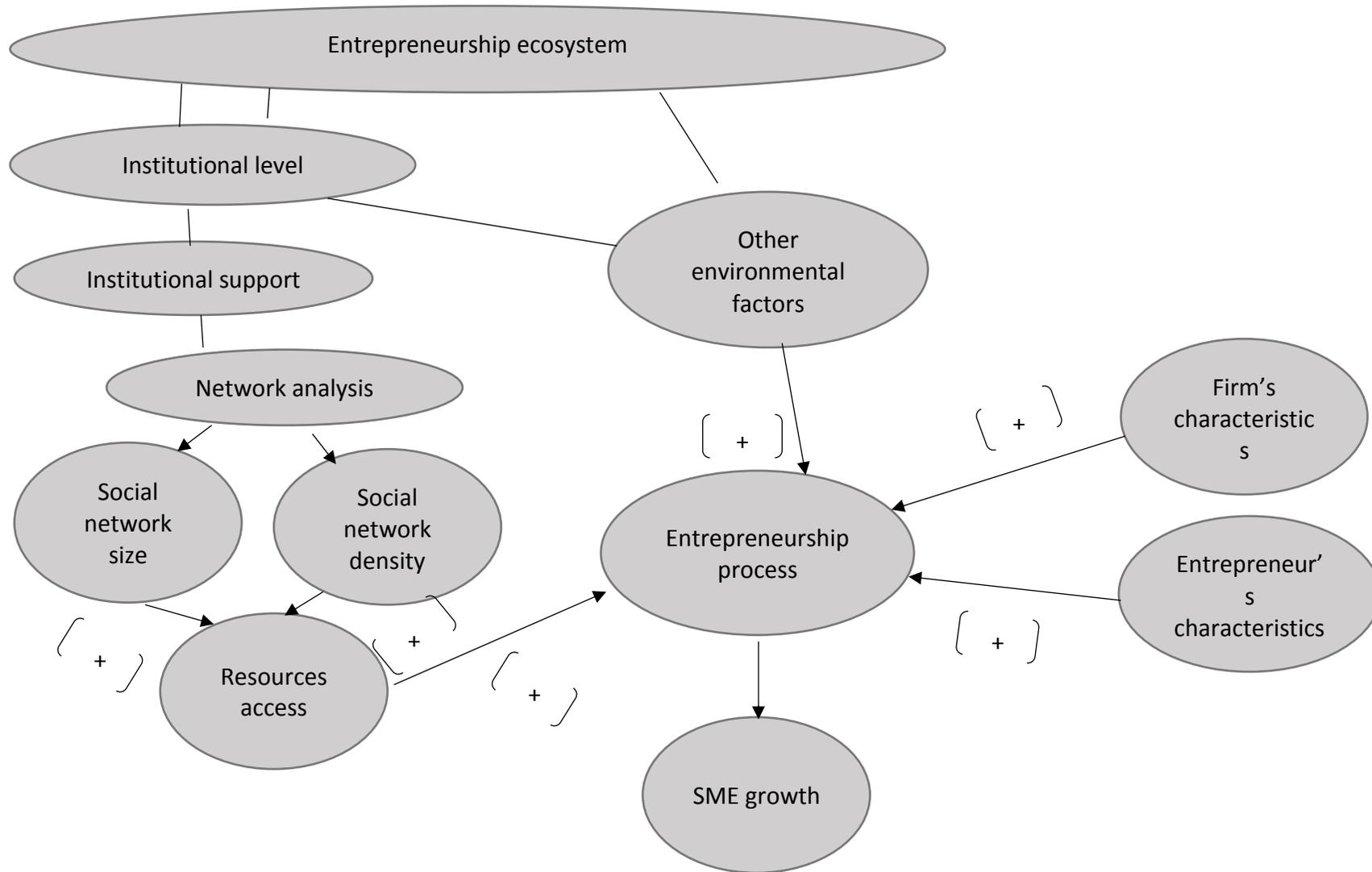
The conceptual and empirical framework of this study is summarised in Table 3-1 and Figure 3-1 and answers the three main questions in this research. First, 'what' refers to the main factors and concepts explaining the

phenomena? Second, 'how' explains the causal relationships between these factors or variables, to find a pattern of relations. Third, 'why' refers to the core of a theory that provides logic and justification for the first and second questions.

Table 3-1 Conceptual and empirical framework

| What | How | Why |
|--|--|--|
| What is the role of institutional support in enabling resource access at the collective level in Saudi Arabia? | | |
| <p>Social network size: total number of people with whom entrepreneurs interact to access resources on the individual and collective levels.</p> <p>Social network density: the average frequency of communication between entrepreneurs and social network actors on the individual and collective levels.</p> <p>Individual and collective levels: the level of actors with whom entrepreneurs interact to access different resources on the individual (personal contacts such as family and friends) and collective (private and government institutions) levels.</p> <p>Resource access: accessibility of finance, information and knowledge, training and education and human resources.</p> | <p>The size and density of the entrepreneur's social network on the individual and collective levels are positively associated with resource access.</p> | <p>Social networks can facilitate resource access, which can reduce transaction costs for SMEs, help them engage better and enhance trust among network actors, thus supporting their business. This indicates that the higher the density network, the more communications and interactions between actors. Social network size (number of ties) can influence access resources, as it increases the number of ties with whom entrepreneurs interact for resource access, as well as the frequency of business interactions positively associated with accessing resources.</p> |
| How much does institutional support influence SME growth in Saudi Arabia? | | |
| <p>Resource access: availability of finance, information and knowledge, training and education and human resources.</p> | <p>There is a positive relationship between resource access and SME growth.</p> | <p>Resource access would help entrepreneurs fund their business, identify opportunities, see management improvements and enhance SME productivity.</p> |
| <p>Entrepreneurs' characteristics: need for achievement, self-confidence, risk-taking, education and experience, innovativeness and locus of control.</p> | <p>There is a positive relationship between entrepreneurs' characteristics and SME growth.</p> | <p>This is because entrepreneur's characters can influence how the business is managed, and their strengths are often reflected.</p> |
| <p>Firm characteristics: age, location and strategies that include (marketing, training and competitive strategies, R&D and adopting new technology).</p> | <p>There is a positive relationship between a firm's characteristics and SME growth.</p> | <p>This is because firm characteristics can reflect business capabilities in all steps of the entrepreneurship process.</p> |
| <p>Other environmental factors: political, economic, legal, local culture and technology.</p> | <p>There is a positive relationship between environmental factors and SME growth.</p> | <p>Environmental factors are external factors and beyond the control of entrepreneurs, thus they can provide opportunities or threats to a business and influence the growth of SMEs.</p> |
| <p>SME growth: changes in the employment and annual revenues of SMEs.</p> | | |

Figure 3-1 Conceptual and empirical framework



3.4 Conclusion

To conclude, this chapter explained how this research will achieve its fundamental objectives, by discussing the conceptual and empirical background. Next, the chapter explained the conceptual and empirical framework by discussing the main concepts, assumptions and justifications regarding the role of entrepreneurs' social networks in enabling resource access and the role this plays, along with other factors, in influencing SME growth. Finally, a summary of the conceptual and empirical framework was illustrated. Before explaining the methodology and research design, we need to explain the Saudi context and the importance of this study, so the next chapter addresses the economy of Saudi Arabia.

Chapter 4: The Saudi Arabian Economy

4.1 Introduction

Saudi Arabia is one of the most oil-rich countries in the world and the largest oil producer, outputting almost 9.8 million barrels of crude oil per day, which is around 30% of daily oil production in OPEC members (Fantin, 2016). The country took advantage of the competitiveness of the international market for oil and has thus received extremely high revenues for over 40 years. As such, the oil industry is considered the main engine of the country's economic development (Albassam, 2015). Since the 1980s, the industry has contributed to half of the total gross domestic product (GDP). According to the Central Department of Statistics and Information of Saudi Arabia, but despite this economic development, relying on this industry has created a major problem in the form of a non-diversified economy, resulting in unsustainable development and a weak private sector. The latter contributed 10% to total GDP between 2004 and 2013 (Aldarwish et al., 2015), and contributed 17% to GDP in 2016 after the economic reforms in 2015 (Bhatia, 2017).

Additionally, the private sector cannot generate high-skilled job opportunities; instead, the majority of jobs are low-skilled and poorly paid, resulting in an increase in foreign workers in this sector by up to 50% (Khorsheed et al., 2014) comparing with job opportunities in the government and oil sector and related industries that were the most supported by the government. As around 57% of job seekers in the kingdom are highly educated, they only consider jobs that require high

qualifications – not low-skilled jobs. In addition, the private sector does not provide the necessary training programmes to enhance skills and productivity, which would otherwise engage local workers (De Bel-Air, 2014). Based on a survey carried out by Najat et al. (2016), more than 30% of Saudis find it difficult to work in the private sector, due to long working hours and low payment, and 21% admit that private sector work does not suit them. Others state that some businesses in the private sector do not want to employ nationals, and finding a suitable job might require having good contacts. A diversified economy would assist in achieving sustainable growth away from the oil industry through strengthened productivity and the contribution of the private sector (Aldarwish et al., 2015). Consequently, diversifying the economy is necessary to decrease the risk of volatility and uncertainty in the international oil market, which could cause problems for the economy (Walker, 2015), and help generate suitable job opportunities in the private sector.

The Saudi government has adopted policies to strengthen the private sector and achieve diversification by enhancing the business environment and reforming the labour market to increase employment rates. In different development plans, policies have been introduced since the first Development Plan (1970-1975) and the latest Development Plan (2015-2019) (Albassam, 2015), which will be reformed by introducing new policies and programmes in the new Vision 2030 strategy. Economic diversification has been a main target of the government in all ten Development Plans. One of the three objectives of the first Development Plan was *“diversifying sources of national income and reducing dependence on oil by increasing of other productive sectors in gross domestic product”* (Ministry of

Economy and Planning, 2014, p.23). Although diversification is one of the major objectives of all development plans, the oil sector is considered the driving force behind the Saudi economy, as the government relies on oil revenues to cover expenditure more than other income, based on SAMA statistics (SAMA, 2016). Relying on oil revenues presented a real challenge when oil prices fell significantly in 2015 to US \$46.47 per barrel, as the government had to cover expenditure and thus decrease GDP in 2015. The lack of any success in diversifying the economy can be attributed to these plans lacking clarity on who should apply these policies and programmes (Alkhathlan, 2008). Thus, changes need to be made, in order to achieve a number of economic goals (Alkhathlan, 2008). Considerable reforms and changes have been made politically and economically during these Development Plans (Albassam, 2012), one of which is Vision 2030, as will be explained in more detail in this chapter.

This chapter is organised as follows. First, it presents a review of the main features of the Saudi economy, including diversification, employment and unemployment and the business and entrepreneurship ecosystem. In addition, a brief outline of the main objectives of all ten Development Plans is provided. The second section discusses in more detail Saudi Vision 2030, which was adopted recently to tackle fundamental issues in the kingdom. Vision 2030 is explained in terms of the governance bodies, how to achieve Vision 2030, SMEs, entrepreneurship and achievements to date.

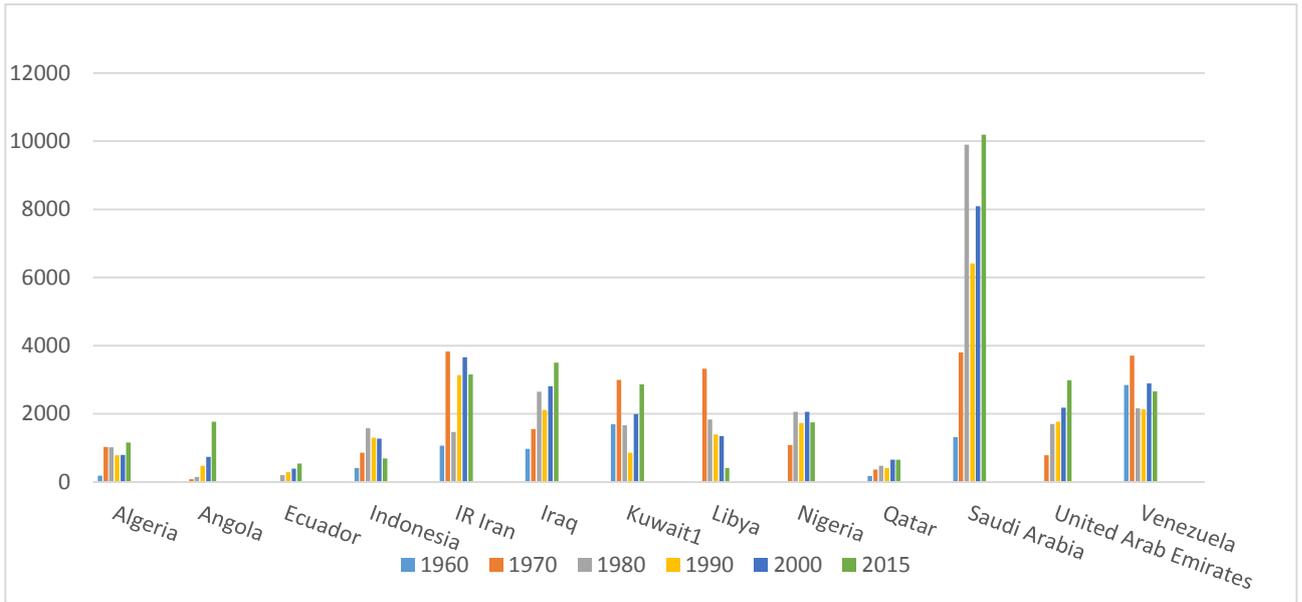
4.2 A Review of the Saudi Economy

4.2.1 Diversification in the Saudi Economy

Saudi Arabia is one of the most oil-rich countries in the world and the largest oil producer (see Figure 4-1 for the daily crude oil production (average) of OPEC⁷ members for the last six decades). Compared with other members of OPEC, Saudi Arabia has been considered the largest producer since 1970s. The country took advantage of the competitiveness of the international market for oil and received extremely high revenues for over 40 years. As such, the oil industry is considered the main driver of the country's economic development (Albassam, 2015). Since the 1970s, the oil sector has contributed significantly to total GDP (see Figure 4-2 for different sector contributions to GDP in Saudi Arabia from 1970-2015). In addition, the Saudi government has relied mainly on oil revenues to cover all government expenditure, namely on developing human and economic resources, health and social infrastructure, transport and communication since the 1980s (see Figure 4-3 Government revenues and expenditures).

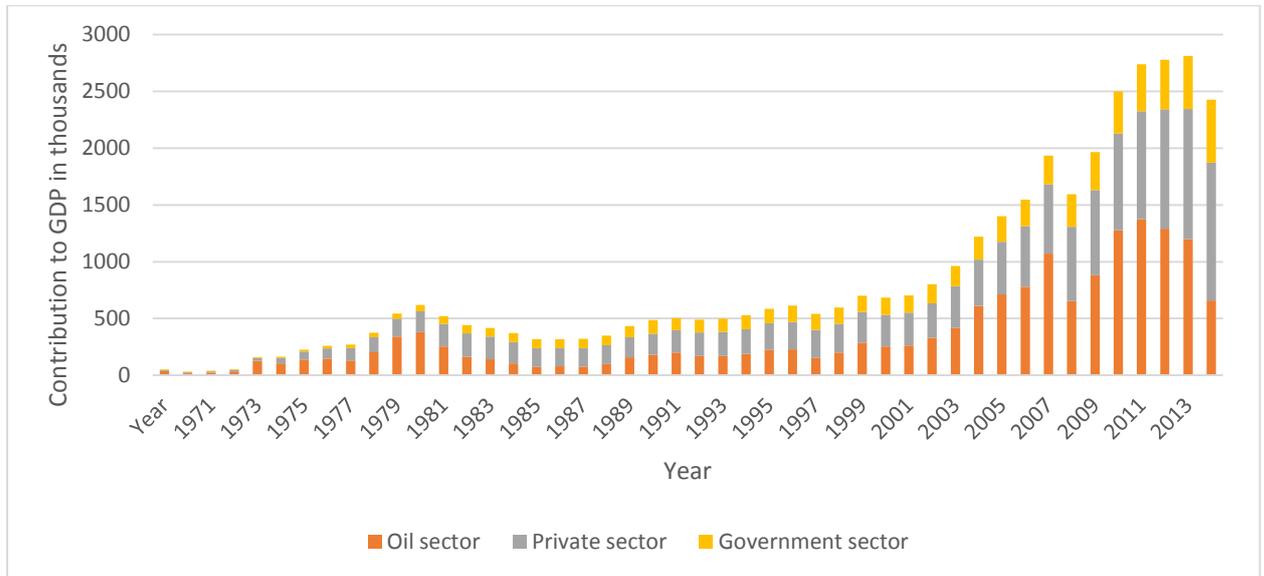
⁷ OPEC is the Organization of Petroleum Exporting Countries

Figure 4-1 Daily Crude Oil Production (average) of OPEC Members



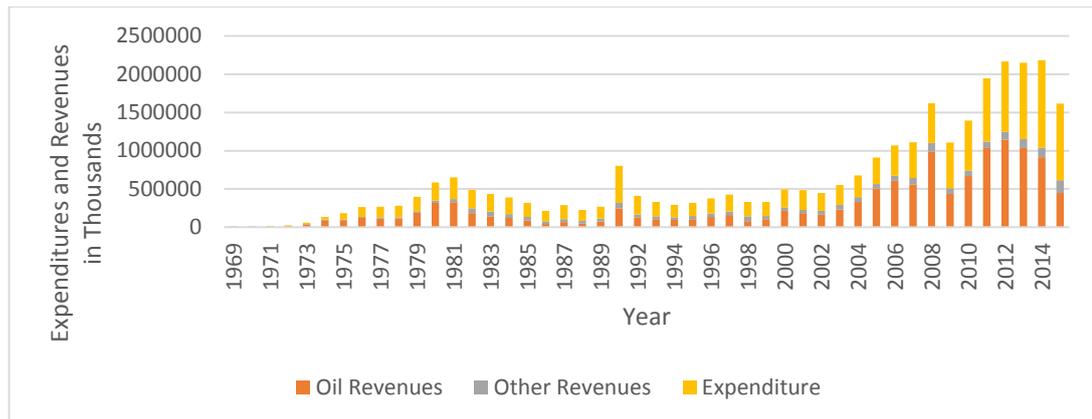
Source: OPEC Annual Statistical Bulletin Report, 2016.

Figure 4-2 Contribution of different Sectors in Saudi Arabia (1970-2015)



Source: Saudi Arabian Monetary Authority (SAMA), Annual Statistics (SAMA, 2016).

Figure 4-3 Government Revenues and Expenditures



Source: Saudi Arabian Monetary Authority (SAMA), Annual Statistics (SAMA, 2016).
 Note: data for 1989, 1990 and 1991 are not available.

Although the oil industry has contributed significantly to the economic development in Saudi since, by funding significantly GDP and covering all government expenditure, relying on it has created a major problem for the non-diversified economy that has emerged, resulting in unsustainable development. This means that any changes in the oil prices would influence directly the Saudi economy, which is what happened recently in 2015 and resulted in major changes in the economy and policy. To explain further, when oil prices fell significantly in 2015 to US \$ 46.47 per barrel (see Table 4-1 changes in oil prices), oil revenues decreased along with GDP (see Figures 4-2 and 4-3).

Table 4-1 Changes in Oil prices (Arabian Light), Nominal and Real Prices

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|-------------------------------------|-------|-------|-------|-------|-------|--------|--------|--------|-------|-------|
| Oil Prices for Arabian Light | | | | | | | | | | |
| Nominal Price (*) | 61.10 | 68.75 | 95.16 | 61.38 | 77.82 | 107.82 | 110.22 | 106.53 | 97.18 | 49.85 |
| Real Price (*) | 59.94 | 62.59 | 80.38 | 53.89 | 68.60 | 88.79 | 93.06 | 88.95 | 80.34 | 46.47 |

Source: the Saudi Arabian Monetary Authority (SAMA), Annual Statistics (SAMA, 2016).

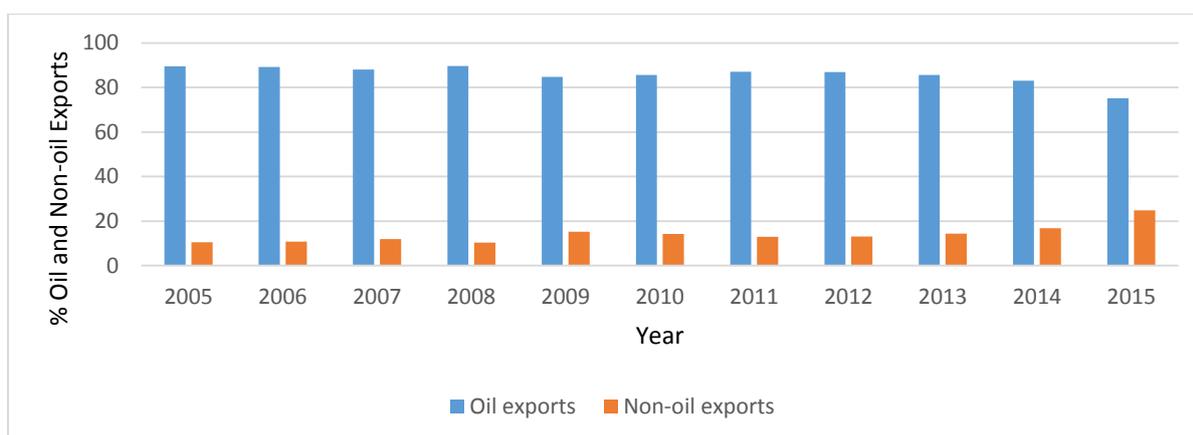
(*) Base year 2005 and prices in US\$ per barrel.

Theoretically, changes in oil prices are expected to have two contradictory effects on the private sector and the manufacturing sector, since production costs will reduce. However, this is not the case in Saudi Arabia, where the government plays an important role in supporting the manufacturing and private sectors and relies on oil export revenues to support them. Therefore, lower oil prices will reduce export revenues and the government may not be able to provide the same level of support to the private and manufacturing sectors as it used to do (Mahboub and Ahmad, 2017). This has led to changes in the Saudi economy and policies, such as decreasing government expenditure for 2016 in the education and military sectors, as well as announcing the Saudi Vision 2030 during an interview with Prince Mohammed Bin Salman (2016) and explained further in another interview (Salman, 2017), which will be explained in more detail later on.

In terms of diversification, Saudi Arabia needs economic change for numerous reasons. First, since the government relies significantly on oil sector revenues to cover expenditure and support different sectors, diversifying the economy would minimise the risk of uncertainty amidst the volatility of oil prices. Second, diversifying the economy would influence economic development in regards to

generating more job opportunities and thus decreasing unemployment rates, especially among the younger generation, as well as increase productivity and ensure sustainable growth and non-oil revenues (Al-Darwish et al., 2015a). As seen in Figure 4-2, illustrating the contributions of different sectors to GDP, further diversification is important, to avoid the risk of one-sided, heavy reliance on production and exports. Figure 4-4 indicates this heavy reliance on oil exports at almost 90% in 2005, which decreased slightly during the following years to around 73% in 2015.

Figure 4-4 Oil and Non-Oil Exports Percentages in Saudi Arabia (2005-2015)



Source: Saudi Arabian Monetary Authority (SAMA), Annual Statistics (SAMA, 2016).

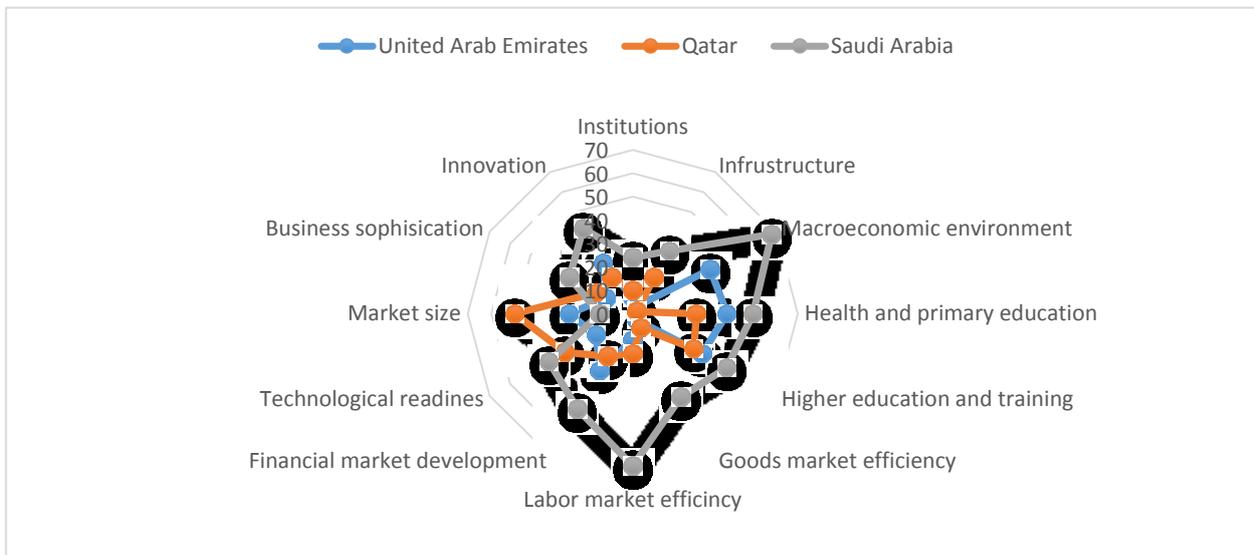
Comparing the business indicators of Saudi Arabia with other countries, the kingdom is doing well regarding infrastructure, promoting exports, regulating the labour market and training and education, and yet further changes and enhancements need to be made in terms of business regulations (Al-Darwish et al., 2015a). To explain, according to the Global Competitiveness Index⁸ 2016-

⁸ This index involves 114 measurements representing the productivity and prosperity of a nation.

2017, among 138 countries, Saudi Arabia was ranked 29th, losing four places due to decreasing oil prices that impacted negatively on the economic environment (Schwab, 2017). For basic requirements, the macroeconomic environment has the lowest rank (68), in terms of efficiency-driven economies the lowest rank was in labour market efficiency, and in innovation-driven economies innovation was ranked lowest. Therefore, achieving higher diversification will require enhancing the macroeconomic environment in terms of basic requirements, and building capacities in innovative industries and service sectors to enhance innovation and sophistication factors. In addition, augmenting labour regulations and making them more flexible, as well as strengthening education, will be necessary in this regard (Schwab, 2017; Jeddah-Chamber, 2016). To achieve this goal, understanding the challenges of the labour market and the main features of the entrepreneurship ecosystem will help tackle the fundamental issues in the Saudi economy. Figure 4-5 shows the global competitiveness rank in three Gulf Cooperation Council (GCC)⁹ nations, namely United Arab Emirates, Qatar and Saudi Arabia. The following sections discuss the main challenges in the labour market and then the main features of the entrepreneurship ecosystem in Saudi Arabia.

⁹ The GCC includes Kuwait, Bahrain, Saudi Arabia, United Arab Emirates and Oman.

Figure 4-5 Global Competitive Rank in Saudi Arabia, United Arab Emirates and Qatar, 2016-2017



Source: Global Competitiveness Report, 2016-2017.

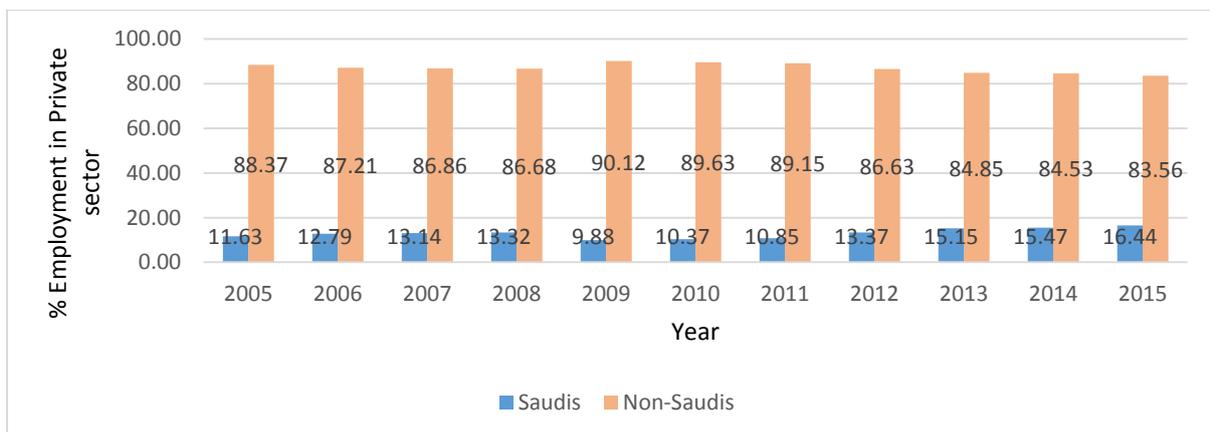
4.2.2 Employment and Unemployment in Saudi Arabia

Four main challenges in the labour market explain its insufficiency. First is a lack of competitive job opportunities for locals in the private sector, as the majority of positions are low-skilled and low-wage, which has resulted in an increase in foreign workers in this sector by up to 50% (Khorsheed et al., 2014). As around 57% of job seekers in Saudi Arabia are highly educated, they refuse to take these low-skilled jobs that do not require high academic qualifications. In addition, the private sector does not provide the necessary training programmes to enhance skills and productivity, which are necessary to engage local workers in the private sector (De Bel-Air, 2014).

In addition, state-owned enterprises still provide most of the jobs for Saudis entering the workforce, with about two-thirds of the employable population finding work in this way. Expanded opportunities within the private sector, however, have

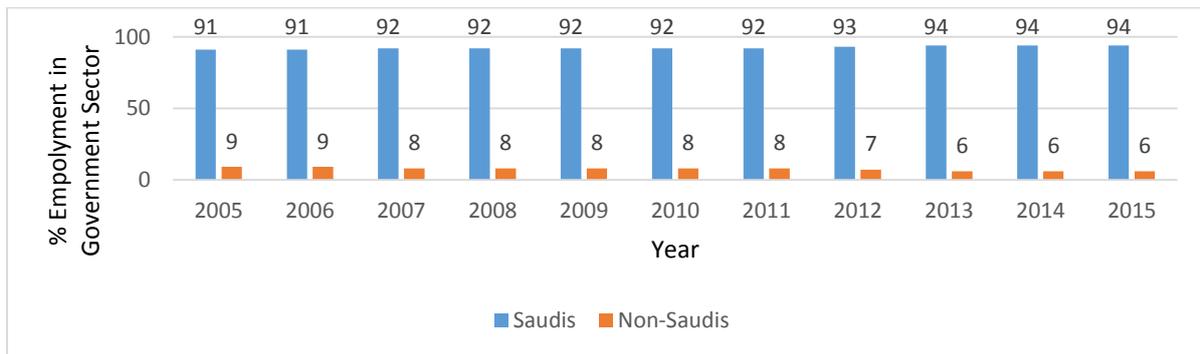
not changed perceptions of these jobs, and so Saudi nationals continue to view public sector work as more attractive than the private sector. As a result, as shown in Figure 4-6, expatriates overwhelmingly hold private sector jobs, while in Figure 4-7 Saudis dominate the public sector job market. As Figure 4-8 highlights, the ratio of government sector to private sector wages is changing slightly, but government sector wages are still better than private sector wages, which reinforces many Saudis' employment perceptions. In addition, many public sector jobs require a working week of 40 hours or fewer, while private sector jobs often require working for more days and hours per week. Accordingly, younger workers often prefer to remain jobless and wait for a public-sector vacancy. Therefore, although the number of Saudis in the private sector has been increasing, the private sector relies mainly on foreign labour, which is considered the second challenge in the labour market (MOL, 2016).

Figure 4-6 Employment Percentage by Nationality in Private Sector (2005-2015)



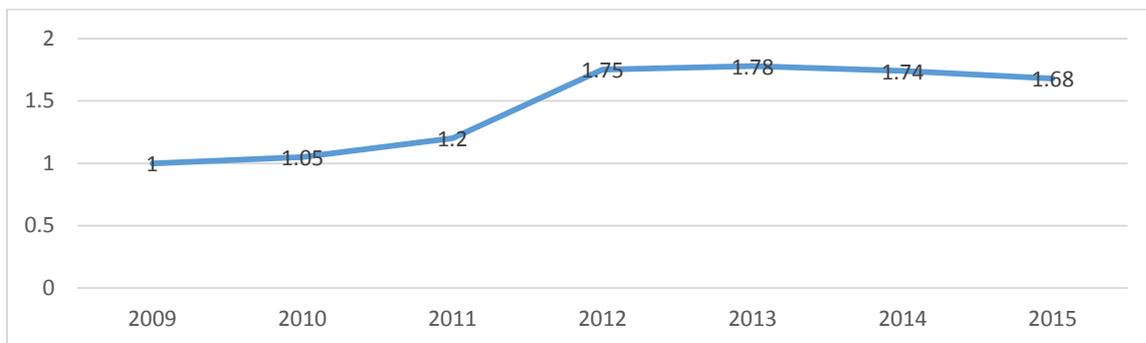
Source: Saudi Arabian Monetary Authority (SAMA), Annual Statistics (SAMA, 2016).

Figure 4-7 Employment Percentage by Nationality in Government Sector (2005-2015)



Source: Saudi Arabian Monetary Authority (SAMA), Annual Statistics (SAMA, 2016).

Figure 4-8 Ratio of Employment in Government Sector to the Private Sector

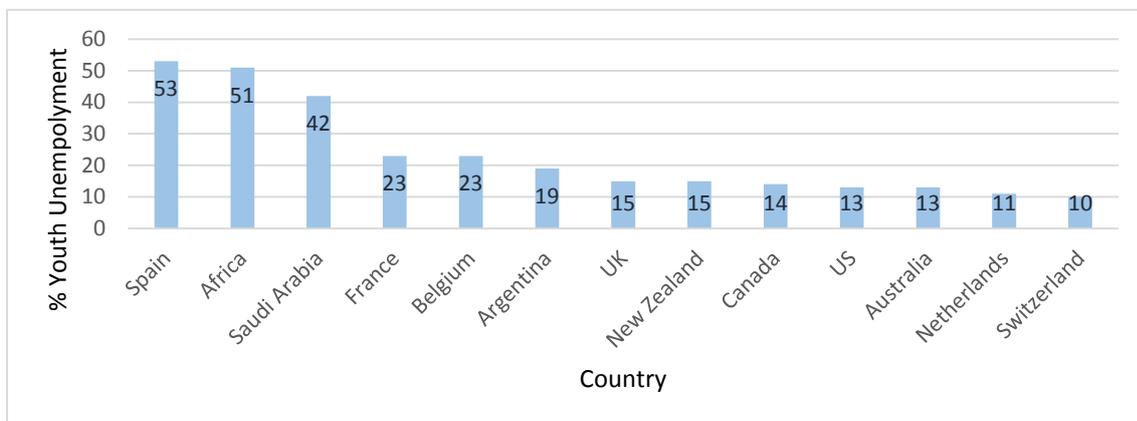


Source: Manpower & Employment, Talent Management and Compensation, 2016 by Jeddah Chamber.

The third challenge is youth unemployment, which is increasing annually, as more young people join the labour market year on year; in 2014, for instance, 42% of unemployed Saudis were from the younger generation. Figure 4-9 shows youth unemployment rates in different countries, with Saudi Arabia having significant rate. A major driver of the high unemployment rate is the gap between labour demand and supply in terms of academic qualifications and required skills. Thus, providing training and education programmes designed to meet the needs of the labour market (private sector) is required. In addition, setting different regulations to generate more competitive job opportunities for young Saudis, such as enhancing wages, working hours and days, and improving job security, would be

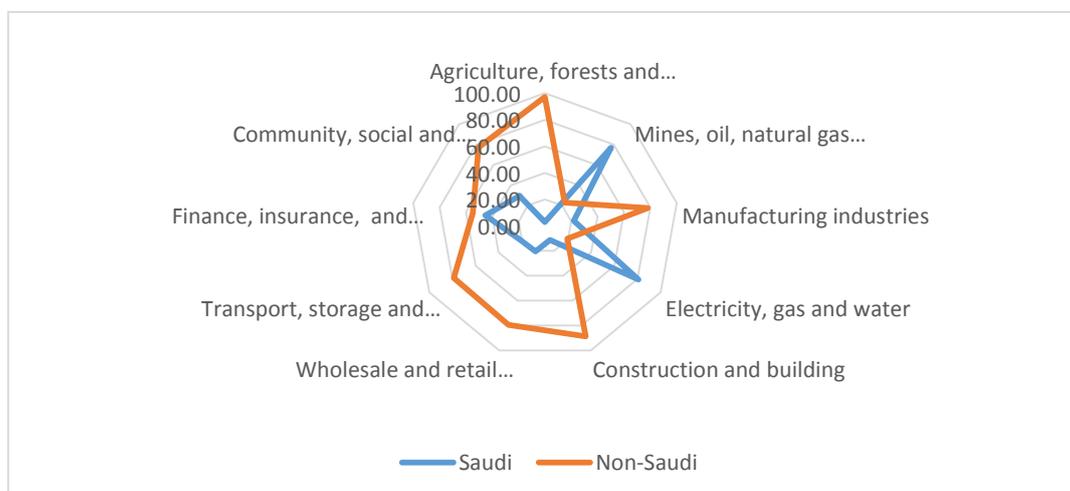
a welcome intervention (Jeddah-Chamber, 2016). Although government sectors (education, public administration and defence) are major employers in the kingdom, the public sector cannot grow indefinitely, which means that most of the jobs must come from the private sector, which currently employs a comparatively lower number of Saudi workers (MOL, 2016). Figure 4-10 shows the number of employees in different sectors.

Figure 4-9 Youth (aged 15-24) Unemployment Percentage across Nations



Source: Saudi Arabia – Manpower and Employment Talent Management and Compensation Report, by Jeddah Chamber (2016).

Figure 4-10 Percentage of Saudi and non-Saudi workers in different economic activities (2016)



Source: Saudi Arabian Monetary Authority (SAMA), Annual Statistics (SAMA, 2016).

Fourth, there is a gap between demand and supply in the labour market, which is related to the issues mentioned above. Mismatching between demand and supply, especially in connecting jobseekers to opportunities that most effectively match their skills, is considered another obstacle in the labour market, and so we can deduce that the link between jobseekers and private employers is clearly not functioning effectively. Part of the reason for the lack of publicly available information is that the labour market has relied traditionally on personal connections and networks (MOL, 2016, Jeddah-Chamber, 2016). Based on survey results done by Oxford Strategic Consulting on Saudi employment, not having good contacts is considered one of the most significant difficulties Saudis face in finding jobs. In addition, Saudis might face several problems finding a suitable job in the private sector, due to long working hours, low payment and the fact that some business will actively avoid employing nationals (Najat et al., 2016).

4.2.3 Business and Entrepreneurship Ecosystem in Saudi Arabia

The ecosystem concept underlines and emphasises the community aspect and environment with which this community's actors interact, and a business ecosystem represents how the business community is dynamically structured and interconnected. It is suggested that these businesses can be of any size, in any sector and have varying ways in influencing the system (business ecosystem) (Peltoniemi & Vuori, 2004). As such, the business ecosystem can be developed by these organisations through prevailing competition and cooperation. On the other hand, an entrepreneurship ecosystem emphasises the importance of other players

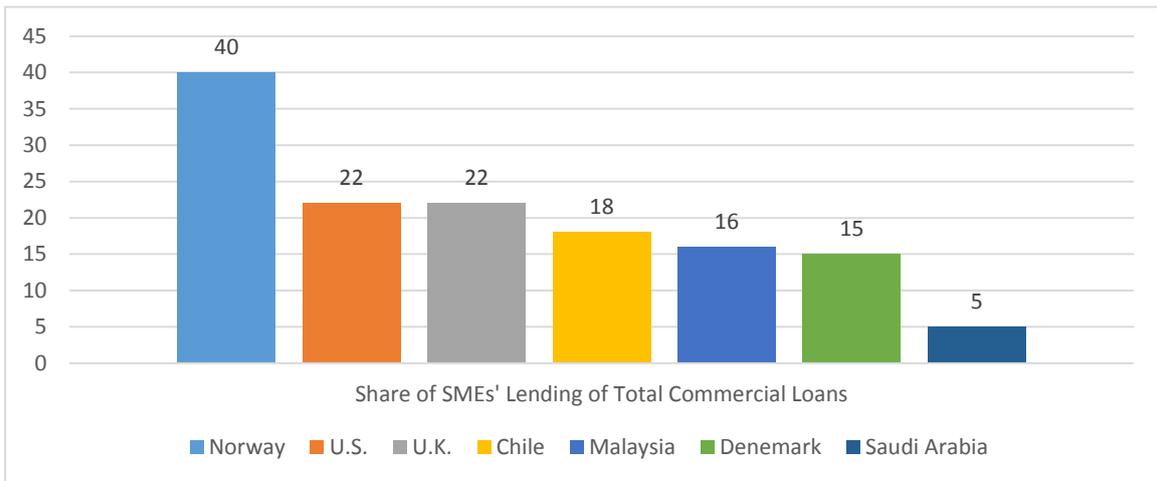
in the economy in developing the ecosystem and influencing firm growth (Davidsson et al., 2006), thus requiring serious and cohesive action (Khan, 2016). As mentioned in the second chapter, entrepreneurship is defined in terms of the process involved in SME creation and growth. As such, it is a “correspondence act,” or process, for inventing technology, products, methods, industries or markets (Ndhlovu & Spring, 2009) to establish SMEs, and this process involves identifying opportunities, evaluating these opportunities and reacting to them by managing resources and appraising environmental factors (Shane & Venkataraman, 2000). Therefore, SMEs are affected by certain factors that the government can play a significant role in enhancing them to develop the ecosystem, including resource availability and other environmental factors, namely political, economic, local culture, legal and technological.

In most advanced economies, SMEs contribute as much as 70% to GDP. Saudi SMEs, however, are not yet major contributors, accounting for less than 20% of GDP in 2015 compared with other developed countries, as shown in Figure 4-11. Although Saudi Arabia has taken considerable steps toward boosting the business environment and supporting SMEs, further enrichment regarding institutional support needs to progress further. For example, in terms of financial support, financial institutions in the kingdom provide no more than 5% of their commercial loans to SMEs, which is lower than the global average (see Figure 4-11). In addition, many entrepreneurs and investors believe that business regulations and incorporation policies, such as accessing funds and establishing a business, are inefficient and deter investment, while the legal framework does not provide

enough support or transparency to resolve contract disputes or avoid bankruptcies. In fact, Saudi Arabia ranks last among advanced countries in resolving insolvency issues. Cultural attributes can also inhibit start-up businesses, because entrepreneurs have very few examples to follow, since the businesses most familiar to Saudis are large government-controlled enterprises (MOL, 2016). As a result, the younger generation entering the workforce favour large businesses for their prestige, stability and promising career paths (Najat et al., 2016). According to Mohammad and Ahmed (2013), the main features of Saudi culture might deter entrepreneurial activities, particularly in regard to favouring large size business and avoiding taking risks, while government sector work offers security. Accordingly, these reasons should be considered within development policies to enhance the entrepreneurship ecosystem by creating an entrepreneurial culture and encouraging SME creation, since it can play a significant role in job creation, not just contribute to GDP. For further details on how much SMEs contribute to GDP in different countries, see Figure 4-12, and on numbers of employees by sector and company size, see Figures 4-13 and 4-14. For more detail on the sector structure of SMEs, which is skewed towards simple contacting and trading operations (Hertog, 2010), see as follows:

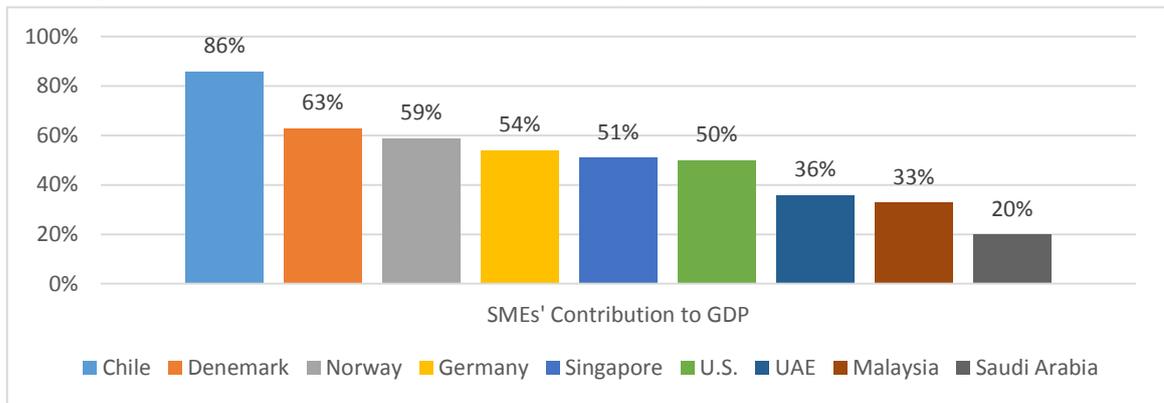
- 47% commercial and hotel
- 27% construction
- 12% industrial
- 6% social services
- 8% other

Figure 4-11 Share of SME Lending to Total Commercial Loans (2015)



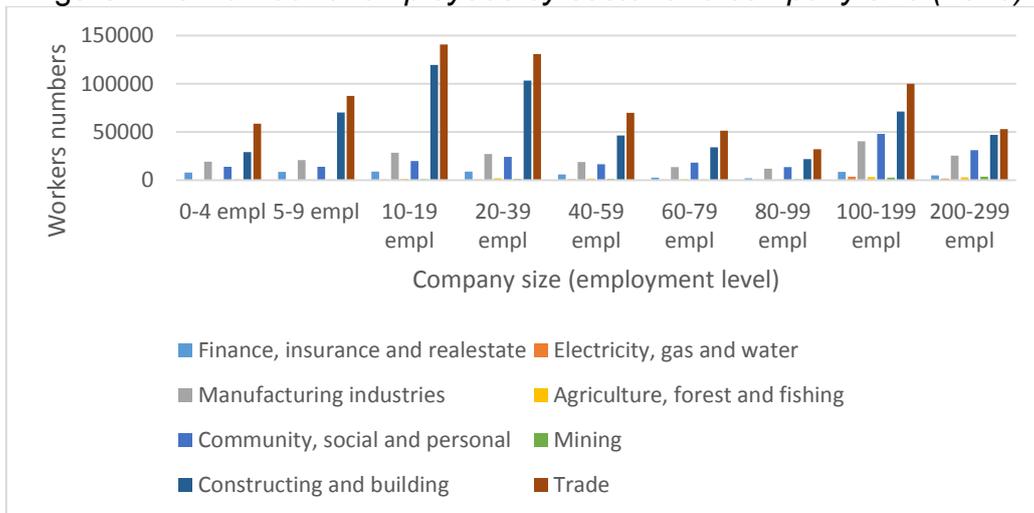
Source: Saudi Arabia Labour Market Report, 3rd edition (2016).

Figure 4-12 SME Contribution to GDP (2015) in Different Countries



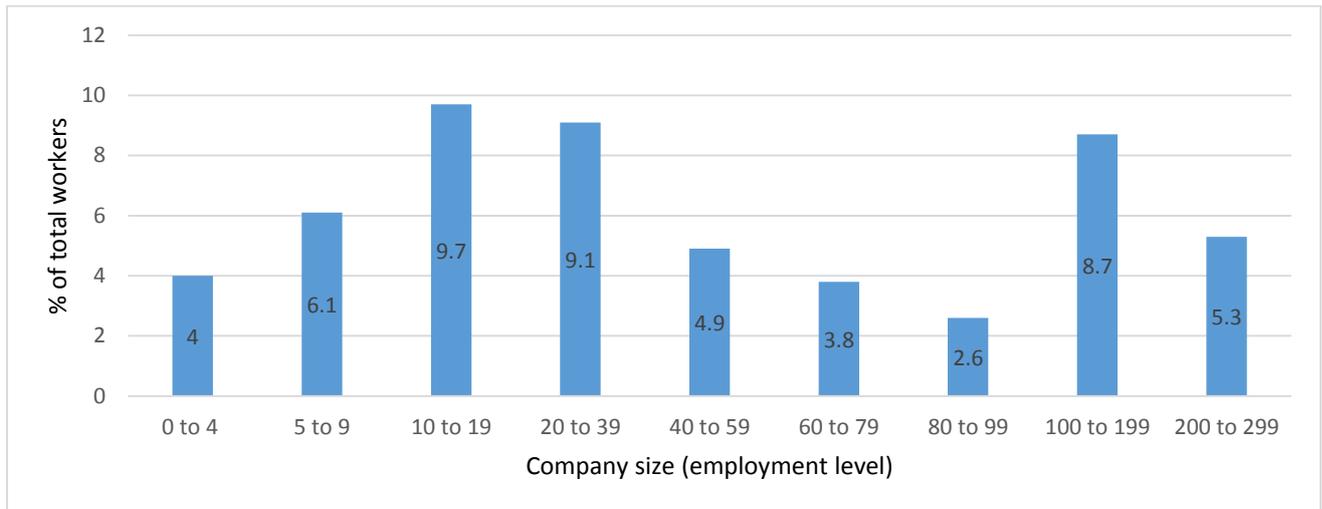
Source: Saudi Arabia Labour Market Report, 3rd edition (2016).

Figure 4-13 Number of employees by sector and company size (2010)



Source: Benchmarking SME policies in GCC: a survey of challenges and opportunities by (Hertog, 2010).

Figure 4-14 Percentage of total workers by company size



Source: *Benchmarking SME policies in GCC: a survey of challenges and opportunities* (Hertog, 2010).

Based on the evaluation by Khan (2016) of the Saudi Arabia entrepreneurship ecosystem (2013-2015), it operates at the institutional level. In other words, different institutions, such as government and non-governmental institutions, are responsible for providing different types of support, such as educational and training support, thereby enabling entrepreneurs to access different resources and easing the rigours of establishing a business. Improvements can be seen in the considerable increase in the number of institutions providing access to education, training, information and knowledge resources in 2014, whereas in 2013 this support was limited. To develop the level of the entrepreneurship ecosystem from the institutional level to the enterprise level, further support is required, such as consulting and mentoring services, access to technology and technology transfer and incubators (Khan, 2016). See Table 4-3 for more information on all levels of the entrepreneurship ecosystem, and Figure 4-15 for more details on government and private sector organisations. Therefore, efforts need to be applied in five areas:

sector development, financing, capability and resources, the business environment and entrepreneurship culture (MOL, 2016).

In general, the non-diversified economy and high unemployment rates in Saudi Arabia have been considered the main issues in the economy since the 1970s, even though the Saudi government has adopted ten Development Plans to address these issues (see Tables 1, 2, 3 and 4 in Appendix 2 for more details on the objectives of these plans). Furthermore, policies have been adopted to boost the entrepreneurship ecosystem and subsequently to support SME growth, believing that SMEs can play a significant role in Saudi Arabia, especially in creating job opportunities and achieving diversification. An evaluation of these Development Plans, undertaken by (Alkhatlan, 2008), shows that the government has had to adopt new policies and programmes to achieve its goals. As the author suggested, this involves continuing the establishment of more industrial cities, encouraging large corporations, promoting export-oriented development policies and generating more investment in the country, thus diversifying the economy by focusing more on privatisation, economic knowledge and research. In addition, he suggests dealing with the oil sector separately from others, since it is politically organised and follows OPEC arrangements, and supervising the progress of the Development Plans. Considerable reforms and changes have been made politically and from an economy point of view during these Development Plans (Albassam, 2012). The most significant economic reform was made by the new government, under the rulership of King Salman, in 2015, by announcing the Vision 2030 by the Crown Prince. The programmes are divided into three batches, with the first running until 2020, the second up to 2025 and the third to 2030, and they

have clear objectives and methods to achieve the vision, as explained by the prince himself when Al Arabiya¹⁰ interviewed him in (2016). Thereafter, the rest of the first-phase vision programmes up to 2020 were launched in 2017 in another Crown Prince interview by the same channel in (2017). Ten programmes were launched, amongst which were the National Transformation Programme and the Fiscal Balance programme, which should be achieved during 2017, 2018, 2019 and 2020. The following section discusses Vision 2030, and how to achieve this vision and governance model, by focusing on how it will help tackle the fundamental issues in Saudi Arabia and augment the current entrepreneurship ecosystem.

¹⁰ Al Arabiya is a Middle-Eastern channel.

Table 4-2 Levels of Entrepreneurship Ecosystems

| Level, Responsibility and Requirements | | Why |
|---|---|--|
| Strategic Level | <p>1. Governments are responsible for execution of this level, and so clear government policy is required.</p> <p>2. Creating a conducive political environment, which is favourable to accepting private business.</p> | <p>To develop sustainable environment and to promote and then creating the entrepreneurial activity through SME Development and growth. It requires the following: 1. Legal entrepreneurship instrument, 2. SME Support programmes by the governments and 3. Government sponsored financial resources commitments.</p> |
| Institutional Level | <p>The following are responsible for enabling enterprise:</p> <ul style="list-style-type: none"> • Government institutions • Chambers of commerce • Professional and trade associations • Training institutions • Enterprise Development agencies at both the national and regional levels • Banks and financial intermediaries • Non-governmental organisations, including professional bodies, consultants, universities, etc. <p>Information on how to start a business is required</p> | <p>Promote SMEs by providing effective business support services, including support and information on:</p> <ol style="list-style-type: none"> 1. How to prepare business plans 2. Organisation and dissemination of information on business and licensing etc. 3. Marketing intelligence 4. Access to financial resources and credit guarantees 5. Human resources 6. Real estate 7. Innovation and facilitating cooperation |
| Enterprise Level | <p>Entrepreneurs and enterprises are responsible for strengthening entrepreneurial and managerial skills</p> | <p>Practical interventions such as:</p> <ol style="list-style-type: none"> 1. Consulting services 2. Business information hubs and centres 3. Incubators, techno-parks and industrial estates 4. Access to technology and technology transfer 5. Quality awareness 6. Management systems 7. Awareness of consumer protection 8. Intellectual property rights |

Source: Entrepreneurship Ecosystem Evaluation Strategy of Saudi Arabia, by Khan (2016).

Figure 4-15 Government and Private Sector Organisations in the Saudi Arabian Ecosystem



Source: Competitive Government (SMEs in Saudi Arabia), Global Competitiveness Forum, 2015.

4.3 Vision 2030

In general, Vision 2030 aims at adopting different programmes and changes to tackle fundamental issues in the Saudi economy by focusing on key strengths that encourage diversity and capability. To do so, a set of objectives on different levels has been announced. Table (4-8) explains the economic objectives on three main levels, and Table 4-9 outlines programmes and related objectives of Vision 2030. Those related to the objectives mentioned in Table (4-8) include: a national enrichment programme, a fiscal balance programme, a national companies programme, a national industrial development logistics programme, a public investment fund programme, a strategic partnerships programme, a financial sector development programme, a privatisation programme and a national transformation programme. Table (4-9) explains these programmes and related objectives either directly or indirectly.

In general, the Public Investment Fund Programme, as explained by Prince Mohammed (2017), aims to target many sectors in and outside Saudi Arabia by developing the size of the public investment fund. The top opportunity involves transforming Aramco Company from an oil-producing corporation into a global industrial conglomerate, using at least 50 to 70% of its cash flow and diverting it into the mining, military, automotive, tourism and entertainment and logistic sectors. In the mining sector, for instance, according to the Saudi Geological Survey (2016), the value of minerals lying beneath the kingdom amounts to \$1 trillion. Since \$300 billion will be required, and since it is difficult for foreign and local investors to undertake risks in new sectors, this investment will be made through the Public Investment Fund. It is noted that the highest spending by Saudi

Arabia on goods and activities outside the kingdom is in the military sector, automotive and tourism and entertainment, and so the goal of Vision 2030 is to have 50% of this spending brought back into the kingdom.

In the military sector, various industries can be localised, one of which is technology that is not highly sensitive and can be transferred completely to Saudi Arabian soil. Medium technicality industries can some countries be sensitive about transferring it, so Saudi Arabia can reach a deal with a certain percentage of local content. The automotive industry is the second largest expense outside Saudi Arabia, with value of \$30billion per year, with \$13 billion for Saudi government purchases. Therefore, as a starting point, the Saudi government could be serviced in this regard by Saudi manufacturing companies, but not to citizens, since it is difficult to compete in terms of price and quality. Regarding tourism and entertainment, \$22billion is spent annually outside Saudi Arabia on entertainment and tourism, and so again the aim is to transfer 50% of spending in this sector back to the nation by 2030.

Regarding logistics services, 13% of world trade passing through the Red Sea and Saudi Arabia does not offer anything in return, and so huge opportunities exist to work along the Red Sea, dealing with many of the exports and imports through developing industrial cities and building a bridge to link the kingdom with Egypt. After covering opportunities within Saudi Arabia, the remaining 50-30% of the cash from Aramco will target the promising external sector, though details in this respect have not announced at the time of writing.

Another initial programme in the vision involves privatising three main sectors, namely the municipal, transportation and health sectors, which will reduce the Saudi government's financial burden related to their management and enable spending in other sectors. Therefore, one of the government aims is to grow the contribution of the private sector by improving the entrepreneurship ecosystem and enhancing the institutional support role, in order to help entrepreneurs to access different resources. This would in turn nurture job creation through SMEs and micro enterprises and help national companies grow and succeed on the national, regional and global stages.

According to Prince Mohammed (Salman, 2017), more than 100 companies have the chance to transform from a local company to a pioneering regional company, and from a pioneering regional company to a pioneering global company after 2020, and the Saudi government must perform its role in helping Saudi national companies succeed. Regarding SME support, the Small and Medium Enterprises Authority (SMEA) was established recently in 2016 to provide several services, such as facilitating resource access, revising regulations to remove obstacles and creating developed networking and facilitating cooperation between SMEs and other investors, incubators and customers. The following section explains the vision further in relation to SMEs and entrepreneurship, and it outlines some of the achievements to date since the announcement of the vision.

Table 4-3 Selected Strategic Objectives of Vision 2030

| Level 1 Objectives | Level 2 Objectives | Level 3 Objectives |
|---------------------------|--|--|
| 1. Diversify the economy | 1.1 Grow the contribution of the private sector to the economy | 1.1.1 Enhance ease of doing business 1.1.2 Unlock state-owned assets for the private sector 1.1.3 Privatise selected government services 1.1.4 Ensure the formation of an advanced capital market 1.1.5 Enable financial institutions to support private sector growth 1.1.6 Attract foreign direct investment 1.1.7 Create special zones and rehabilitate economic cities |
| 2. Increase employment | 2.1 Enable job creation through SMEs and Micro-enterprises | 2.1.1 Nurture and support the innovation and entrepreneurship culture 2.1.2 Grow SME contribution to the economy 2.1.3 Grow productive families' contribution to the economy |

Source: Saudi Vision 2030.

Table 4-4 Programmes and related Objectives of Vision 2030

| Programme | Description | Related Objectives |
|--|--|---|
| 1.National character enrichment programme | Develops and strengthens citizens' sense of national identity, personal and psychological characteristics to be successful and optimistic | 2.1.1 Nurture and support the innovation and entrepreneurship culture 2.1.2 Grow SMEs study to the economy |
| 2.Fiscal balance programme | Strengthens SA's financial administration, restructures its financial situation, creates different mechanisms to improve government performance and ensures financial sustainability | 1.1.2 Unlock state-owned assets for the private sector 1.1.3 Privatised selected government services 1.1.4 Ensure the formation of an advanced capital market 1.1.5 Enable financial institutions to support private sector growth |
| 3.National companies promotion programme | Incentivises more than 100 national companies, which are promising regionally and internationally, to strengthen their status. Increases local production, increases productivity and diversity of the economy, grows SMEs and creates new job opportunities | 2.1.2 Grow SME contributions to the economy 2.1.1 Nurture and support the innovation and entrepreneurship culture |
| 4.National industrial development logistic programme | Develops industries and promotes local production and exports through infrastructural and logistic improvement | 2.1 Enable job creation through SMEs and micro-enterprises 1.1.1 Enhance ease of doing business 1.1.2 Unlock state-owned assets for the private sector 1.1.3 Privatised selected government services 1.1.4 Ensure the formation of an advanced capital market 1.1.5 Enable financial institutions to support private sector growth 1.1.6 Attract foreign direct investment 1.1.7 Create special zones and rehabilitate economic cities |
| 5.Public investment fund programme | The programme strengthens the public investment fund, which is the engine behind economic diversity in SA. It also develops high-focus strategic sectors by growing and maximising the impact of the fund's investments. | 1.1.6 Attract foreign direct investment 1.1.7 Create special zones and rehabilitate economic cities 2.1.2 Grow SME contributions to the economy |

| Programme | Description | Related Objectives |
|--|---|--|
| 6.Strategic partnerships programme | Builds and strengthens international economic partnerships that have the capacity to contribute to the vision. Builds partnerships in the GCC and the region to facilitate the movement of people as well as cover the flow of goods and capital. The programme aims to strengthen and expand different economic sectors, create new sectors, localise knowledge, diversify sources of income and increase the quality of the economy and SA's impact regionally and globally by negotiating major deals | 1.1.1 Enhance ease of doing business 1.1.3 Privatise selected government services 1.1.6 Attract foreign direct investment 1.1.7 Create special zones and rehabilitate economic cities |
| 7.Financial sector development programme | Developing SA capital markets, improving operators and users' experiences as well as the status of SA's capital markets regionally and internationally. It helps create an advanced market that attracts local and foreign investors to diversifying the source of income. It develops financial institutions and strengthens its role supporting private sector growth | 1.1.2 Unlock state-owned assets for the private sector 1.1.3 Privatise selected government services 1.1.4 Ensure the formation of an advanced capital market 1.1.5 Enable financial institutions to support private sector growth 1.1.6 Attract foreign direct investment 2.1.2 Grow SME contributions to the economy |
| 8.Privatisation programme | Strengthens the role of the private sector in providing services and avails government assets to them, which will generally improve quality of service, reduce costs, refocus the government on its legislative and organisational roles and ensure alignment with the vision. Moreover, the programme will attract foreign direct investment and improve the balance of payments | 1.1.2 Unlock state-owned assets for the private sector 1.1.3 Privatise selected government services 1.1.6 Attract foreign direct investment |
| 9.National transformation programme | It aims to develop government effectiveness, establish the necessary infrastructure to realise the vision and support its objectives by driving flexibility in government and increasing coordination, joint working and planning. The programme will identify shared objectives for public entities, based on national priorities, transferring expertise between public agencies and involving the private and government sector to identify challenges and suggest solutions. Looking at funding and implementation methods and contributing to follow-up and performance assessment for involved entities | 1.1.1 Enhance ease of doing business 1.1.7 Create special zones and rehabilitate economic cities 2.1.2 Grow SME contributions to the economy 2.1.3 Grow productive families' contribution to the economy |

Source: Saudi Vision 2030, 2017.

4.3.1 SMEs and Entrepreneurship in Vision 2030

Three strategic objectives to develop SMEs and entrepreneurship in Saudi Arabia are found in Vision 2030. First, innovation and entrepreneurship must be nurtured and supported by providing all kinds of help to the younger generation. The main target here is increasing the number of SMEs in Saudi Arabia from 50,000 to 104,000, whereas the global standard is 347,015. Second, SME contributions to the economy must grow, with the main targets being to: 1) increase SME contributions to non-oil national production, from 30% to 60%, 2) increase SME contributions to GDP from 20% to 36%, where the global standard is 51%, and 3) decrease SME failure rates during the first three years, where the global standard is 82.5%, though there are no available statistics. Third, focus should fall on increasing SME contributions to generating more job opportunities through providing all necessary institutional support in the private and government sectors. The main target here is to increase the workforce in SMEs from 51% to 53%.

In order to develop the entrepreneurship ecosystem in Saudi Arabia, different supportive institutions have been built in the government and private sectors, including business incubators, business speeding, investors, finance programmes and joint working. The support from these institutions varies, in that some provide business incubator programmes such as Wa'ed and 9/10ths, and others provide business speeding programmes such as Wadi Makkah. Other institutions provide investment opportunities in the technology sector such as STC programmes, or finance programmes such as banks. Finally, other institutions provide support to entrepreneurs through joint working programmes, namely by supporting talented

students and organising networking and meeting events for business cooperation and support from investors and other businesspersons. Table 4-10 summarises different institutional support in Saudi Arabia that is available in the government and the private sector.

As mentioned before, the Small and Medium Enterprises Authority (SMEA) was established recently in 2016 to support SMEs by providing several services, such as facilitating resource access, revising regulations to remove obstacles and creating developed networking and facilitating cooperation between SMEs and other investors, incubators and customers. This authority has organised different events since it was established, with some of the following forums and meetings just a few examples:

1. Economic Forum in Riyadh and Jeddah
2. Arab Net Riyadh Forum
3. Family Business Forum
4. National Forum for Creative Industries
5. Fast Forward Investor Day 2017
6. Investment Opportunities Forum in Qatif Governorate
7. Launch your Business Meeting
8. Saudi Start-ups Meeting
9. SMEs and Opportunity Meetings
10. Innovation Award and Exhibition
11. Islamic Entrepreneurship Competition for Women

Table 4-5 Summary of different Institutional Support in Saudi Arabia (Government and Private Sectors)

| Programme Type | The Institutional Name | Sector | Type of support |
|-----------------------|--|-------------------|---|
| Business incubators | Princess Nora University (Business Support and Development Centre) | Governmental | Supporting leading female-owned commercial businesses and marketing the research results of innovators by providing them with the services and facilitates that guarantee the success of their promising projects |
| | Wa'ed (Aramco's Entrepreneurship Centre) | Private | Funding offerings to expand or grow an established business or establish a new business. Providing a range of services such as training and mentorship, in addition to office space and amenities |
| | 9/10ths | Governmental | Provide seed funding, office space, mentorship, access to investors, exposure, stimulating environment, access to experts. Access to Saudi opportunities, access to knowledge and information of all markets and industries, access to freelances, access to apps services. Providing e-commerce solutions for home-based business. Provide an innovative suite of services designed to foster start-ups and help businesses grow |
| | IDC Jubial (industrial development centre) | Governmental | Provide support in planning for business and managing, office space, any logistic service, developing business strategies |
| | Prince Mohammed bin Salman Incubator | Governmental | Provide office space, logistics services, developing business strategies, mentoring and training, networking and easing procedures in government institutions related to business matters |
| | Inspire U | Private | Provide support for idea/product with digital/ICT focus, unique ide with novelty, in Riyadh at least for six months. Support business with office space and mentoring |
| | KAUST | Governmental | Provide industry collaboration programme, conduct R&D at KAUST, access to excellent talent. Provide corporate innovation training, research & technology parks, licence KAUST technologies and funding start-ups |
| | KFUPM Entrepreneurship Institute | Governmental | The programme is designed for KFUPM students who want to be entrepreneurs, to provide different types of support, training courses and workshops covering all processes necessary to starting and managing a business |
| Business Speeding | Namaa Al Munawara | Semi-governmental | Support local business in AL Madinah City through mentoring, training, easing access to financial and marketing services |
| | King Abdualziz University Business Accelerator | Governmental | Provide knowledge, skills, counselling, training and supervision that help students in creating and operating their own business. Support its participants in their attempts to create prototype models and market their ideas and services in partnership with third parties in the labour market |
| | Wadi Makkah | Governmental | Provide necessary technical services to transform innovative ideas into economically viable products. Provide consulting services, training, mentoring and funding and office spaces, in addition to accessing the market |
| | Centennial Accelerator | Governmental | Support business through easing access to financial resources and support the business during the early stage |
| | Ittjar | Semi-governmental | Support business through providing electronic base for electronic trade |
| | Flat 6 lab | Private | Provide different types of support, such as financial support, mentorship, training and guiding entrepreneurs, office space and facilitating networking and cooperation with other institutions, entrepreneurs and investors. |

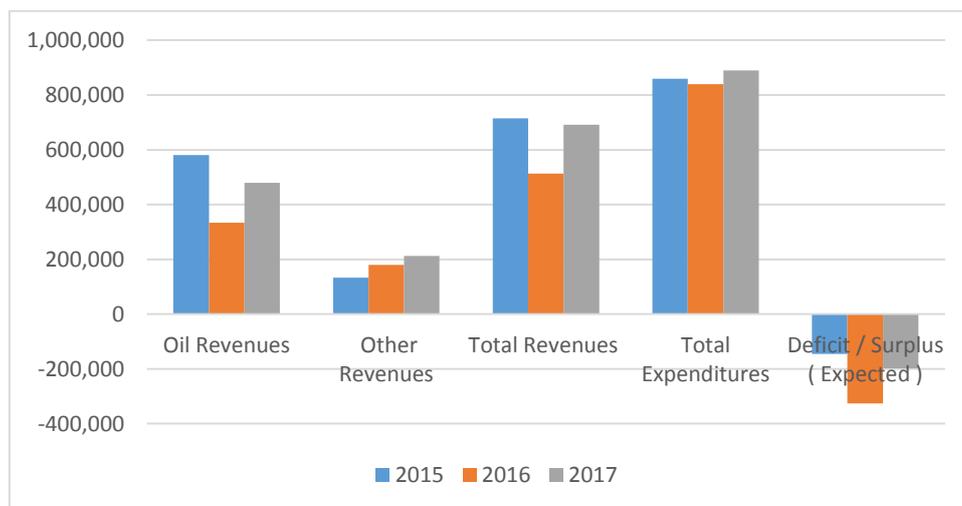
| Programme Type | The Institutional Name | Sector | Type of support |
|----------------------|--------------------------|-------------------|---|
| Investors | RAED Ventures | Private | Investment in technology. Providing the funding to create substantial financial and strategic returns to its investors, while delivering exceptional value to its portfolio companies |
| | BECO Capital | Private | Support the technology revolution in the Middle East through investing in smart, early-stage internet and mobile companies, founded by entrepreneurs that are creating transformational solutions that solve large regional problems |
| | STC Venture Fund | Public | Support technical businesses through providing capital venture funding |
| | Middle East Venture | Private | Provide financial support to certain types of SMEs, i.e. early-stage and innovative firms that are built on innovation and creativity, and these firms should be established in the GCC market |
| | TAQNIA Investments | Public | This institution focuses on transforming technologies to Saudi Arabia through providing support to local and international investors. Concentrates on certain characteristics of SMEs, including technological-based, profitability, R&D, value chain and has an economic impact |
| Financing Programmes | Riyadh | Semi-governmental | Provide access to financial resources |
| | Banks (8different banks) | Private | Funding business |
| Joint Works | Bab Rizq Jameel | Private | An electronic base for entrepreneurs and jobseekers, which helps entrepreneurs to access qualified human resources |
| | Oceaniat | Private | Supports entrepreneurs through networking and meeting events, to allow them to cooperate and meet other investors and entrepreneur |
| | Mawhiba | Governmental | Fostering talented students, creating potential and innovation in school |
| | Misk | Private | This institution provides support to talented people, creative potential and innovation through creating a positive environment that allows these talents and creative ideas to be invested in, educated and trained and networked and covered in the media, nationally and internationally |

Source: Small and Medium Enterprises Authority, 2016.

4.3.2 Achievements to date

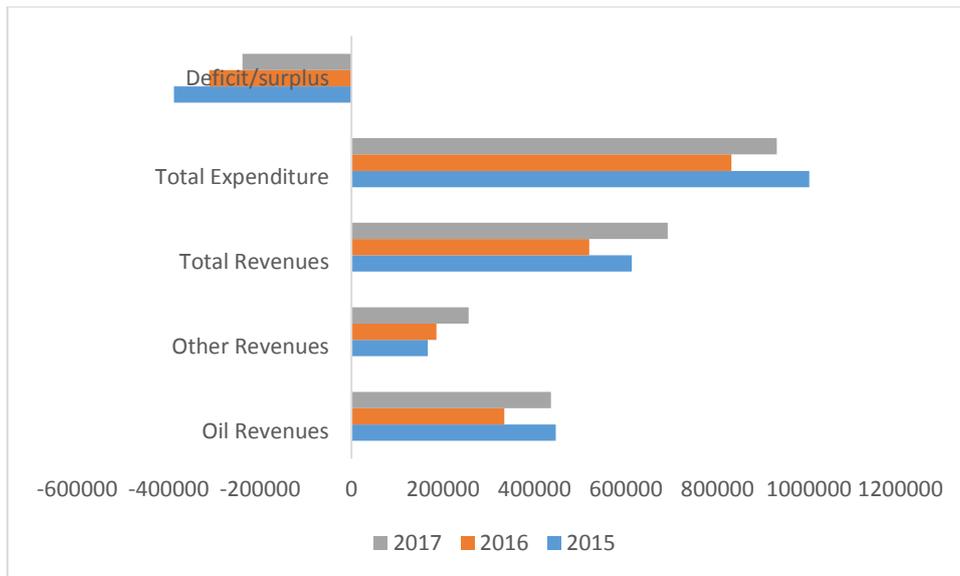
One year after launching Vision 2030, several achievements can be acknowledged since the oil price dropped. One of these achievements is the increase in non-oil revenues from SAR 111 billion to around SAR 200 billion. Another achievement is the decreasing budget deficit, from almost 45% to around 10% (Salman, 2017). Figure 4-16 shows the expected government budget, with data regarding expected oil revenues, other revenues, total expenditures and deficit /surplus shown for 2015, 2016 and 2017. Figure 4-17 shows the real government budget, with data representing oil and other revenues, total expenditures and deficit/surplus. Figure 4-18 shows the differences in each element of the government budget. According to Prince Mohammed (2017), non-oil revenues in 2015 and 2016 helped to make the deficit fall. In addition, Public Investment Fund revenues helped to decrease the deficit as well as for the first time the Public Investment Fund generating tens of billions for the Treasury in 2015 and 2016.

Figure 4-16: Expected Government Budget (2015 -2017)



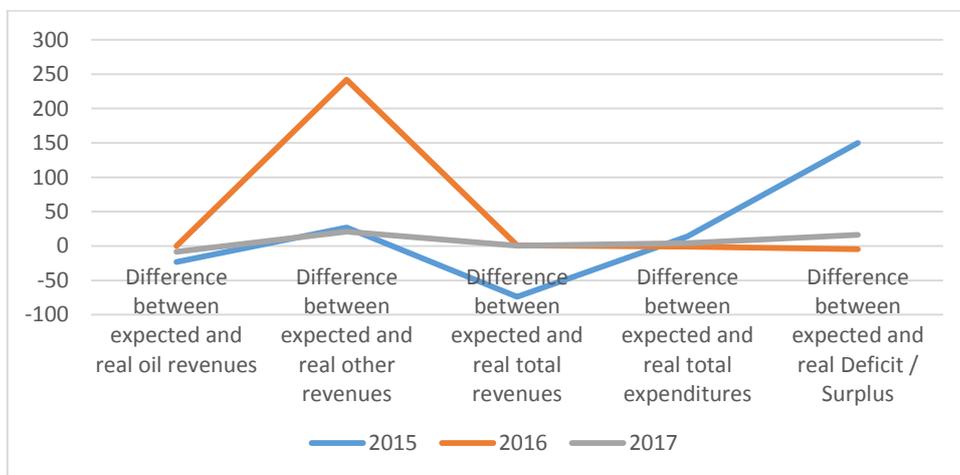
Source: Saudi Arabian Monetary Authority (SAMA), Annual Statistics (SAMA, 2016).

Figure 4-17 Real Government Budget (2015 -2017)



Source: Saudi Arabian Monetary Authority (SAMA), Annual Statistics (SAMA, 2016).

Figure 4-18 Differences between Expected and Real Government Budget (2015-2017)

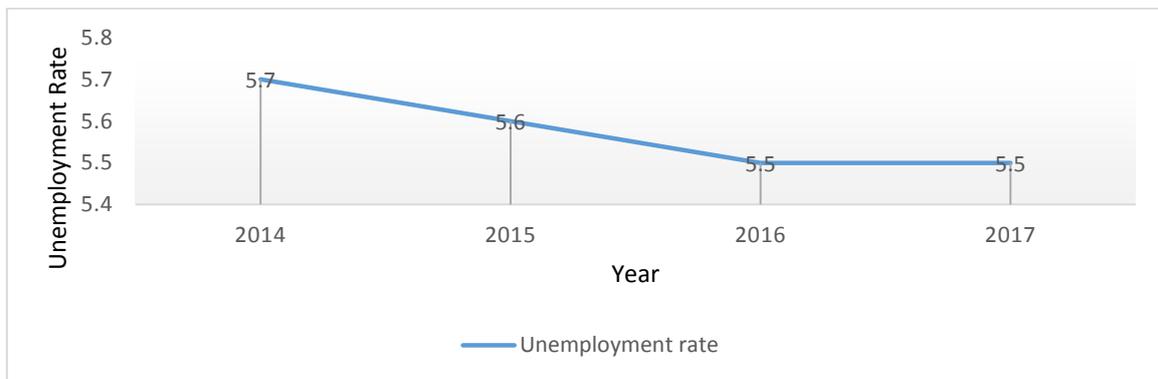


Source: Saudi Arabian Monetary Authority (SAMA), Annual Statistics (SAMA, 2016)

Another achievement can be seen in the unemployment rates for instance was protected and unaffected in a major way (see Figure 4-19 for more details on unemployment rates 2014-2017). In addition, the international investment position has not been affected significantly, though there was slight decrease in assets and

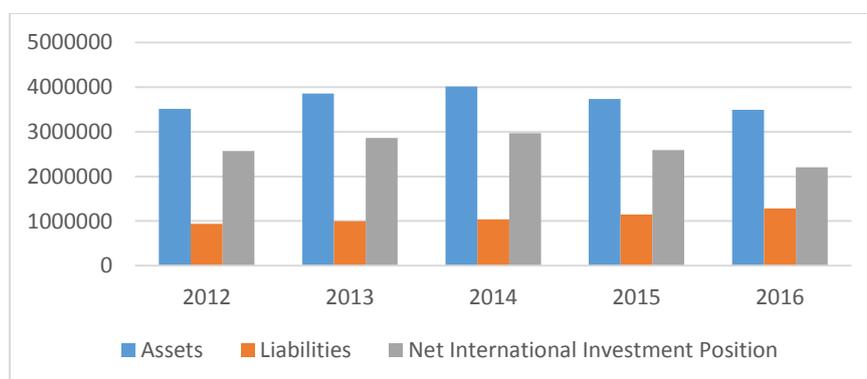
the net international investment position and a slight increase in liabilities in 2016, as shown in Figure 4-20. Furthermore, public debt to GDP did not exceed 30% in 2016. According to Prince Mohammed (2017), it is healthy for the Saudi economy to have debt, because this means that there is a developmental programme opportunity, as in developed countries their debt is above 30%, and some can reach to 100%. Figure 4-21 shows the percentage of public debt to GDP in Saudi Arabia and advanced economies (2005-2016).

Figure 4-19 Unemployment Rate in Saudi Arabia (2014-2017)



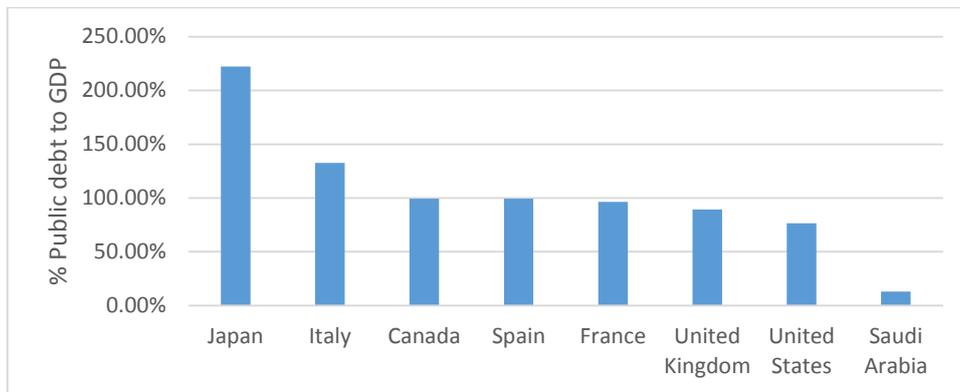
Source: International Labor Organization, ILOSTAT database. Data retrieved in March 2017.

Figure 4-20 The International Investment Position in Saudi Arabia (2012-2016)



Source: Saudi Arabian Monetary Authority (SAMA), Annual Statistics (SAMA, 2016).

Figure 4-21 Public debt to GDP in Saudi Arabia and Some Advanced Economies



Source: Saudi Arabian Monetary Authority (SAMA), Annual Statistics (SAMA, 2016) and International Monetary Fund Database (2017).

Since the establishment of the Small and Medium Enterprises Authority (SMEA) in 2016, the authority reviewed laws and regulations thoroughly to minimise challenges, facilitated resource access and created developed networking and facilitated cooperation between SMEs and other investments, incubators and customers.

In more detail, the SMEA has worked on four main areas, namely encouraging and supporting entrepreneurship, supporting SME growth and capabilities, simplifying and easing starting and practicing business and funding SMEs. The SMEA's efforts to encourage entrepreneurship are seen in the following accomplishments:

1. Organised six incubators, accelerators and joint working initiatives, and working on new ones in six cities. First batch of entrepreneurs have started in the King Abdullah Economic City.
2. Identified more than 80 investment opportunities in more than ten sectors, worth more than SR 25 billion.

3. Launched the 'Biban' Forum, which means *doors*, to create an innovative environment to offer support from incubators encouraging creativity and excellence, to achieve sustainable development. There were more than 70,000 visitors and 250 participants to support entrepreneurs and SMEs.
4. Launched the 'Ebtker' exhibition, which means *create*, to spread the culture of innovation and discover innovators and support their projects. There were more than 3,000 visitors to watch participant innovators compete, with three winners gaining full support of their projects in SMEA incubators.

Second, to support SME growth and enhance capabilities, the SMEA has achieved the following:

1. Trained more than 2,000 SMEs in 11 cities.
2. Launched the e-commerce programme to transform more than 1,500 traditional stores into electronics stores.
3. Launched 'Tamoh' programme, which means *ambitious*, for promising SMEs. So far, more than 250 enterprises have benefited.
4. Launched the National Ideas Platform 'Fikrah' to enable the community to bring innovative solutions and idea to business and government entities and transform them into commercial ventures.
5. Launched the 'Momken' platform, which means *possible*, to evaluate SMEs.
6. Launched the 'Fonar' platform to connect entrepreneurs with consultants and investors.
7. Launched a common cloud solutions platform in the accounting, human resources and supply chains.

Third, the SMEA has worked to simplify and ease starting and practicing business through the following accomplishments:

1. Devised a standard definition of SMEs.
2. Launched an SR 7 billion corporate government fee recovery programme.
3. Contributed to the establishment of the 'Firas' service centre, which aims to provide government services related to the start and practice of business in one place.
4. Cooperated with government agencies to limit obstacles and develop systems and many procedures that serve enterprises.
5. Completed the national strategy to address commercial concealment.

Fourth, funding SMEs through the following accomplishments:

1. Raising capital guarantees from less than SR100 million to one billion and 200 million.
2. The provision of indirect financing to enterprises through financing companies amounted to SR 1 billion and 600 million.
3. Completed the development of the start-up financing programme.

4.4 Conclusion

To conclude, this chapter has discussed three main points. First are the key challenges in the Saudi economy. As mentioned previously, the oil industry has contributed significantly to economic development, and yet relying on it has created a major problem for the non-diversified economy that has emerged, thereby resulting in unsustainable development and a weak private sector. In addition, some business indicators illustrate a number of difficulties faced by businesses in the private sector, as well as changes to the entrepreneurship ecosystem to support SMEs, since in most advanced economies, SMEs contribute as much as 70% to GDP. Saudi SMEs, however, are not yet a major contributor in this regard. Considering these issues in the Saudi economy, the main policies to tackle these fundamental issues have been discussed by presenting an outline of all ten Development Plans.

Next, this chapter explained Vision 2030, which was adopted recently to tackle the fundamental issues in Saudi Arabia by explaining the governance bodies of this vision and how to achieve its fundamental objectives of focusing on SMEs and entrepreneurship and what has been achieved to date for entrepreneurs and SMEs. The following chapter explains in more detail SME growth and resource access by addressing the following matters. First, it explores the role of social networks on the individual and collective levels in enabling resource access. Second, it establishes the role of resource access, on the individual and collective levels, along with other factors in influencing SME growth, based on a questionnaire.

Chapter 5: Research Design and Methodology

5.1 Introduction

This chapter addresses the ontological, epistemological and methodological issues that govern this research. The previous chapter reflected on the arguments of entrepreneurship and SME concepts and measures, as well as what might influence SME growth, and then formulated the empirical and conceptual framework to address the following questions:

1. *What is the role of entrepreneurs' social networks at the collective level in enabling resource access?*
2. *What is the role of resource access, along with other factors, in SME growth?*

To answer these questions, this thesis takes a positivist approach that assumes that the researcher is detached from the study, as the reality is objective and independently devoid of human actors. Knowledge of this stance is developed through meticulous observation as well as measures of existent objective reality. Thus, it involves statistical and numerical measures that are in turn used to verify, test or refine the theories that are logically linked to precise measurements of the social world.

This chapter starts by reviewing the debates in SME research and social science regarding the philosophical stances and approaches adopted by researchers. Thereafter, it takes a positivist stance in answering the research questions, following which it explains in more detail the data collection plan, which is a survey method, by presenting the survey design and how the data will be analysed. A survey method is adapted to collect data because it is the appropriate method to test and analyse network relationships on multiple levels and to understand two matters: first, analysing the role of the social network at the collective level in enabling resource access, and second, analysing the relationship between resource access, along with other factors and SME growth. Accordingly, this research examines these matters based on the theoretical and empirical framework clarified in the second chapter. Finally, this chapter explains how this research meets ethics, reliability and validity requirements in all phases, and the pilot study report is explained at the end.

5.2 SME Research and Social Science

The quantitative methodology is considered the dominant approach in social network and SME studies. Many scholars have approached SMEs from a background in traditional science, such as economics, psychology and sociology. In addition, this stance is favoured more financially in government institutions and agencies (Hill and McGowan, 1999). As interest in social capital has increased in SME studies, an alternative approach, i.e. qualitative methodology, has been adopted in different studies to explain individual perspectives on phenomena (Tuli, 2010). Another group of

researchers has conducted mixed methods studies – the qualitative and quantitative methods – to meet their research needs and purposes (Creswell, 2014; Teddlie & Tashakkori, 2010).

These methodologies differ in their philosophical bases, in that they include ontology, epistemology and methodology for each approach. Ontology refers to the reality of nature, i.e. that it can be either objective, assuming reality is independent, or subjective, assuming that reality is based on social processes and cannot be independent (Tuli, 2010). Epistemology, which includes the same broad positions as ontology, relates to whether the researcher can study the social world similarly to studying natural social sciences (Bryman, 2012). Thus, it poses several questions related to existing knowledge, such as how do we know what we know now, what is knowledge and what is the relationship between the knower and what is known? Finally, the selection of research methodology, qualitative, quantitative or mixed methods depends on the research design and the philosophical stance, both of which guide the research on how to gain and generate knowledge (Tuli, 2010).

Studies with a positivist point of reference are such that the researchers see themselves as detached from the variables of the study, seeking to study objective reality independently, devoid of human actors. Positivist researchers develop knowledge through meticulous observation as well as measurements of existent objective reality. In this vein, positivist research studies involve statistical and numerical measurements that are in turn used

to verify, test or refine the theories used in research studies (Creswell, 2014; Bryman, 2012; Tuli, 2010). A positivist approach involves the researcher driving the research based on assuming causal relationships that are logically formed and linked to previous studies, in order to generate indicators measures social world, where the researcher deals with research objectively at all stages to confirm or deny certain assumptions of casual relationships in the social world (Neuman, 2000). This means that knowledge can be discovered and generated by using quantitative methods such as surveys and statistical analysis to collect and analyse research data (Black, 1999).

On the other hand, a researcher with a constructivist orientation generates knowledge subjectively from individual interpretations and views of the social world. Therefore, the researcher interprets the meanings others have of the phenomenon, rather than testing or refining a theory as the first paradigm (Creswell, 2014; Crotty, 1998). Accordingly, the interpretive researcher can conduct a qualitative methodology to investigate, interpret and describe social realities (Tuli, 2010). Qualitative methods treat people as research participants, and qualitative researchers recognise that individual experiences form their interpretation (Creswell, 2014). Moreover, the researcher can apply qualitative methods to collect and analyse data, such as case studies, action research and interviews.

Another group of social researchers combines the previous approaches, namely the quantitative and qualitative methods, as an alternative

approach, and yet some scholars, for example Hall (2013), Guba and Lincoln (1994), have claimed that the mixed method is limited, as the paradigms underlining each stance oppose, weaken and limit this stance. With this in mind, several alternative approaches have been developed, such as pragmatism, transformative and realism. Pragmatist perspective enquiries draw liberally from qualitative and quantitative assumptions, as the main focus is on overcoming the practical issues of adopting one method by combining the strengths of each method (Morgan, 2014). According to this paradigm, choosing this approach depends on the research problem and how the researcher can collect and analyse data (Hall, 2013). The transformative stance focuses on minority groups and certain communities, and it can be found in fields such as gender and ethnic/racial research when examining people's lives and experiences in a social setting (Mertens, 2003), which can be applicable to a small range of social research (Hall, 2013). Accordingly, to overcome this weakness, it is better to define the stance as the aim and purpose of the research (Teddlie & Tashakkori, 2010).

The critical realism stance, on the other hand, it is not limited to solving practical issues or focusing on certain communities or groups, and it supports the use of quantitative and qualitative methods (Hall, 2013). This perspective assumes reality exists independently from the researcher's perspectives, perceptions, theories and constructions, with a constructive epistemology to understand the world. This means it acknowledges the reality of mental phenomena and the value of an interpretive perspective to

study these phenomena (Maxwell, 2010; Hall, 2013; Tadajewski et al., 2011). Ontologically, critical realism assumes that reality exists independently and the researcher uses causal relationships to explain the social world, thereby indicating that knowledge can be generated from one method alone, as reality can be understood through a conceptual framework along with different objects and categories thereof. Accordingly, it maintains ontological realism while accepting a form of epistemological relativism or constructivism (Maxwell, 2010; Tadajewski et al., 2011; Bhaskar, 2008; Archer et al., 2013; Gorski, 2013; Walker, 2017; Bhaskar, 1989).

However, mixed method research should only be employed when there is a particular reason to do so, and as such it is imperative to determine the reasons for adopting a mixed methods approach. Creswell and Plano Clark (2011) provided a set of reasons common to the extant literature, provided in detail by Greene et al. (1989). According to Greene et al. (1989), a researcher can take a mixed methods approach for the following reasons: first, to corroborate results (triangulation), as this can increase validity and reliability of a research. Second, to clarify results (complementary), meaning using two different types of data to explain particular phenomena, which can help generalise findings and provide further explanations. Third, to develop another method (development), such as using interviews to develop surveys to examine and analyse in-depth a particular subject. Fourth, mixed methods can be used to discover new perspectives of frameworks (initiation) and to generate new assumptions, for example using qualitative methods to form assumptions and examine them quantitatively. Finally, the

mixed methods approach can be used to analyse in-depth a particular subject from different perspectives by using different enquiry components (expansion).

Choosing which approach to use relies on considering the main objectives of the research, as well as the philosophical stance. Since the main objectives of this research are to examine the role of the entrepreneurs' social networks at the collective level in enabling resource access, and to examine the relationship between resource access and other factors, and SME growth, this research takes a positivist stance, and therefore a quantitative approach, to collect and analyse data. The following section explains the research approach in more detail.

5.3 Research Approach

This explanatory research aims to clarify the patterns of the role of institutional support in enabling resource access and influencing SME's growth in Saudi Arabia. Thus, it follows the main assumption of the positivist approach, which emphasises discovering causal relationships to explain a phenomenon that formed logically and based on previous studies (Neuman, 2000). In other words, it is an organised method for combining deductive logic (builds reasoning and tests hypotheses) with precise empirical observations (inductive reasoning leads to tentative generalisation) (Hallebone & Priest, 2009) of individual perceptions, in order to examine a set of conceptual assumptions and thus to explain individual behaviour (Neuman, 2000). Ontologically, it is assumed that reality exists

independently (Hallebone & Priest, 2009), and so it is therefore empirically evident (Neuman, 2000). Epistemologically, a conceptual and empirical framework is designed and driven from a theoretical position, to confirm or deny certain assumptions regarding casual relationships in a particular subject – and thus generate knowledge therefrom (Hallebone & Priest, 2009). Accordingly, the methodology is nomothetic, in that any explanation relies heavily on causal laws and interrelations to create and qualify general findings by using empirical data, testing hypotheses formed from theory and ensuring the researcher operates as a dispassionate outsider (Hallebone & Priest, 2009; Neuman, 2000). Thus, the main methods utilised to collect and analyse data are quantitative methods such as surveys and experiments (Creswell, 2014; Bryman, 2012; Tuli, 2010; Black, 1999).

In experiments, researchers divide participants randomly into different groups to examine certain assumptions of casual relationships between sets of variables, after controlling for a certain time factor. During the experiment, the researcher takes note of individual behaviour, to test and develop explanations for all groups. In contrast, a survey method is based on the theoretical position of the study, whereby certain assumptions are formed, to be tested based on respondents' answers. This survey is designed to measure a set of variables, thereby providing a statistical analysis and an explanation of the individual trends, attitudes or opinions of a sample group, and generalises these results to the population (Neuman, 2000; Creswell, 2014). However, the purpose of conducting a survey varies from one research to another. According to Fowler (2014), some

researchers think of a survey as a first effort in attempting to learn something about a population; yet, a survey should be undertaken only after it is certain that the information cannot be obtained in other ways, in addition to meeting the need for data and analysis.

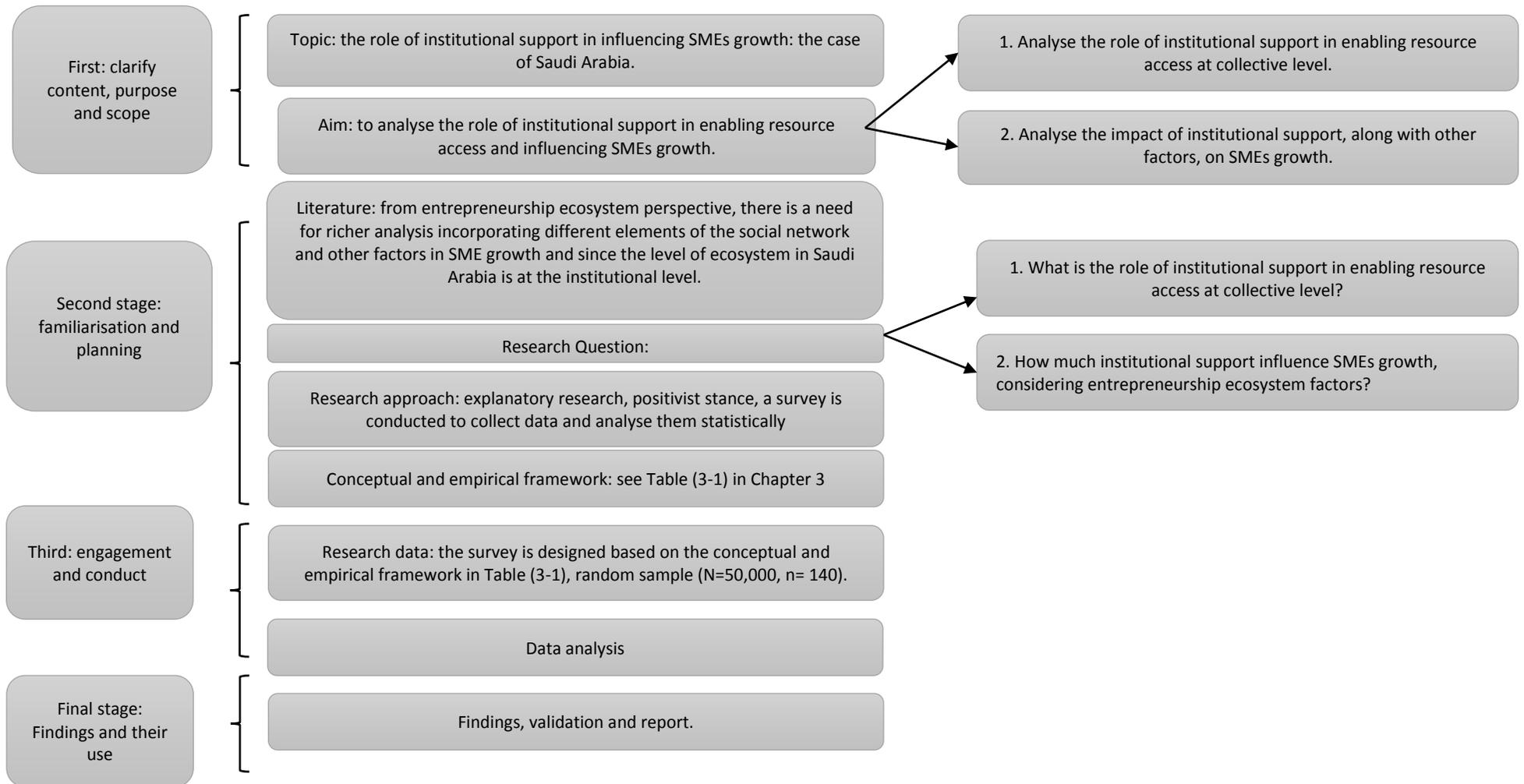
Accordingly, this research will conduct a survey for two reasons. First, it is important to produce statistics, i.e. quantitative or numerical descriptions of the role of entrepreneurs' social networks at the collective level in enabling resource access and the relationship between resource access, along with other factors and SME growth. Second, this is the only way to meet the research needs for data that are not available elsewhere, as well as meet the analysis needs. A special-purpose survey, in this research, is the only method to ensure the collection of all the data needed for desired analysis. See Table (5-1), which summarises the research paradigm, and Figure (5-1), which illustrates the research design.

Table 5-1 the Research Paradigm

| Investigate theory | |
|-------------------------------------|--|
| Ontology | It is assumed that reality exists independently |
| Epistemology | Independent and objective, it follows a linear process to generate knowledge through confirming or denying a set of assumptions formed from theoretical argument |
| Argument structure and logic | Linear, deductive reasoning builds and tests hypotheses, and inductive reasoning leads to tentative generalisations |
| Methodology | Nomothetic, in that it creates and qualifies general findings by using empirical data and testing hypotheses formed from theory |
| Researcher's stance | The researcher operates as a dispassionate outsider |
| Main method | Quantitative: survey to collect data and statistical methods to analyse the data |

Resource: (Hallebone & Priest, 2009)

Figure 5-1 the Research Design



5.4 Data Collection Plan

5.4.1 Survey Method

As mentioned previously, this research will conduct a survey method to provide a statistical description of the phenomena, i.e. the role of entrepreneurs' social networks at the collective level in enabling resource access, and understanding the relationship between resource access, along with other factors, and SME growth in Saudi Arabia. In addition, the availability of data to understand the phenomena is difficult using another method. Thus, this method meets research enquiries to collect and analyse the data. However, like other measures and methods, the survey method has certain shortcomings; hence, the researcher needs to consider aspects of sampling, question design and methods of gathering data in a more accurate way. The process utilised to conduct the survey has a major impact on the likelihood that the findings will describe accurately the intended subject (Fowler, 2014).

Andres (2012) argued that data gathered through a survey are valid to the extent that 1) they generate information that answers the research questions, 2) they accurately describe the study's target population and 3) where possible, they can be extended to the population beyond the respondents in the study. The validity and trustworthiness of survey findings are affected by the conduct of the entire survey, from sampling to data analysis. Sampling refers to the approach used to select a small subset that

will represent the entire population under study. Another procedure involves designing questions that can be used as measures – here, the researcher has to make sure that the questions are well understood and the answers are meaningful. Finally, the researcher chooses the data collection mode that is cost-effective and produces the best-quality data (Fowler, 2014).

A major development in the process of making surveys useful is selecting an accurate sample to represent the whole population. Deciding on an accurate sample for the research can be tricky, as this decision can be influenced by many factors, including the scope and complexity of the research, population diversity, the alpha level and acceptable margin of error, the number of variables in the research and statistical analysis required to answer the research questions. The researcher might also need a large sample size in situations where the scope of the research is broad and complex, meaning that the broader and more complex the research, the larger sample size. In addition, the diversity of the population is important for consideration, as the more diverse a population, the larger sample is required for an accurate sample; similarly, the more variables the researcher needs to include in the study, the larger the sample size (Morse, 2000; Welch & Comer, 1988). Another consideration is related to error estimation, by deciding the alpha level and acceptable margin of error, which is either .05 or .01 in most researches. In social science research, the figures for categorical data are usually .05 and .03 for continuous data (Barlett et al., 2001). A further element in determining sample size is the statistical test, as sample size might differ from the study that applies

multiple regressions rather than studies applying factor analysis (Barlett et al., 2001).

Deciding on the survey sample in this research took into consideration all of the matters above. First, it looked at the conceptual and methodological options, i.e. this method is conducted to test a theoretical hypothesis that can act as a guide to what kinds of the target population are relevant to the conceptual framework (Fowler, 2014; Aldridge & Levine, 2001). Therefore, it is better to follow the formula that meets the statistical test determination, namely a correlation test. In order to achieve this goal, this research follows what Barlett et al. (2001) suggested, so, for significance value (.05) and the probability of falsely accepting the null hypothesis (.80), the accurate sample is 58 and above. Another consideration is the diversity of the population and the scope of this research. Since the main range of this study is SMEs in Saudi Arabia, the sample needs to mirror the diversity of the SME population. It was mentioned before that the total number of SMEs in Saudi Arabia is around 50,000, located in different regions and sectors. In order to achieve this goal, it was noted that the total number of sectors in Saudi is seven and the total number of regions is five, so at least ten SMEs in each sector and each region would be required, to have an accurately diverse sample. In addition, according to the classification of SMEs in Saudi, the sample must cover these classifications, meaning we would need at least ten businesses from each one of these classifications. Therefore, the sample had to be at least 70 from different regions and sectors, with significance values (.05) and power value (.80). The sample was selected

randomly, since the individual list was long, and so choosing a random sample would be easier for the researcher. In addition, this would help generalise the findings to the population (Creswell, 2014).

The second procedure in the survey process is designing questions that can be used as measures. This procedure involves designing and planning the order of questions and the main structure of the questionnaire, and these questions should provide answers that represent the value of each variable, i.e. designing a survey's questions to act as measurements (Fowler, 2014, Aldridge & Levine, 2001). The questions needed to be clear and understood by every respondent, using adequate and complete wording, defining terms properly and avoiding multiple questions at once, to increase reliability. In addition, the extent to which the answer reflected what the researcher was trying to measure was also necessary (Fowler, 2014). To achieve this goal, the survey's questions were designed based on the conceptual and empirical framework, to reflect the main measurements and indicators, and the wording was in a language clearly understood by the respondents, since they were Arabic speakers.

Once a questionnaire has been developed, it must be evaluated rigorously before final administration, which is called pilot testing. In general, three stages are followed at this stage, with the first being question development, to check for:

1. Adequate different responses

2. Clarity of questions
3. The reliability of measurements to test included items
4. Item non-response
5. Evidence of acquiescence

Second is questionnaire development, whereby it is checked for flow, and if it is too long, by considering the time and effort involved so that the respondents do not lose interest and provide adequate answers throughout. Third involves checking the effectiveness of changes after the previous steps (De Vaus, 2014). Accordingly, the first draft of the survey was sent to 40 entrepreneurs via email, with 25 responses. Based on the results, changes were made to several questions, to clarify meanings, add a Likert scale to some questions and add four more questions. Further details regarding these changes and the pilot study are explained in the survey design section and the pilot test section later in this chapter.

The last procedure in the survey process is the mode of data gathering, often grounded on aspects of cost-effectiveness and the production of ideal data. The chosen mode of data gathering (telephone, email or internet) is associated directly with the research frame, the topic, sample traits as well as available facilities and staff (Fowler, 2014; Aldridge & Levine, 2001). In this study, online surveys were delivered electronically, which is cost-effective and ideal when dealing with a large sample of SMEs in different regions. This approach has other merits, too, such as high levels of returns, the provision of time to respondents, allowing for thoughtful answers, as well

as the ability to change the sequence of questions that fit the previous answer. Quality data can thus be drawn from internet surveys. This research uses the respondent rate of the pilot study to determine oversampling. Thus, since the respondent rate of the pilot study was around 63%, and to meet the diversity of the SME population, two main steps were taken:

1. Fifteen questionnaires were sent to SMEs in five different regions, using data from Jeddah Chamber.
2. Fifteen questionnaires were sent to SMEs in different sectors, using data from the Small and Medium Enterprises Authority (SMEA).

5.4.2 Survey Design

To design and write a questionnaire, questions should be worded carefully, so that they are clear for respondents, and designed based on the conceptual framework to measure each variable and facilitate analysis and interpretation. At this stage, the researcher needs to determine the survey questions, wording, the layout of the questions and ancillary documents. The questions should be written so that they can be quantitatively analysed (closed-ended), and the wording must be easily understandable to the target audience (Kasunic, 2005). In order to achieve this goal, the survey was designed based on the conceptual and empirical framework that identifies the main indicators and types of questions that should be asked based on the main concepts (see Table 3-1 in Chapter 3).

The survey structure was designed to cover all measurements in the conceptual and empirical framework, and the cover letter contained the

following elements (Lavrakas, 2008): survey request, the importance of participation, the method of selection, confidentiality, voluntary participation, explanation of incentives, where to get more information, instructions for return and sincere thanks to the respondents. The survey itself was designed in five main sections. The first section covered the demographic questions, entrepreneurs' characteristics and firm characteristics. Demographic questions included gender, age, educational level, labour market position and individual income. Entrepreneurs' characteristics include questions to identify self-confidence, the need for achievement, risk-taking, innovativeness, tolerance of ambiguity, experience and managerial skills. Entrepreneurs were asked to evaluate themselves on a scale (1-5) for each characteristic (this scale was added after the pilot test, to increase the validity of the questions). Firm characteristics such as location, age, sector and strategies, where the entrepreneurs were asked about the importance of different strategies on a scale (1-5), were added after the pilot test to increase the validity of the questions. These strategies included marketing, training and development, R&D, competition and adopting new technology.

The second section concentrated on the resource generator, to measure resource access via entrepreneurs' social networks. Usually, the resource generator method is used to analyse and measure social capital at the individual level by analysing the ego network of participants. Each participant is asked about his/her network and how it is used to gain access to different resources or when searching for a job (Kobayashi et al., 2013).

However, this does not serve the main aim of this research and does not meet the Saudi culture and research context. Therefore, changes were made in this section, whereby the collective level was added, and additionally change the questions of the resources generation method to meet the Saudi culture and the research context were included. In this section, entrepreneurs were asked 1) whether different resources are available at the collective level (institutions in the private and government sectors) and 2) whether they have accessed these resources via collective social network. After the pilot test, question wording was changed, to increase the validity of the questions.

The third section covered the features of social network analysis, including network size and network density. For network size, entrepreneurs were asked about the total number of institutions in private and government sectors that can help them access different resources. For network density, entrepreneurs were asked about how frequently they contact institutions in these sectors. The fourth section included questions to identify the level of resource access via the collective level, and entrepreneurs were asked to score these answers on a scale (1-5). The Likert scale was added after the pilot test, to increase the validity of the questions.

The final section, on SME growth, asked questions based on the Small and Medium Authority (SMEA) in Saudi Arabia, using two indicators of growth, namely employment and annual revenues. Thus, entrepreneurs were asked to choose the level of employment and annual revenues on two stages

(business launch and now). Levels of employment and annual revenues were written based on the SMEA definitions. Finally, the entrepreneurs were asked to state from on a scale of 1-5 how other environmental factors influence their business growth. Again, this scale was added after the pilot test, to increase the validity of the questions. These factors included political situations, economic situations, legal matters, local culture and technology.

To collect data, an electronic survey was designed, using BOS Online Survey,¹¹ and distributed electronically. SPSS¹² was used to analyse the data statistically, as the following section explains.

5.4.3 Secondary Data

This study will use secondary data to explain the entrepreneurship ecosystem in Saudi Arabia and present a full picture of SMEs' growth there. The secondary data will be collected from the Global Entrepreneurship Index for three years (2015, 2016 and 2017), and the pillars will be explained and analysed. These pillars include opportunity perception, start-up skills,

¹¹ BOS: an online survey tool that helps to design and distribute questionnaires electronically.

¹² SPSS: platform offering statistical analysis.

risk acceptance, networking, cultural support, opportunity start-up, technology absorption, human capital, competition, product innovation, process innovation, high growth, internationalisation, and risk capital. These concepts and how each one is measured are explained in Table 2-1 in the second chapter. The pillar performance can indicate if the ecosystem of entrepreneurship is healthy, because “a healthy ecosystem will drive resource allocation towards productive uses. It will also drive total factor productivity through process innovation. The greater total factor productivity, the greater the economy’s capacity to create jobs and wealth” (Acs et al., 2017, P.14). These data can indicate the strength and weakness of pillars in the Saudi entrepreneurship ecosystem to further explain SMEs' growth and direct policy-makers towards what pillars need to be improved to contribute better to the economy. In addition, individual and institutional scores will be used from the same source.

5.4.4 Data Analysis

5.4.4.1 Secondary data

Data from the Global Entrepreneurship Index will be analysed based on each indicator. Each indicator presents the pillar performance that ranges from (0-1). This study will use the following categories to evaluate indicators: weak performance if an indicator's performance ranges between (.10-.29), moderate performance if an indicator's performance ranges between (.30-

.49), and strong performance if indicator's performance ranges between (.50-1).

5.4.4.2 Survey data

To address the first question of this research, namely what is the relationship between the network size and density of the entrepreneur's social network and resource access, two major steps were followed. The first step was the preliminary analyses, which included presenting descriptive statistics, exploring and examining the normality assumptions of the data by using graphs and normality tests and checking the reliability of the scales. In addition, the outputs of this step guided us in assessing normality. In order to achieve this goal, first, the values of Skewness and kurtosis were checked, as Skewness value indicates distribution symmetry and kurtosis indicates a distribution peak. A positive skew indicates that data have peaked to the left at low values, and a negative skew indicates that data have peaked at the opposite side of the graph. To assess the normality of the variables, an assumption of the normal distribution of each variable can be accepted if the significant value is more than .05. In addition, normal distribution can be assessed by a histogram, with a reasonably straight line suggesting a normal distribution. Another assessment of normality can be seen from detrended normal Q-Q plots when the actual deviation of scores does not cluster around the zero line. Descriptive statistics can indicate if there is problem with data, because if there are significant differences between trimmed mean and mean values, data should investigated further (Pallant, 2010).

The second step involves choosing the right statistic to answer the research question in relation to how accurately the variables are distributed. In other words, if the variables follow the normal distribution, then we will choose the accurate statistic for this type of data; otherwise, we will choose nonparametric statistical tests. To answer the first research question, we applied a correlation test (Pearson's product-moment for parametric or Spearman's rho for nonparametric) to examine the relationship between social network features and resource access at the collective level. There were five main steps to analyse the outputs of this test. First, we checked information about the sample, where the sample size should be corrected and there were no excluded data caused by missing data. Second, we determined the direction of the relationship by looking at the correlation coefficient value in the correlations table, with a negative value indicating a negative relationship. Third, we established the strength of the relationship with the value of the coefficient – if the value was between .10 and .29, there was a small relationship between variables, if the value was between .30 and .49, this meant a means medium relationship between two variables and if the value was between .50 and 1, this represented a large relationship between variables. Fourth, we calculated the coefficient of determination (R^2) (r^2), which indicates how much the variable can explain the variance of the other variable. Finally, assessing the significance level from the correlation table that should be less than .05 (Pallant, 2010). For further analysis, resource availability and resource access at the collective level will be compared among regions and sectors by applying the statistical test that

was suitable for the type of data. If the variables were normally distributed, one-way ANOVA was applied; otherwise, the Kurskal-Wallis H test was applied if variables were nonparametric. These tests assume that the means for resource availability and resource access were equal among regions and sector, if the significant value was less than .05. If not, the means of resource availability and resource access will be compared among regions and sectors to see which region and sector have the highest mean.

To address the second question of this research, namely exploring the relationship between resource access and other factors on SME growth, a correlation test was applied. The descriptive analysis should be applied first for all variables and follow the same steps as explained in the previous section. The variables included entrepreneurs' characteristics (self-confidence, need for achievement, risk-taking, education, experience, innovativeness and locus of control), firm characteristics (age, marketing, training and competitive strategies, R&D and adopting new technology), resource access and other environmental factors (political, economic, cultural, legal and technological). An accurate correlation test, following the same steps as above, was then carried out.

5.5 Ethics, Reliability and Validity of the Research

Enhancing the quality of research has long been an issue of concern for academic researchers, in terms of validity and reliability. According to Maimbo and Pervan (2005), any research design that incorporates the

concept of reliability ensures the repeatability or recurrences of results and findings under similar conditions. A higher level of confidence with the research instrument is instilled through the incorporation of validity, which in turn ensures that the argument being researched corresponds to the prevailing reality. For this reason, and based on the philosophical approach and the research design, this research utilised a pilot test, to increase the reliability and validity of the survey design and all measurements, as changes were made in several parts of the survey sections. In addition, we applied ethical procedures during all phases of the research, again to increase reliability and validity.

The term 'triangulation' is sometimes used with mixed methods research to enhance validity and reliability, but this can come in different forms. The notion of triangulation can be found in multiple theories and concepts, multiple measurements and multiple data resources to increase the validity and reliability of research during all phases (Modell, 2009). The following procedures were adopted in this regard:

- Mixed theories and concepts were discussed and joined, namely social capital, network analysis and SME growth factors, to understand the phenomena.
- Previous studies on social capital, network analysis, entrepreneurship ecosystem, institutional support and SME growth were used to find a conceptual and operational definition of each variable and how it can be measured and collected.

- Previous studies were used to outline the conceptual and empirical framework of this research, which helped select the most suitable research design and methodology.
- Two sources of data will be used to present the full picture of institutional support in influencing SMEs' growth in an entrepreneurship ecosystem. These are survey and secondary data from the Global Entrepreneurship Index.
- The questionnaire was designed to measure each variable based on previous studies.
- A set of actions that must be fulfilled to gain ethical approval regarding conducting the survey:
 1. The sample size was determined by considering the following points:
 - Following the formula that meets the statistical test determination, i.e. a correlation test. Thus, for significance value (.05) and the probability of falsely accepting the null hypothesis (.80), an accurate sample was 58 and above.
 - The diversity of the sample, in regions and sectors; thus, at least ten SMEs in each sector and each region were required, to have an accurately diverse sample. In addition, the sample had to cover SME classification in Saudi Arabia, meaning at least ten business from each business size classification.
 2. The sample was selected randomly, because it would help the researcher generalise the findings to the population.
 3. The questionnaire was designed so the questions would measure the variable, with the scale based on previous studies.

4. The cover letter for the survey included the survey request, the importance of participation, method of selection, confidentiality, voluntary participation, explanation of incentives, where to get more information, instructions for return and sincere to thanks to the respondents.
5. The first draft of the survey was designed in the English language, translated carefully into Arabic and revised by another colleague, since all participants were Arabic speakers.
6. A pilot test was conducted to evaluate the questions and the questionnaire, following which some changes were made to increase reliability and validity, as explained in the next section.
7. For time and cost efficiencies, all questionnaires were distributed electronically to entrepreneurs by using BOS Online Survey.

SPSS was used to store and analyse the data, and analysis steps in the SPSS Survival Manual, by (Pallant, 2010), were used.

5.6 Pilot Study

As mentioned previously, once a questionnaire has been developed, it must be evaluated rigorously before final administration, and this is known as pilot testing. In general, three stages were followed for this study's pilot test. First was question development, to check for:

1. Adequately different responses
2. Clarity of the questions

3. Test reliability of measurements used to test included items
4. Item non-response
5. Evidence of acquiescence

Second was questionnaire development, whereby the test was treated as undeclared, to check whether the questionnaire flowed and if it was too long and would lead respondents to lose interest and not give adequate answers. Third, we checked the effectiveness of these changes after the previous steps (De Vaus, 2014). The main aim of the pilot study was to increase reliability and validity during all phases of data collection and analysis. In the questionnaire design, it is important to consider the validity and reliability of the questions. First, the question should be answered in the same way on different occasions if given to the same person. Therefore, to increase reliability: 1) questions were designed based on the conceptual and empirical framework, 2) feedback was considered from the pilot study respondents and 3) we used SPSS to test for reliability.

Second, the question should be valid, meaning it should measure what it is meant to measure. Thus, to increase validity, 1) questions were designed to measure the variables based on the conceptual and empirical framework based on the literature and 2) feedback from the pilot study respondents on required changes was taken into account. When collecting data, the response rate shows that all questionnaires were collected electronically in one week, thus increasing the reliability and validity of the method. In the analysis phase, the data were analysed based on the conceptual and

empirical framework, in order to accept or reject the main assumptions of this research. The following section explains how each variable was measured, the reliability and validity analysis and what changes needed to be made on the questionnaire to increase its validity and reliability.

5.6.1 Pilot Study Report

The questionnaire was designed to answer both of the research questions at the collective level for each resource (financial, human, information and knowledge and training and education). To answer the first question, which was to explore the role of entrepreneurs' social networks at the collective level in enabling resource access, three variables were needed on each level and for each resource. First, resource access was measured by asking entrepreneurs whether they had accessed each resource via a private or government institution. Second, network size was measured by asking entrepreneurs about the number of institutions in private and government sector that can help them gain access to each resource. Third, network density was measured by asking the entrepreneurs about the frequency of communications with 'weak ties', to access each resource. This was measured on a scale of 0-4.

To answer the second question, which was to explore the relationship between resource access along with other factors (entrepreneurs' characteristics, firms' characteristics and other environmental factors) and SME growth, five variables needed to be measured. First, resource access was measured as mentioned for the first question. Second, entrepreneurs'

characteristics were measured based on four items on a scale (1-3), including self-confidence, the need for achievement, risk-taking and education level. Third, a firm's characteristics were measured based on six items on a scale (1-3) as well, including the marketing strategy, training, competition, R&D, technology adoption and firm age. Fourth, other environmental factors, including cultural, political, economic and technological factors, were also measured on a scale (1-3). Finally, SME growth was measured by the percentage change in the employment level and annual revenue level. The pilot questionnaire was sent to 40 entrepreneurs via email and had 25 respondents. No missing data were found for any questions, and some feedback was received from entrepreneurs and academic researchers at the same time. In general, their feedback was on the following points:

1. Change some question wording, to make it clearer
2. Adding a Likert scale to some questions, to increase reliability
3. Change some open questions to multiple choice
4. Add further choices to some questions
5. Delete irrelevant questions
6. Change the order of some questions

Accordingly, several changes were made to the survey design based on the results and feedback, to increase the validity and reliability of the survey and measurements. These changes included changing the wording on network size at the collective level, in order to be clearer and better understood by

respondents. Second, we added a scale of 1-5 to answer questions on entrepreneurs' characteristics, firm characteristics and environmental factors. Third, we added items to measure entrepreneurs' characteristics such as education and experience, innovativeness and locus of control. Table 5-4 summaries the pilot test, along with all variables and how to measure each one in the survey. Reliability and validity changes are summarised in the table.

Table 5-2 Summary of the Pilot Test

| The variable | How to measure it in the questionnaire | Reliability and validity | Changes |
|------------------------------------|---|--|---|
| Network Size (collective level) | How many institutions in the private and government sectors give you access to the following resources? The total number of these contacts represents the network size on the collective level. | Based on the feedback suggestions, it is better to clarify the question. | Change in the question wording. |
| Network density (collective level) | On a scale of 1-5, how frequently do you contact your family and friends to access the following resources, where 1=never, 2=rarely, 3=sometimes, 4=mostly and 5 always? Then divide the frequency by the number of resources (4) to calculate the average. | Reliability test on SPSS shows that the measurement is reliable, as the Cronbach's Alpha value was more than .7. | No change. |
| Resource access (collective level) | Have you accessed any of the following resources via institutions in the private and government sector, yes=1 and no=0? The total represents resource access. | | |
| Entrepreneurs' characteristics | Ask entrepreneurs to scale themselves on the following items (1-3), where 1 is low and 3 is high (need for achievements, self-confidence and risk-taking). | | Add experience, innovativeness and locus of control. Scale (1-5). |
| Firm's Characteristics | Ask entrepreneurs: what is the importance of the following items regarding the time and money spent (marketing, training and development, competition, R&D, adopting new technology) on a scale of 1-3, where 1 is not important and 3 is important? | | Change the scale (1-5) for better explanations. |
| Other Environmental factors | Ask entrepreneurs: how would you describe the influence of the following factors (political, economic, regulations, local culture and technology), (negative, no influence, and positive)? | The reliability test shows that this measurement was not reliable. | Add Score (1-5) to increase reliability of the measurement. |
| SME growth | Ask entrepreneurs: what was the level of employment when you started the business and what is the level now? Then calculate the growth average. These levels are based on the SME definition. | The reliability test shows that measurements were reliable. | No change. |
| | Another measurement: what was the level of annual revenues in your business when you started your business and what was it now? | | |

5.7 Conclusion

This chapter addressed the ontological, epistemological and methodological issues that govern this research, to address the following questions:

1. *What is the role of entrepreneurs' social networks at the collective level in enabling resource access?*
2. *What is the role of resource access, along with other factors, in SME growth?*

A positivist approach was adopted in this research, assuming knowledge is developed through meticulous observation as well as measurements of existent objective reality. Thus, it involves statistical and numerical measurements that are in turn used to verify, test or refine theories linked logically to precise measurements of the social world. Therefore, this research conducted a survey method to collect data and apply statistical measurement to analyse the data.

This chapter started by reviewing the debates in SME research and social science regarding the philosophical stances and approaches adopted by researchers. Thereafter, it explored how a positivist stance could help in answering the research questions, following which it explained in more detail the data collection plan, namely the survey method, by explaining its design and how data would be analysed. The survey method was the most appropriate for analysing and testing network relationships at the collective level to

understand two matters: first, analysing the role of social network at the collective level in enabling resource access, and second, analysing the relationship between resource access, along with other factors, and SME growth. Accordingly, this research will address these matters based on the theoretical and empirical framework explained in the third chapter. Finally, this chapter explained how this research meets the ethics, reliability and validity of this research during all phases, and the pilot study was explained at the end.

Chapter 6: Analysis and Discussion

6.1 Introduction

The purpose of this study is to analyse the role of institutional support in influencing SME growth from entrepreneurship ecosystem through providing evidence from Saudi Arabia. In order to achieve this goal, this research conducted a questionnaire method to collect data. As mentioned before, to achieve each objective, several factors need to be analysed. First are the actors in entrepreneurs' social networks at the collective level that provide institutional support. Second, we note the links between entrepreneurs and actors who provide institutional support. Third are the main features of entrepreneurs' social networks at the collective level, and fourth, we establish the relationship between the main features of these social networks (network size and density) and resource access at the collective level.

To analyse how much institutional support influence SMEs growth, considering other factors, several questions need to be addressed. First, we need to establish the relationship between entrepreneurs' characteristics and SME growth. Second is the relationship between firms' characteristics and SME growth. Third, we identify the relationship between resource access at both levels and SME growth. Fourth, we test the relationship between environmental factors and SME growth.

Therefore, this chapter aims to answer all of these questions by analysing data that were collected from SMEs in Saudi Arabia in two main sections. This chapter starts by discussing the research method by outlining the participants, the data collection

method and the procedures for collecting the data. Thereafter, the main results are discussed by explaining the response rate, reliability and validity, the primary analysis and the data analysis to answer all above questions.

6.2 Data Collection Method

As mentioned previously, this research used previous studies in social capital, network analysis and SME growth to find a conceptual and operational definition of each variable and how it can be measured and collected, in order to outline the conceptual and empirical framework of this research, which helped to determine the most suitable research design and methodology. Thus, the questionnaire was designed to measure each variable based on the previous literature.

The sample size was determined by considering diversification of the sample. Meaning the sample need to be diversified regarding regions, sectors and SME classification, where the sample should have at least ten SMEs in each sector and each region. In addition, the sample should have at least ten businesses of each business size classification. The sample was selected randomly, since this would make it possible for the researcher to generalise the findings to the population. Before starting data collection, a pilot test was conducted to test the reliability and validity of the questionnaire and to predict the response rate of the electronic questionnaires. The response rate was 60%, so the main study followed the same procedures as the pilot study, with some changes in the survey design as explained in the third chapter. Based on SME contact details from the Small & Medium Enterprises Authority (SMEA) and the Chamber of Commerce in Jeddah and the Eastern region, 400 electronic questionnaires were sent to SMEs in different

regions and different sectors, with 140 respondents replying. The following figures explain the demographic data of the participants.

This study uses secondary data from the Global Entrepreneurship Index for three years (2015, 2016 and 2017) to explain the ecosystem in Saudi Arabia on the environmental, individual, and institutional levels. These data will present an outlook of the main indicators, changes during the three years, and strongest and weakest performances. First, secondary data of the entrepreneurship ecosystem in Saudi Arabia is analysed in the next section.

6.3 Entrepreneurship Ecosystem in Saudi Arabia

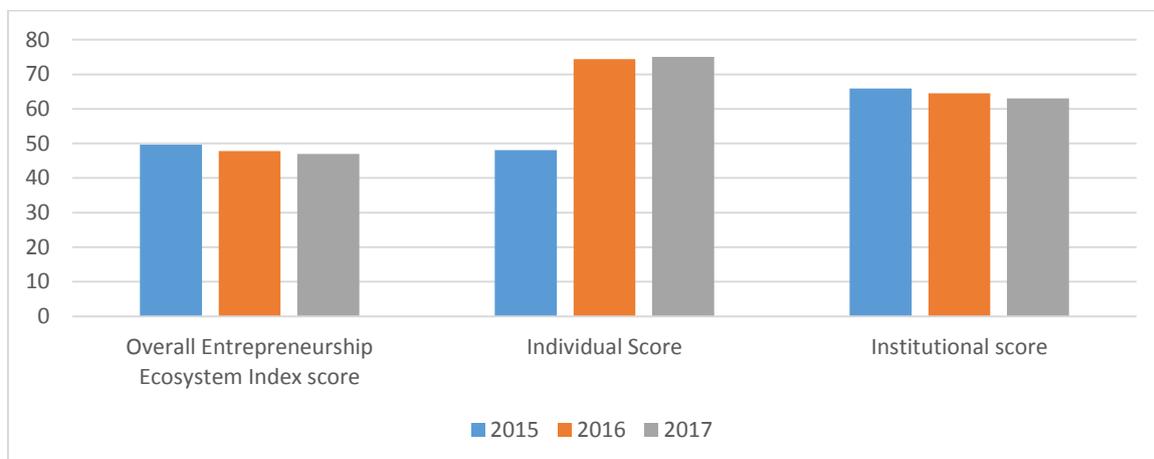
As mentioned before, each indicator is evaluated based on three categories. Weak performance if the indicator range between (.10-.29), moderate performance if the indicator range between (.30- .49) and strong performance if the indicator range between (.50-1). In general, the rank of Saudi Arabia in entrepreneurship enhanced in 2017, Saudi Arabia ranked 31th out of 130 countries in 2015, then decrease to reach 36th out of 132 in 2016, and then increased to reach 30th out of 137 countries in 2017. This can be due to the economic reforming to diversify the economy and tackle the fundamental issues in the Saudi economy after the massive decline in oil prices that happened in 2015. On the individual level, there is considerable improvement from 2015 to 2017, as entrepreneurship ecosystem on the individual level scored 48% in 2015 and increased to reach 75% in 2017 this can be as a result of the changings in Saudi Arabia, as the vision 2030 was announced in 2015 and the SMEA was established in 2015. This indicates that entrepreneurship

ecosystem on the individual level is strong. On the institutional level, there is slight decrease in the score, as the institutional score was 65% in 2015 then decreased in to reach 63% in 2017, but the performance still strong on the institutional level as it is above 50%. However, the overall index is moderate during the three years, with slight decrease from 2015 to 2017. Table 6-1 and Figure 5-1 shows the indicators of entrepreneurship ecosystem in Saudi Arabia (2015-2017).

Table 6- 1 Indicators of the entrepreneurship ecosystem in Saudi Arabia (2015-2017)

| Indicators | 2015 | 2016 | 2017 |
|--------------------------------------|-------------|-------------|-------------|
| Overall Entrepreneurship Index score | 49.6 | 47.8 | 47 |
| Individual Score | 48.1 | 74.4 | 75 |
| Institutional score | 65.9 | 64.5 | 63 |
| World rank | 31 | 36 | 30 |
| Regional rank | 4 | 5 | 4 |

Figure 6- 1 Indicators of the entrepreneurship ecosystem in Saudi Arabia (2015-2017)



It is worth mentioning that each level used a variety of variables to measure the score. See Tables 1 and 2 in Appendix 1 for more details on these variables in each level. However, since there is a lack of variables' scores regarding institutional and individual levels, the analysis of the entrepreneurship ecosystem in Saudi Arabia

focuses more on the environmental level because the data of pillars' performance are available from the Global Entrepreneurship Index for three years (2015-2017). Table (6-2) and Figure (6-2) show the pillars' performance of the entrepreneurship ecosystem in Saudi Arabia (2015-2017).

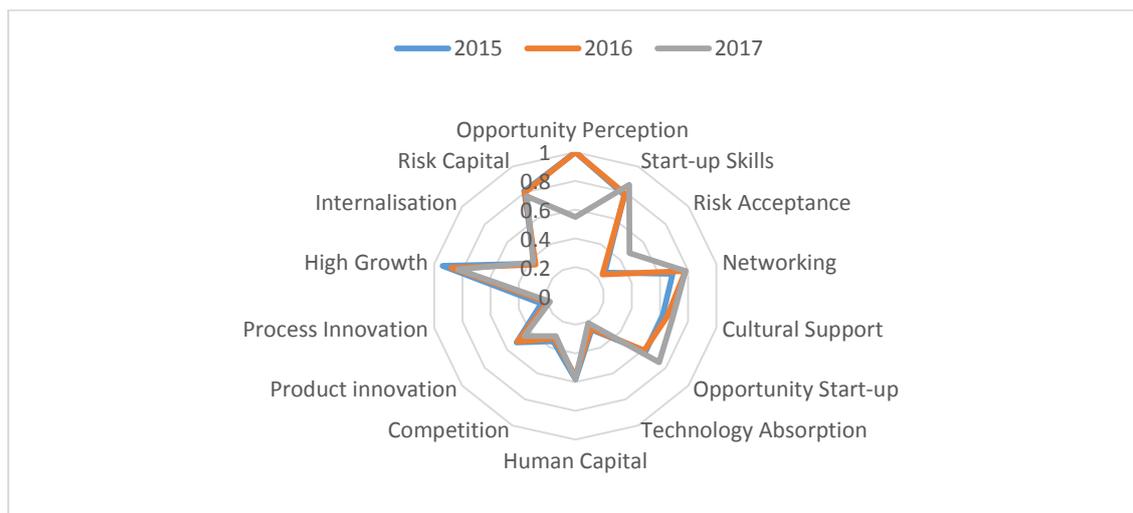
In 2015 and 2016, nine pillars performed strongly: opportunity perception, high growth, risk capital, start-up skills, networking, cultural support, opportunity start-up, human capital, and product innovation. Two pillars performed moderately: competition and internalisation. Each pillar needs at least a 10% effort to improve in the Global Entrepreneurship Index of Saudi Arabia. The weakest performances of the pillars were process innovation, risk acceptance, and technology absorption. Each of these pillars needs at least 24% or more to improve in the Global Entrepreneurship Index. The pillars performed similarly in 2017, but there was decrease in the performance of product innovation from strong performance to moderate performance that will require at least a 5% effort to improve in the Global Entrepreneurship Index in Saudi Arabia. According to the Global Entrepreneurship Index report in 2017, improving the conditions for entrepreneurship in Saudi Arabia required at least 10%, which could add \$139 billion to the economy. In general, we can claim that the entrepreneurship ecosystem in Saudi is healthy and supports entrepreneurship and SMEs' growth, but several improvements are required in regard of innovation, competition, risk and failure acceptance, adopting technology and internalisation. Therefore, policy-makers need to consider these pillars to improve the ecosystem in Saudi Arabia and take it to the next level, which is the enterprise level, in which entrepreneurs and enterprise are responsible for improving ecosystem. According to Khan (2016), this level requires practical

interventions, namely, access to technology, incubators, and consulting services. The next section analyses in more detail the role of institutional support in enabling resource access and influencing SMEs' growth.

Table 6- 2 Pillars performance of entrepreneurship ecosystem in Saudi Arabia (2015-2017)

| Pillar name | Pillar performance | | |
|------------------------|--------------------|------|------|
| | 2015 | 2016 | 2017 |
| Opportunity Perception | 1 | 1 | .55 |
| Start-up Skills | .78 | .79 | .86 |
| Risk Acceptance | .26 | .24 | .48 |
| Networking | .69 | .78 | .78 |
| Cultural Support | .62 | .65 | .69 |
| Opportunity Start-up | .62 | .61 | .74 |
| Technology Absorption | .26 | .25 | .21 |
| Human Capital | .58 | .56 | .58 |
| Competition | .35 | .33 | .31 |
| Product innovation | .52 | .51 | .45 |
| Process Innovation | .24 | .20 | .18 |
| High Growth | .94 | .88 | .83 |
| Internalisation | .36 | .35 | .37 |
| Risk Capital | .81 | .80 | .77 |

Figure 6- 2 Pillars performance of the entrepreneurship ecosystem in Saudi Arabia (2015-2017)



6.4 Research Participants

As mentioned above, 400 electronic questionnaires were sent to SMEs in different regions and different sectors, with 140 respondents replying. This group can be described based on their gender, age, education level, labour situation, individual income and reasons for starting a business. In addition, the participants can be described based on some of their business characteristics, such as location, firm age, sector and business size (based on the SME classification in Saudi Arabia, employment and annual revenue level).

Male participants outnumbered female participants in this research, with 60% of respondents being male entrepreneurs and 40% of them female. The majority of the respondents were from the younger generation (25-34 years old) and highly educated (more than 50% had undergraduate degrees and more than 22% postgraduate degrees). Half of the respondents were self-employed, 36% employed in the government or private sector and only 4% students. Half of the respondents received more than SAR 15,000 (US\$ 4000) income per month, 10% received less than SAR 5,000 (US\$1,333) per month and the rest received between SAR 5,000 and 14,999 (US\$ 1,333 and 3,999) per month. Regarding the reason for starting their business, half of the respondents stated that they did so because they identified an opportunity in the market, while 30% stated that it was available support at the individual and collective levels. Around 25% of them stated that they were employed originally either in the private or the government sector, but they started their business to increase their income, whereas 20% started their business because they did not have any other choice. Figure 6-3 shows a summary of the respondents' characteristics as outlined above.

In addition, the respondents can be described based on business characteristics such as age, location, sector and size. Regarding business age, 44% were in the early stages (between 0 and 3 years), 25% started between 3 and 7 years ago, 15% of the businesses were established 7-11 years ago and 14% started more than 11 years ago. The business location varied: 9% were in the northern region, 25% the eastern region, 21% the western region, 35% the central region and only 7% in the southern region. Finally, regarding business sector, there were diverse participants from all sectors: 43 businesses from the trade sector, 7-11 businesses from manufacturing, real estate, construction or health sectors, 13 businesses from the education sector and 15 businesses from the technical sector. Figure 6-4 shows a summary of the business characteristics as explained above.

Figure 6-3 Summary of the respondents' characteristics

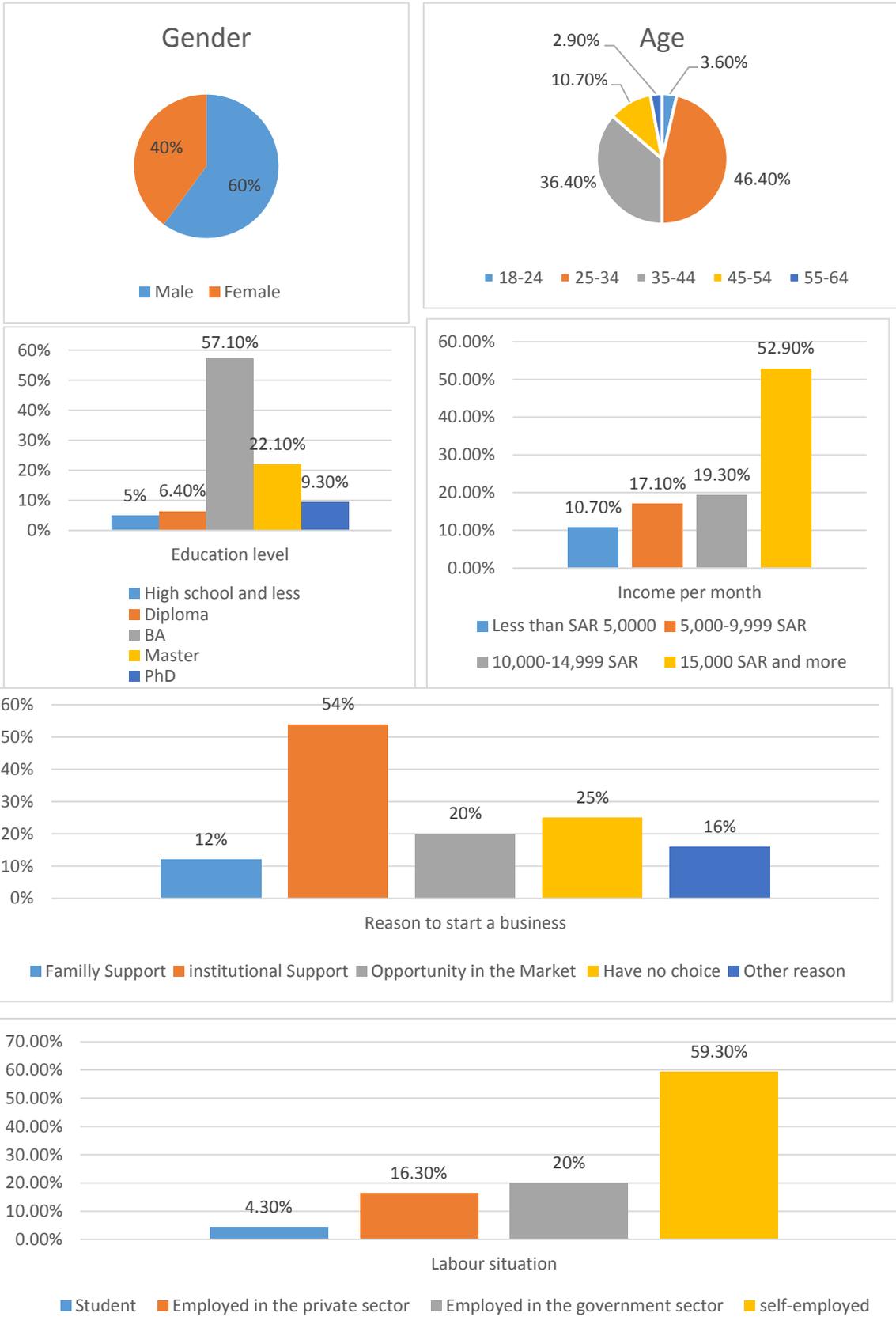
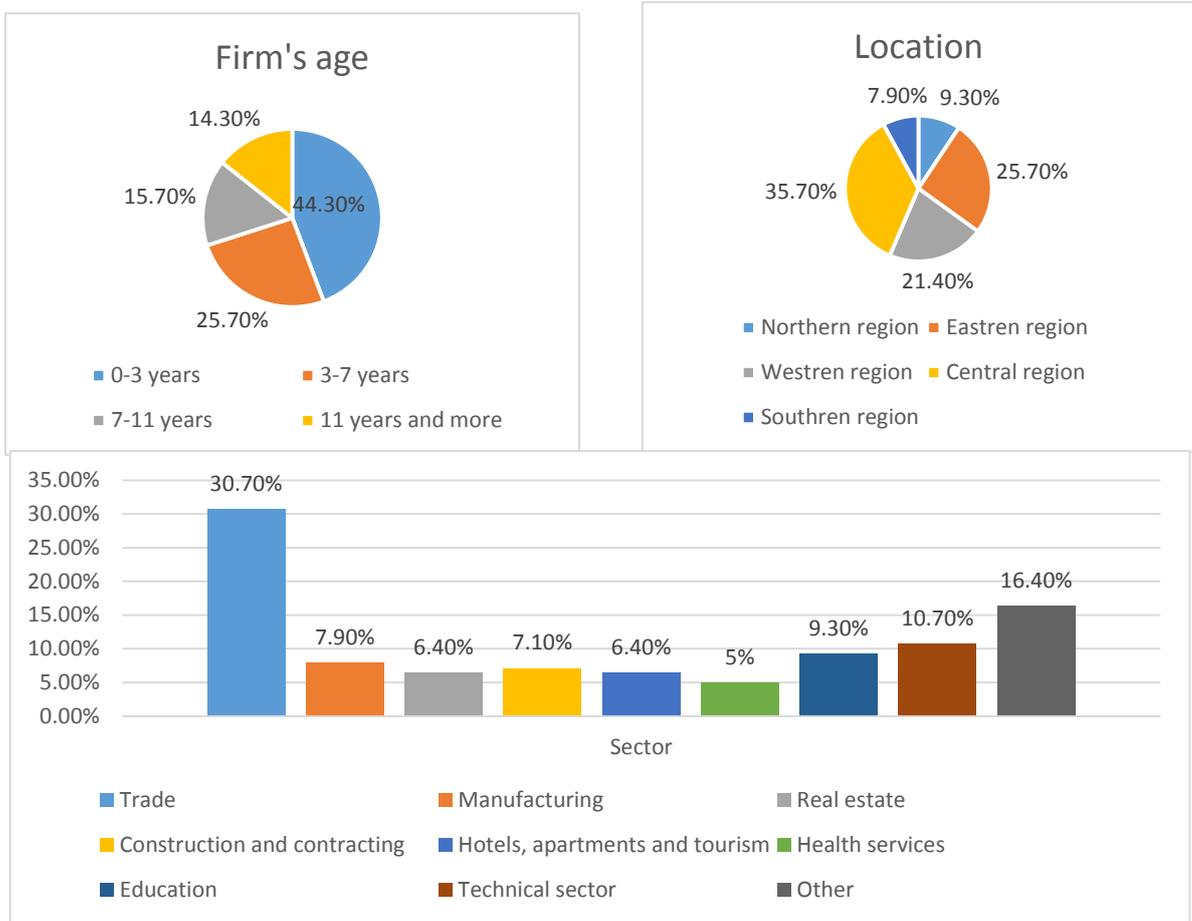


Figure 6-4 Summary of business characteristics



6.5 Data Analysis

6.5.1 The role of institutional support in enabling resource access

As mentioned, the first objective of this study is to analyse the role of institutional support in influencing resource access. To do this, this study used network analysis of entrepreneurs' social network at collective level. Accordingly, several factors need to be analysed. These are: actors that provide institutional support to entrepreneurs collectively; the link between these actors and entrepreneurs; the network features; and the relationship between these features and resource access at collective level.

In this research, social network actors include contacts at the collective level (such as institutions in the government and private sectors) that can be contacted to allow access to resources. Thus, they are defined based on the strength of ties. In general, in social network theory, there are strong and weak ties. The former are associates in entrepreneurs' social networks that can be contacted frequently, such as family and friends, while the latter can be contacted along with other entrepreneurs in a collective manner, such as institutions in the private and government sectors, which are the focus of this study. To analyse the role of entrepreneurs' social networks in enabling resource access, several features, including network size and network density, need to be analysed first. Thereafter, this chapter examines the relationship between these features and resource access at the collective level. Later, the resource generator is analysed for a better understanding regarding availability, access and effective resources via instructions and comparing these factors between respondents, regions and sectors. Finally, further analysis of institutional support is discussed.

6.4.1.1 The features of entrepreneurs' social networks and resource access

I. Network Size

A. How it is measured

The first feature of an entrepreneur's social network is its size at the collective level, which can be identified by the number of weak ties, i.e. the number of institutions in the private and government sectors that entrepreneurs can contact to access financial, human, information and knowledge, training and education resources. Entrepreneurs were asked to state the number of institutions, in both the private and the government sector, they use to access each of the four resources. See the

Appendix (5), the Fourth section, question 14. The total numbers of these institutions in each sector represent social network size at the collective level.

B. Reliability and Validity

To enhance the validity and reliability of these measurements, we used previous studies in social capital, network analysis and SME growth to find a conceptual and operational definition of each variable and how it can be measured and collected. The reliability test was applied to this measurement. To accept the assumption of measurement reliability, the Cronbach's Alpha value should be more than .7. Tables 6-3 and 6-4 show the reliability test for network size at the collective level (government and private institutions), indicating that the measurement is reliable, since the Cronbach's Alpha value is more than .7 for both government and private institutions.

C. Descriptive and Normality

Descriptive analysis can be used to describe the characteristics of network size at the collective level. In addition, it will be used to examine the normality of network size to choose the accurate statistical test that addresses the relationship between network size and resource access at the collective level. To choose an accurate statistical test, the normality assumption should be assessed to determine whether or not the variable follows a normal distribution. Table 6-5 shows the descriptive network size analysis at the collective level (government and private institutions).

The table shows that among 140 cases, network size ranged between 0-17 institutions in the government sector, with the mean around six institutions, and between 0-36 institutions in the private sector, where the mean is around nine

institutions. The skewness value indicates the symmetry of the distribution, and kurtosis indicates the clustering of this distribution. Both variables are clustered to the left, since the value of skewness is positive. Both variables, either flat or too many cases, are in the extreme, since the kurtosis value is below zero for both. This indicates that these variables do not follow normal distribution assumptions.

We applied a normality test to these variables, to assess normality assumptions. Table 6-6 and Figures 6-5 and 6-6 show the normality assessment of network size. The significance values of both normality tests are below .05, meaning that we can accept the assumption that both variables are not normally distributed. The histogram shows both variables peaking to the left, which means that they are not normally distributed, and thus non-parametric tests are appropriate.

Table 6-3 Reliability test of network size at the collective level (government institutions)

| Reliability Statistics | | | |
|-------------------------------|-------------|--|--|
| Cronbach's Alpha | No of Items | | |
| .835 | 4 | | |

| Item Statistics | | | |
|--|------|----------------|-----|
| | Mean | Std. Deviation | N |
| Network size — government institutions (financial resources) | 1.64 | 1.800 | 140 |
| Network size — government institutions (human resources) | .94 | 1.342 | 140 |
| Network size — government institutions (information and knowledge resources) | 1.88 | 2.207 | 140 |
| Network size — government institutions (training and education resources) | 2.20 | 2.821 | 140 |

Table 6-4 Reliability test of network size at the collective level (private institutions)

| Reliability Statistics | | | |
|-------------------------------|-------------|--|--|
| Cronbach's Alpha | No of Items | | |
| .850 | 4 | | |

| Item Statistics | | | |
|--|------|----------------|-----|
| | Mean | Std. Deviation | N |
| Network size — private institutions (financial resources) | 2.64 | 2.936 | 140 |
| Network size — private institutions (human resources) | 1.83 | 2.481 | 140 |
| Network size — private institutions (information and knowledge resources) | 2.71 | 4.300 | 140 |
| Network size level — private institutions (training and education resources) | 2.81 | 3.743 | 140 |

Table 6-5 Descriptive statistics of network size at the collective level

| | Descriptive Statistics | | | | | | | | |
|--|------------------------|-----------|-----------|-----------|----------------|-----------|------------|-----------|------------|
| | N | Minimum | Maximum | Mean | Std. Deviation | Skewness | | Kurtosis | |
| | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| Network size on the collective level (government institutions) | 140 | .00 | 17.00 | 5.9357 | 5.22199 | .417 | .205 | -1.042 | .407 |
| Network size on the collective level (private institutions) | 140 | .00 | 36.00 | 8.6643 | 8.70839 | .858 | .205 | .023 | .407 |
| Valid N (list-wise) | 140 | | | | | | | | |

Table 6-6 Normality tests of network size at the collective level

| | Tests of Normality | | | | | |
|--|---------------------------------|-----|------|--------------|-----|------|
| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Network size on the collective level (government institutions) | .142 | 140 | .000 | .903 | 140 | .000 |
| Network size on the collective level (private institutions) | .168 | 140 | .000 | .877 | 140 | .000 |

Figure 6-5 Histogram of network size at the collective level (government institutions)

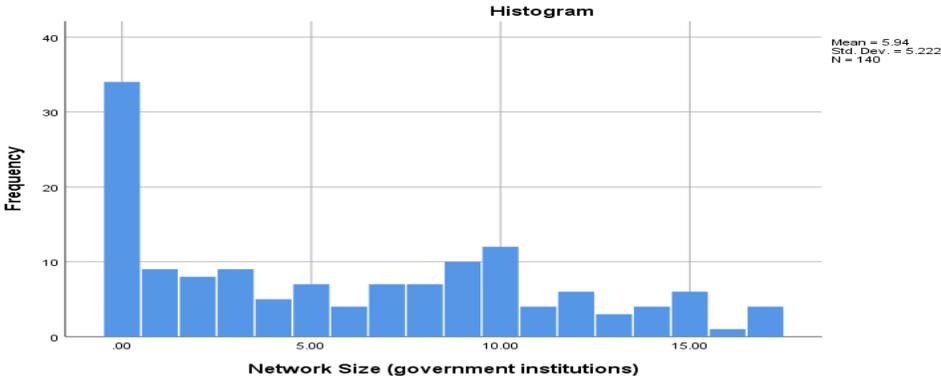
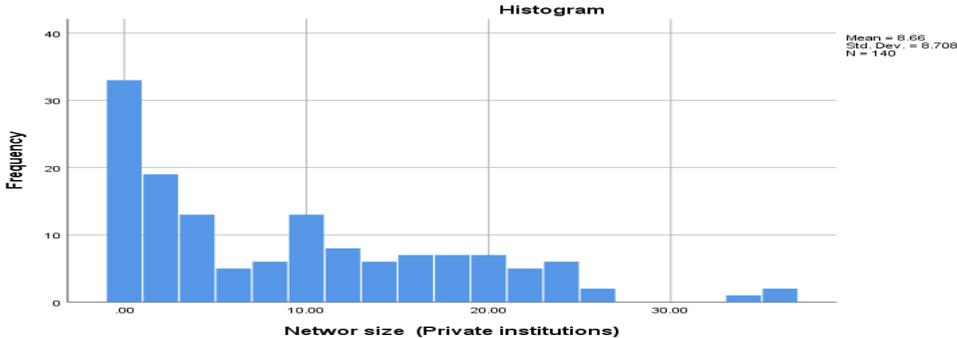


Figure 6-6 Histogram of network size at the collective level (private institutions)



II. Network Density

- *How it is measured*

The next feature of social networks is network density, which refers to how frequently entrepreneurs contact their social network actors to access resources at the collective level. Entrepreneurs were asked to scale their contact frequency with social network contacts (institutions in the government and private sectors) at the collective level on a scale (0-4), where zero means 'never contact' and four means 'always contact'. See Appendix (5), Fourth section, question 16 and 17. To calculate the network density average, we divided the total network density of all resources by the total network size at the collective level. In other words, we divided total frequency of accessing all resources via government institutions by the total number of government institutions in the entrepreneurs' social networks, to access all four resources. The process was repeated for private institutions.

- *Reliability and Validity*

Similar to the social network, social network density is measured based on the previous studies, to form a definition and establish how it can be measured. Previous studies on social capital, network analysis and SME growth were utilised to find a conceptual and operational definition of network density at the collective level. The reliability test was applied to this measurement. To accept the assumption of measurement reliability, the Cronbach's Alpha value should be more than .7. Tables 6-7 and 6-8 show the reliability test for network density at the collective level (government and private institutions). The reliability tests for social

networks size show that the measurement is reliable, since the Cronbach's Alpha value is more than .7 for both government and private institutions.

- *Descriptive and Normality*

Similar to what was explained for the social network, to choose an accurate statistical test, a descriptive analysis and a normality assessment are required. This means that this variable should be tested to see whether or not it follows a normal distribution. Table 6-9 shows a descriptive analysis of network density at the collective level (government and private institutions).

The table shows that among 140 cases, the network density ranged between 0 and 5 institutions in both the government and private sectors, with the mean of density at around one from both. As mentioned previously, the skewness value indicates the symmetry of the distribution, and kurtosis indicates the clustering of this distribution. Both variables are clustered to the left, since the value of skewness is positive, and they peak because the kurtosis value is positive. To assess normality, we applied a normality test to these variables. Table 6-10 shows the normality test for network density at the collective level, and Figures 6-7 and 6-8 show the histogram of network density for government and private institutions, respectively. The normality test of network density (government and private institutions) shows that they are not distributed normally, while the histogram shows that neither variable is normally distributed, as both are clustered to the left.

Table 6-7 Reliability test of network density at the collective level (government institutions)

| Reliability Statistics | | | |
|-------------------------------|------------------|------------|--|
| | Cronbach's Alpha | N of Items | |
| | .898 | 4 | |

| Item Statistics | | | |
|---|------|----------------|-----|
| | Mean | Std. Deviation | N |
| Network density — government institutions (financial resources) | 2.18 | 1.254 | 140 |
| Network density — government institutions (human resources) | 2.27 | 1.302 | 140 |
| Network density — government institutions (information and knowledge resources) | 2.50 | 1.370 | 140 |
| Network density — government institutions (training and education resources) | 2.36 | 1.353 | 140 |

Table 6-8 Reliability test of network density at the collective level (private institutions)

| Reliability Statistics | | | |
|-------------------------------|------------------|-------------|--|
| | Cronbach's Alpha | No of Items | |
| | .916 | 4 | |

| Item Statistics | | | |
|--|------|----------------|-----|
| | Mean | Std. Deviation | N |
| Network density — private institutions (financial resources) | 2.27 | 1.211 | 140 |
| Network density — private institutions (human resources) | 2.21 | 1.222 | 140 |
| Network density — private institutions (information and knowledge resources) | 2.41 | 1.330 | 140 |
| Network density — private institutions (training and education resources) | 2.33 | 1.289 | 140 |

Table 6-9 Descriptive statistics of network density at the collective level

| | Descriptive Statistics | | | | | | | | |
|---|------------------------|-----------|-----------|-----------|----------------|-----------|------------|-----------|------------|
| | N | Minimum | Maximum | Mean | Std. Deviation | Skewness | | Kurtosis | |
| | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| Network Density (government institutions) | 140 | .00 | 5.00 | 1.2872 | 1.30046 | 1.291 | .205 | 1.244 | .407 |
| Network Density (private institutions) | 140 | .00 | 5.00 | 1.2136 | 1.53189 | 1.567 | .205 | 1.223 | .407 |
| Valid N (list-wise) | 140 | | | | | | | | |

Table 6-10 Normality tests of network density at the collective level

| | Tests of Normality | | | | | |
|---|---------------------------------|-----|------|--------------|-----|------|
| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Network Density (government institutions) | .161 | 140 | .000 | .852 | 140 | .000 |
| Network Density (private institutions) | .248 | 140 | .000 | .734 | 140 | .000 |

Figure 6-7 Histogram of network density at the collective level (government institutions)

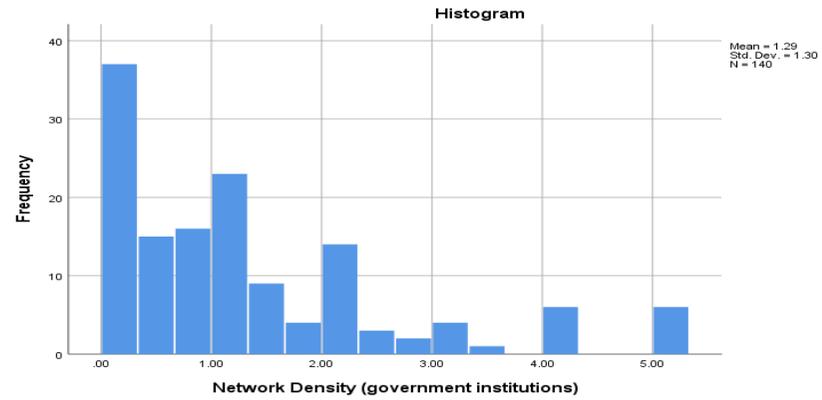
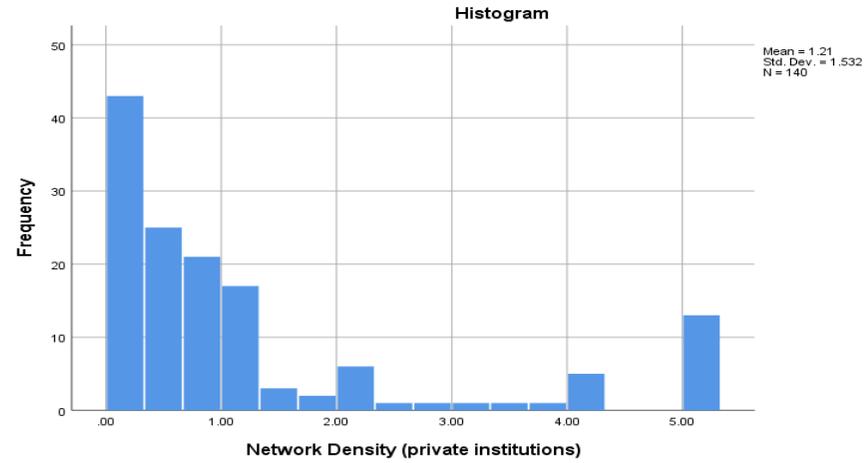


Figure 6-8 Histogram of network density at the collective level (private institutions)



III. Resource Access (Resource Generator)

- *How it is measured*

A resource generator is usually used in the literature to measure resource access based on certain items, and then applying different methods to analyse these items, as mentioned previously. Several changes have been made to this measurement to meet the requirements, objectives and context of this research. Therefore, we measured resource access based on several items, including whether each resource is accessed via institutions in the government and private sectors, see appendix (5), fourth section, question 11. Thereafter, resource access was measured based on a scale (0-4), where zero represents that none of the resources is accessed at the collective level, and four represents that all four resources are accessed at the collective level. In other words, a zero value indicates no access, (1) partial access, (2) moderate access, (3) significant access and (4) full access. To measure resource access, we followed three steps. First, entrepreneurs were asked, “have you accessed the following resources via government and private institutions: financial resources, human resources, education and training resources, and knowledge and information?” Second, for each resource, if the answer is yes, the value is 1, if not the value is zero. Third, the total number indicates the scale of resource access.

- *Reliability and Validity*

As mentioned previously in relation to network size and density, to increase the validity of this measurement, it was formed based on the conceptual and empirical

framework. To increase its reliability, a Likert scale was applied to measure resource access, using five potential choices at the collective level. We applied a reliability test to resource access via government and private institutions, to gauge measurement reliability based on certain items. Table 6-11 shows the reliability of resource access via government institutions, and Table 6-12 shows the reliability test for resource access via private institutions. As shown in Tables 6-11 and 6-12, the measurement is reliable, since the Cronbach's Alpha value is more than .7.

- *Descriptive and Normality*

Both a descriptive and a normality assessment were needed, to choose an accurate statistical test for resource access via government and private institutions. This means this variable should be tested to see whether or not it follows a normal distribution. Table 6-13 shows the descriptive analysis of resource access via government and private institutions, indicating that it ranges between 0 and 4, where the mean is one for the government institutions and around two for private institutions. Skewness values for both are positive, and thus they are skewed to the left. We applied a normality test, which illustrated that both variables are not normally distributed, Table 6-14 shows the normality test of resource access. The histogram in Figure 6-9 and 6-10 show that both of them are not normally distributed. Therefore, the non-parametric test is the accurate statistical test.

Table 6-11 Reliability test of resource access via government institutions

| Reliability Statistics | |
|------------------------|-------------|
| Cronbach's Alpha | No of Items |
| .835 | 4 |

| Item Statistics | | | |
|--|-------|----------------|-----|
| | Mean | Std. Deviation | N |
| Accessed financial resources via institutions in government sector | .3000 | .45990 | 140 |
| Accessed human resources via institutions in government sector | .3286 | .47138 | 140 |
| Accessed information and knowledge resources via institutions in government sector | .3857 | .48851 | 140 |
| Accessed training and education resources via institutions in government sector | .3643 | .48296 | 140 |

| Reliability Statistics | |
|------------------------|-------------|
| Cronbach's Alpha | No of Items |
| .815 | 4 |

Table 6-12 Reliability test of resource access via private institutions

| Item Statistics | | | |
|---|-------|----------------|-----|
| | Mean | Std. Deviation | N |
| Accessed financial resources via institutions in private sector | .3429 | .47637 | 140 |
| Accessed human resources via institutions in private sector | .2571 | .43863 | 140 |
| Accessed information and knowledge resources via institutions in private sector | .3357 | .47394 | 140 |
| Accessed training and education resources via institutions in private sector | .3643 | .48296 | 140 |

Table 6-13 Descriptive statistics of resource access at the collective level

| | Descriptive Statistics | | | | | | | | |
|---|------------------------|-----------|-----------|-----------|----------------|-----------|------------|-----------|------------|
| | N | Minimum | Maximum | Mean | Std. Deviation | Skewness | | Kurtosis | |
| | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| Resource access via government institutions | 140 | .00 | 4.00 | 1.3786 | 1.55692 | .682 | .205 | -1.104 | .407 |
| Resource access via private institutions | 140 | .00 | 4.00 | 1.6286 | 1.37471 | .528 | .205 | -.935 | .407 |
| Valid N (list wise) | 140 | | | | | | | | |

Table 6-14 Normality tests of resource access at the collective level

| | Tests of Normality | | | | | |
|---|---------------------------------|-----|------|--------------|-----|------|
| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Resource access via government institutions | .262 | 140 | .000 | .780 | 140 | .000 |
| Resource access via private institutions | .233 | 140 | .000 | .863 | 140 | .000 |

Figure 6-9 Histogram of resource access via government institutions

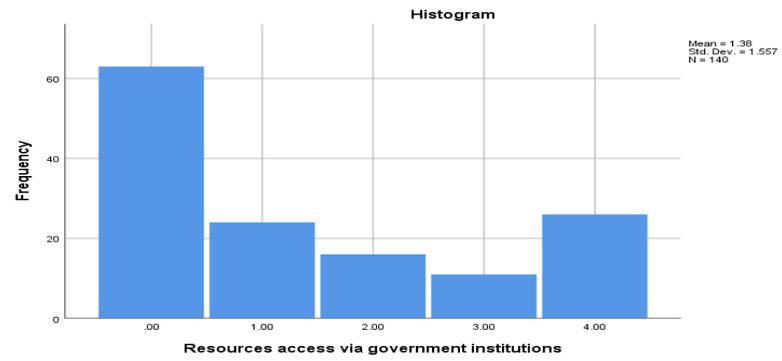
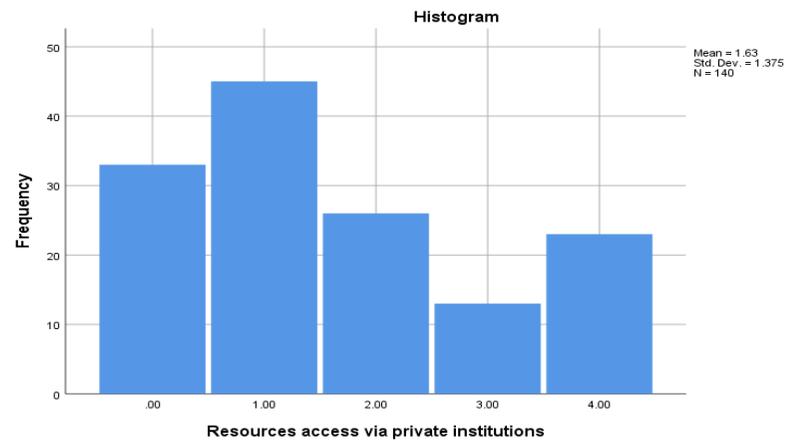


Figure 6-10 Histogram of resource access via private institutions



6.4.1.2 The relationship between features of entrepreneurs' social networks and resource access

To examine the relationship between resource access and both network size and density at the collective level, we applied a non-parametric statistic Spearman's rho, since all variables were not distributed normally. It was hypothesised that resource access is related positively to both network size and density at the collective level. To accept the correlation assumption, the significance value should be less than .05, in which case the strength and direction of the relationship can be identified based on the correlation coefficient value. Table 6-15 shows the correlation test between resource access via government institutions and features of entrepreneurs' social networks (government institutions). Table 6-16 shows the correlation test between resource access via private institutions and features of entrepreneurs' social networks (private institutions).

The outputs of the correlation tests on both government (Table 6-15) and private institutions (Table 6-16) show that there is a positive relationship between both features of social networks and resource access, since the significant value is less than .05. The strength of this relationship varies. By looking at the correlation coefficient, resource access is related strongly to network size (.57 for the government sector and .61 for the private sector. which means that the greater the numbers of institutions in entrepreneurs' social networks, the more likely they are to have access to resources, which can indicate that network size at the collective level enables resource access significantly. Social network density is related slightly to resource access via government institutions (.23) and moderately via

private institutions (.30), which indicates that the more entrepreneurs contact institutions in private and government sectors, the more they access resources.

Table 6-15 Correlation test between resource access and social network features (government sector)

| Correlations | | | Resource access via government institutions |
|---------------------|---|-------------------------|--|
| Spearman's rho | Network Size (government institutions) | Correlation Coefficient | .574** |
| | | Sig. (2-tailed) | .000 |
| | | N | 140 |
| | Network Density (government institutions) | Correlation Coefficient | .228** |
| | | Sig. (2-tailed) | .007 |
| | | N | 140 |

Table 6-16 Correlation test between resource access and social network features (private sector)

| Correlations | | | Resource access via private institutions |
|---------------------|--|-------------------------|---|
| Spearman's rho | Network size (private institutions) | Correlation Coefficient | .605** |
| | | Sig. (2-tailed) | .000 |
| | | N | 140 |
| | Network Density (private institutions) | Correlation Coefficient | .295** |
| | | Sig. (2-tailed) | .000 |
| | | N | 140 |

6.4.1.3 How resource access via institutions is different between regions and sectors

To understand better the role of entrepreneurs' social networks at the collective level, we wanted to compare resource access among regions and sectors, to examine if there are any differences. In order to achieve this goal, we applied the Kruskal-Wallis test, where the null hypothesis assumes that the median of the sample is not significant different. To accept this assumption, the test's significance value should be above .05. Tables 6-15 and 6-16 show the Kruskal-Wallis test for resource access among regions and the test report, and Tables 6-17 and 6-18 show the Kruskal-Wallis test for resource access among sectors and the test report.

Resource access via government and private institutions is not significant different among regions, since the value of significance is more than .05, as shown in Table 6-17. By comparing the resource access via government institutions mean among regions, entrepreneurs in the southern region have the higher mean, then the central and eastern regions and then finally the northern and western regions. Similarly, the resource access via private institutions mean is highest in the central and southern regions and lowest in the other regions, see Table 6-16.

Resource access among sectors via government and private institutions is not significant different among sectors, as the significance value is more than .05, as shown in Table 6-18, in which case we can accept the assumption that the resource access means between sectors are not significant different. By comparing the resource access via government mean, the highest is in the manufacturing sector and then education, while the lowest is in the trade and hotels, apartments and tourism sectors. The resource access via private

institutions mean is higher in the manufacturing and education sectors, while the lowest is in the remaining sectors.

Table 6-17 Kruskal-Wallis H Test of resource access among regions

| | Test Statistics^{a,b} | |
|------------------|---|--|
| | Resource access via government institutions | Resource access via private institutions |
| Kruskal-Wallis H | 8.870 | 7.437 |
| Df | 4 | 4 |
| Asymp. Sig. | .064 | .115 |

Table 6-18 Kruskal-Wallis H Test report of resource access medians among regions

| Location | Resource access via government institutions | Resource access via private institutions |
|-----------------|---|--|
| Northern region | .0000 | 1.0000 |
| Eastern region | 1.0000 | 1.0000 |
| Western region | .0000 | 1.0000 |
| Central region | 1.0000 | 2.0000 |
| Southern region | 3.0000 | 2.0000 |
| Total | 1.0000 | 1.0000 |

Table 6-19 Kruskal-Wallis H Test of resource access among sectors

| | Test Statistics^{a,b} | |
|------------------|---|--|
| | Resource access via government institutions | Resource access via private institutions |
| Kruskal-Wallis H | 14.135 | 9.884 |
| Df | 8 | 8 |
| Asymp. Sig. | .078 | .273 |

Table 6-20 Kruskal-Wallis H Test report of resource access medians among sectors

| Sector | Resource access via government institutions | Resource access via private institutions |
|--------------------------------|---|--|
| Trade | .0000 | 1.0000 |
| Manufacturing | 4.0000 | 3.0000 |
| Real estate | 1.0000 | 1.0000 |
| Construction and contracting | 1.0000 | 2.0000 |
| Hotels, apartments and tourism | .0000 | 1.0000 |
| Health services | 1.0000 | 1.0000 |
| Education | 2.0000 | 2.0000 |
| Technical sector | 1.0000 | 1.0000 |
| Other | .0000 | 1.0000 |
| Total | 1.0000 | 1.0000 |

We can argue that resource access via institutions might be influenced by the availability of resources and the awareness of entrepreneurs regarding institutional support, because resources might be not available for entrepreneurs to access via institutions, or they might be not aware of any institutional support in this regard. Therefore, we included several questions in the questionnaire to analyse the availability of resources at the collective level, following the same steps taken in the resource generator method. In addition, we asked the entrepreneurs whether or not they were aware of institutional support, and, if so, they considered it a support for their business, and why. The following section discusses these factors.

6.4.1.4 Further analysis of institutional support (resource availability at collective level)

To measure the availability of resources at the collective level, we followed the same steps taken in measuring resource access. We applied reliability to each measurement, and Tables 6-21 and 6-22 show the reliability tests for resource availability via government and private institutions, respectively. The outputs show that resource availability is reliable, since the Cronbach's Alpha value is more than .7. Similar to resource access, this variable does not follow a normal distribution, and so we applied the non-parametric statistical test to compare the availability of regions and sectors. See Table 6-23's descriptive statistics for resource availability at the collective level, Table 6-24's normality test for resource availability at the collective level and Figures 6-11 and 6-12s' histogram for resource availability via government and private institutions, respectively. Although the normality tests show that this variable does not follow normal distribution, as the significance values are less than .05, the histogram shows resource availability via government and private institutions peaking on the right. Therefore, this variable is not normally distributed.

Table 6-21 Reliability test of resource availability via government institutions

| Reliability Statistics | |
|------------------------|------------|
| Cronbach's Alpha | N of Items |
| .785 | 4 |

| Item Statistics | | | |
|---|-------|----------------|-----|
| | Mean | Std. Deviation | No |
| Availability of financial resources via government institutions | .7000 | .45990 | 140 |
| Availability of human resources via government institutions | .4786 | .50133 | 140 |
| Availability of information and knowledge resources via government institutions | .6000 | .49166 | 140 |
| Availability of training and education resources via government institutions | .6071 | .49014 | 140 |

Table 6-22 Reliability test of resource availability via private institutions

| Reliability Statistics | |
|-------------------------------|-------------|
| Cronbach's Alpha | No of Items |
| .802 | 4 |

| Item Statistics | | | |
|--|-------|----------------|-----|
| | Mean | Std. Deviation | No |
| Availability of financial resources via private institutions | .6643 | .47394 | 140 |
| Availability of human resources via private institutions | .5643 | .49763 | 140 |
| Availability of information and knowledge resources via private institutions | .6429 | .48088 | 140 |
| Availability of training and education resources via private institutions | .6929 | .46297 | 140 |

Table 6-23 Descriptive statistics of resource availability at the collective level

| | Descriptive Statistics | | | | | | | | |
|---|------------------------|----------------------|----------------------|-------------------|-----------------------------|-----------------------|------------|-----------------------|------------|
| | N Statistic | Minimum Statistic | Maximum Statistic | Mean Statistic | Std. Deviation Statistic | Skewness Statistic | Std. Error | Kurtosis Statistic | Std. Error |
| Resource availability via government institutions | 140 | .00 | 4.00 | 2.3857 | 1.51532 | -.301 | .205 | -1.412 | .407 |
| Resource availability via private institutions | 140 | .00 | 4.00 | 2.5643 | 1.51829 | -.543 | .205 | -1.213 | .407 |
| Valid N (list-wise) | 140 | | | | | | | | |

Table 6-24 Normality test of resource availability at the collective level

| | Tests of Normality | | | | | |
|---|---------------------------------|-----|------|--------------|-----|------|
| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Resource availability via government institutions | .228 | 140 | .000 | .837 | 140 | .000 |
| Resource availability via private institutions | .256 | 140 | .000 | .809 | 140 | .000 |

Figure 6-11 Histogram of resource availability via government institutions

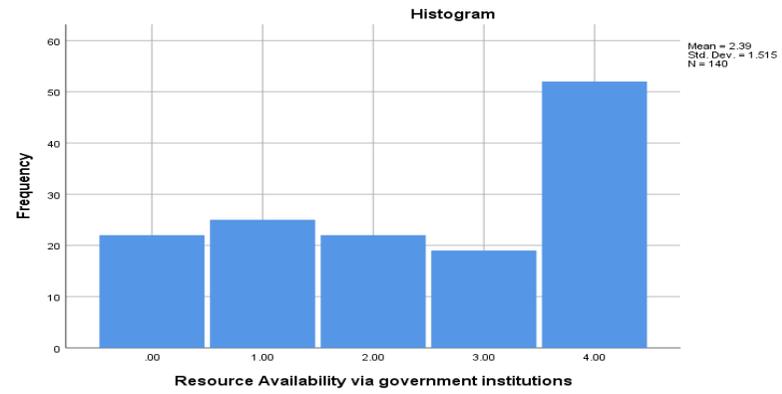
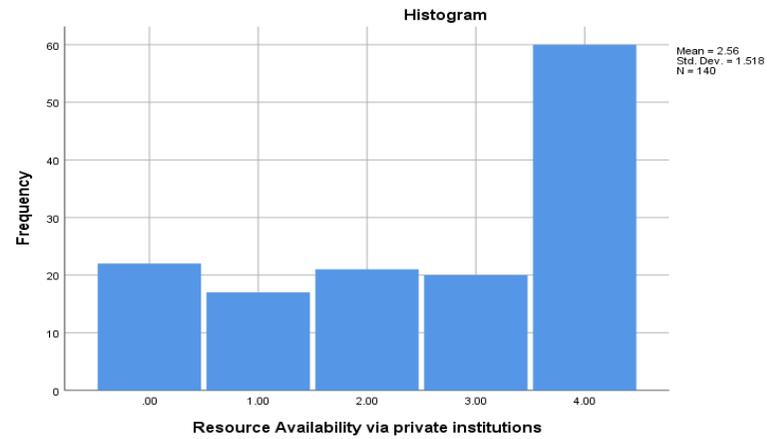


Figure 6-12 Histogram of resource availability via private institutions



Similar to resource access, we wanted to run a comparison of resource availability between regions and sectors, to explain any differences. In order to achieve this goal, we applied a Kruskal-Wallis test that assumes that the median of the sample is not significantly different. To accept this assumption, the significance value of the test should be more than .05. Table 6-25 shows the Kruskal-Wallis test for resource availability among regions and the test report, and Tables 6-26 and 6-27 show the Kruskal-Wallis test for resource availability among sectors and the test report.

As highlighted in Table 6-25, the significance value of the Kruskal test is less than .05, and so we accept the assumption that the resource availability means among regions are significantly different via government and private institutions, as shown in Table 6-26. On the other hand, resource availability among different sectors, as the significance value of the Kruskal Test, is more than .05. By comparing resource availability among sectors, government institutions, such as manufacturing, health services and education, are the best, while the worst is the hotels, apartments and tourism sector. Resource availability via private institutions is available to almost all sectors, but the worst is in the trade sector.

Table 6-25 Kruskal-Wallis H Test of resource availability among regions

| | Test Statistics^{a,b} | |
|------------------|---|---|
| | Resource availability via government institutions | Resource availability via private institutions |
| Kruskal-Wallis H | 15.736 | 9.796 |
| Df | 4 | 4 |
| Asymp. Sig. | .003 | .044 |

Table 6-26 Kruskal-Wallis H Test report of resource availability medians among regions

| Location | Resource availability via government institutions | Resource availability via private institutions |
|-----------------|---|--|
| North region | 3.0000 | 3.0000 |
| Eastern region | 2.5000 | 2.0000 |
| Western region | 2.0000 | 2.0000 |
| Central region | 3.0000 | 3.0000 |
| Southern region | 4.0000 | 4.0000 |
| Total | 3.0000 | 3.0000 |

Table 6-27 Kruskal-Wallis H Test of resource availability among sectors

| | Test Statistics ^{a,b} | |
|------------------|---|--|
| | Resource availability via government institutions | Resource availability via private institutions |
| Kruskal-Wallis H | 11.133 | 10.534 |
| Df | 8 | 8 |
| Asymp. Sig. | .194 | .229 |

Table 6-28 Kruskal-Wallis H Test report of resource availability medians among sectors

| Sector | Resource availability via government institutions | Resource availability via private institutions |
|--------------------------------|---|--|
| Trade | 2.0000 | 2.0000 |
| Manufacturing | 4.0000 | 4.0000 |
| Real estate | 3.0000 | 3.0000 |
| Construction and contracting | 2.5000 | 4.0000 |
| Hotels, apartments and tourism | 1.0000 | 4.0000 |
| Health services | 4.0000 | 4.0000 |
| Education | 4.0000 | 4.0000 |
| Technical sector | 3.0000 | 3.0000 |
| Other | 2.0000 | 2.0000 |
| Total | 3.0000 | 3.0000 |

These findings raise an important question: if resources are available to entrepreneurs via institutions, why do some not access them to support their business? With this in mind, we asked the entrepreneurs two questions. The first asked if they were aware of institutional support in the government and private sectors, and then we asked if they would consider having this support, and why?

We found that out of ten entrepreneurs, at least three were not aware of the institutional support provided by the government and the private sector (see Figure 6-13). When entrepreneurs were asked whether they had considered accessing the institutional support of the government or the private sector, 60% of them had thought about institutional support in the government sector, and 47% would consider private sector institutions. Figure 6-14 shows the percentage of entrepreneurs who would consider institutional support from the government and private sectors.

Figure 6-13 Percentage of entrepreneurs who are aware of institutional support in private and government sectors

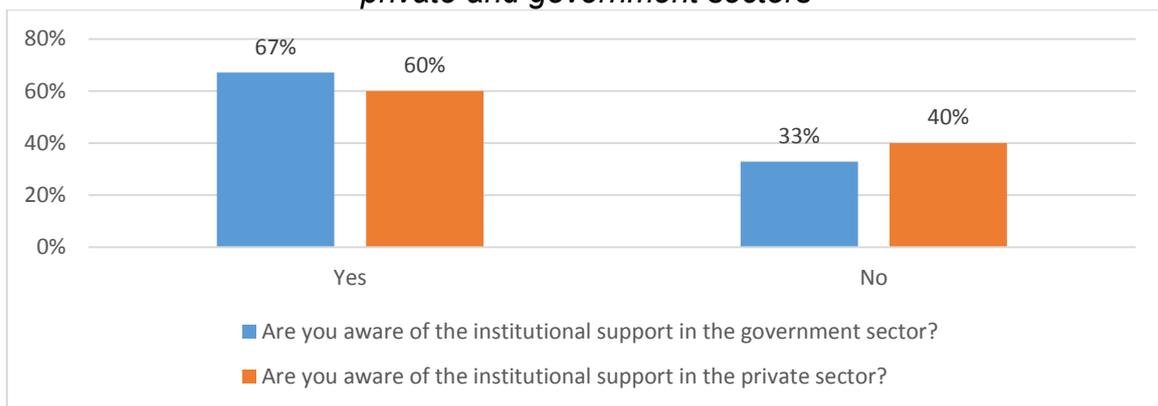
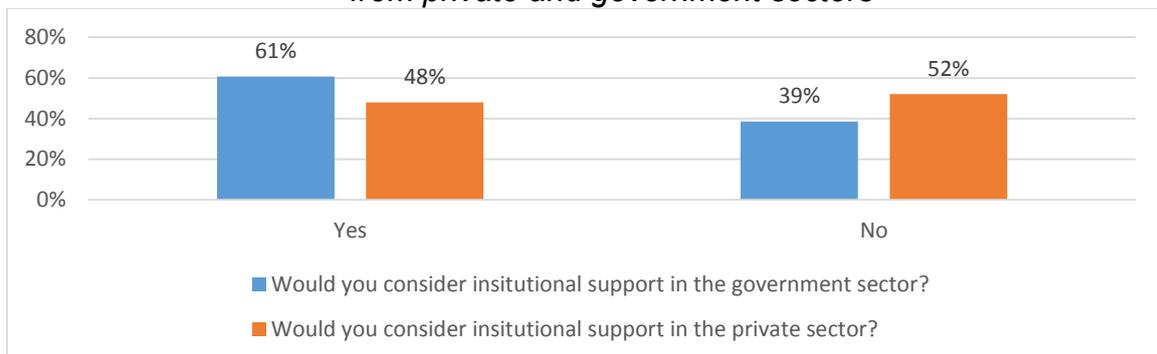


Figure 6-14 Percentage of entrepreneurs who would consider institutional support from private and government sectors



They were then asked to state their reasons for considering this institutional support. They offered various reasons, including expanding and developing their business, accessing different resources, minimising difficulties in starting and

managing a business, fewer procedures via private institutions and low-interest rates via government institutions. Some stated that they would indeed think about this support, while others had had it before, some needed further information and the remainder stated that these institutions would not support their business type.

On the other hand, entrepreneurs who would not consider this support stated one or more of the following reasons, which might explain why they rely instead on their contacts (family and friends) to access resources. These reasons include: avoiding risk and debt, insufficient support regarding cost, time-consuming, trust issues, limited support regarding support and business type, not enough information regarding institutional support or they did not agree with the conditions surrounding institutional support. Some entrepreneurs stated that they would not consider institutional support because they had had it before, while others stated that they did not need this provision. Others stated that they preferred support from government institutions, due to favourable interest rates, yet not from the private sector, due to high interest rate and trust issues.

6.5.2 How much does institutional support influence SME growth?

The second objective of this research was to analyse how much institutional support influences SME growth. To achieve this particular goal, we considered several factors that might have an impact on the entrepreneurship process as claimed in this study, namely resource access, environmental factors, entrepreneurs' characteristics, and SME characteristics. To achieve this objective, each variable needed to be explained regarding how it is measured, its reliability, definition and normality, to choose the most accurate statistical test to examine the

relationship between SME growth and other factors. These factors include resource access, entrepreneurs' characteristics, firm characteristics and environmental factors.

6.4.2.1 Variables

I. Entrepreneurs' Characteristics

- *How it is measured*

Entrepreneurs' characteristics in this research include self-confidence, the need for achievement, risk-taking, managerial skills, experience, the locus of control and innovativeness. They were asked to rate themselves regarding these characteristics from 1-5, where one means very low and five means very high ability. The total number of these items' scores represents entrepreneurs' characteristics.

- *Reliability and Validity*

To enhance the validity and reliability of this measurement, we used previous studies to find a conceptual and operational definition that could be measured and collected. In addition, we applied a Likert scale to the entrepreneurs' characteristics scale to increase its reliability, i.e. we offered five potential choices to represent each item. Moreover, we applied a reliability test to the entrepreneurs' characteristics measurement to check its reliability, as illustrated in Table 6-29, which shows that the measurement is reliable, since the Cronbach's Alpha value is more than .7.

Table 6-29 Reliability test of entrepreneurs' characteristics measurement

| Reliability Statistics | |
|------------------------|-------------|
| Cronbach's Alpha | No of Items |
| .921 | 6 |

| Item Statistics | | | |
|----------------------|------|----------------|-----|
| | Mean | Std. Deviation | N |
| Self-confidence | 4.26 | 1.116 | 140 |
| Need for achievement | 4.48 | 1.166 | 140 |
| Risk-taking | 3.99 | 1.089 | 140 |
| Managerial skills | 4.04 | 1.010 | 140 |
| Experience | 3.77 | 1.146 | 140 |
| Locus of control | 4.41 | .982 | 140 |

- *Descriptive and Normality*

As mentioned previously, both descriptive and normality tests are required to choose the most accurate statistical test. Table 6-30 shows the descriptive statistics for entrepreneurs' characteristics, Table 6-31 shows the normality test for entrepreneurs' characteristics and Figure 6-15 shows the histogram for entrepreneurs' characteristics. The normality test shows that this variable does not follow a normal distribution, while the kurtosis value indicates that the variable peaks and the skewness value is negative. Thus, the variable peaks at the high end, as shown in the histogram. Therefore, the non-parametric statistical test is accurate for examining the relationship between entrepreneurs' characteristics and SME growth.

Table 6-30 Descriptive statistics of entrepreneurs' characteristics

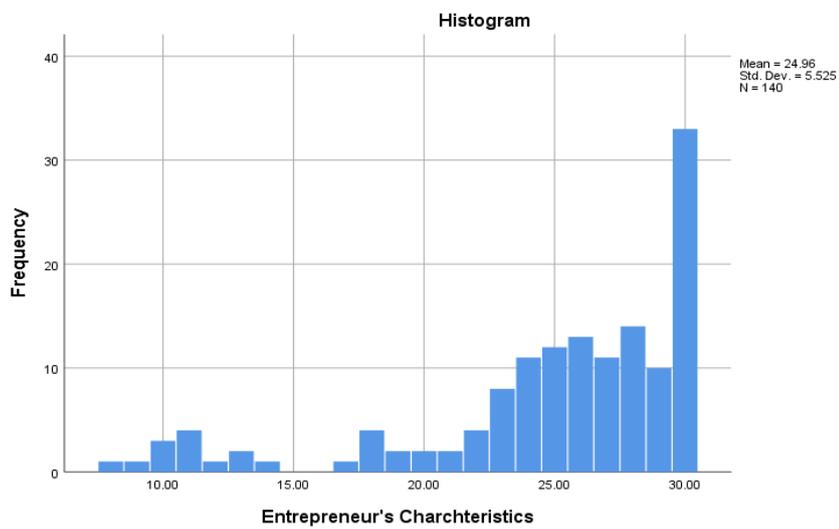
| Descriptive Statistics | | | | | | | | |
|------------------------|-----------|-----------|-----------|----------------|-----------|------------|-----------|------------|
| N | Minimum | Maximum | Mean | Std. Deviation | Skewness | Kurtosis | | |
| Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| | | | | | | | | |

| | | | | | | | | | |
|--------------------------------|-----|------|-------|---------|---------|--------|------|-------|------|
| Entrepreneurs' characteristics | 140 | 9.00 | 35.00 | 28.8214 | 6.30892 | -1.371 | .205 | 1.277 | .407 |
| Valid N (list-wise) | 140 | | | | | | | | |

Table 6-31 Output of normality test of entrepreneurs' characteristics

| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|--------------------------------|---------------------------------|-----|------|--------------|-----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Entrepreneurs' Characteristics | .165 | 140 | .000 | .838 | 140 | .000 |

Figure 6-15 Histogram of entrepreneurs' characteristics



II. Firm Characteristics

- *How it is measured*

Firm characteristics in this research refer to age, location, sector and strategies, the latter of which include marketing, training and competitive strategies, R&D and adopting new technology. Regarding a firm's strategies, the entrepreneurs were asked to rate the importance they give to these strategies regarding time, cost and planning on a scale of 1-5, where one means very low importance and five means very high importance. The total number of all strategies scores represents firms' strategies. To examine the relationship between firm characteristics and SME growth, we first examined the relationship between strategies and SME growth, using a correlation test, before comparing SME growth with age, regions and sectors, since they are categorical variables.

- *Reliability and Validity*

To enhance the validity and reliability of this measurement, it was formulated based on the conceptual and operational definition. In addition, we applied a Likert scale to firm strategies, to increase reliability. Table 6-32 shows the output of the reliability test. To accept the assumption of a measurement's reliability, the Cronbach's Alpha value should be more than .7. The output here shows that this measurement is reliable, since the Cronbach's Alpha value was more than .7.

Table 6-32 Output of the reliability test of entrepreneurs' strategies measurement

| Reliability Statistics | | | |
|------------------------|------------------|------------|--|
| | Cronbach's Alpha | N of Items | |
| | .849 | 5 | |

| Item Statistics | | | |
|-----------------------------------|------|----------------|-----|
| | Mean | Std. Deviation | N |
| Marketing strategy | 4.09 | 1.255 | 140 |
| Training and development strategy | 3.57 | 1.270 | 140 |
| Competition strategy | 3.84 | 1.248 | 140 |
| R&D | 3.68 | 1.231 | 140 |
| Adopting new technology | 3.66 | 1.302 | 140 |

- *Descriptive and Normality*

We mentioned that firm characteristics in this research refer to age, location, sector and strategies. Table 6-33 shows the descriptive statistics for firm strategies, Table 6-34 shows a normality test for firm strategies and Figure 6-16 shows the histogram. Firm strategies ranged from 9 to 35, with a mean of 28.8 and a standard deviation of 6.3. The normality test for this variable shows that the variable is not normally distributed, while the histogram and skewness values indicate that this variable does not follow a normal distribution. Thus, the non-parametric statistical test is appropriate for examining the relationship between firm strategies and SME growth.

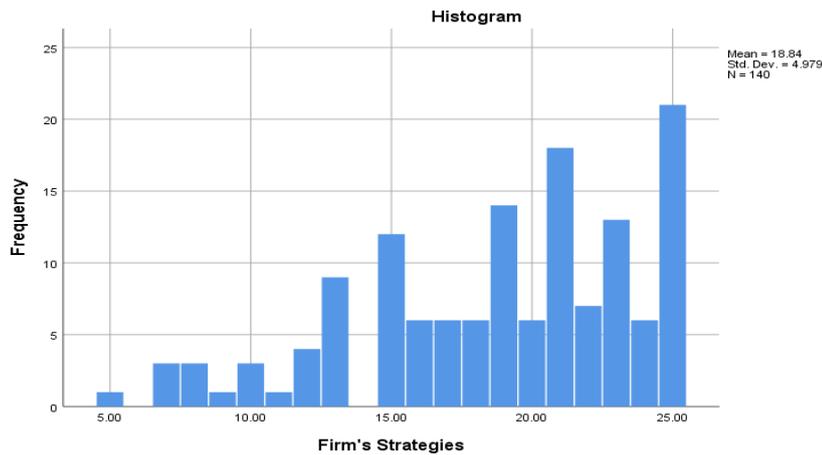
Table 6-33 Descriptive statistics of firm characteristics

| | Descriptive Statistics | | | | | | | | |
|---------------------|------------------------|-----------|-----------|-----------|----------------|-----------|------------|-----------|------------|
| | N | Minimum | Maximum | Mean | Std. Deviation | Skewness | | Kurtosis | |
| | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| Firm strategies | 140 | 9.00 | 35.00 | 28.8214 | 6.30892 | -1.371 | .205 | 1.277 | .407 |
| Valid N (list-wise) | 140 | | | | | | | | |

Table 6-34 Output of normality test of SME growth

| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|------------------------|---------------------------------|-----|------|--------------|-----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Firm's Characteristics | .132 | 140 | .000 | .930 | 140 | .000 |
| Valid N (list-wise) | 140 | | | | | |

Figure 6-16 Histogram of firm strategies



Tables 6-35, 6-36 and 6-37 show the descriptive statistics for the categorical characteristics age, location and sector, respectively. Regarding business age, 44% of the businesses were in the early stages (between 0 and 3 years), 25% started between 3 and 7 years ago, 15% were established between 7 and 11 years ago and 14% started more than 11 years ago. Business location varied in this research: 9% were in the northern region, 25% in the eastern region, 21% in the western region, 35% in the central region and only 7% were in the southern region. Finally, regarding business sector, there were diverse participants from all sectors: 43 businesses from the trade sector, 7-11 businesses from the manufacturing, real estate, construction and constructing or health sectors, 13 businesses from the education sector and 15 businesses from the technical sector.

Table 6-35 Descriptive statistics of firm age

| | | Firm age | | | |
|-------|------------------------|-----------------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Between 0 and 3 years | 62 | 44.3 | 44.3 | 44.3 |
| | Between 3 and 7 years | 36 | 25.7 | 25.7 | 70.0 |
| | Between 7 and 11 years | 22 | 15.7 | 15.7 | 85.7 |
| | 11 and more | 20 | 14.3 | 14.3 | 100.0 |
| | Total | 140 | 100.0 | 100.0 | |

Table 6-36 Descriptive statistics of firm location

| | | Location | | | |
|-------|-----------------|-----------------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Northern region | 13 | 9.3 | 9.3 | 9.3 |
| | Eastern region | 36 | 25.7 | 25.7 | 35.0 |
| | Western region | 30 | 21.4 | 21.4 | 56.4 |
| | Central region | 50 | 35.7 | 35.7 | 92.1 |
| | Southern region | 11 | 7.9 | 7.9 | 100.0 |
| | Total | 140 | 100.0 | 100.0 | |

Table 6-37 Descriptive statistics of firm sectors

| | | Sector | | | |
|-------|--------------------------------|---------------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Trade | 43 | 30.7 | 30.7 | 30.7 |
| | Manufacturing | 11 | 7.9 | 7.9 | 38.6 |
| | Real estate | 9 | 6.4 | 6.4 | 45.0 |
| | Construction and contracting | 10 | 7.1 | 7.1 | 52.1 |
| | Hotels, apartments and tourism | 9 | 6.4 | 6.4 | 58.6 |
| | Health services | 7 | 5.0 | 5.0 | 63.6 |
| | Education | 13 | 9.3 | 9.3 | 72.9 |
| | Technical sector | 15 | 10.7 | 10.7 | 83.6 |
| | Other | 23 | 16.4 | 16.4 | 100.0 |
| | Total | 140 | 100.0 | 100.0 | |

III. Environmental factors

- *How they are measured*

Other factors that should be considered when studying SME growth are environmental, which in this research refer to political, economic, legal, local culture and technology elements. Entrepreneurs were asked to rate the impact of these factors on their business on the following scale: significant negative impact, slight negative impact, no impact, slight positive impact and significant positive impact. Each factor had five different groups regarding their impact on SME growth. Therefore, these variables will be analysed based on the descriptive and comparison between the means of each factor among regions and sectors.

- *Reliability and Validity*

Similar to other variables, we used previous studies to form this measurement, to increase its reliability and validity. We applied a Likert scale to each factor to measure the impact on SMEs, in order to increase reliability by giving entrepreneurs five potential choices to represent the value of each item.

IV. SME Growth

- *How it is measured*

SME growth was measured two times – once based on changes in employment levels, and once based on changes in annual revenues since the business started. Entrepreneurs were asked to choose their employment and annual revenue levels when they started their business and now, based on SME categories in Saudi Arabia explained in the second chapter. Thereafter, we scaled changes in both

levels based on a Likert scale, where (-2) means a significant decrease, (-1) a slight decrease, (0) no change, (1) a slight increase and (2) a significant increase.

As explained in the second chapter, SME classification in Saudi Arabia based on employment level includes microbusinesses (1-5 employees), small businesses (6-49 employees), medium businesses (50-249 employees) and large businesses (more than 249 employees). The other measurement of SME growth was based on annual revenues. As explained in the second chapter, SME classification in Saudi Arabia based on annual revenues included microbusinesses (0-3 million SAR), small businesses (3-40 million SAR), medium businesses (40-200 million SAR) and large businesses (more than 200 million SAR).

- *Reliability and Validity*

Similar to other variables, we used previous studies to formulate this measurement, to increase reliability and validity. We applied a Likert scale to each factor to measure the impact on SMEs, in order to increase its reliability by giving entrepreneurs five potential choices to represent the value of each item. In addition, we used Small and Medium Enterprises Authority definitions regarding employment and annual revenues.

- *Descriptive and Normality*

Assessing the normality of SME growth required choosing an accurate statistical test, so we applied a descriptive and a normality test. Table 6-38 shows the descriptive statistics for SME growth (both measurements), Table 6-39 shows the normality test for SME growth (both measurements) and Figures 6-17 and 6-18

show the histogram for both SME growth measurements. Based on the descriptive test and histogram for SME growth, none of the SME growth measurements followed a normal distribution, as they peaked at the left, although the normality test shows that both measurements were not normally distributed, because the significance value is less than .05. Therefore, non-parametric tests were applied.

Table 6-38 Descriptive statistics for SME growth

| Descriptive Statistics | | | | | | | | | |
|------------------------------------|-----------|-----------|-----------|-----------|----------------|-----------|---------------|------------|------------|
| | N | Minimum | Maximum | Mean | Std. Deviation | Skewness | Std. Kurtosis | Std. Error | Std. Error |
| | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic |
| SME growth (employment level) | 140 | -1.00 | 2.00 | .5357 | .74342 | .356 | .205 | -.353 | .407 |
| SME growth (annual revenues level) | 140 | .00 | 2.00 | .3071 | .59852 | 1.806 | .205 | 2.108 | .407 |
| Valid N (list-wise) | 139 | | | | | | | | |

Table 6-39 Output of the normality test on SME growth

| Tests of Normality | | | | | | |
|------------------------------------|---------------------------------|-----|------|--------------|-----|------|
| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
| | Statistic | df | Sig. | Statistic | df | Sig. |
| SME growth (employment level) | .293 | 140 | .000 | .827 | 140 | .000 |
| SME growth (annual revenues level) | .460 | 140 | .000 | .555 | 140 | .000 |

Figure 6-17 Histogram of SME growth (employment)

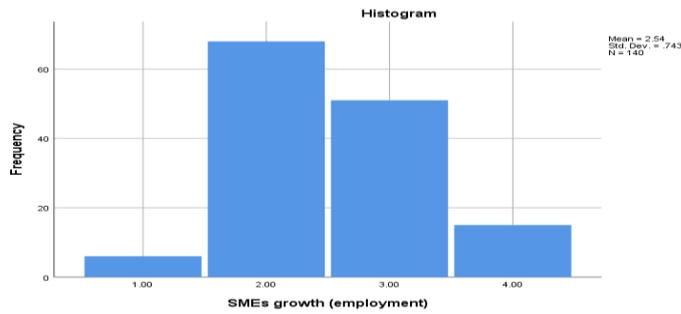
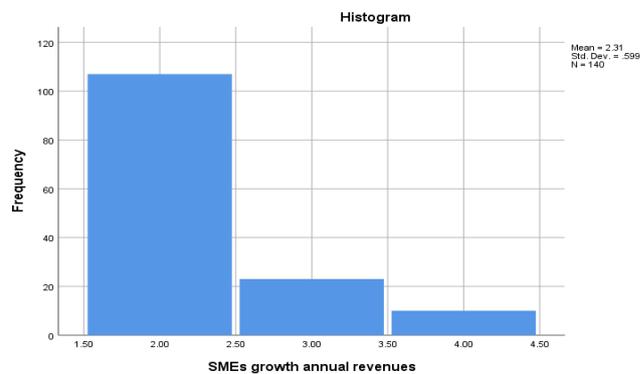


Figure 6-18 Histogram of SME growth (annual revenues)



6.4.2.2 Correlation Test

Since none of the independent and dependent variables followed a normal distribution, in order to examine the relationship between resource access, along with other factors, and SME growth, the non-parametric statistical test is an accurate option. This test is a Spearman's rho, and in order to accept the assumption of the relationship between two variables, the significance value should be less than .05. In this case, the direction and strength of this relationship can be identified based on the correlation coefficient. A positive value indicates a positive relationship, while a negative value indicates a negative relationship. The strength of this relationship can be identified as a small relationship if the coefficient value ranges from .10 to .29, a medium relationship if the coefficient value ranges

between .30 and .49 and large for a value between .50 and 1.0. Thereafter, the determination coefficient can be calculated by squaring the coefficient value (Pallant, 2010). Table 6-40 shows the correlation tests for SME growth (both measurements) and all other variables (entrepreneurs' characteristics, firm strategies and age and resource access via government and private institutions).

To begin with, it is assumed that SME growth is related positively with entrepreneurs' characteristics, because an entrepreneurs' character can influence how the business is managed, based on their strengths. The output of the correlation test confirms this assumption, as the significance value is less than .05 for both measurements of SME growth. The direction of this relationship is positive; however, its strength of this relationship varies. Growth in annual revenues is moderately related to entrepreneurs' characteristics, and employment growth is slightly related to entrepreneurs' characteristics. Employment growth can be predicted at 7.3% in line with entrepreneurs' characteristics, and annual revenues growth can be predicted at 11.6% in this regard.

Regarding firm characteristics that include firm strategies and age, it is hypothesised that both are related positively to SME growth, because firm characteristics can reflect a business's ability to go through all entrepreneurship processes, starting by identifying the process, evaluating opportunities, analysing the internal and external environment, adopting required strategies and managing required resources through organisational practices. To explain this point further, certain locations might have more opportunities than other locations, while placing importance on marketing and competition strategies will strengthen a business's

position in the market and thus help it grow and expand. The results of the correlation test confirm this assumption, as the significance values, for both measurements of SME growth, are less than .05 and the coefficient values are positive, which means that the direction of the relationship is positive. Regarding a firm's strategies, these are related slightly to both employment and annual revenue growth, whereas firm age is related moderately to both measurements of growth. Firm strategies can explain 6.3% of annual revenue growth and 4.8% of employment growth, while age can explain 24% of annual revenues and 17.6% of employment growth.

Another factor is resource access at the collective level, in that it is hypothesised it is related positively with SME growth, because resource access would help entrepreneurs fund their business, identify opportunities, see management improvements and enhance production capacity. The output of the correlation test shows that there is a slightly positive relationship between both measurements of SME growth and resource access via government and private institutions. Resource access via government institutions explains 10.9% of annual revenue growth and 5.8% of employment growth, whereas resource access via private institutions explains 13.7% of annual revenues and 7.8% of employment growth.

Table 6-40 Correlation test between SME growth and other factors

| | | | SME growth (employment) | SME growth annual revenues |
|----------------|--|-------------------------|----------------------------|-------------------------------|
| Spearman's rho | Entrepreneurs' characteristics | Correlation Coefficient | .270** | .336** |
| | | Sig. (2-tailed) | .001 | .000 |
| | | N | 140 | 140 |
| | Firm age | Correlation Coefficient | .423** | .489** |
| | | Sig. (2-tailed) | .000 | .000 |
| | | N | 140 | 140 |
| | Firm strategies | Correlation Coefficient | .224** | .250** |
| | | Sig. (2-tailed) | .008 | .003 |
| | | N | 140 | 140 |
| | Resource access via government institutions | Correlation Coefficient | .244** | .326** |
| | | Sig. (2-tailed) | .004 | .000 |
| | | N | 140 | 140 |
| | Resource access via private institutions | Correlation Coefficient | .284** | .373** |
| | | Sig. (2-tailed) | .001 | .000 |
| | | N | 140 | 140 |

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

6.4.2.3 The impact of environmental factors on SMEs

Descriptive statistics for all environmental factors are shown in Tables 6-41, 6-42, 6-43, 6-44 and 6-45. In each factor, there are five different impacts on SMEs, as mentioned above. As shown in Table 6-41, 15% of SMEs were significantly affected and 28% were affected slightly in a negative way, whereas 34% were not affected by political factors. On the other hand, 10% were slightly affected and 12% were significantly affected in a positive way by political factors. Therefore, we can say that political factors do affect SME growth negatively, according to almost 43% of SMEs.

Table 6-41 Impact of political factors on SME growth

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------------------------|-----------|---------|---------------|--------------------|
| Valid | Significant negative impact | 21 | 15.0 | 15.0 | 15.0 |
| | Slight negative impact | 39 | 27.9 | 27.9 | 42.9 |
| | No impact | 48 | 34.3 | 34.3 | 77.1 |
| | Slight positive impact | 15 | 10.7 | 10.7 | 87.9 |
| | Significant positive impact | 17 | 12.1 | 12.1 | 100.0 |
| | Total | 140 | 100.0 | 100.0 | |

Table 6-42 shows that economic factors impacted negatively for a large proportion of SMEs (62%), and only 26% were affected positively by economic factors, whereas 13% stated that their businesses was not affected by economic factors in any way. Thus, the higher percentage of SMEs were affected negatively by economic factors.

Table 6-42 Impact of economic factors on SME growth

Impact of the economic situation on SME growth

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------------------------|-----------|---------|---------------|--------------------|
| Valid | Significant negative impact | 50 | 35.7 | 35.7 | 35.7 |
| | Slight negative impact | 36 | 25.7 | 25.7 | 61.4 |
| | No impact | 18 | 12.9 | 12.9 | 74.3 |
| | Slight positive impact | 17 | 12.1 | 12.1 | 86.4 |
| | Significant positive impact | 19 | 13.6 | 13.6 | 100.0 |
| | Total | 140 | 100.0 | 100.0 | |

Over half of all SMEs were affected negatively by legal factors, whereas a small minority (16%) did not have any issue in this regard. On the other hand, more than a quarter of SMEs (28%) were positively influenced by legal factors. See Table 6-43's descriptive statistics on the impact of legal factors on SME growth.

Table 6-43 Impact of legal factors on SME growth

Impact of the legal situation on SME growth

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------------------------|-----------|---------|---------------|--------------------|
| Valid | Significant negative impact | 31 | 22.1 | 22.1 | 22.1 |
| | Slight negative impact | 46 | 32.9 | 32.9 | 55.0 |
| | No impact | 23 | 16.4 | 16.4 | 71.4 |
| | Slight positive impact | 17 | 12.1 | 12.1 | 83.6 |
| | Significant positive impact | 23 | 16.4 | 16.4 | 100.0 |
| | The total | 140 | 100.0 | 100.0 | |

Local culture has a positive impact on SMEs more than identified in previous studies, as more than half (58%) were affected positively, whereas a small number (27%) were influenced negatively and a small minority (16%) not affected in any way. See Table 6-44 for the impact of local culture on SME growth.

Table 6-44 Impact of local culture on SME growth

| Impact of the local culture on SME growth | | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|-----------------------------|-----------|---------|---------------|--------------------|
| Valid | Significant negative impact | 20 | 14.3 | 14.3 | 14.3 |
| | Slight negative impact | 18 | 12.9 | 12.9 | 27.1 |
| | No impact | 22 | 15.7 | 15.7 | 42.9 |
| | Slight positive impact | 40 | 28.6 | 28.6 | 71.4 |
| | Significant positive impact | 40 | 28.6 | 28.6 | 100.0 |
| | The total | 140 | 100.0 | 100.0 | |

Similarly, technology has a positive impact on SME growth more than a negative impact, as the majority of SMEs (70%) were influenced by technology in a positive way, whereas a mere 14% were influenced negatively and 16% not influenced in any way.

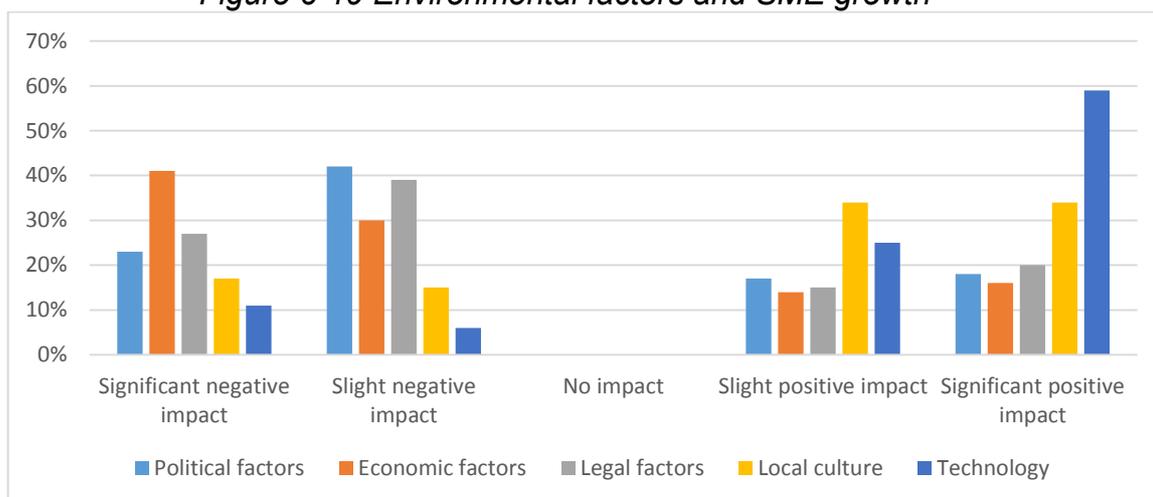
Table 6-45 Impact of technology on SME growth

| Impact of technology on SME growth | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|-----------------------------|-----------|---------|---------------|--------------------|
| Valid | Significant negative impact | 13 | 9.3 | 9.3 | 9.3 |
| | Slight negative impact | 7 | 5.0 | 5.0 | 14.3 |
| | No impact | 22 | 15.7 | 15.7 | 30.0 |
| | Slight positive impact | 29 | 20.7 | 20.7 | 50.7 |
| | Significant positive impact | 69 | 49.3 | 49.3 | 100.0 |
| | Total | 140 | 100.0 | 100.0 | |

By comparing all environmental factors on SMEs, at least 65% of entrepreneurs stated that political, economic and legal factors had influenced their business negatively, while a majority found that local culture and technology had had a positive effect. See Figure 6-19 for the impact of environmental factors on SME growth. The negative impact of political,

economic and legal factors on SME growth could be due to the events in Saudi Arabia, starting with political conflict with some neighbouring countries, decreasing oil prices and massive changes in the government and some legal procedures as explained in the fourth chapter.

Figure 6-19 Environmental factors and SME growth



6.4.2.4 SME growth among regions and sectors

For a further explanation on SME growth in Saudi Arabia, and since it can be affected by location and sector, we applied a Kruskal-Wallis test, which assumes that the median of the sample is not significantly different. To accept this assumption, the test's significance value should be more than .05. Table 6-46 shows the Kruskal-Wallis test for SMEs among regions, Table 6-47 shows the mean's report and Table 6-48 shows Kruskal-Wallis test of SME among sectors and mean's report in Table 6-49.

Looking at Table 6-46, the Kruskal-Wallis test shows that employment growth is not significantly different among regions, as the significance value is more than .05, albeit this does not apply to the growth of annual revenues, as the significance value is less than .05. Table 6-47 indicates that employment growth is higher in the southern region, whereas it is lowest in the northern region.

Table 6-46 Kruskal-Wallis H Test of SME growth among regions

| Test Statistics^{a,b} | | |
|--------------------------------------|----------------------------|---------------------------------|
| | SME growth (employment) | SME growth (annual revenues) |
| Kruskal-Wallis H | 7.478 | 13.244 |
| Df | 4 | 4 |
| Asymp. Sig. | .113 | .010 |

Table 6-47 Kruskal-Wallis H Test report on SME growth medians among regions

| Report | | |
|-----------------|----------------------------|-------------------------------|
| Mean | SME growth (employment) | SME growth annual revenues |
| Northern region | 2.3077 | 2.3846 |
| Eastern region | 2.5556 | 2.3611 |
| Western region | 2.4333 | 2.1000 |
| Central region | 2.5200 | 2.2600 |
| Southern region | 3.0909 | 2.8182 |
| Total | 2.5357 | 2.3071 |

Table 6-48 shows that employment growth does not differ significantly among sectors, as the significance value is more than .05, albeit this does not apply to

the growth of annual revenues, since the significance value is less than .05. By comparing the mean of employment among sectors in Table 6-49, employment growth is prevalent in the manufacturing sector, while it is worst in the trade sector. Similarly, comparing the mean of annual revenues among sectors, the best growth is in manufacturing and the worst is again in the trade sector.

Table 6-48 Kruskal-Wallis H Test of SME growth among sectors

| Test Statistics^{a,b} | | |
|--------------------------------------|----------------------------|---------------------------------|
| | SME growth (employment) | SME growth (annual revenues) |
| Kruskal-Wallis H | 9.071 | 18.259 |
| Df | 8 | 8 |
| Asymp. Sig. | .336 | .019 |

Table 6-49 Kruskal-Wallis H Test report for SME growth medians among sectors

Report

| Mean | SME growth (employment) | SME growth annual revenues |
|--------------------------------|----------------------------|-------------------------------|
| Sector | | |
| Trade | 2.3721 | 2.0930 |
| Manufacturing | 2.9091 | 2.8182 |
| Real estate | 2.5556 | 2.5556 |
| Construction and contracting | 2.5000 | 2.4000 |
| Hotels, apartments and tourism | 2.8889 | 2.5556 |
| Health services | 2.8571 | 2.5714 |
| Education | 2.4615 | 2.3846 |
| Technical sector | 2.4000 | 2.1333 |
| Other | 2.5652 | 2.2174 |
| Total | 2.5357 | 2.3071 |

6.5 Research Findings and Discussion

Based on the analysis of the Saudi entrepreneurship ecosystem, this study found that the ecosystem is healthy on three levels, the individual, institutional, and environmental levels. However, the overall score of entrepreneurship is moderate, meaning further efforts are needed to develop entrepreneurship and SMEs in Saudi Arabia. To explain, on the environmental level, several pillars performed strongly, namely cultural support, high growth, opportunities, and networking. However, further improvements are required to enhance the ecosystem because several pillar performed poorly or moderately, such as innovation and technology. Therefore, policy-makers need to consider enabling entrepreneurs to gain access to technology and encourage process and product innovation in SMEs to increase their contribution to the economy. We mentioned before that the level of entrepreneurship ecosystem in Saudi Arabia is at the institutional level, meaning that institutions in the private and government sectors are responsible for strengthening and developing the ecosystem by enabling resource access and influencing SMEs' growth. Accordingly, the survey was designed to analyse these two matters.

The survey analysis uncovered several important findings regarding the role of institutional support in influencing resource access and SMEs' growth. We found that 54% of entrepreneurs started a business because institutional support is available to them. By analysing the role of institutional

support in enabling resource access, we found that resource access via institutions in government and the private sector are related positively to network size, i.e. the number of institutions in government and private sectors entrepreneurs can contact, to access institutional support. This means the more institutions in entrepreneurs' social networks can provide institutional support, the more resource access they enjoy. In addition, the strength of ties between entrepreneurs and institutions in the private and government sectors (network density) is associated positively with resource access. This means the more entrepreneurs contact institutions in private and government sectors to gain institutional support, the more resource access they enjoy. Similarly, to what is suggested in previous studies, entrepreneurs' social networks are expected to influence business (Brand et al., 2018; Ansari et al., 2018), because they provide access to resources (Jenssen & Koenig, 2002; Hanneman, 2014; Ozdemir et al., 2014). Evidence is also in the literature regarding network density (Pollack et al., 2015; Hansen, 1995; Watson, 2007; Aldrich & Reese, 1994; Lee & Tsang, 2001) and network size (Hansen, 1995; Raz & Gloor, 2007). Accordingly, since the performance of networking in Saudi Arabia is strong, policy-makers can use networking at a collective level to provide institutional support to enable technology and innovation access to improve entrepreneurship and SMEs in Saudi Arabia.

Although resource availability via government institutions among regions is not different, this difference is seen among regions, with the highest mean for resource availability in the southern and central regions, whereas the lowest is in the northern and western regions. This indicates that regional

institutional support in the government sector is equal, though not all entrepreneurs have accessed this support, due to a lack of awareness or they do not consider it for several reasons, such as avoiding debt, trust issues, they already have it, insufficient support regarding time and expensive. We can argue that, since Saudi Arabia is facing political conflict in the southern region, the government might give priority to supporting SMEs in this area. Similarly, resource access via private institutions is different among regions. The southern region has the highest resource access, whereas the other regions have the lowest. This might be due to the availability of these resources via institutions in the private and government sectors, as the southern region has the highest mean of resource availability and is lower in other regions. In addition, entrepreneurs do not consider institutional support in the private sector for the same reasons mentioned in the government sector above.

Comparing resource availability via government and private sectors among economic sectors, the mean is different. The highest is in the manufacturing sector and the lowest in the trade sector. Accordingly, resource access is higher in manufacturing and lower in the other sectors. This is similar to the picture painted by the Saudi Industrial Development (SIDF, 2017), an institutional support forum in the government sector that provides SMEs access to financial resources, in that the manufacturing sector is one of the top beneficiaries of financial funding, with 284 guarantees in 2016. This might indicate that institutional support concentrates more on those sectors that might generate more job opportunities and help diversify the Saudi

economy. Accordingly, since this sector is a priority for job creation and diversification, enabling access to medium and high technology and innovation in this sector can develop entrepreneurship and SMEs in Saudi Arabia and thus increase their contribution to the economy.

By analysing SMEs' growth, we found that 47% of SMEs grew on the employment level, 49% remain on the same level of employment, and only 4% decreased on the employment level. We found no change in annual revenues for the majority of SMEs, of which only a quarter succeeded in increasing their annual revenues. By analysing several factors that might influence SME growth, we found that SME growth regarding employment and annual revenues growth is related to entrepreneurs' characteristics, a firm's strategies and age and resource access at the collective level. Similarly, previous studies showed that entrepreneurs' characteristics (Wang, 2016; Sarwoko & Frisdiantara, 2016; Al-Damen, 2015; Ingley et al., 2017) as well as firm characteristics (Sarwoko & Frisdiantara, 2016; Williams & Vorley, 2014; Mayer, 2013; Islam et al., 2011; Bouazza et al., 2015; Yeboah, 2015) influence SME growth, because an entrepreneur's character and strongest traits can influence how the business is managed (Ciavarella et al., 2004). In addition, these characteristics affect all aspects of the entrepreneurship process (Bouazza et al., 2015). In addition, firm characteristics can reflect a business's ability to go through all process of entrepreneurship (Zhou & de Wit, 2009).

Evidence shows that resource access influences SME growth positively (Sarwoko & Frisdiantara, 2016; Zhou & de Wit, 2009). Such examples include access to financial resources (Semrau & Werner, 2014; Zhou & de Wit, 2009; Ajiboye et al., 2018; Ingley et al., 2017), since these allow for development and enhancement through innovation, entering new markets and generating new job opportunities (Bellinger & Fletcher, 2014). Access to information and knowledge of starting and managing a business (Jenssen & Koenig, 2002; Klapper et al., 2010), identifying opportunities (Levy et al., 2005; Carter et al., 2007) and continuing management enhancements (Capó-Vicedo et al., 2011). In addition, resource access influences SME growth positively in terms of gaining access to human resources and an academically qualified and experienced workforce, as investment in the knowledge, skills and abilities of human resources influences SME outcomes such as growth and performance (Rotefoss & Kolvereid, 2005; Klyver & Schenkel, 2013; Rauch et al., 2005; Quader, 2007). Finally, in this regard, evidence highlights that accessing training and education resources, to develop skills, can influence SME growth and survival (Bouazza et al., 2015; Njoroge & Gathungu, 2013; Vik & McElwee, 2011), because these factors affect an individual's productive capacity (Levy et al., 2005) and thus SME growth.

Environmental factors need to be considered when analyzing the growth of SMEs, namely political, economic, local culture, legal and technology, since they might create opportunities or threats in the market that either encourage an SME to grow or deter it from doing so. After asking the

entrepreneurs about the impact of these factors on business growth, we found that the majority of SMEs were affected negatively by political, economic and legal factors. Environmental factors such as political, economic, legal, local culture, technology and resource access (Sarwoko & Frisdiantara, 2016; Chittithaworn et al., 2011; Ingley et al., 2017) might have an impact on SME growth, since they are external factors and beyond the control of entrepreneurs (Gupta et al., 2013). The negative impact of political, economic and legal factors on SME growth could be due to the events in Saudi Arabia, starting with political conflict with some neighbouring countries, decreasing oil prices, massive economic reforming in Saudi that can take time to notice positive results. In addition, based on the labour market report for Saudi Arabia in 2016, many entrepreneurs and investors believe that business regulations and incorporation policies, such as access to funds and business establishment, are inefficient and deter investment, while the legal framework does not provide enough support or transparency for resolving contract disputes and bankruptcies – the kingdom ranks last among advanced countries in resolving insolvency issues. However, Saudi Arabia has made significant reforms to support business and SMEs. For example, the World Bank Data show that Saudi Arabia made starting a business easier by reducing the time from 24 days in 2015 to 18 days in 2017. In addition, Saudi Arabia strengthened the protection of minority investors' protections, ranking 10th out of 192 countries in 2018.

Cultural attributes can also inhibit start-up businesses, because entrepreneurs have few examples to follow, since enterprises most familiar

to Saudis are large government-controlled initiatives (MOL, 2016). As a result, youths looking to enter the workforce favour large businesses for their prestige, stability and promising career path (Najat et al., 2016). According to Mohammad and Ahmed (2013), the main features of Saudi culture might deter entrepreneurial activities, i.e. favour large companies; however, our results show that both cultural and technology factors influence SME growth positively. In addition, the Global Entrepreneurship Index for three years shows that cultural factors performed significantly in supporting SMEs and entrepreneurship. Cultural support, which is how positively Saudis view entrepreneurs in term of status and career choice, scored 69% in 2017.

To sum up, this research provides a unique picture of Saudi Arabia by analysing the role of institutional support in influencing SME growth, from an entrepreneurship ecosystem perspective. This study argues that an entrepreneurship ecosystem is a set of dynamic factors such as networks, institutions, culture, economic, political, legal, and technology that combine and interact in complex ways that influence entrepreneurship and SMEs' growth. Therefore, an analysis of SMEs' growth should consider the level of the entrepreneurship ecosystem, which is at the institutional level in Saudi Arabia. This study argues that entrepreneurship can be defined based on the process that entrepreneurs go through in identifying an opportunity, seizing it and reacting accordingly, by assuming that the entrepreneurship process should be part of helping an SME grow and thus make a contribution to the economy by increasing the GDP and generating job opportunities. Therefore, we can claim that what influences the

entrepreneurship process in turn affects the growth of SMEs. The first example is institutional support that enable resource access, because having access to financial, human, information and knowledge, training and education resources helps entrepreneurs identify an opportunity, evaluate it and then make a decision. Second, entrepreneurs' characteristics, since these people go through this process, and so personal traits might influence how they identify the opportunity, evaluate it and react to it. Third are SME characteristics, as they reflect the capabilities of the business to act on an opportunity. Finally, environmental factors, such as economic and political situations, technology, legal procedures and local culture, can influence the entrepreneurship process, as entrepreneurs have no control over them, even though they can affect business growth. From an entrepreneurship ecosystem viewpoint, we argue that Saudi Arabia is at the institutional level, whereby institutions in the private and government sectors are responsible for supporting SMEs through enabling entrepreneurs to access different resources. Accordingly, we can say that institutional support plays a significant role in SME growth. This notion is evidenced by the significant increase in the number of institutions that provide different types of support in Saudi Arabia (Khan, 2016). In addition, there has been a notable improvement since the establishment of the Small and Medium Enterprises Authority (SMEA). The authority has reviewed laws and regulations thoroughly, to minimise challenges, facilitate resource access, create and develop networking and facilitate cooperation between SMEs and other investors, incubators and customers. Furthermore, the SMEA has concentrated on four main areas: encouraging and supporting

entrepreneurship, supporting SME growth and enhancing capabilities, simplifying and easing starting and practicing a business and, finally, funding SMEs. The SMEA has also worked to develop an entrepreneurship ecosystem by liaising with other institutions in the government and private sectors (SMEA, 2017). However, further enhancements and developments need to be considered to develop the ecosystem in Saudi Arabia that can facilitate SME growth. One of these considerations is easing technology and innovation access in different sectors. Another is promoting more institutional support to educate entrepreneurs about the types of support and how entrepreneurs can access them. In addition, time and costs required to access institutional support might deter entrepreneurs from seeking it.

6.6 Conclusion

The purpose of this study is to analyse the role of institutional support in influencing Saudi Arabian SME growth from an entrepreneurship ecosystem perspective. In order to achieve this goal, this research conducted a questionnaire to collect data in addition to using secondary data to present an outlook of the entrepreneurship ecosystem in Saudi Arabia from the Global Entrepreneurship Index (2015-2017). As mentioned previously, to achieve each objective, several factors were analysed. Regarding the first objective, actors in entrepreneurs' social networks, and the link between them, were explained. Thereafter, the main features of entrepreneurs' social networks were explored. Then, the relationship between the main features

of social networks and resource access were examined. Regarding the second objective, namely analysing the role of resource access, along with other factors, in influencing SME growth, correlation tests were applied to examine the relationship between these factors and resource access. These factors include entrepreneurs' characteristics, firm characteristics and resource access. For environmental factors, a comparing groups test was applied to analyse the impact of all environmental factors on SME growth. Finally, this research discussed the main findings and presented the main similarities with previous studies and empirical evidence in the literature.

Therefore, this chapter aimed to answer through two main sections all of these questions, by analysing data collected from SMEs in Saudi Arabia. It started by discussing the research method and explaining the participants, the data collection method and the procedures employed to collect the data. Thereafter, the main results were discussed according to response rate, reliability and validity, the primary analysis and the data analysis, to answer all of the above questions.

Chapter 7: Conclusion

7.1 Introduction

This chapter presents conclusions from the research. First, a summary of the current study is provided, following which it discusses and identifies how this research contributes to knowledge. Thereafter, it provides a summary of the main findings and a discussion of this research, before shedding light on the limitations and challenges faced while conducting this research. Following this, the implications are provided and the chapter is summarised in a concluding section.

7.2 Summary of Study

7.2.1 Summary of the literature review

There is increasing interest in SME growth among researchers and policymakers, due to the role they play (Blackburn & Schaper, 2012) in economic and social development, such as job creation, fostering economic growth and improving competitiveness and regional development, and yet limited evidence supports the idea that SMEs create jobs. In most advanced economies, SMEs contribute as much as 70% to GDP. Saudi SMEs, however, are not yet a major contributor, accounting for less than 20% of GDP in 2015 compared to other developed countries (MOL, 2016). Different contributions in the literature discuss how environment might influence SMEs growth from different perspectives. These include the institutional

perspective (Bosma et al., 2018; Acs et al., 2018), social capital and network analysis (Ozdemir et al., 2014; Semrau & Werner, 2014; Sullivan & Ford, 2014; Pollack et al., 2015), the ecosystem perspective (Spigel, 2015a; Shepherd & Patzelt, 2011, Malecki, 2018), cluster perspective (Kasabov, 2015; Rauch, 2013; Delgado et al., 2010).

In general, these perspectives emphasise three main resources that influence SMEs' growth. First, supportive government policies and institutional support remove obstacles and enable entrepreneurs to access resources (Spigel, 2015; Acs et al., 2018). Second, resources can be spread and shared via social network by connecting different actors (Ozdemir et al., 2014). Third, a supportive environment can facilitate cooperation and resource access (Rouch, 2013; Bosma et al., 2018; Acs et al., 2018).

From an entrepreneurship ecosystem perspective, Saudi Arabia is at the institutional support stage (khan, 2016), in which institutions in the private and government sectors are responsible for strengthening SMEs and entrepreneurship by enabling resource access and networking. Saudi Arabia has taken considerable steps towards enhancing the ecosystem, but further improvement of institutional support is needed. Accordingly, an analysis of SMEs' growth in Saudi Arabia needs to consider the level of the entrepreneurship ecosystem. In addition, since this research argues that SMEs' growth is influenced by what influences the entrepreneurship process, an analysis of SMEs' growth should consider the entrepreneurship

process. There are different contributions toward what is meant by entrepreneurship from different disciplines, namely from economics, business management, and social science (Carlsson et al., 2013).

Clearly, there is a need for a richer and more balanced analysis of the role of institutional support in influencing SME growth in Saudi Arabia from entrepreneurship ecosystem perspective. This study argues that entrepreneurship can be defined based on the process that entrepreneurs go through in identifying an opportunity, seizing this opportunity and reacting to it, and it assumes that the entrepreneurship process should be part how SMEs grow and contribute to the economy and to GDP by generating job opportunities. Therefore, we claim that what influences the entrepreneurship process in turn affects SME growth, in this case entrepreneurship ecosystem factors, including institutional support, and environmental factors, entrepreneurs' characteristics, SME characteristics, and environmental factors. Accordingly, this research aims to analyse the role of the institutional support in influence SMEs growth through providing four contributions to knowledge. This can be achieved by analysing the role of institutional support in enabling resource access through adopting network analysis at collective level. Then examining how institutional support influence SMEs growth by considering factors influence entrepreneurship process.

7.2.2 Summary of the conceptual and empirical framework

This study aims to analyse the role of institutional support in influencing SME growth in Saudi Arabia from the entrepreneurship ecosystem perspective. This study argues that what influences entrepreneurship in turn affects the growth of SME¹³, as entrepreneurship is defined as the process that entrepreneurs go through when identifying an opportunity, seizing this opportunity and then reacting to it, which they can do by inventing new products, techniques or markets. This study defines an entrepreneurship ecosystem a set of dynamic factors such as networks, institutions, culture, economic, political, legal, and technology that combine and interact in complex ways that influence entrepreneurship and SMEs' growth. The level of entrepreneurship ecosystem should be considered. Since the study is conducted in Saudi Arabia, the ecosystem level is at the institutional level, meaning institutions in the government and private sector are responsible for supporting entrepreneurs and SMEs. This means institutional support can be represented as facilitating resources and networking. Accordingly, the following factors are considered in analysing SMEs' growth in Saudi Arabia. First, institutional support involves gaining access to finance, information and knowledge, training and education resources. Second, environmental factors, such as economic and political situations, technology, legal procedures and local culture. Third, entrepreneurs' characteristics. Finally, SME characteristics. Accordingly, this research aims to analyse the role of institutional support in influencing SME growth, by providing practical evidence from Saudi Arabia from entrepreneurship

¹³ Small and medium enterprises (SMEs) are defined in this study based on the classification of employment and annual revenue levels mentioned by the Small and Medium Enterprises Authority in Saudi Arabia.

ecosystem perspective. In order to achieve this goal, this study considers network analysis to analyse the role of institutional support in enabling resource access and considering the above factors in analysing SMEs growth.

In order to achieve the main aim of this study, it sought to achieve the fundamental objectives by answering the following questions:

1. What is the role of institutional support in enabling resource access at the collective level in Saudi Arabia?

- Who are the actors of entrepreneurs' social networks that provide institutional support?
- What is the link between entrepreneurs and these actors who provide institutional support?
- What are the main features of entrepreneurs' social networks at the collective level?
- What is the relationship between the main features of entrepreneurs' social networks and resource access at the collective level?

2. How much does institutional support influence SME growth in Saudi Arabia?

- What is the relationship between entrepreneurs' characteristics and SME growth?
- What is the relationship between firm characteristics and SME growth?

- What is the relationship between resource access at the collective level and SME growth?
- What is the relationship between environmental factors and SME growth?

To address these questions, several concepts need to be clarified, to provide the empirical evidence for each in turn. The initial concept relates to the first four questions, several key concepts at the heart of the network analysis, including actors, relational ties, groups, relations and networks. The term 'social networks' refers to the relationships between different actors, i.e. the defining feature of a social network depends on the presence of relational information, in which case they can be analysed based on features at the individual and collective levels, assuming that entrepreneurs use their ties on these levels to access resources. The main concepts regarding network analysis are explained below.

- The actors in this thesis refer to those with whom entrepreneurs interact at the collective level, to access different resources. This means actors in this study refers to the institutions in the private and government sectors that provide institutional support.
- Relational ties refer to the link between actors who provide institutional support and entrepreneurs that allows resource access. This means entrepreneurs can access resources through weak ties, such as business and work-related, at the collective level.

- Relations and networks are defined based on the collection of relational ties at the collective level, and these include ties between entrepreneurs and institutions in the private and government sectors.
- Network size refers to the total number of actors with whom entrepreneurs interact, in order to access resources at the collective level.
- Network density can be defined as the average frequency of communication between entrepreneurs and social network actors at the collective level.
- Resource access is defined as resources accessed via weak ties in entrepreneurs' social networks. These resources include financial, information and knowledge and training and education resources.

It is assumed that the size of an entrepreneur's social network is positively associated with resource access at the collective level, because size may be helpful for entrepreneurs looking to organise and expand any opportunities that may be available (Memon, 2016). It is assumed that the density of an entrepreneur's social network, at both levels, is associated positively with resource access at both levels as well, since it may give insights into the speed at which resources are accessed by entrepreneurs through weak and strong ties (Hanneman, 2014). Thus, social networks can

facilitate resource access, which, in this thesis, was measured by the resource generator method after considering major changes necessary to meet the conceptual framework, the purpose of this research and its context.

Regarding the rest of the questions mentioned above, several concepts need to be clarified along with the main assumptions. The concepts are as follows:

- Entrepreneurs' characteristics include the need for achievement, self-confidence, risk-taking, education and experience, innovativeness and a locus of control.
- Firm characteristics include age, location and strategies (marketing, training and competitive strategies, R&D and adopting new technology).
- Environmental factors include political, economic, legal, local culture and technology factors.
- SME growth refers to changes in employment and annual revenue levels regarding the classification of SMEs in Saudi Arabia, to classify and measure the growth of SMEs. Based on Small and Medium Enterprises Authority (SMEA) information, SMEs in Saudi Arabia are classified into microbusinesses (1-5 employees and from 0-3 million SR annual revenues), small enterprises (6-49 employees and 3-40 million SR annual revenues) and medium enterprises (50-249 employees and 40-200 million SR annual revenues).

To analyse the growth of SMEs, it is assumed that all of these features are associated positively with SME growth (changes in employment and annual revenues). In more detail, regarding entrepreneurs' characteristics, it is assumed that these are related positively to SME growth, because entrepreneurs' characters and strengths can influence how the business is managed (Ciavarella et al., 2004; Bouazza et al., 2015). In addition, these characteristics influence all aspects of the entrepreneurship process, starting with identifying opportunities and then evaluating and reacting to them, through adopting suitable strategies and managing resources. In addition, firm characteristics are associated positively with SME growth, because they can reflect a business's ability to go through all of the processes involved in running a business (Zhou & de Wit, 2009). Furthermore, resource access is related positively with SME growth, because it can help entrepreneurs fund their business, identify opportunities, attain management improvements and enhance productive capacity. In addition, environmental factors such as political, economic, legal, local culture and technology (Sarwoko & Frisdiantara, 2016; Chittithaworn et al., 2011) are related positively to SME growth, since they can provide opportunities or threats to a business and influence the growth of SMEs (Gupta et al., 2013).

7.2.3 Summary of the research methodology

This research is explanatory in nature, in that it follows the main assumptions of the positivist approach. Ontologically, it is assumed that

reality exists independently (Hallebone & Priest, 2009), and so reality is empirically evident (Neuman, 2000). Epistemologically, a hypothetic-deductive structure follows a linear process to confirm or refute a hypothesis derived from a theoretical position (Hallebone & Priest, 2009). Consequently, any explanation relies heavily on causal laws and interrelations to create and qualify general findings by using empirical data and testing hypotheses formed from theory, and the researcher operates as a dispassionate outsider (Hallebone & Priest, 2009; Neuman, 2000). Thus, the main method employed to collect and analyse data is the quantitative method (Creswell, 2014; Bryman, 2012; Tuli, 2010; Black, 1999).

This research conducted a survey method for two reasons. The first was to produce statistics, i.e. quantitative or numerical descriptions of the role of entrepreneurs' social networks at the collective level in enabling resource access, and the relationship between resource access, along with other factors, and SME growth. Second, this was the only way to meet the research needs for data not available elsewhere, as well as meeting the analysis needs. To enhance the reliability and validity of the data collection method, a pilot study was conducted. A pilot questionnaire was sent to 40 entrepreneurs via email and had 25 respondents, no missing data for any question and some feedback from entrepreneurs and academic researchers at the same time. In general, we followed their feedback by implementing the following:

7. Changed some of the question wording, to make it clearer

8. Added Likert scales to some questions, to increase reliability
9. Changed some open questions to multiple choice
10. Added further choices to some questions
11. Deleted irrelevant questions
12. Changed the order of some questions

The sample size was determined by considering two main issues. The first was to meet the statistical test determination for a correlation test with the appropriate significant value (.05) and the probability of falsely accepting the null hypothesis (.80), with an accurate sample size being 58 and above. Second, we considered a diversified sample regarding regions, sectors and SME classification, in that the sample should have at least ten SMEs in each sector and region. In addition, the sample should have at least ten businesses of each business size classification. The sample was selected randomly, to give help the researcher generalise the findings to the population. The response rate for the pilot study was 60%, so the main study followed the same procedures. Based on SME contact details from the Small & Medium Enterprises Authority (SMEA), and the Chamber of Commerce in Jeddah and the eastern region, around 400 electronic questionnaires were sent to SMEs in different regions and different sectors, with 140 respondents replying; thus, the response rate was 35%.

In addition to the survey method, this study used secondary data from the Global Entrepreneurship Index of Saudi Arabia (2015-2017) to generate an outlook of the entrepreneurship ecosystem in Saudi Arabia. This index uses three levels in measuring entrepreneurship in each country: individual,

institutional, and environmental levels. However, due to the lack of the data about entrepreneurship on the individual and institutional levels, we analysed the entrepreneurship ecosystem on the environmental level and used only the total score on the other levels. The environmental level includes data regarding the performance of different pillars: opportunity perception, start-up skills, risk acceptance, networking, cultural support, opportunity start-up, technology absorption, human capital, competition, product innovation, process innovation, high growth, internationalisation, and risk capital.

7.3 Research Contribution

First, we provide a unique viewpoint on how institutional support influences SMEs' growth in Saudi Arabia from an entrepreneurship ecosystem perspective. Second, we consider network analysis at the collective level to analyse the role of institutional support in enabling resource access. Third, we analyse how institutional support affects SMEs' growth along with other factors, including environmental factors, entrepreneur characteristics, and firm characteristics. Fourth, we adopt a resource generator to measure resource access at the collective level. The resource generator method meets the requirements of the conceptual and empirical framework and the levels of analysis, as well as addressing the Saudi context.

7.4 Summary of the Findings and Discussion

In general, the rank of Saudi Arabia in entrepreneurship improved in 2017. Saudi Arabia ranked 30th out of 137 in 2017, an improvement from its rank of 37th in 2016. On the individual level, there was considerable improvement from 2015 to 2017, increasing 27% in 2017. On the institutional level, there was a slight decrease in 2017, but the performance is still strong because it is above 50%. On the environmental level, nine pillars performed strongly: networking, cultural support, and opportunities. Other pillars, such as innovation, technology, competition, and acceptance of failure and risk performed less well. The overall index is moderate during the three years, meaning that more effort is needed to develop entrepreneurship in Saudi Arabia. Policy-makers need to consider the weak performance pillars and develop them to improve the ecosystem in Saudi Arabia and take it to the next level, which is the enterprise level. In this level, entrepreneurs and enterprises are responsible for improving the ecosystem. Since the level of the ecosystem in Saudi Arabia is institutional, we conducted a survey to analyse the role of institutional support in influencing SMEs' growth. The next section summarises the main findings of the survey.

7.4.1 Descriptive Research Sample

The sample in this study can be described based on entrepreneurs (sex, age, education level, labour situation, income and reason for starting a business) and businesses (age, location and sector). Male participants outnumbered female participants slightly, and the majority of the respondents were from the younger generation and highly educated. Half of the respondents were self-employed, with just over third employed in the

government or private sector and a small minority students. Half of the respondents received more than SAR 15,000 (US\$ 4000) income per month and the other half received less. Regarding the reason for starting their business, half of the respondents identified an opportunity in the market, a third of them had support at both levels, around a quarter of them did so to increase their income and the rest of them did not have any other choice. Forty-four percent of the SMEs were in the early stages (0-3 years), a quarter started 3-7 years ago, 15% were established 7-11 years ago and 14% started more than 11 years ago. More than half of the SMEs were located in the central region, a quarter in the eastern region, 21% in the western region and a small minority in the northern and southern regions. A third of the businesses operated in the trade sector, 10% in the technical sector, 9% in education and around 8% in each of the following sectors: manufacturing, real estate, construction and health.

7.4.2 The role of institutional support in enabling resource access

Half of this study's sample started their businesses because institutional support was available to them. By analysing entrepreneurs' network on the collective level, we found that the more institutions there are in entrepreneurs' social network, the more resource access they enjoy. In addition, the more entrepreneurs contact institutions to access resources, the more resource access they can enjoy. This indicates that resource access is related positively to network size and density at the collective level. Similarly, to what is suggested in previous studies, regarding network density (Pollack et al., 2015; Hansen, 1995; Watson, 2007; Aldrich & Reese,

1994; Lee & Tsang, 2001) and network size (Hansen, 1995; Raz & Gloor, 2007). Entrepreneurs' social networks are expected to influence business (Brand et al., 2018; Ansari et al., 2018), because they provide access to resources (Hanneman, 2014; Ozdemir et al., 2014). The entrepreneurship ecosystem analysis shows that the performance of networking in Saudi Arabia is strong. Policy-makers can use networking at the collective level to provide institutional support to enable entrepreneurs to access technology and innovation.

By comparing resource availability via government and private institutions among regions, we found that regional institutional support in the government sector is equal, but institutional support via private institutions differs among regions. Comparing availability of institutional support among economic sectors, we found that the manufacturing sector has the most institutional support and the trade sector has the lowest institutional support. This might indicate that institutional support concentrates more on those sectors that might generate more job opportunities and help diversify the Saudi economy. However, we found that not all entrepreneurs have accessed this support, due to a lack of awareness or because they do not consider it for several reasons, such as avoiding debt, trust issues, they already have it, and insufficient support regarding time and expense. Therefore, policy-makers need to consider these issues to develop institutional support.

7.4.3 How much does institutional support influence SME growth?

By analysing SMEs' growth, we found that almost half of this study's sample has succeeded in growing on the employment level, and only a quarter of them managed to increase their annual revenues. After analysing the factors might influence SMEs growth, we found that employment and annual revenue growth is related positively to entrepreneurs' characteristics, firm strategies and age and resource access at the collective level. Similarly, previous studies have shown that entrepreneurs' characteristics (Wang, 2016; Sarwoko & Frisdiantara, 2016; Al-Damen, 2015; Ingley et al., 2017) as well as firm characteristics (Sarwoko & Frisdiantara, 2016; Williams & Vorley, 2014; Mayer, 2013; Islam et al., 2011; Bouazza et al., 2015; Yeboah, 2015) influence SME growth. An entrepreneurs' character can influence how the business is managed (Ciavarella et al., 2004) according to his or her strengths (Bouazza et al., 2015). In addition, certain characteristics can reflect the effectiveness of a firm's traits regarding location, age and how it is managed (Zhou & de Wit, 2009).

Resource access also influenced SMEs' growth positively (Sarwoko & Frisdiantara, 2016; Zhou & de Wit, 2009), namely access to financial resources (Bellinger & Fletcher, 2014), information and knowledge (Capó-Vicedo et al., 2011), human resources (Klyver & Schenkel, 2013), and training and education resources (Bouazza et al., 2015; Njoroge & Gathungu, 2013). Therefore, institutional support plays a considerable role in enabling resource access and thus influencing SMEs' growth. Further enhancements are required to develop the entrepreneurship ecosystem. One of these enhancements is enabling entrepreneurs to access

technology and innovation through institutional support. This can influence the SMEs' growth and enhance the competitiveness in the local and international markets.

Other environmental factors influence SMEs growth differently. For instance, we found that the majority of SMEs are affected negatively by political, economic and legal factors. The negative impact of the political factors could be due to political conflict with some neighbouring countries. The negative impact of the economic factors could be due to the massive decreasing oil prices in 2015, as the Saudi Arabia relies heavily on oil. Regarding legal factors, according to the labour market report for Saudi Arabia in 2016, many entrepreneurs and investors believe that business regulations and incorporation policies, such as access to funds and business start-ups, are inefficient and deter investment, while the legal framework does not provide enough support or transparency for resolving contract disputes and bankruptcies. However, according the World Bank Data, Saudi Arabia made starting a business easier by reducing time from 24 days to 18 days in 2017; as well as strengthening investors' protections. Saudi Arabia ranked 10th out of 192 countries in 2018. Other factors such as culture and technology influenced SMEs' growth positively for the majority of SMEs.

To sum up, we can say that institutional support plays a significant role in enabling entrepreneurs to access resources that in turn engender SME growth. This is evident through the significant increase in the number of

institutions providing different types of support in Saudi Arabia (Khan, 2016). In addition, there has been a notable improvement since the establishment of the Small and Medium Enterprises Authority (SMEA). The authority has reviewed laws and regulations thoroughly to minimise challenges, facilitated resource access, developed networking and facilitated cooperation between SMEs and other investors, incubators and customers. Furthermore, the SMEA has worked on four main areas: encouraging and supporting entrepreneurship, supporting SME growth and enhancing capabilities, simplifying and easing starting and practicing a business and funding SMEs. Moreover, the organisation has worked to develop an entrepreneurship ecosystem by liaising with other institutions in the government and in the private sector (SMEA, 2017).

7.5 Limitations

As is common in any research, this study has its limitations. The first is that it was designed to analyse entrepreneurs' social networks at the collective and individual levels; however, after conducting the survey, the measurement at the individual level (resource generator) showed that the included elements were not reliable. In addition, since this research considers the level of the entrepreneurship ecosystem level, which is at the institutional level in Saudi Arabia. Accordingly, the analysis of social networks at the individual level was deleted, to enhance the validity of this study. Second, since the language of this study is English and the study analysed SMEs in Saudi Arabia, where the Arabic language is the mother tongue, we only relied on English references to analyse the phenomena and

excluded any Arabic references. In addition, the survey was conducted in Arabic, which required very careful translation, and we used a pilot study to establish reliability and validity, which was considered another challenge due to time and cost elements. Another limitation regards the research sample, as there is no agriculture sector. In addition, the sample represents only the surviving firms, meaning that discontinued firms were not included in this study, although these firms might represent meaningful arguments regarding how their network influenced resource access and growth. However, since the main focus of this research is on SME growth, these firms were not included. Another challenge occurred during data collection, as finding participants was difficult for the researcher because SME contact details provided by the Jeddah Chamber of Commerce were not accurate, and so the researcher had to travel to three different regions in the kingdom, in order to attend three different events organised by SMEA to support SMEs, to collect data. Another limitation is in the measurement of the entrepreneurs' characteristics since the data are self-reported, which can be problematic. Another limitation was found in the environmental factor measurements, in that the questions were designed to ask entrepreneurs in general about the impact of each factor, without seeking any details of the items within each environmental factor. Another limitation was in statistical analysis, as we were unable to apply regression analysis to SME growth to analyse SME growth factors and resource access via institutions in government and the private sector, because not every variable in this study followed the main assumptions of normal distribution. In addition, multivariate analysis was not included in this research, as some of the

variables are measured based on other variables, namely network density and network size. Moreover, as the conceptual and empirical framework is showing the dynamic and complex relationship between a set of variables, correlation tests were applied. It is difficult to decide the causation between these variables since the causation assumes that one variable is the cause of the other variable. This is one of the challenges that has led to an applied correlation test and not regression.

7.6 Research Implications

This study has reached some findings and conclusions that may have implications for policy, practice and future research. This section will discuss these recommendations in the context of SMEs in Saudi Arabia. The first is that the results of this study show that entrepreneurs' characteristics, firm characteristics, resource access and environmental aspects play a considerable role in SME growth, thus entrepreneurs need to consider these factors to grow in the future. In more detail, entrepreneurs may consider developing certain characteristics in relation to the main elements affecting business growth, namely self-confidence and risk-taking. In addition, they could give more priority and importance to their business strategies, to develop their business and grow. Resource access is another important factor they may consider, since they are available via institutions in the private and government sectors and would help them grow and expand in the future, thereby supporting their business. Finally, entrepreneurs may wish to analyse threats and opportunities related to environmental factors, in order take the business forward.

Policymakers can use the results of this study, especially when it comes to resource access and availability via institutions in the private and government sectors, to consider what elements deter entrepreneurs from accessing resources. Mention was made that although institutional support is available to the majority of entrepreneurs, not all of them have accessed this support to date, due to a lack of awareness or that they did not consider it for the following reasons: avoiding risk and debt, insufficient support regarding cost, time-consuming, trust issues, limited support regarding the support type and business type, not enough information regarding institutional support or they do not agree with the conditions of institutional support. Some entrepreneurs stated that they would not consider institutional support because they had had it before, while others stated that they did not need it. Some stated that they preferred support from government institutions, due to interest rates, but not the support from the private sector. Accordingly, policymakers need to consider these reasons when forming policy to support and develop the SME sector in Saudi Arabia. In addition, policy-makers can take advantage on three points in the entrepreneurship ecosystem to develop it. First, the level of the ecosystem in Saudi is at the institutional level, meaning policy-makers can facilitate technology and innovation access through institutional support. Second, the analysis of the ecosystem shows that networking performed strongly. Thus, policy-makers can develop networking at the collective level to support entrepreneurs in different regions and sectors. Finally, this study shows that the number of institutions providing institutional support and the frequency

of contact with these institutions to access institutional support influence resource access positively. Therefore, policy-makers can increase the number of institutions that provide institutional support and ease contact with these institutions to access different resources.

For future research, this study makes several recommendations. The first is to consider on the individual level the resource generator method, to compare between resource access at the individual and collective levels after changes to items at the individual level. Second, they should contemplate an in-depth analysis of environmental factors, such as adding items and questions in regard to each factor. In addition, they should consider cluster analysis and compare SMEs in the cluster with those outside, to analyse the SME environment in depth and how this influences their growth. To explain further, in this study, we asked entrepreneurs in general to rank how local culture or political factors influence their growth, where 1 is a significant decrease, 3 is no change, and 5 is a significant increase without going into details regarding each factor. We did that to save time and effort because the main aim is to create a general outlook. Future studies can consider analysing the items of each environmental factor to understand the weak areas that need to be developed the policy-makers. Future studies could also focus on one sector, or those sectors that generate more job opportunities and higher annual revenues, to analyse the obstacles to and solutions for supporting SMEs to achieve diversification and decrease unemployment.

7.7 Conclusion

This chapter started by presenting the summary of the literature review, the conceptual and empirical framework and the methodology. Thereafter, it explained how this study contributes to knowledge, before presenting a summary of the results and findings on the role of social networks in enabling resource access, and the role of resource access along with other factors in enabling SME growth. Finally, this chapter discussed the main challenges and limitations of this study and presented recommendations for practice, policy and future research in the context of Saudi Arabia.

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Appendices

Appendix (1) the Variables of Global Entrepreneurship Index on the Individual and Institutional Level

Table (1) the description of the Individual Variables Used in Global Entrepreneurship Index

| Individual Variable | Description |
|--------------------------|---|
| Opportunity recognition | The percentage of the 18-64 aged population recognising good conditions to start business next 6 months in area he/she lives. |
| Skill perception | The percentage of the 18-64 aged population claiming to possess the required knowledge/skills to start business. |
| Risk perception | The percentage of the 18-64 aged population stating that the fear of failure would not prevent starting business. |
| Know entrepreneurs | The percentage of the 18-64 aged population knowing someone who started a business in the past 2 years. |
| Career | The percentage of the 18-64 aged population saying that people consider starting business as good career choice. |
| Status | The percentage of the 18-64 aged population thinking that people attach high status to successful entrepreneurs. |
| Career Status | The status and respect of entrepreneurs calculated as the average of Career and Status. |
| Opportunity motivation | Percentage of the TEA businesses initiated because of opportunity start-up motive. |
| Technology level | Percentage of the TEA businesses that are active in technology sector (high or medium). |
| Educational level | Percentage of the TEA businesses owner/managers having participated over secondary education. |
| Competitors | Percentage of the TEA businesses started in those markets where not many businesses offer the same product. |
| New product | Percentage of the TEA businesses offering products that are new to at least some of the customers. |
| New technology | Percentage of the TEA businesses using new technology that is less than 5 years old average (including 1 year). |
| Gazelle | Percentage of the TEA businesses having high job expectation average (over 10 more employees and 50% in 5 year) |
| Export | Percentage of the TEA businesses where at least some customers are outside country (over 1%). |
| Informal investment mean | The mean amount of 3 year informal investment |
| Business angel | The percentage of the population aged 18-64 who provided funds for new business in past 3 years, excluding stocks and funds, average. |
| Informal investment | The amount of informal investment calculated as (informal investment mean* business angel) |

Table (2) the Description of the Institutional Variables Used in Global Entrepreneurship Index

| institutional Variable | Description |
|-------------------------------|--|
| Economic freedom | “Business freedom is a quantitative measure of the ability to start, operate, and close a business that represents the overall burden of regulation, as well as the efficiency of government in the regulatory process. The business freedom score for each country is a number between 0 and 100, with 100 equalling the freest business environment. The score is based on 10 factors, all weighted equally, using data from the World Bank’s Doing Business study”. |
| Property rights | “The property rights component is an assessment of the ability of individuals to accumulate private property, secured by clear laws that are fully enforced by the state. It measures the degree to which a country’s laws protect private property rights and the degree to which its government enforces those laws. It also assesses the likelihood that private property will be expropriated and analyses the independence of the judiciary, the existence of corruption within the judiciary, and the ability of individuals and businesses to enforce contracts.” |
| Freedom and property | Economic Freedom * Property Rights. |
| Tertiary education | Gross enrolment ratio in tertiary education, 2015 or latest available data. |
| Quality of education | Answers to the question: “In your country, how do you assess the quality of math and science education? [1 = extremely poor – among the worst in the world; 7 = excellent – among the best in the world]”. |
| Education | Tertiary Education * Quality of Education. |
| Country risk | The country risk classifications are meant to reflect country risk. Under the Participants’ system, country risk is composed of transfer and convertibility risk (i.e. the risk a government imposes capital or exchange controls that prevent an entity from converting local currency into foreign currency and/or transferring funds to creditors located outside the country) and cases of force majeure (e.g. war, expropriation, revolution, civil disturbance, floods, earthquakes). |
| Urbanisation | Urbanization that is the percentage of the population living in urban areas, data are from the Population Division of the United Nations, 2010 estimate. |
| Infrastructure | Infrastructure and connectivity in the World Competitiveness Report: “(...) in addition to assessing the quality of the transport infrastructure, the pillar also measures the quality of domestic and international transport networks.” |
| Connectivity | Urbanization * Infrastructure. |
| Corruption | The Corruption Perceptions Index (CPI) measures the perceived level of public-sector corruption in a country. “The CPI is a "survey of surveys", based on 13 different expert and business surveys.” Overall performance is measured on a ten point Likert scale. Data are collected over the last 24 months. |

| institutional Variable | Description |
|----------------------------------|---|
| Taxation | Paying taxes scores, “(...) addresses the taxes and mandatory contributions that a medium-size company must pay or withhold in a given year, as well as measures the administrative burden in paying taxes.” |
| Good governance | The effectiveness of the government “the capacity of the government to effectively formulate and implement sound policies”. |
| Tax govern | Measures the effectiveness of using the taxes by combining the level of the tax by the quality of government services, Taxation* Good Governance. |
| Tech absorpion | Firm level technology absorption capability: “Companies in your country are (1 = not able to absorb new technology, 7 = aggressive in absorbing new technology)”. |
| Labour freedom | Measures the freedom of the labour as “(...) that considers various aspects of the legal and regulatory framework of a country’s labour market, including regulations concerning minimum wages, laws inhibiting layoffs, severance requirements, and measurable regulatory restraints on hiring and hours worked.” |
| Staff Training | The extent of staff training: “To what extent do companies in your country invest in training and employee development? (1 = hardly at all; 7 = to a great extent)”. |
| Labour market | Labour Freedom * Staff Training. |
| Regulation | Effectiveness of anti-monopoly policy, answering to the question: “In your country, how effective are anti-monopoly policies at ensuring fair competition? [1 = not effective at all; 7 = extremely effective] “. |
| Market dominance | Extent of market dominance: “Corporate activity in your country is (1 = dominated by a few business groups, 7 = spread among many firms)”. |
| Comp regulation | Regulation * Market Dominance. |
| Technology transfer | These are the innovation index points from GCI: a complex measure of innovation including investment in research and development (R&D) by the private sector, the presence of high-quality scientific research institutions and the collaboration in research between universities and industry, and the protection of intellectual property. |
| GERD | Gross domestic expenditure on Research & Development (GERD) as a percentage of GDP, year 2014 or latest available data Puerto Rico, Dominican Republic, and United Arab Emirates are estimated. |
| Scientific institutions | Quality of scientific research institutions. Answering to the question: “In your country, how do you assess the quality of scientific research institutions? [1 = extremely poor – among the worst in the world; 7 = extremely good – among the best in the world] “. |
| Availability of scientist | Availability of scientists and engineers. Answering to the question: “In your country, to what extent are scientists and engineers available? [1 = not at all; 7 = widely available] “. |
| Science | GERD* Average of Scientific Institutions and Availability of Scientist. |

| institutional Variable | Description |
|--------------------------------|--|
| Venture Capital | Venture capital availability. Answering to the question: “In your country, how easy is it for start-up entrepreneurs with innovative but risky projects to obtain equity funding? [1 = extremely difficult; 7 = extremely easy]”. |
| Business strategy | Refers to the ability of companies to pursue distinctive strategies, which involves differentiated positioning and innovative means of production and service delivery. |
| Finance and strategy | Venture Capital Business Strategy. |
| Economic complexity | “The complexity of an economy is related to the multiplicity of useful knowledge embedded in it. Because individuals are limited in what they know, the only way societies can expand their knowledge base is by facilitating the interaction of individuals in increasingly complex networks in order to make products. We can measure economic complexity by the mix of these products that countries are able to make.” |
| Depth of capital market | The Depth of Capital Market is one of the six sub-indices of the Venture Capital and Private Equity index. This variable is a complex measure of the size and liquidity of the stock market, level of IPO, M&A and debt and credit market activity. Note that there were some methodological changes over the 2006–2015 time period so previous years comparison is not perfect. |

Source: The global entrepreneurship index (2017).

Appendix (2) the Objectives of 10 Economic Development Plans in Saudi Arabia

Table (1) the Ten Economic Development Plans of Saudi Arabia (Part 1)

| Plan Name | Framework Time | Objectives |
|----------------------------------|----------------|---|
| 1 st Development Plan | 1970-1974 | <ol style="list-style-type: none"> 1. Increasing the rate of gross domestic product (GDP) growth 2. Developing human resources so that several elements of society will be able to contribute more effectively to production and participate fully in the process of development 3. Diversifying sources of national income and reducing dependence on oil through increasing the share of alternative productive sectors in GDP |
| 2 nd Development Plan | 1975-1979 | <ol style="list-style-type: none"> 1. Maintain a high rate of economic growth by developing economic resources, maximising earnings from oil over the long term, conserving depletable resources 2. Reduce economic dependence on the export of crude oil 3. Develop human resources through education, training and raising standards of health 4. Increase the well-being of all groups within society and foster social stability under circumstances of rapid social change 5. Develop the physical infrastructure to support the achievement of the above goals |
| 3 rd Development Plan | 1980-1984 | <ol style="list-style-type: none"> 1. Structural change in the economy 2. Increased participation and social welfare in development 3. Increased economic and administrative efficiency |

Source: Ministry of Economy and Planning of Saudi Arabia, 1st, 2nd and 3rd Development Plans.

Table (2) the Ten Economic Development Plans of Saudi Arabia (Part 2)

| Plan Name | Framework Time | Objectives |
|----------------------------------|----------------|---|
| 4 th Development Plan | 1985-1989 | <ol style="list-style-type: none"> 1. To form productive citizen-workers by providing them with education and health services, thus ensuring their livelihoods and rewarding them on the basis of their work 2. To develop human resources, thus ensuring a constant supply of manpower, and to upgrade and improve efficiency to serve all sectors 3. To raise cultural standards, to keep pace with the kingdom's development 4. To reduce dependence on the production and export of crude oil as the main source of national income 5. To continue with real structural changes in the kingdom's economy, to produce a diversified economic base with due emphasis on industry and agriculture 6. To develop mineral resources and encourage the discovery and utilisation thereof 7. To concentrate on qualitative development through improving the performance of utilities and facilities already established during the three previous plan periods 8. To complete the infrastructural projects necessary to achieve overall development 9. To achieve economic and social integration between the Arab Gulf Cooperation Council (GCC) countries. |

Source: Ministry of Economy and Planning of Saudi Arabia, 4th Development Plan.

Table (3) the Ten Economic Development Plans of Saudi Arabia (Part 3)

| Plan Name | Framework Time | Objectives |
|--|------------------------|---|
| 5 th Development Plan | 1990-1994 | <ol style="list-style-type: none"> 1. The same objectives as the previous development plan 2. To encourage further private sector participation in socioeconomic development 3. To achieve balanced growth throughout all regions of the kingdom |
| 6 th Development Plan 7 th Development Plan | 1995-1999 2000-2004 | <ol style="list-style-type: none"> 1. The same objectives as the previous development plan 2. To complete scientific activity and to raise cultural and informational standards to keep pace with the kingdom's development 3. To achieve economic and social integration among Gulf Cooperation Council (GCC) countries and to support economic cooperation with other nations |
| 8 th Development Plan | 2005-2009 | <ol style="list-style-type: none"> 1. Continue working on the objectives of the previous development plan 2. To improve the productivity of the national economy, improve its competitiveness and prepare it to adjust in a more flexible and efficient manner to economic changes and developments at all levels 3. To enhance the private sector's participation in economic and social development 4. To conserve and develop water resources and ensure their rational utilisation, to protect the environment and develop suitable systems in the context of sustainable development |

Source: Ministry of Economy and Planning of Saudi Arabia, 5th, 6th, 7th and 8th Development Plans.

Table (4) the Ten Economic Development Plans of Saudi Arabia (Part 4)

| Plan Name | Framework Time | Objectives |
|-----------------------------------|----------------|--|
| 9 th Development Plan | 2010-2014 | 1. Continue the objectives of the previous development plan |
| 10 th Development Plan | 2015-2019 | 2. To move towards a knowledge-based economy and consolidate the basis of an information society 3. To enhance the role of the private sector in socioeconomic and environmental development and expand domains of private investments (domestic and foreign) and public-private partnerships 4. To develop, conserve and ensure the rational utilisation of natural resources, particularly water, protect the environment and develop environmental systems within the context of sustainable development 5. To continue socioeconomic and institutional reform, develop regulations aimed at raising efficiency and improving performance, work towards entrenching transparency and accountability and support civil-society institutions in advancing their developmental activities 6. To develop the small and medium enterprise (SME) sector, in order to increase its contribution to GDP and create frameworks for nurturing and organising it correctly |

Source: Ministry of Economy and Planning of Saudi Arabia, 9th and 10th Development plans.

Appendix (3) Pilot Test Questionnaire in the English Language



The role of institutional support, along with other factors, in influencing SME growth in Saudi Arabia

Dear entrepreneur,

This questionnaire is designed to collect data for a PhD thesis. The main aim of this study is to analyze the role of institutional support, along with other factors, in influencing SME growth in Saudi Arabia. As an entrepreneur, I wish to invite you to participate in this study by answering this questionnaire, which will not require a lot of time or effort.

Would you like to participate in this research?

Yes

No

First: Demographic questions

- 1. Gender:**
 - Female
 - Male
- 2. Age (type a number):**
- 3. Level of education:**
 - Primary
 - High school
 - Diploma
 - College
 - Master
 - PhD
- 4. Labour market position besides a business owner (please choose only one answer):**
 - Student
 - Wage-earner (government sector)
 - Wage-earner (private sector)
 - Self-employed
- 5. Monthly income (please give an answer for individual income, not family income):**
 - Less than 5000 SR
 - SR 5000-9999
 - SR 10000-14999
 - SR 15000 and higher
- 6. Why did you start your business?**
- 7. What is the location of your business?**
- 8. What is your business age?**
 - 0-3 years
 - 4-7 years
 - 8-11 years
 - More than 11 years
- 9. Please choose the sector of your business:**
 - Finance, real estate and business services
 - Agriculture
 - Constructing and building
 - Electricity, gas and water
 - Social services
 - Trade
 - Industry
 - Mining
 - Other, please specify

Second Section: Characteristics of Firms, Entrepreneurs and other factors:

10. How would you describe yourself in the following?

| Entrepreneur characteristics | Low | Medium | High |
|--|------------|---------------|-------------|
| 1. Your need for achievement and success | | | |
| 2. Self-confidence and belief in yourself | | | |
| 3. Risk-taking in your business, such as making a decision in a turbulent environment with minimal information and an unclear end result | | | |
| Total | | | |

11. How much do you spend in your business on the following tasks?

| Firm's characteristics | Low | Medium | High |
|---|------------|---------------|-------------|
| 1. Marketing strategy | | | |
| 2. Training strategy | | | |
| 3. Competitive strategy | | | |
| 4. Research and design | | | |
| 5. Adopting new technology or new methods | | | |
| Total | | | |

12. What is the influence of the following factors on your business growth?

| Firm external factors | Negative influence | No influence | Positive influence |
|--|---------------------------|---------------------|---------------------------|
| Political situations | | | |
| The economic situation | | | |
| Legal matters and employment regulations | | | |
| Local culture | | | |
| Technology | | | |

Third Section: Resource Generator Questions

13. Are the following resources available to you via personal contacts, such as family and friends?

| Resources | Are they available? | |
|---------------------------|---------------------|----|
| | Yes | No |
| Financial resources | | |
| Human resources | | |
| Information and knowledge | | |
| Training and education | | |

14. Have you accessed the following resources via personal contacts, such as family and friends?

| Resources | Are they available? | |
|---------------------------|---------------------|----|
| | Yes | No |
| Financial resources | | |
| Human resources | | |
| Information and knowledge | | |
| Training and education | | |

15. Are the accessed resources via personal contacts effective, meaning they have helped you achieve business objectives?

| Resources | Are they available? | |
|---------------------------|---------------------|----|
| | Yes | No |
| Financial resources | | |
| Human resources | | |
| Information and knowledge | | |
| Training and education | | |

16. Are the following resources available to you via institutions in the government and private sector?

| Resources | Government institutions | | Private institutions | |
|---------------------------|-------------------------|----|----------------------|----|
| | Yes | No | Yes | No |
| Financial resources | | | | |
| Human resources | | | | |
| Information and knowledge | | | | |
| Training and education | | | | |

17. Have you accessed any of the following resources via institutions in the government and private sector?

| Resources | Government institutions | | Private institutions | |
|---------------------------|-------------------------|----|----------------------|----|
| | Yes | No | Yes | No |
| Financial resources | | | | |
| Human resources | | | | |
| Information and knowledge | | | | |
| Training and education | | | | |

18. Are the accessed resources via institutions in the government and the private sector effective, i.e. have they helped you achieve your business objectives?

| Resources | Government institutions | | Private institutions | |
|---------------------------|-------------------------|----|----------------------|----|
| | Yes | No | Yes | No |
| Financial resources | | | | |
| Human resources | | | | |
| Information and knowledge | | | | |
| Training and education | | | | |

Fourth Section: Network Size and Density

19. How many of your personal contacts can help access the following resources?

| Resources | Type number |
|---------------------------|-------------|
| Financial resources | |
| Human resources | |
| Information and knowledge | |
| Training and education | |

20. How many institutions in the government and private sectors help you access the following resources?

| Resources | Government institutions | Private institutions |
|---------------------------|-------------------------|----------------------|
| Financial resources | | |
| Human resources | | |
| Information and knowledge | | |
| Training and education | | |

21. How frequently do you contact your personal contacts to access the following resources?

| Resources | Never | Occasionally | Sometimes | Often | Always |
|---------------------------|-------|--------------|-----------|-------|--------|
| Financial resources | | | | | |
| Human resources | | | | | |
| Information and knowledge | | | | | |
| Training and education | | | | | |

22. How frequently do you contact institutions in the government sector to access the following resources?

| Resources | Never | Occasionally | Sometimes | Often | Always |
|---------------------------|-------|--------------|-----------|-------|--------|
| Financial resources | | | | | |
| Human resources | | | | | |
| Information and knowledge | | | | | |
| Training and education | | | | | |

23. How frequent do you contact institutions in the private sector to access the following resources?

| Resources | Never | Occasionally | Sometimes | Often | Always |
|---------------------------|--------------|---------------------|------------------|--------------|---------------|
| Financial resources | | | | | |
| Human resources | | | | | |
| Information and knowledge | | | | | |
| Training and education | | | | | |

24. On a scale of 1-5, how much do you rely on your personal contacts (family and friends) to access the following resources, where 1 means never and 5 means always?

| Resources | 1 | 2 | 3 | 4 | 5 |
|---------------------------|----------|----------|----------|----------|----------|
| Financial resources | | | | | |
| Human resources | | | | | |
| Information and knowledge | | | | | |
| Training and education | | | | | |

25. On a scale of 1-5, how much do you rely on institutions in the government sector to access the following resources?

| Resources | 1 | 2 | 3 | 4 | 5 |
|---------------------------|----------|----------|----------|----------|----------|
| Financial resources | | | | | |
| Human resources | | | | | |
| Information and knowledge | | | | | |
| Training and education | | | | | |

26. On a scale of 1-5, how much do you rely on institutions in the private sector to access the following resources?

| Resources | 1 | 2 | 3 | 4 | 5 |
|---------------------------|----------|----------|----------|----------|----------|
| Financial resources | | | | | |
| Human resources | | | | | |
| Information and knowledge | | | | | |
| Training and education | | | | | |

Sixth Section: SME Growth

27. What was the level of employment in your business when you started and now?

| | | | | |
|------------------|---------------------------|----------------------------|------------------------------|--------------------------------|
| When you started | From 1-5 employees | From 6-49 employees | From 50-249 employees | More than 249 employees |
| Now | From 1-5 employees | From 6-49 employees | From 50-249 employees | More than 249 employees |

28. What was the level of your assets when you started your business and now?

| | | | | |
|------------------|-----------------------|------------------------|--------------------------|---------------------------------|
| When you started | 0-3 million SR | 3-40 million SR | 40-200 million SR | More than 200 Million SR |
| Now | 0-3 million SR | 3-40 million SR | 40-200 million SR | More than 200 Million SR |

Appendix (4) Pilot Test Questionnaire in the Arabic Language

دور الدعم المؤسسي، إلى جانب عوامل أخرى، في التأثير على نمو المشاريع الصغيرة ومتوسطة الحجم SME في السعودية

السلام عليكم ورحمة الله وبركاته،

هذه الاستبانة لجمع بيانات لبحث الدكتوراه، الذي بدوره يهدف لبحث دور العلاقات الاجتماعية على المستوى الشخصي والمؤسسي على نمو المشاريع الصغيرة ومتوسطة الحجم في المملكة العربية السعودية. لهذا كونك أحد رواد الأعمال، أدعوك للمشاركة في البحث من خلال الإجابة على الأسئلة التالية. إتمام الاستبانة لا يتطلب الكثير من الوقت والجهد.

هل تود المشاركة في هذه الاستبانة؟

نعم
لا

أولاً: الأسئلة الديموغرافية

١. الجنس:

- أنثى
- ذكر

٢. العمر:

٣. المستوى التعليمي:

- ابتدائي
- ثانوية
- دبلوم
- بكالوريوس
- ماجستير
- دكتوراه

٤. إلى جانب امتلاكك للمشروع، ما هو وضعك الحالي في سوق العمل؟

- طالب
- موظف في القطاع الحكومي
- موظف في القطاع الخاص
- متفرغ لإدارة مشروع

٥. مستوى الدخل الشهري الخاص بك وليس العائلي:

- أقل من ٥٠٠٠ ريال سعودي
- ٥٠٠٠ - ٩٩٩٩ ريال سعودي
- ١٠٠٠٠ - ١٤٩٩٩ ريال سعودي
- ١٥٠٠٠ وما فوق

٦. ما هو السبب الذي دفعك للبدء بالمشروع التجاري؟

٧. ما هو موقع مشروعك التجاري؟

٨. كم يبلغ عمر المشروع؟

- من ٠ - ٣ سنوات
- من ٣ إلى أقل من ٧ سنوات
- من ٧ إلى أقل من ١١ سنة
- أكثر من ١١ سنة

٩. ما هو قطاع مشروعك؟

- القطاع المالي، العقارات وخدمات الأعمال
- القطاع الزراعي
- قطاع البناء والتشييد
- قطاع التعدين
- الكهرباء، الغاز، والماء
- القطاع التجاري
- القطاع الصناعي
- قطاع التعدين
- أخرى، الرجاء التحديد

ثانياً: سمات رواد الأعمال والمشاريع

١٠. كيف تقيم نفسك بالسمات الشخصية التالية

| سمات رائد الأعمال | منخفض | متوسط | عالي |
|--|-------|-------|------|
| الحاجة للإنجاز والنجاح | | | |
| الثقة بالنفس والإيمان بالذات | | | |
| القدرة على المخاطرة في المشروع، مثل القدرة على اتخاذ القرار في ظل عدم توفر معلومات كافية | | | |

١١. ما هي أهمية كلاً من الاستراتيجيات التالية، من ناحية الجهد المبذول، التكلفة والوقت؟

| استراتيجيات المشروع | منخفض | متوسط | عالي |
|--|-------|-------|------|
| استراتيجية التسويق في المشروع | | | |
| استراتيجية التدريب في المشروع | | | |
| الاستراتيجية التنافسية للمشروع التجاري | | | |
| استراتيجية البحث والتصميم في المشروع | | | |
| استراتيجية تبني تقنية وتكنولوجيا حديثة | | | |

١٢. ما هو أثر العوامل الخارجية التالية على نمو مشروعك التجاري؟

| العوامل | أثر سلبي | لا يوجد أثر | أثر إيجابي |
|---|----------|-------------|------------|
| أثر الأوضاع السياسية على نمو مشروعك التجاري | | | |
| أثر الأوضاع الاقتصادية على نمو مشروعك التجاري | | | |
| أثر الأوضاع القانونية والإجراءات على نمو مشروعك التجاري | | | |
| أثر الثقافة المحلية على نمو مشروعك التجاري | | | |
| أثر التكنولوجيا والتقنية على نمو مشروعك التجاري | | | |

ثالثاً: توفر، الوصول، وفعالية الموارد من خلال عدة مستويات

١٣. هل الموارد التالية متوفرة لك عن طريق الأقارب والعائلة والأصدقاء؟

| الموارد | هل هي متوفرة | |
|--------------------|--------------|----|
| | نعم | لا |
| موارد مالية | | |
| موارد بشرية | | |
| معلومات ومعرفة | | |
| موارد تدريب وتعليم | | |

١٤. هل سبق لك واستخدامت أحد الموارد التالية من خلال العائلة والأصدقاء؟

| هل سبق الاستخدام | | الموارد |
|------------------|-----|--------------------|
| لا | نعم | |
| | | موارد مالية |
| | | موارد بشرية |
| | | معلومات ومعرفة |
| | | موارد تدريب وتعليم |

١٥. هل أي من الموارد التي تم الوصول إليها عن طريق العائلة والأصدقاء فعالة، بمعنى هل ساهمت في تحقيق الأهداف المرجو منها بالمشروع؟

| هل هي فعالة | | الموارد |
|-------------|-----|--------------------|
| لا | نعم | |
| | | موارد مالية |
| | | موارد بشرية |
| | | معلومات ومعرفة |
| | | موارد تدريب وتعليم |

١٦. هل الموارد التالية متوفرة لك عن طريق المؤسسات في القطاع الخاص والحكومي؟

| القطاع الحكومي | | القطاع الحكومي | | الموارد |
|----------------|-----|----------------|-----|--------------------|
| لا | نعم | لا | نعم | |
| | | | | موارد مالية |
| | | | | موارد بشرية |
| | | | | معلومات ومعرفة |
| | | | | موارد تدريب وتعليم |

١٧. هل تم استخدام أي من الموارد التالية عن طريق المؤسسات في القطاع الخاص والحكومي؟

| القطاع الحكومي | | القطاع الحكومي | | الموارد |
|----------------|-----|----------------|-----|--------------------|
| لا | نعم | لا | نعم | |
| | | | | موارد مالية |
| | | | | موارد بشرية |
| | | | | معلومات ومعرفة |
| | | | | موارد تدريب وتعليم |

١٨. هل أي من الموارد التي تم استخدامها من خلال المؤسسات في القطاع الحكومي والخاص فعالة، بمعنى هل ساهمت في تحقيق الأهداف المرجو منها بالمشروع؟

| القطاع الحكومي | | القطاع الحكومي | | الموارد |
|----------------|-----|----------------|-----|--------------------|
| لا | نعم | لا | نعم | |
| | | | | موارد مالية |
| | | | | موارد بشرية |
| | | | | معلومات ومعرفة |
| | | | | موارد تدريب وتعليم |

رابعاً: الشبكات الاجتماعية لرواد الأعمال:

١٩. كم عدد الأشخاص من عائلتك وأصدقائك المقربين يمكنك الرجوع إليهم للوصول للموارد التالية؟

| عدد جهات الاتصال | الموارد |
|------------------|--------------------|
| | موارد مالية |
| | موارد بشرية |
| | معلومات ومعرفة |
| | موارد تدريب وتعليم |

٢٠. كم عدد المؤسسات في القطاع الحكومي والخاص التي يمكن الرجوع إليها للحصول على الموارد التالية؟

| عدد جهات الاتصال | | الموارد |
|------------------|----------------|--------------------|
| القطاع الخاص | القطاع الحكومي | |
| | | موارد مالية |
| | | موارد بشرية |
| | | معلومات ومعرفة |
| | | موارد تدريب وتعليم |

٢١. كم يبلغ معدل تواصلك مع جهات الاتصال من المقربين (العائلة والأصدقاء) للحصول على الموارد التالية؟

| الموارد | لا يوجد اتصال | نادراً | أحياناً | غالباً | دائماً |
|--------------------|---------------|--------|---------|--------|--------|
| موارد مالية | | | | | |
| موارد بشرية | | | | | |
| معلومات ومعرفة | | | | | |
| موارد تدريب وتعليم | | | | | |

٢٢. كم يبلغ معدل تواصلك مع مؤسسات القطاع الحكومي للحصول على الموارد التالية؟

| الموارد | لا يوجد اتصال | نادراً | أحياناً | غالباً | دائماً |
|--------------------|---------------|--------|---------|--------|--------|
| موارد مالية | | | | | |
| موارد بشرية | | | | | |
| معلومات ومعرفة | | | | | |
| موارد تدريب وتعليم | | | | | |

٢٣. كم يبلغ معدل تواصلك مع مؤسسات القطاع الخاص للحصول على الموارد التالية؟

| الموارد | لا يوجد اتصال | نادراً | أحياناً | غالباً | دائماً |
|--------------------|---------------|--------|---------|--------|--------|
| موارد مالية | | | | | |
| موارد بشرية | | | | | |
| معلومات ومعرفة | | | | | |
| موارد تدريب وتعليم | | | | | |

٢٤. بمعدل من ١-٥، ما هو درجة اعتمادك على الدعم المقدم من العائلة والأصدقاء من خلال تسهيل الوصول للموارد التالية؟ حيث ١ يعني اعتماد منخفض جداً، و٥ تعني اعتماد عالي جداً.

| الموارد | ١ | ٢ | ٣ | ٤ | ٥ |
|--------------------|---|---|---|---|---|
| موارد مالية | | | | | |
| موارد بشرية | | | | | |
| معلومات ومعرفة | | | | | |
| موارد تدريب وتعليم | | | | | |

٢٥. بمعدل من ١-٥، ما هو درجة اعتمادك على الدعم المقدم من مؤسسات القطاع الحكومي من خلال تسهيل الوصول للموارد التالية؟ حيث ١ يعني اعتماد منخفض جداً، و٥ تعني اعتماد عالي جداً.

| الموارد | ١ | ٢ | ٣ | ٤ | ٥ |
|--------------------|---|---|---|---|---|
| موارد مالية | | | | | |
| موارد بشرية | | | | | |
| معلومات ومعرفة | | | | | |
| موارد تدريب وتعليم | | | | | |

٢٦. بمعدل من ١-٥، ما هو درجة اعتمادك على الدعم المقدم من المؤسسات في القطاع الخاص من خلال تسهيل الوصول للموارد التالية؟ حيث ١ يعني اعتماد منخفض جداً، و٥ تعني اعتماد عالي جداً.

| الموارد | ١ | ٢ | ٣ | ٤ | ٥ |
|--------------------|---|---|---|---|---|
| موارد مالية | | | | | |
| موارد بشرية | | | | | |
| معلومات ومعرفة | | | | | |
| موارد تدريب وتعليم | | | | | |

سادساً: نمو المشاريع الصغيرة ومتوسطة الحجم:

٢٧. ما هو مستوى التوظيف في مشروعك عند البدء بالمشروع التجاري، وكم يبلغ الآن؟

| بداية عمر المشروع | ١-٥ موظفين | ٦-٤٩ موظفين | ٥٠-٢٤٩ موظف | أكثر من ٢٤٩ موظف |
|-------------------|------------|-------------|-------------|------------------|
| الآن | ١-٥ موظفين | ٦-٤٩ موظفين | ٥٠-٢٤٩ موظف | أكثر من ٢٤٩ موظف |

٢٨. ما هو مستوى العوائد السنوية في مشروعك عند البدء بالمشروع التجاري، وكم يبلغ الآن؟

| بداية عمر المشروع | ٠-٣ مليون ريال سعودي | ٣-٤٠ مليون ريال سعودي | ٤٠-٢٠٠ مليون ريال سعودي | أكثر من ٢٠٠ ريال سعودي |
|-------------------|---|---|--|------------------------|
| الآن | ٠-٣ مليون ريال سعودي <td>٣-٤٠ مليون ريال سعودي <td>٤٠-٢٠٠ مليون ريال سعودي <td>أكثر من ٢٠٠ ريال سعودي </td></td></td> | ٣-٤٠ مليون ريال سعودي <td>٤٠-٢٠٠ مليون ريال سعودي <td>أكثر من ٢٠٠ ريال سعودي </td></td> | ٤٠-٢٠٠ مليون ريال سعودي <td>أكثر من ٢٠٠ ريال سعودي </td> | أكثر من ٢٠٠ ريال سعودي |

Appendix (5) Questionnaire in the English Language

The role of institutional support, along with other factors, in influencing SME growth in Saudi Arabia

Dear entrepreneur,

This questionnaire is part of a PhD study to analyse the role of institutional support, along with other factors, in influencing SME growth in Saudi Arabia. The target sample of this research is entrepreneurs in Saudi Arabia (SME owners).

Data collected from this questionnaire will be used to answer the main questions in this research. For confidentiality purposes, and to comply with the ethical procedures of academic research, none of the entrepreneurs will be asked for their names or any personal information. This questionnaire contains seven sections, with 32 questions in total, in order to collect enough data about the research topic. Most of the questions are multiple-choice, and the time required to finish the questionnaire is from 5 to 19 minutes. If you have any questions, please contact me via the following email:

naeimah.f.almawishir@stu.mmu.ac.uk

Thank you for taking time to participate in this questionnaire.

Naeimah Almawishir

Do you wish to participate?

- Yes
- No

First: Demographic Questions

1. Gender:

- Male
- Female

2. Age:

- 18-24 years
- 25-34 years
- 35-44 years
- 45-54 years
- 55-64 years
- More than 64 years

3. Level of education:

- High school and below
- Diploma
- College
- Master
- PhD

4. Labour market position besides a business owner (please choose only one answer):

- Student
- Employed in the government sector
- Employed in the private sector
- Self-employed

5. Monthly income (please give an answer for individual income, not family income):

- Less than 5000 SR
- SR5000-9999
- SR 10000-14999
- 15000 and higher

6. Why did you start your business?

- To support family
- Institutional support
- Opportunity in the market
- Had no choice, had no job
- Had job, but wanted to increase income
- Other, please specify

Second section: Firm's Characteristics:

7. What is the age of your business?

- From 0-3 years
- From 3 to less than 7 years
- From 7 to less than 11 years
- More than 11 years

8. What is the location of your business?

- North region
- Central region
- South region
- Western region
- Eastern region

9. What is your business sector?

- Trade sector
- Manufacturing sector
- Real estate sector
- Construction and contracting sector
- Tourism, apartments and hotels
- Agriculture sector
- Health services
- Education sector
- Technical sector
- Other, specify

10. On a scale of 1-5, how much do you spend in your business on the following tasks: 1 means too low and 5 means too high.

| Firm's characteristics | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 1. Marketing strategy | | | | | |
| 2. Training strategy | | | | | |
| 3. Competitive strategy | | | | | |
| 4. Research and design | | | | | |
| 5. Adopting new technology or new methods | | | | | |

Third section: Entrepreneurs' characteristics:

6. On a scale of 1-5, how would you describe yourself, where 1 means too low and 5 means too high?

| Entrepreneur's characteristics | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 1. Your need for achievement and success | | | | | |
| 2. Self-confidence and belief in yourself | | | | | |
| 3. Risk-taking, such as making a decision in a turbulent environment with minimal information and an unclear result | | | | | |
| 4. Innovativeness in your business methods, products or services | | | | | |
| 5. Locus of control | | | | | |
| 6. Your experience in the business sector | | | | | |
| 7. Your skill in managing your business | | | | | |

Fourth Section: Resource availability, accessibility and productivity

7. Are the following resources available to you through your friends and relatives?

| Resources | Are they available? | |
|---|---------------------|----|
| | Yes | No |
| Financial resources via personal contacts | | |
| Human resources via personal contacts | | |
| Information and knowledge resources via personal contacts | | |
| Training and education resources via personal contacts | | |

8. Have you accessed the following resources via your personal contacts (family and friends)?

| Resources | Have accessed? | |
|---|----------------|----|
| | Yes | No |
| Financial resources via personal contacts | | |
| Human resources via personal contacts | | |
| Information and knowledge resources via personal contacts | | |
| Training and education resources via personal contacts | | |

9. Are the accessed resources productive (effective), i.e. they help achieve business objectives?

| Resources | Are they effective? | |
|---|---------------------|----|
| | Yes | No |
| Financial resources via personal contacts | | |
| Human resources via personal contacts | | |
| Information and knowledge resources via personal contacts | | |
| Training and education resources via personal contacts | | |

10. Are the following resources available via institutions in the private and government sectors?

| Resources | Are they available? | | | |
|---|---------------------|----|---------|----|
| | Government | | Private | |
| | Yes | No | Yes | No |
| Financial resources on the collective level | | | | |
| Human resources on the collective level | | | | |
| Information and knowledge resources on the collective level | | | | |
| Training and education resources on the collective level | | | | |

11. Have you accessed the following resources via institutions in the government and private sectors?

| Resources | Are they available? | | | |
|---|---------------------|----|---------|----|
| | Government | | Private | |
| | Yes | No | Yes | No |
| Financial resources on the collective level | | | | |
| Human resources on the collective level | | | | |
| Information and knowledge resources on the collective level | | | | |
| Training and education resources on the collective level | | | | |

12. Are the accessed resources productive (effective), i.e. they helped achieve your business objectives?

| Resources | Are they available? | | | |
|---|---------------------|----|---------|----|
| | Government | | Private | |
| | Yes | No | Yes | No |
| Financial resources on the collective level | | | | |
| Human resources on the collective level | | | | |
| Information and knowledge resources on the collective level | | | | |
| Training and education resources on the collective level | | | | |

Fifth section: Social networks of entrepreneurs:

13. How many personal contacts from your family and friends group support your business by helping you access the following resources?

| Resources | Contact numbers |
|-------------------------------------|-----------------|
| Financial resources | |
| Human resources | |
| Information and knowledge resources | |
| Training and education resources | |

14. How many institutions in the private and government sectors help you access the following resources?

| Resources | Institutions number | | | |
|-------------------------------------|---------------------|--|---------|--|
| | Government | | Private | |
| Financial resources | | | | |
| Human resources | | | | |
| Information and knowledge resources | | | | |
| Training and education resources | | | | |

15. How frequently do you get in touch with your personal contacts, family and friends, to access the following resources?

| Resources | Never | Occasionally | Sometimes | Often | Always |
|-------------------------------------|-------|--------------|-----------|-------|--------|
| Financial resources | | | | | |
| Human resources | | | | | |
| Information and knowledge resources | | | | | |
| Training and education resources | | | | | |

16. How frequently do you get in touch with institutions in the government sector to access the following resources?

| Resources | Never | Occasionally | Sometimes | Often | Always |
|-------------------------------------|-------|--------------|-----------|-------|--------|
| Financial resources | | | | | |
| Human resources | | | | | |
| Information and knowledge resources | | | | | |
| Training and education resources | | | | | |

17. How frequently do you get in touch with institutions in the private sector to access the following resources?

| Resources | Never | Occasionally | Sometimes | Often | Always |
|-------------------------------------|-------|--------------|-----------|-------|--------|
| Financial resources | | | | | |
| Human resources | | | | | |
| Information and knowledge resources | | | | | |
| Training and education resources | | | | | |

18. Are you aware of institutional support in the government sector to support SMEs in Saudi Arabia?

- Yes
- No

19. Do you consider your business is supported? And why?

- Yes
- No

Reason:

20. Are you aware of institutional support in the private sector to help SMEs in Saudi Arabia?

- Yes
- No

21. Do you consider your business is supported? And why?

- Yes
- No

Reason:

22. On a scale of 1-5, how much do you rely on your personal contacts (family and friends) to access the following resources?

| Resources | 1 | 2 | 3 | 4 | 5 |
|-------------------------------------|---|---|---|---|---|
| Financial resources | | | | | |
| Human resources | | | | | |
| Information and knowledge resources | | | | | |
| Training and education resources | | | | | |

23. On a scale of 1-5, how much do you rely on institutions in the government sector to access the following resources?

| Resources | 1 | 2 | 3 | 4 | 5 |
|-------------------------------------|----------|----------|----------|----------|----------|
| Financial resources | | | | | |
| Human resources | | | | | |
| Information and knowledge resources | | | | | |
| Training and education resources | | | | | |

24. On a scale of 1-5, how much do you rely on the institutions in the private sector to access the following resources?

| Resources | 1 | 2 | 3 | 4 | 5 |
|-------------------------------------|----------|----------|----------|----------|----------|
| Financial resources | | | | | |
| Human resources | | | | | |
| Information and knowledge resources | | | | | |
| Training and education resources | | | | | |

Sixth Section: SME Growth

25. What was the level of employment in your business when you started your business and now?

| | | | | |
|-------------------------------------|--------------------|---------------------|-----------------------|-------------------------|
| When you start your business | From 1-5 employees | From 6-49 employees | From 50-249 employees | More than 249 employees |
| Now | From 1-5 employees | From 6-49 employees | From 50-249 employees | More than 249 employees |

26. What was the level of annual revenues when you started your business and now?

| | | | | |
|-------------------------------------|----------------|-----------------|-------------------|--------------------------|
| When you start your business | 0-3 million SR | 3-40 million SR | 40-200 million SR | More than 200 Million SR |
| Now | 0-3 million SR | 3-40 million SR | 40-200 million SR | More than 200 Million SR |

27. What is the influence of the following factors on your business growth?

| Firm external factors | Significant negative | Slightly negative | No influence | Slightly Positive | Significant positive |
|---|----------------------|-------------------|--------------|-------------------|----------------------|
| Political situation | | | | | |
| How do the economic situation influence your business growth? | | | | | |
| How do legal matters regarding your business and employment regulations influence your business growth? | | | | | |
| How does the local culture influence your business growth? | | | | | |
| How does technology influence your business growth? | | | | | |

Appendix (6) Questionnaire in the Arabic Language

دور الدعم المؤسسي، إلى جانب عوامل أخرى، في التأثير على نمو المشاريع الصغيرة ومتوسطة الحجم SME في السعودية

السلام عليكم ورحمة الله وبركاته

هذا الاستبيان جزء رئيسي من أطروحة دكتوراه في ريادة الأعمال حول موضوع دور الشبكات الاجتماعية لرواد الأعمال (على المستوى الفردي والمؤسسي) في تحقيق نمو المشاريع الصغيرة ومتوسطة الحجم في السعودية. الفئة المستهدفة لهذا البحث هم رواد الأعمال في السعودية.

سيتم استخدام المعلومات والإجابات لأغراض البحث العلمي الخاصة بالأطروحة، ولضمان سرية المعلومات ومنح المجال للمشارك للإجابة بكل أريحية، فالاستبيان لا يتضمن أية معلومات حول اسم وعنوان المشارك. الاستبيان يتكون من 7 أقسام 32 سؤال وذلك بغرض جمع معلومات وافية تساهم في تقديم دراسة مفيدة

للمشارك حرية الإجابة والمشاركة وأتمنى من الجميع التجاوب والمساعدة وإكمال الاستبيان

معظم أسئلة الاستبيان تطرح خيارات متعددة للإجابة

مدة الإجابة المتوقعة للاستبيان هي من 5 إلى 10 دقائق

إذا كانت هنالك أية أسئلة أو استفسارات فالرجاء التواصل مباشرة على البريد الإلكتروني التالي

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شكرا جزيلا لكم جميعا على المشاركة وأطيب الأمنيات للجميع بالتوفيق

هل تود المشاركة في هذه الاستبانة؟

○ نعم

○ لا

أولاً: الأسئلة الديموغرافية

١. الجنس:

- أنثى
- ذكر

٢. العمر:

- ١٨ - ٢٤ سنة
- ٢٥ - ٣٤ سنة
- ٣٥ - ٤٤ سنة
- ٤٥ - ٥٤ سنة
- ٥٥ - ٦٤ سنة
- أكثر من ٦٤ سنة

٣. المستوى التعليمي:

- ثانوية أو أقل من ذلك
- دبلوم
- بكالوريوس
- ماجستير
- دكتوراه

٤. إلى جانب امتلاكك للمشروع، ما هو وضعك الحالي في سوق العمل؟

- طالب
- موظف في القطاع الحكومي
- موظف في القطاع الخاص
- متفرغ لإدارة مشروع

٥. مستوى الدخل الشهري الخاص بك وليس العائلي:

- أقل من ٥٠٠٠ ريال سعودي
- ٥٠٠٠ - ٩٩٩٩ ريال سعودي
- ١٠٠٠٠ - ١٤٩٩٩ ريال سعودي
- ١٥٠٠٠ وما فوق

٦. ما هو السبب الذي دفعك للبدء بالمشروع التجاري؟

- لدي دعم من العائلة
- توفر الدعم المؤسسي
- تواجد فرصة في السوق
- ليس لدي خيار، لا امتلك وظيفة
- لدي وظيفة، لكن أرغب بزيادة دخلي

ثانياً: سمات المشروع

٧. كم يبلغ عمر المشروع؟

- من ٠ - ٣ سنوات
- من ٣ إلى أقل من ٧ سنوات
- من ٧ إلى أقل من ١١ سنة
- أكثر من ١١ سنة

٨. في أي منطقة يقع مشروعك؟

- المنطقة الشمالية
- المنطقة الوسطى
- المنطقة الغربية
- المنطقة الشرقية
- المنطقة الجنوبية

٩. ما هو قطاع مشروعك؟

- القطاع التجاري
- القطاع الصناعي
- القطاع العقاري
- قطاع البناء والتشييد
- قطاع السياحة، الشقق والفنادق
- القطاع الزراعي
- القطاع الصحي
- قطاع التعليم
- القطاع التقني
- أخرى، الرجاء التحديد

١٠. بمعدل من ١ إلى ٥، ما هو مقدار أهمية الاستراتيجيات التالية بالمشروع من ناحية التكلفة والوقت والجهد المبذول تجاهها، حيث ١ يعني أهمية منخفضة، و٥ تعني أهمية عالية جداً.

| سمات المشروع | ١ | ٢ | ٣ | ٤ | ٥ |
|---|---|---|---|---|---|
| استراتيجية التسويق للمشروع | | | | | |
| استراتيجية التدريب في المشروع | | | | | |
| الاستراتيجية التنافسية للمشروع | | | | | |
| استراتيجية البحث والتصميم في المشروع | | | | | |
| استراتيجية تبني تقنية وتكنولوجيا جديدة في المشروع | | | | | |

ثالثاً: سمات راند الأعمال:

١١. بمعدل من ١ إلى ٥، كيف يمكن تقييم نفسك في الصفات التالية، حيث ١ تعني صفة منخفضة و٥ تعني عالية.

| سمات المشروع | ١ | ٢ | ٣ | ٤ | ٥ |
|---|---|---|---|---|---|
| الرغبة والحاجة للنجاح والإنجاز | | | | | |
| ثقتك وإيمانك بنفسك | | | | | |
| القدرة على المخاطرة، مثل اتخاذ القرارات بأقل المعلومات وظروف بيئية صعبة | | | | | |
| الإبداع والابتكار في المشروع من ناحية المنتجات، الخدمات وطرق التوزيع | | | | | |
| القدرة على تحمل المسؤولية | | | | | |
| لخبرة بالمجال والأعمال | | | | | |
| مهارات متعلقة بإدارة المشروع | | | | | |

رابعاً: توفر الموارد، الوصول لها، وفعاليتها:

١٢. هل الموارد التالية متوفرة لك عن طريق العائلة والأصدقاء؟

| هل هي متوفرة | | الموارد |
|--------------|-----|--------------------|
| لا | نعم | |
| | | موارد مالية |
| | | موارد بشرية |
| | | معلومات ومعرفة |
| | | موارد تدريب وتعليم |

١٣. هل وصلت للموارد التالية عن طريق العائلة والأصدقاء؟

| هل وصلت | | الموارد |
|---------|-----|--------------------|
| لا | نعم | |
| | | موارد مالية |
| | | موارد بشرية |
| | | معلومات ومعرفة |
| | | موارد تدريب وتعليم |

١٤. هل أي من الموارد التي تم الوصول إليها عن طريق العائلة والأصدقاء فعالة، بمعنى هل ساهمت في تحقيق الأهداف المرجو منها بالمشروع؟

| هل هي فعالة | | الموارد |
|-------------|-----|--------------------|
| لا | نعم | |
| | | موارد مالية |
| | | موارد بشرية |
| | | معلومات ومعرفة |
| | | موارد تدريب وتعليم |

١٥. هل الموارد التالية متوفرة لك عن طريق المؤسسات في القطاع الخاص والحكومي؟

| القطاع الحكومي | | القطاع الحكومي | | الموارد |
|----------------|-----|----------------|-----|--------------------|
| لا | نعم | لا | نعم | |
| | | | | موارد مالية |
| | | | | موارد بشرية |
| | | | | معلومات ومعرفة |
| | | | | موارد تدريب وتعليم |

١٦. هل وصلت للموارد التالية عن طريق المؤسسات في القطاع الخاص والحكومي؟

| القطاع الحكومي | | القطاع الحكومي | | الموارد |
|----------------|-----|----------------|-----|--------------------|
| لا | نعم | لا | نعم | |
| | | | | موارد مالية |
| | | | | موارد بشرية |
| | | | | معلومات ومعرفة |
| | | | | موارد تدريب وتعليم |

١٧. هل أي من الموارد التي تم الوصول إليها عن طريق المؤسسات في القطاع الحكومي والخاص فعالة، بمعنى هل ساهمت في تحقيق الأهداف المرجو منها بالمشروع؟

| القطاع الحكومي | | القطاع الحكومي | | الموارد |
|----------------|-----|----------------|-----|--------------------|
| لا | نعم | لا | نعم | |
| | | | | موارد مالية |
| | | | | موارد بشرية |
| | | | | معلومات ومعرفة |
| | | | | موارد تدريب وتعليم |

خامساً: الشبكات الاجتماعية لرواد الأعمال:

١٨. كم عدد الأشخاص من عائلتك وأصدقائك المقربين يمكنك الرجوع إليهم للوصول للموارد التالية؟

| عدد جهات الاتصال | الموارد |
|------------------|--------------------|
| | موارد مالية |
| | موارد بشرية |
| | معلومات ومعرفة |
| | موارد تدريب وتعليم |

١٩. كم عدد المؤسسات في القطاع الحكومي والخاص التي يمكن الرجوع إليها للحصول على الموارد التالية؟

| عدد جهات الاتصال | | الموارد |
|------------------|----------------|--------------------|
| القطاع الخاص | القطاع الحكومي | |
| | | موارد مالية |
| | | موارد بشرية |
| | | معلومات ومعرفة |
| | | موارد تدريب وتعليم |

٢٠. كم يبلغ معدل تواصلك مع جهات الاتصال من المقربين (العائلة والأصدقاء) للحصول على الموارد التالية؟

| الموارد | لا يوجد اتصال | نادراً | أحياناً | غالباً | دائماً |
|--------------------|---------------|--------|---------|--------|--------|
| موارد مالية | | | | | |
| موارد بشرية | | | | | |
| معلومات ومعرفة | | | | | |
| موارد تدريب وتعليم | | | | | |

٢١. كم يبلغ معدل تواصلك مع مؤسسات القطاع الحكومي للحصول على الموارد التالية؟

| الموارد | لا يوجد اتصال | نادراً | أحياناً | غالباً | دائماً |
|--------------------|---------------|--------|---------|--------|--------|
| موارد مالية | | | | | |
| موارد بشرية | | | | | |
| معلومات ومعرفة | | | | | |
| موارد تدريب وتعليم | | | | | |

٢٢. كم يبلغ معدل تواصلك مع مؤسسات القطاع الخاص للحصول على الموارد التالية؟

| الموارد | لا يوجد اتصال | نادراً | أحياناً | غالباً | دائماً |
|--------------------|---------------|--------|---------|--------|--------|
| موارد مالية | | | | | |
| موارد بشرية | | | | | |
| معلومات ومعرفة | | | | | |
| موارد تدريب وتعليم | | | | | |

٢٣. هل أنت على علم بالدعم المؤسسي للمشاريع الصغيرة ومتوسطة الحجم في القطاع الحكومي؟

- نعم
 لا

٢٤. هل من الممكن أن تحصل على الدعم المؤسسي لمشروعك من قبل المؤسسات في القطاع الحكومي؟
ولماذا؟

- نعم
 لا

السبب:

٢٥. هل أنت على علم بالدعم المؤسسي للمشاريع الصغيرة ومتوسطة الحجم في القطاع الخاص؟

- نعم
 لا

٢٦. هل من الممكن أن تحصل على الدعم المؤسسي لمشروعك من قبل المؤسسات في القطاع الخاص؟
ولماذا؟

- نعم
 لا

السبب:

٢٧. بمعدل من ١-٥، ما هو درجة اعتمادك على الدعم المقدم من العائلة والأصدقاء من خلال تسهيل الوصول للموارد التالية؟ حيث ١ يعني اعتماد منخفض جداً، و٥ تعني اعتماد عالي جداً.

| الموارد | ١ | ٢ | ٣ | ٤ | ٥ |
|--------------------|---|---|---|---|---|
| موارد مالية | | | | | |
| موارد بشرية | | | | | |
| معلومات ومعرفة | | | | | |
| موارد تدريب وتعليم | | | | | |

٢٨. بمعدل من ١-٥، ما هو درجة اعتمادك على الدعم المقدم من مؤسسات القطاع الحكومي من خلال تسهيل الوصول للموارد التالية؟ حيث ١ يعني اعتماد منخفض جداً، و٥ تعني اعتماد عالي جداً.

| الموارد | ١ | ٢ | ٣ | ٤ | ٥ |
|--------------------|---|---|---|---|---|
| موارد مالية | | | | | |
| موارد بشرية | | | | | |
| معلومات ومعرفة | | | | | |
| موارد تدريب وتعليم | | | | | |

٢٩. بمعدل من ١-٥، ما هو درجة اعتمادك على الدعم المقدم من المؤسسات في القطاع الخاص من خلال تسهيل الوصول للموارد التالية؟ حيث ١ يعني اعتماد منخفض جداً، و٥ تعني اعتماد عالي جداً.

| الموارد | ١ | ٢ | ٣ | ٤ | ٥ |
|--------------------|---|---|---|---|---|
| موارد مالية | | | | | |
| موارد بشرية | | | | | |
| معلومات ومعرفة | | | | | |
| موارد تدريب وتعليم | | | | | |

سادساً: نمو المشاريع الصغيرة ومتوسطة الحجم:

٣٠. ما هو مستوى التوظيف في مشروعك عند البدء بالمشروع التجاري، وكم يبلغ الآن؟

| بداية عمر المشروع | ١- ٥ موظفين | ٦ - ٤٩ موظفين | ٥٠ - ٢٤٩ موظف | أكثر من ٢٤٩ موظف |
|-------------------|-------------|---------------|---------------|------------------|
| الآن | ١- ٥ موظفين | ٦ - ٤٩ موظفين | ٥٠ - ٢٤٩ موظف | أكثر من ٢٤٩ موظف |

٣١. ما هو مستوى العوائد السنوية في مشروعك عند البدء بالمشروع التجاري، وكم يبلغ الآن؟

| بداية عمر المشروع | ٠ - ٣ مليون ريال سعودي | ٣ - ٤٠ مليون ريال سعودي | ٤٠ - ٢٠٠ مليون ريال سعودي | أكثر من ٢٠٠ ريال سعودي |
|-------------------|------------------------|-------------------------|---------------------------|------------------------|
| الآن | ٠ - ٣ مليون ريال سعودي | ٣ - ٤٠ مليون ريال سعودي | ٤٠ - ٢٠٠ مليون ريال سعودي | أكثر من ٢٠٠ ريال سعودي |

٣٢. ما هو أثر العوامل الخارجية على نمو مشروعك؟

| العوامل الخارجية | أثر سلبي كبير | أثر سلبي بسيط | لا يوجد أثر | أثر إيجابي بسيط | أثر إيجابي كبير |
|---|---------------|---------------|-------------|-----------------|-----------------|
| ١. ما هو أثر الأوضاع السياسية على نمو مشروعك التجاري؟ | | | | | |
| ٢. ما هو أثر الأوضاع الاقتصادية على نمو مشروعك التجاري؟ | | | | | |
| ٣. ما هو أثر الأوضاع والإجراءات القانونية على نمو مشروعك التجاري؟ | | | | | |
| ٤. ما هو أثر الثقافة المحلية على نمو مشروعك التجاري؟ | | | | | |
| ٥. ما هو أثر التكنولوجيا على نمو مشروعك التجاري؟ | | | | | |

Appendix (7) Outputs for the descriptive and normality tests of all variables

Case Processing Summary

| | Valid | | Missing | | Total | |
|--|-------|---------|---------|---------|-------|---------|
| | N | Percent | N | Percent | N | Percent |
| Total Network Size (government institutions) | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |
| Total Network size (Private institutions) | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |

Descriptive

| | | Statistic | Std. Error | |
|--|----------------------------------|-------------|------------|--|
| Total Network Size (government institutions) | Mean | 5.9357 | .44134 | |
| | 95% Confidence Interval for Mean | Lower Bound | 5.0631 | |
| | | Upper Bound | 6.8083 | |
| | 5% Trimmed Mean | 5.6905 | | |
| | Median | 5.0000 | | |
| | Variance | 27.269 | | |
| | Std. Deviation | 5.22199 | | |
| | Minimum | .00 | | |
| | Maximum | 17.00 | | |
| | Range | 17.00 | | |
| | Interquartile Range | 9.00 | | |
| | Skewness | .417 | .205 | |
| | Kurtosis | -1.042 | .407 | |
| Total Network size (Private institutions) | Mean | 8.6643 | .73599 | |
| | 95% Confidence Interval for Mean | Lower Bound | 7.2091 | |
| | | Upper Bound | 10.1195 | |
| | 5% Trimmed Mean | 8.0238 | | |
| | Median | 6.5000 | | |
| | Variance | 75.836 | | |
| | Std. Deviation | 8.70839 | | |
| | Minimum | .00 | | |
| | Maximum | 36.00 | | |
| | Range | 36.00 | | |
| | Interquartile Range | 14.00 | | |
| | Skewness | .858 | .205 | |
| | Kurtosis | .023 | .407 | |

Extreme Values

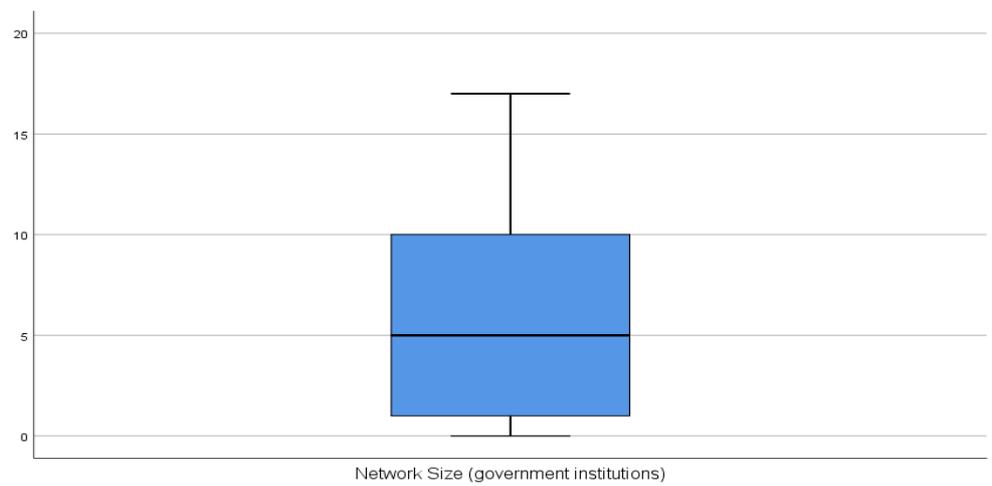
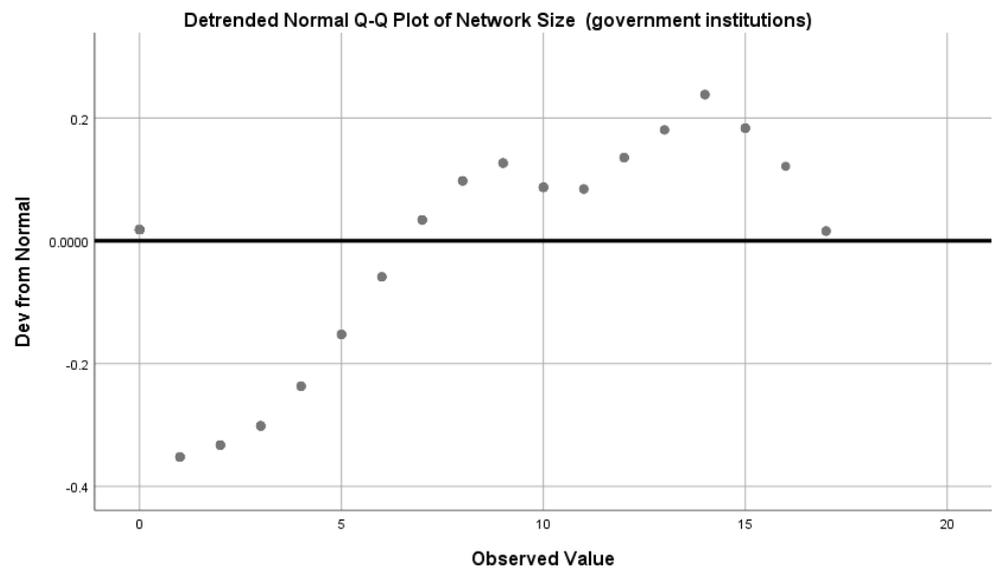
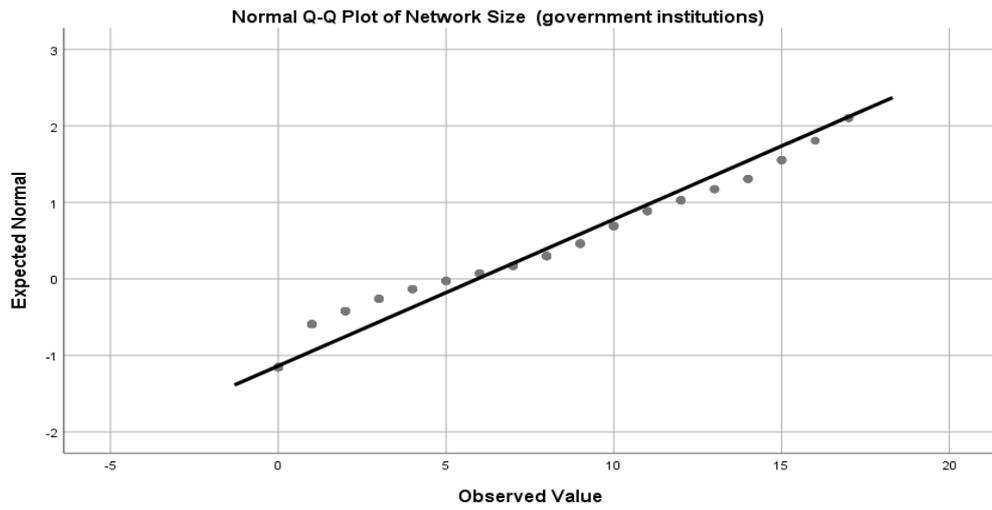
| | | | Case Number | Value |
|--|---------|---|-------------|------------------|
| Total Network Size (government institutions) | Highest | 1 | 81 | 17.00 |
| | | 2 | 104 | 17.00 |
| | | 3 | 105 | 17.00 |
| | | 4 | 113 | 17.00 |
| | | 5 | 87 | 16.00 |
| | Lowest | 1 | 140 | .00 |
| | | 2 | 139 | .00 |
| | | 3 | 138 | .00 |
| | | 4 | 136 | .00 |
| | | 5 | 135 | .00 ^a |
| Total Network size (Private institutions) | Highest | 1 | 69 | 36.00 |
| | | 2 | 81 | 35.00 |
| | | 3 | 34 | 33.00 |
| | | 4 | 85 | 25.00 |
| | | 5 | 89 | 25.00 |
| | Lowest | 1 | 138 | .00 |
| | | 2 | 136 | .00 |
| | | 3 | 135 | .00 |
| | | 4 | 133 | .00 |
| | | 5 | 127 | .00 ^a |

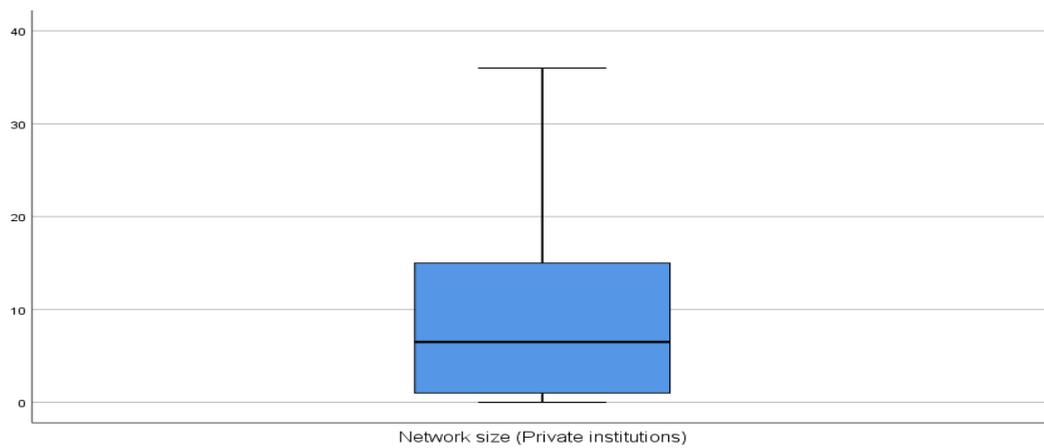
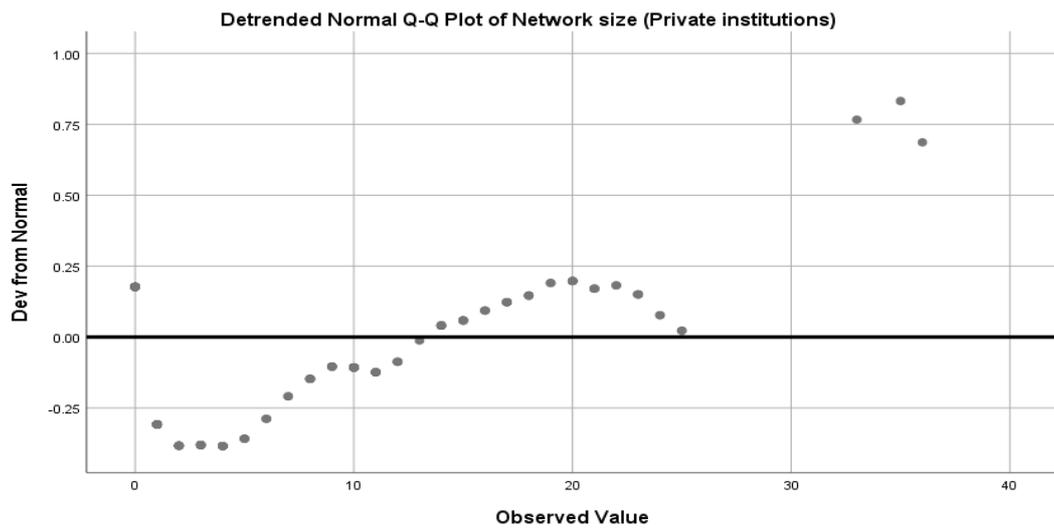
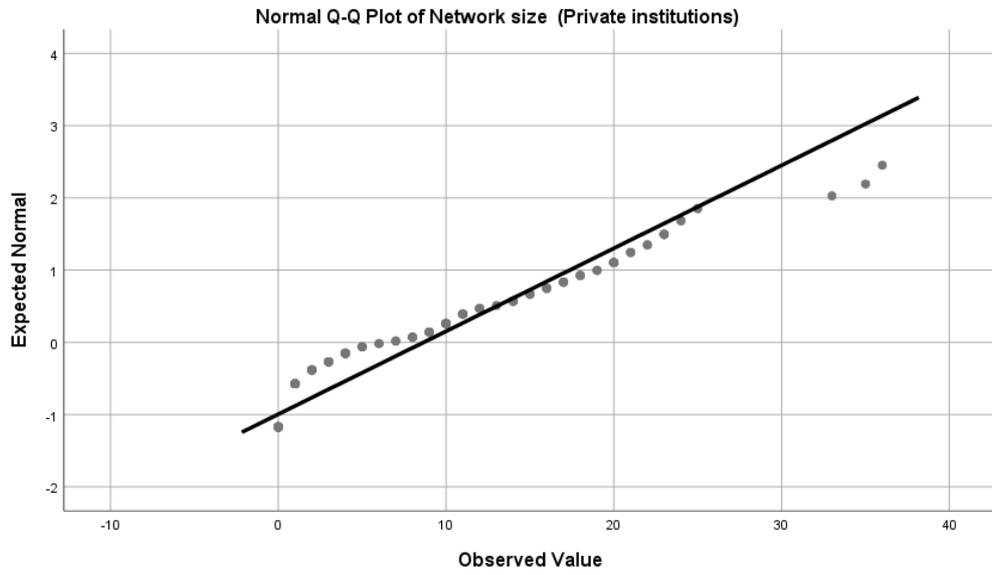
a. Only a partial list of cases with the value .00 is shown in the table of lower extremes.

Tests of Normality

| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|--|---------------------------------|-----|------|--------------|-----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Total Network Size (government institutions) | .142 | 140 | .000 | .903 | 140 | .000 |
| Total Network size (Private institutions) | .168 | 140 | .000 | .877 | 140 | .000 |

a. Lilliefors Significance Correction





Case Processing Summary

| | Valid | | Cases Missing | | Total | |
|---|-------|---------|---------------|---------|-------|---------|
| | N | Percent | N | Percent | N | Percent |
| Network Density (government institutions) | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |
| Network Density (private institutions) | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |

Descriptive

| | | Statistic | Std. Error | |
|--|----------------------------------|-------------|------------|--|
| Network Density (government institutions) | Mean | 1.2872 | .10991 | |
| | 95% Confidence Interval for Mean | Lower Bound | 1.0698 | |
| | | Upper Bound | 1.5045 | |
| | 5% Trimmed Mean | 1.1603 | | |
| | Median | 1.0000 | | |
| | Variance | 1.691 | | |
| | Std. Deviation | 1.30046 | | |
| | Minimum | .00 | | |
| | Maximum | 5.00 | | |
| | Range | 5.00 | | |
| | Interquartile Range | 1.76 | | |
| | Skewness | 1.291 | .205 | |
| | Kurtosis | 1.244 | .407 | |
| Network Density (private institutions) | Mean | 1.2136 | .12947 | |
| | 95% Confidence Interval for Mean | Lower Bound | .9576 | |
| | | Upper Bound | 1.4696 | |
| | 5% Trimmed Mean | 1.0707 | | |
| | Median | .6812 | | |
| | Variance | 2.347 | | |
| | Std. Deviation | 1.53189 | | |
| | Minimum | .00 | | |
| | Maximum | 5.00 | | |
| | Range | 5.00 | | |
| | Interquartile Range | 1.22 | | |
| | Skewness | 1.567 | .205 | |
| | Kurtosis | 1.223 | .407 | |

Extreme Values

| | | Case Number | | Value |
|---|---------|-------------|-----|-------------------|
| Network Density Average on the collective level (government institutions) | Highest | 1 | 10 | 5.00 |
| | | 2 | 43 | 5.00 |
| | | 3 | 56 | 5.00 |
| | | 4 | 64 | 5.00 |
| | | 5 | 123 | 5.00 ^a |
| | Lowest | 1 | 140 | .00 |
| | | 2 | 139 | .00 |
| | | 3 | 138 | .00 |
| | | 4 | 136 | .00 |
| | | 5 | 135 | .00 ^b |
| Network Density on the collective level (private institutions) | Highest | 1 | 7 | 5.00 |
| | | 2 | 10 | 5.00 |
| | | 3 | 37 | 5.00 |
| | | 4 | 46 | 5.00 |
| | | 5 | 58 | 5.00 ^a |
| | Lowest | 1 | 138 | .00 |
| | | 2 | 136 | .00 |
| | | 3 | 135 | .00 |
| | | 4 | 133 | .00 |
| | | 5 | 127 | .00 ^b |

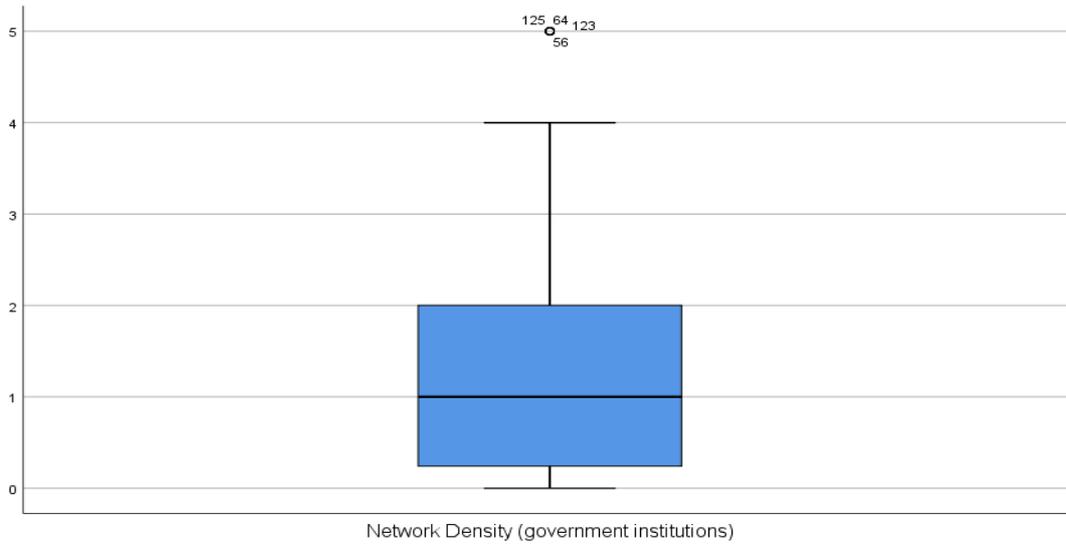
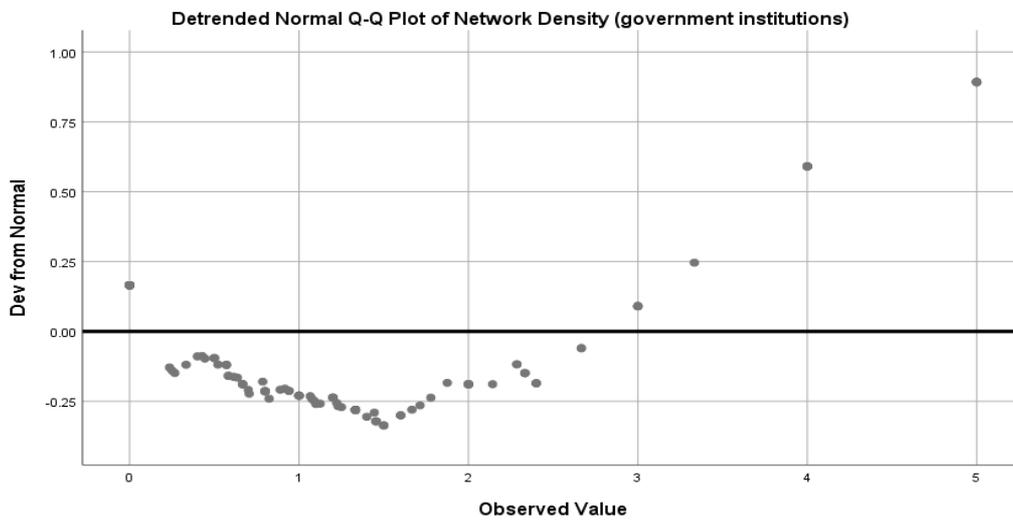
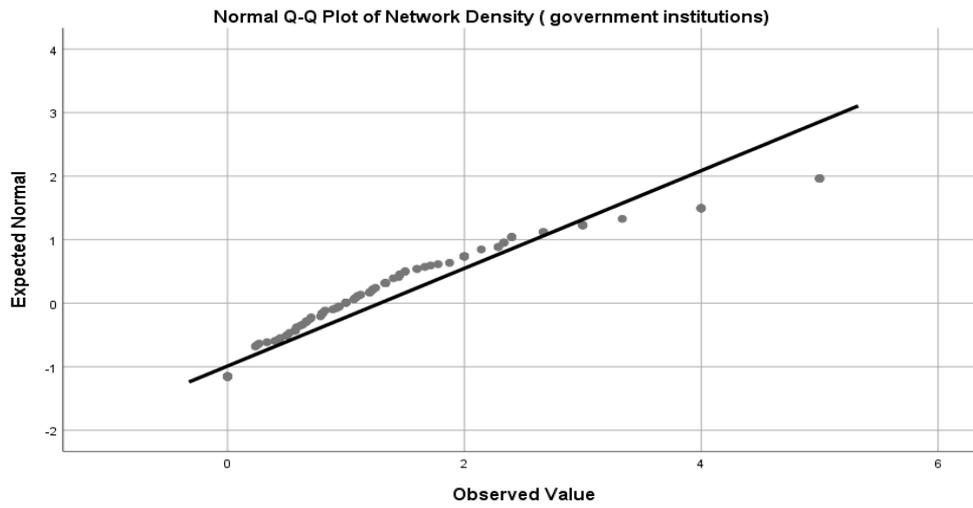
a. Only a partial list of cases with the value 5.00 is shown in the table of upper extremes.

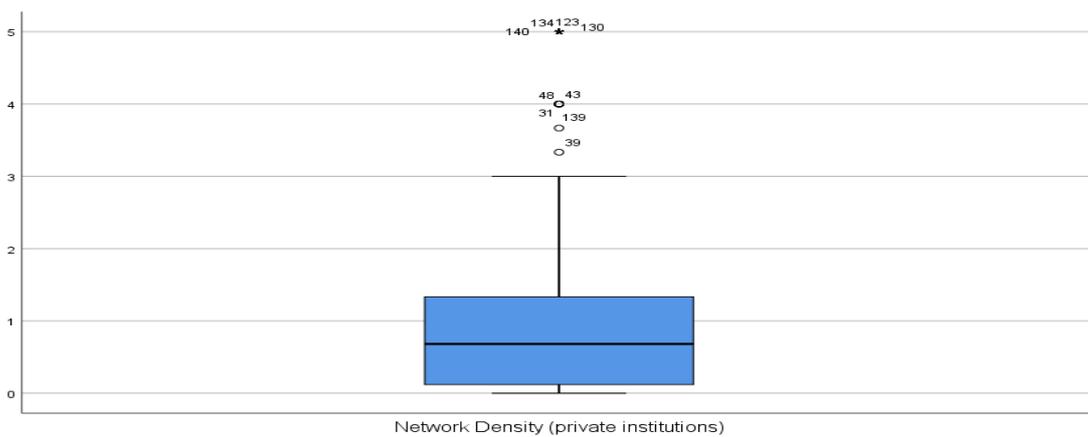
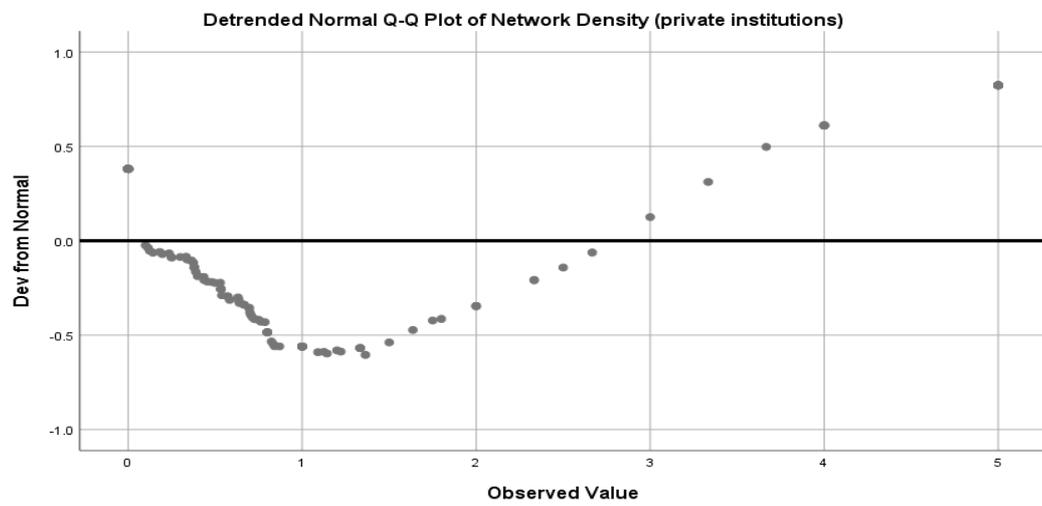
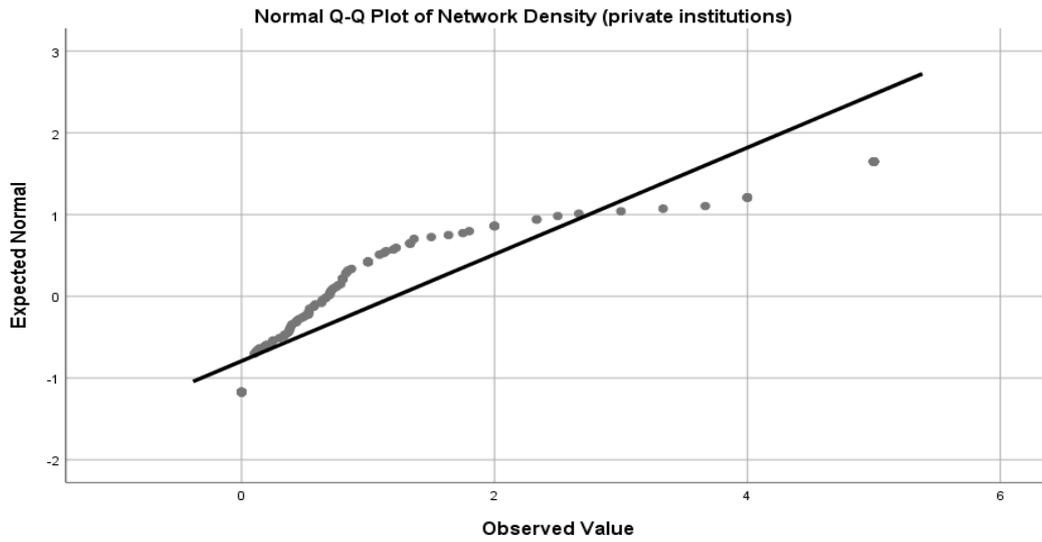
b. Only a partial list of cases with the value .00 is shown in the table of lower extremes.

Tests of Normality

| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|---|---------------------------------|-----|------|--------------|-----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Network Density (government institutions) | .161 | 140 | .000 | .852 | 140 | .000 |
| Network Density (private institutions) | .248 | 140 | .000 | .734 | 140 | .000 |

a. Lilliefors Significance Correction





Case Processing Summary

| | Cases | | | | | |
|---|-------|---------|---------|---------|-------|---------|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Resource access via government institutions | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |
| Resource access via private institutions | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |

Descriptive

| | | Statistic | Std. Error | |
|---|--|-------------|------------|--------|
| Resource access via government institutions | Mean | 1.3786 | .13158 | |
| | 95% Confidence Interval for Mean | Lower Bound | 1.1184 | |
| | | Upper Bound | 1.6387 | |
| | 5% Trimmed Mean | 1.3095 | | |
| | Median | 1.0000 | | |
| | Variance | 2.424 | | |
| | Std. Deviation | 1.55692 | | |
| | Minimum | .00 | | |
| | Maximum | 4.00 | | |
| | Range | 4.00 | | |
| | Interquartile Range | 3.00 | | |
| | Skewness | .682 | .205 | |
| | Kurtosis | -1.104 | .407 | |
| | Resource access via private institutions | Mean | 1.6286 | .11618 |
| 95% Confidence Interval for Mean | | Lower Bound | 1.3989 | |
| | | Upper Bound | 1.8583 | |
| 5% Trimmed Mean | | 1.5873 | | |
| Median | | 1.0000 | | |
| Variance | | 1.890 | | |
| Std. Deviation | | 1.37471 | | |
| Minimum | | .00 | | |
| Maximum | | 4.00 | | |
| Range | | 4.00 | | |
| Interquartile Range | | 2.00 | | |
| Skewness | | .528 | .205 | |
| Kurtosis | | -.935 | .407 | |

Extreme Values

| | | Case Number | | Value |
|---|---------|-------------|-----|-------------------|
| Resource access via government institutions | Highest | 1 | 4 | 4.00 |
| | | 2 | 12 | 4.00 |
| | | 3 | 48 | 4.00 |
| | | 4 | 65 | 4.00 |
| | | 5 | 69 | 4.00 ^a |
| | Lowest | 1 | 140 | .00 |
| | | 2 | 139 | .00 |
| | | 3 | 138 | .00 |
| | | 4 | 136 | .00 |
| | | 5 | 134 | .00 ^b |
| Resource access via private institutions | Highest | 1 | 1 | 4.00 |
| | | 2 | 12 | 4.00 |
| | | 3 | 13 | 4.00 |
| | | 4 | 18 | 4.00 |
| | | 5 | 27 | 4.00 ^a |
| | Lowest | 1 | 138 | .00 |
| | | 2 | 136 | .00 |
| | | 3 | 135 | .00 |
| | | 4 | 133 | .00 |
| | | 5 | 132 | .00 ^b |

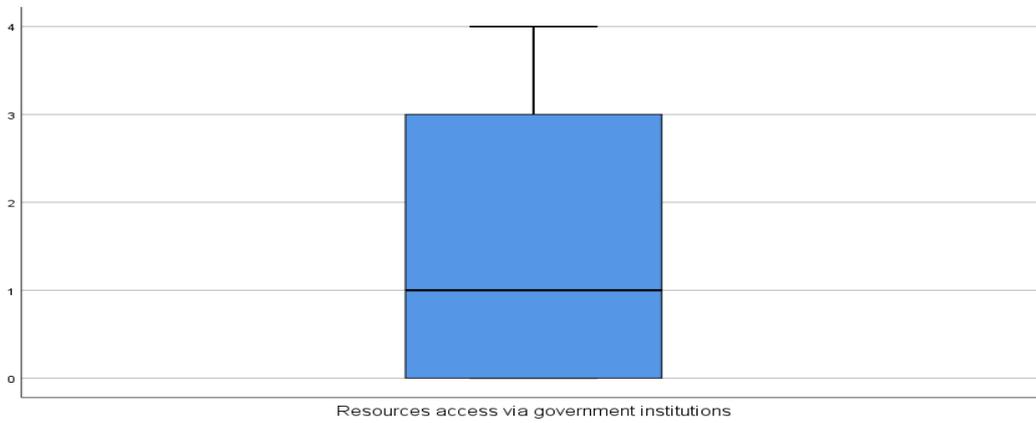
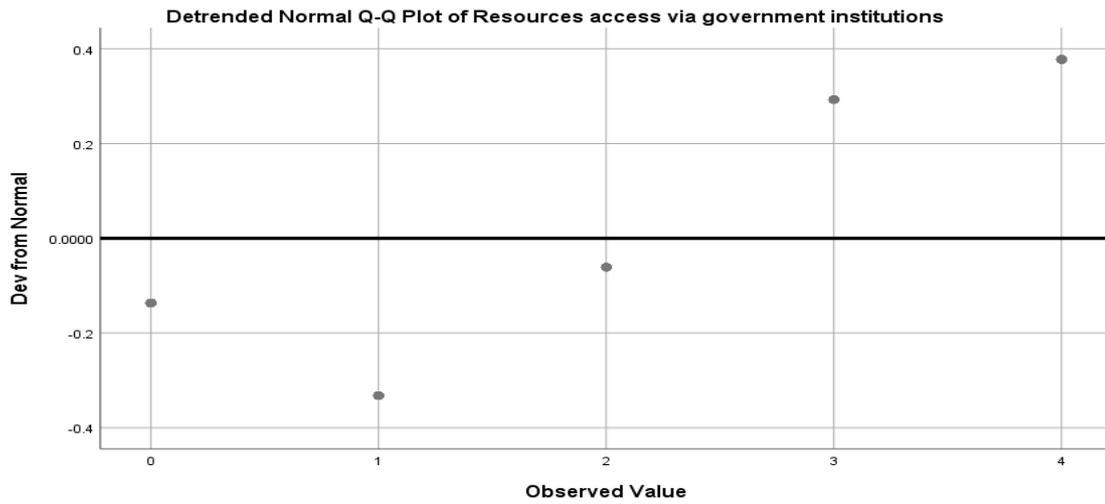
a. Only a partial list of cases with the value 4.00 is shown in the table of upper extremes.

b. Only a partial list of cases with the value .00 is shown in the table of lower extremes.

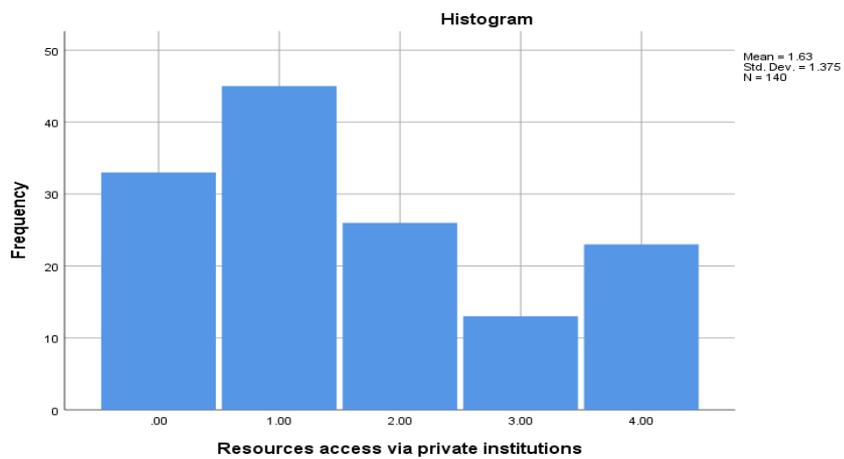
Tests of Normality

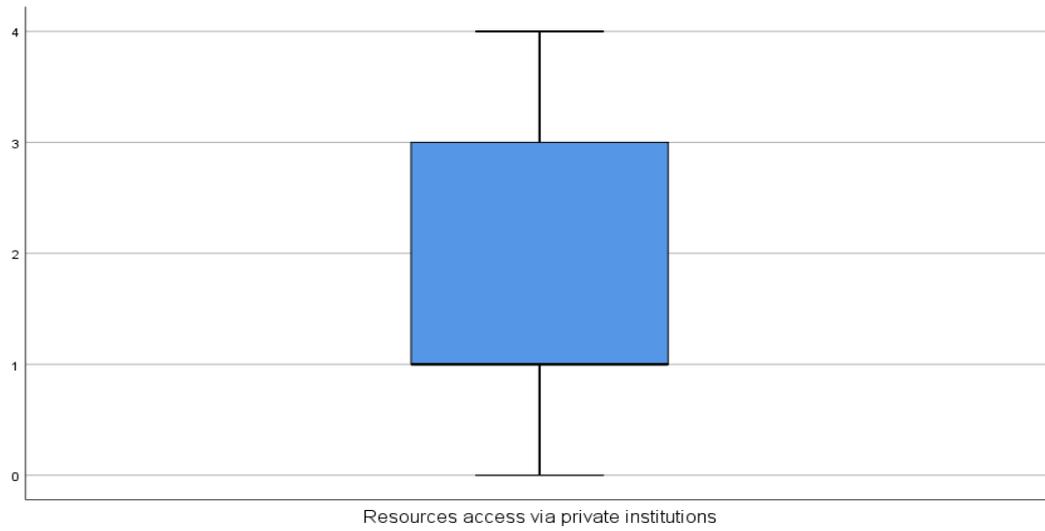
| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|---|---------------------------------|-----|------|--------------|-----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Resource access via government institutions | .262 | 140 | .000 | .780 | 140 | .000 |
| Resource access via private institutions | .233 | 140 | .000 | .863 | 140 | .000 |

a. Lilliefors Significance Correction



Resource access via private institutions





Case Processing Summary

| | Valid | | Cases Missing | | Total | |
|---|-------|---------|---------------|---------|-------|---------|
| | N | Percent | N | Percent | N | Percent |
| Resource availability via government institutions | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |
| Resource availability via private institutions | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |

Descriptive

| | | Statistic | Std. Error |
|--|---|-------------|------------|
| Resource availability via government institutions | Mean | 2.3857 | .12807 |
| | 95% Confidence Interval for Mean | Lower Bound | 2.1325 |
| | | Upper Bound | 2.6389 |
| | 5% Trimmed Mean | 2.4286 | |
| | Median | 3.0000 | |
| | Variance | 2.296 | |
| | Std. Deviation | 1.51532 | |
| | Minimum | .00 | |
| | Maximum | 4.00 | |
| | Range | 4.00 | |
| | Interquartile Range | 3.00 | |
| | Skewness | -.301 | .205 |
| | Kurtosis | -1.412 | .407 |
| | Resource availability via private institutions | Mean | 2.5643 |
| 95% Confidence Interval for Mean | | Lower Bound | 2.3106 |
| | | Upper Bound | 2.8180 |
| 5% Trimmed Mean | | 2.6270 | |
| Median | | 3.0000 | |
| Variance | | 2.305 | |
| Std. Deviation | | 1.51829 | |
| Minimum | | .00 | |
| Maximum | | 4.00 | |
| Range | | 4.00 | |
| Interquartile Range | | 3.00 | |
| Skewness | | -.543 | .205 |
| Kurtosis | | -1.213 | .407 |

Extreme Values

| | | Case Number | | Value |
|---|---------|-------------|-----|-------------------|
| Resource availability via government institutions | Highest | 1 | 4 | 4.00 |
| | | 2 | 9 | 4.00 |
| | | 3 | 11 | 4.00 |
| | | 4 | 12 | 4.00 |
| | | 5 | 29 | 4.00 ^a |
| | Lowest | 1 | 140 | .00 |
| | | 2 | 139 | .00 |
| | | 3 | 138 | .00 |
| | | 4 | 136 | .00 |
| | | 5 | 134 | .00 ^b |
| Resource availability via private institutions | Highest | 1 | 1 | 4.00 |
| | | 2 | 6 | 4.00 |
| | | 3 | 9 | 4.00 |
| | | 4 | 11 | 4.00 |
| | | 5 | 12 | 4.00 ^a |
| | Lowest | 1 | 138 | .00 |
| | | 2 | 136 | .00 |
| | | 3 | 132 | .00 |
| | | 4 | 130 | .00 |
| | | 5 | 127 | .00 ^b |

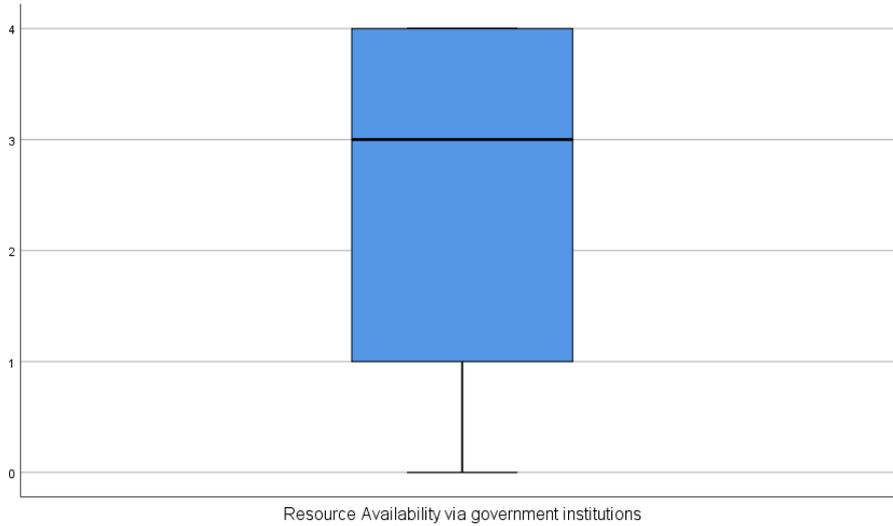
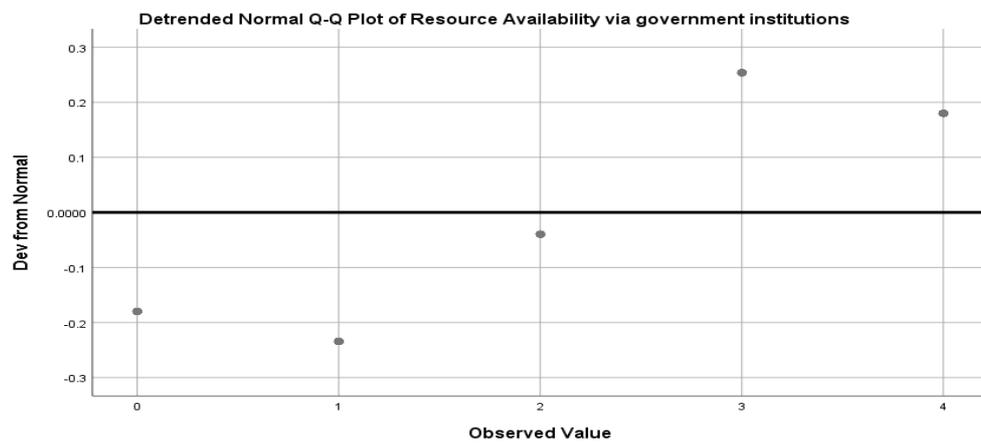
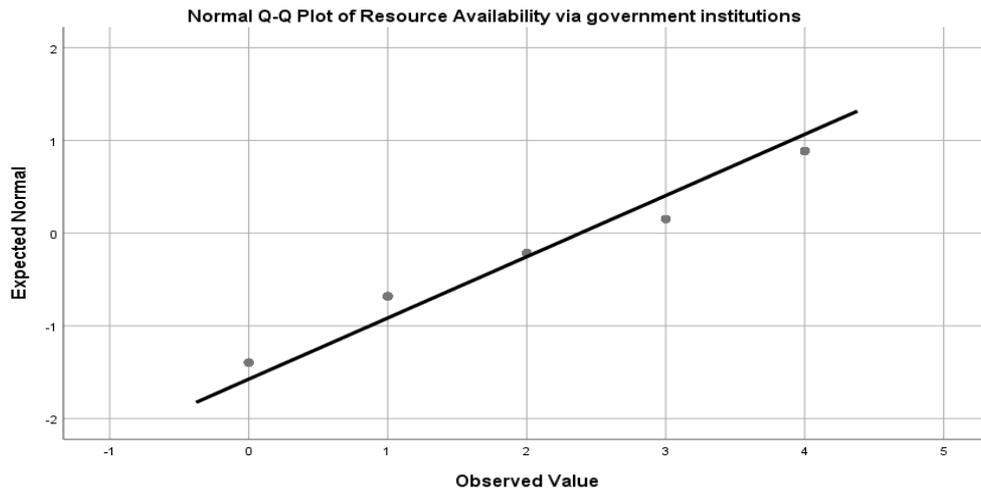
a. Only a partial list of cases with the value 4.00 is shown in the table of upper extremes.

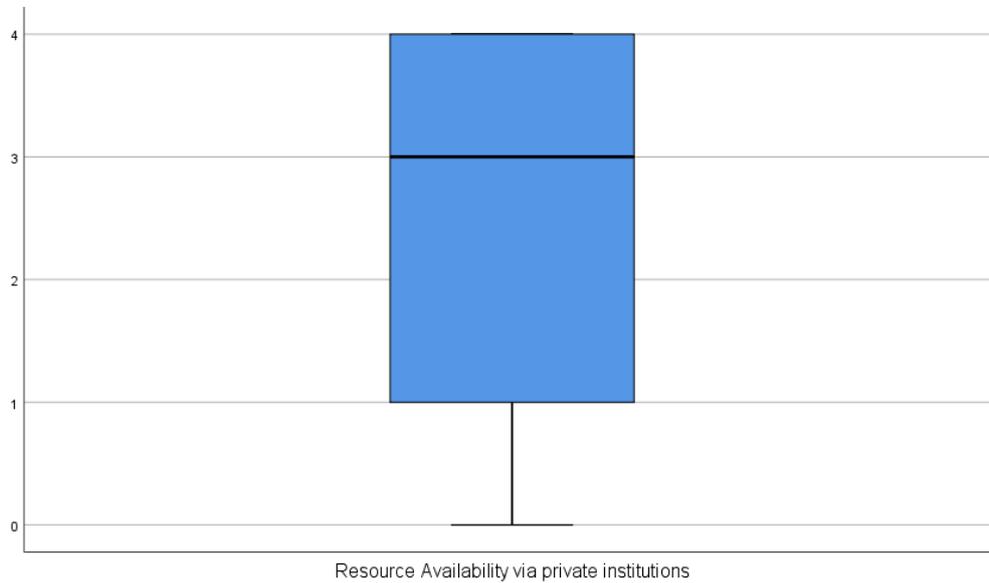
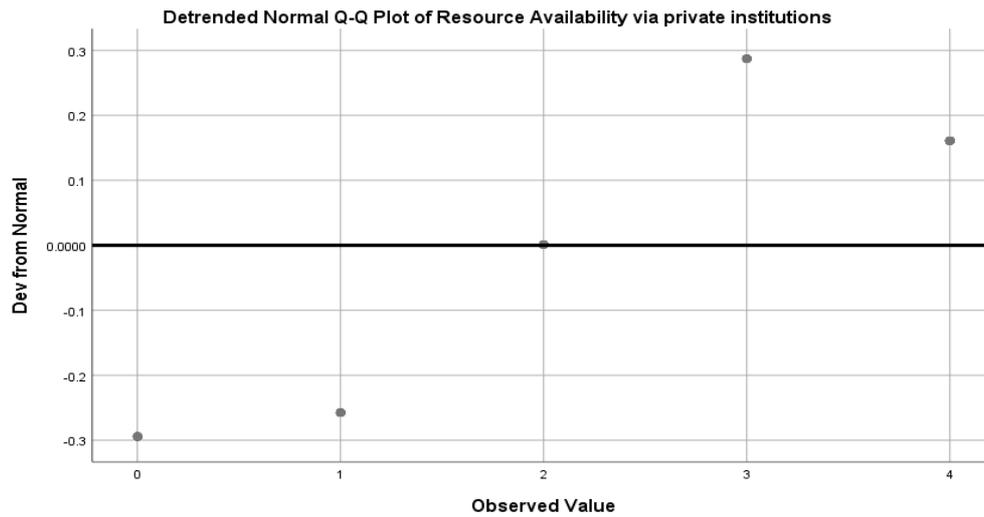
b. Only a partial list of cases with the value .00 is shown in the table of lower extremes.

Tests of Normality

| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|---|---------------------------------|-----|------|--------------|-----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Resource availability via government institutions | .228 | 140 | .000 | .837 | 140 | .000 |
| Resource availability via private institutions | .256 | 140 | .000 | .809 | 140 | .000 |

a. Lilliefors Significance Correction





Case Processing Summary

| | Valid | | Missing | | Total | |
|--------------------------------|-------|---------|---------|---------|-------|---------|
| | N | Percent | N | Percent | N | Percent |
| Entrepreneur's Characteristics | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |

Descriptive

| | | Statistic | Std. Error |
|--------------------------------|----------------------------------|-------------|------------|
| Entrepreneur's Characteristics | Mean | 28.8214 | .53320 |
| | 95% Confidence Interval for Mean | Lower Bound | 27.7672 |
| | | Upper Bound | 29.8757 |
| | 5% Trimmed Mean | 29.4127 | |
| | Median | 31.0000 | |
| | Variance | 39.802 | |
| | Std. Deviation | 6.30892 | |
| | Minimum | 9.00 | |
| | Maximum | 35.00 | |
| | Range | 26.00 | |
| | Interquartile Range | 6.00 | |
| | Skewness | -1.371 | .205 |
| | Kurtosis | 1.277 | .407 |

Extreme Values

| | | Case Number | Value |
|--------------------------------|---------|-------------|--------------------|
| Entrepreneur's Characteristics | Highest | 1 | 35 |
| | | 2 | 35.00 |
| | | 3 | 35.00 |
| | | 4 | 35.00 |
| | | 5 | 35.00 ^a |
| | Lowest | 1 | 18 |
| | | 2 | 50 |
| | | 3 | 130 |
| | | 4 | 139 |
| | | 5 | 136 |

a. Only a partial list of cases with the value 35.00 is shown in the table of upper extremes.

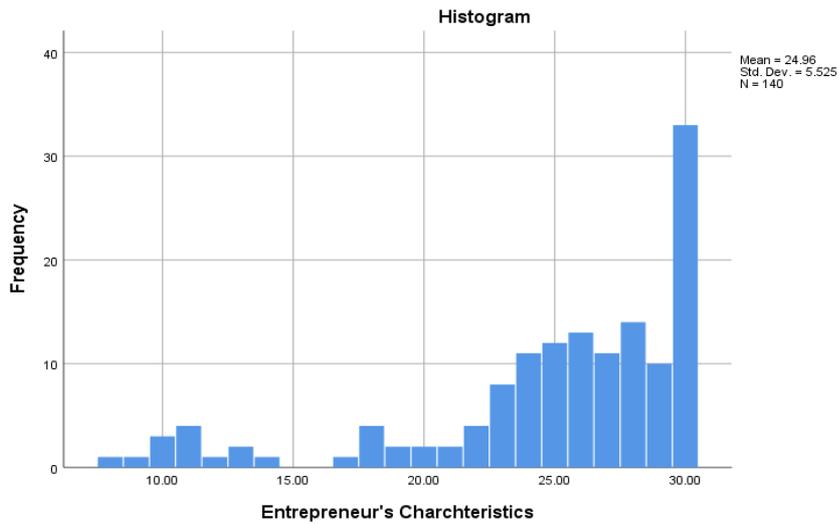
b. Only a partial list of cases with the value 13.00 is shown in the table of lower extremes.

Tests of Normality

| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|--------------------------------|---------------------------------|-----|------|--------------|-----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Entrepreneur's Characteristics | .165 | 140 | .000 | .838 | 140 | .000 |

a. Lilliefors Significance Correction

Entrepreneur's Characteristics



Entrepreneur's Characteristics Stem-and-Leaf Plot

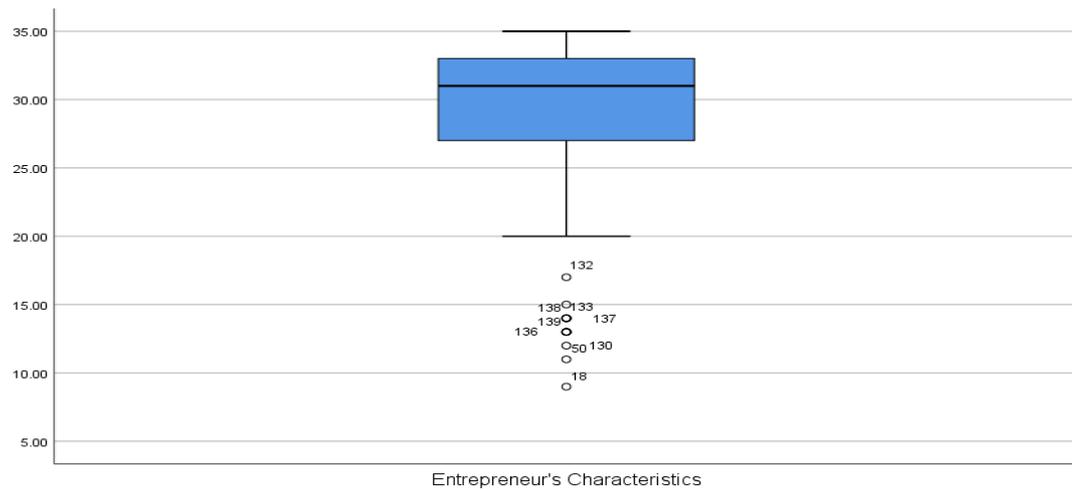
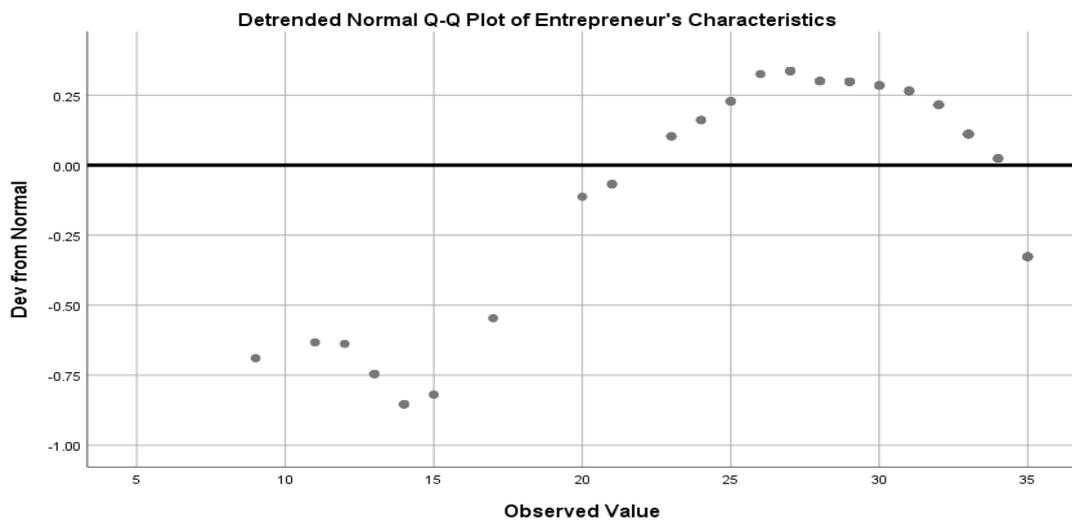
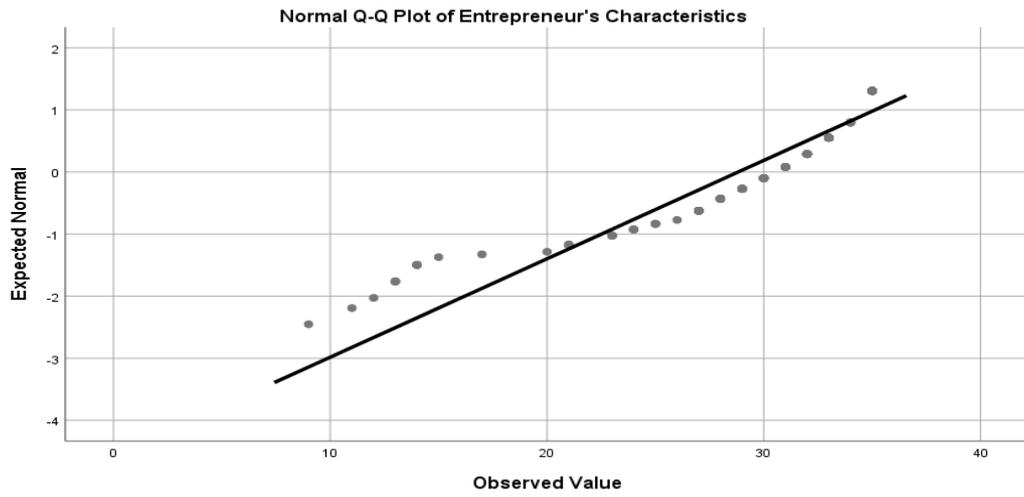
Frequency Stem & Leaf

13.00 Extremes (= \leq 17.0)

| | |
|-------|---------------------------------------|
| 1.00 | 20 . 0 |
| 5.00 | 21 . 00000 |
| .00 | 22 . |
| 4.00 | 23 . 0000 |
| 3.00 | 24 . 000 |
| 4.00 | 25 . 0000 |
| 1.00 | 26 . 0 |
| 12.00 | 27 . 00000000000000 |
| 7.00 | 28 . 0000000 |
| 10.00 | 29 . 0000000000 |
| 9.00 | 30 . 000000000 |
| 11.00 | 31 . 00000000000 |
| 12.00 | 32 . 000000000000 |
| 15.00 | 33 . 0000000000000000 |
| 7.00 | 34 . 0000000 |
| 26.00 | 35 . 00000000000000000000000000000000 |

Stem width: 1.00

Each leaf: 1 case(s)



Case Processing Summary

| | Valid | | Cases Missing | | Total | |
|-----------------|-------|---------|---------------|---------|-------|---------|
| | N | Percent | N | Percent | N | Percent |
| Firm strategies | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |
| Firm age | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |

Descriptive

| | | Statistic | Std. Error | |
|-----------------|----------------------------------|-------------|------------|--|
| Firm strategies | Mean | 18.8357 | .42076 | |
| | 95% Confidence Interval for Mean | Lower Bound | 18.0038 | |
| | | Upper Bound | 19.6676 | |
| | 5% Trimmed Mean | 19.1429 | | |
| | Median | 20.0000 | | |
| | Variance | 24.786 | | |
| | Std. Deviation | 4.97853 | | |
| | Minimum | 5.00 | | |
| | Maximum | 25.00 | | |
| | Range | 20.00 | | |
| | Interquartile Range | 8.00 | | |
| | Skewness | -.696 | .205 | |
| | Kurtosis | -.252 | .407 | |
| Firm age | Mean | 2.0000 | .09180 | |
| | 95% Confidence Interval for Mean | Lower Bound | 1.8185 | |
| | | Upper Bound | 2.1815 | |
| | 5% Trimmed Mean | 1.9444 | | |
| | Median | 2.0000 | | |
| | Variance | 1.180 | | |
| | Std. Deviation | 1.08621 | | |
| | Minimum | 1.00 | | |
| | Maximum | 4.00 | | |
| | Range | 3.00 | | |
| | Interquartile Range | 2.00 | | |
| | Skewness | .683 | .205 | |
| | Kurtosis | -.886 | .407 | |

Extreme Values

| | | Case Number | | Value |
|-------------------|---------|-------------|-----|--------------------|
| Firm's strategies | Highest | 1 | 5 | 25.00 |
| | | 2 | 8 | 25.00 |
| | | 3 | 53 | 25.00 |
| | | 4 | 58 | 25.00 |
| | | 5 | 62 | 25.00 ^a |
| | Lowest | 1 | 87 | 5.00 |
| | | 2 | 133 | 7.00 |
| | | 3 | 50 | 7.00 |
| | | 4 | 18 | 7.00 |
| | | 5 | 132 | 8.00 ^b |
| Firm age | Highest | 1 | 27 | 4.00 |
| | | 2 | 35 | 4.00 |
| | | 3 | 46 | 4.00 |
| | | 4 | 74 | 4.00 |
| | | 5 | 75 | 4.00 ^c |
| | Lowest | 1 | 139 | 1.00 |
| | | 2 | 138 | 1.00 |
| | | 3 | 133 | 1.00 |
| | | 4 | 108 | 1.00 |
| | | 5 | 103 | 1.00 ^d |

a. Only a partial list of cases with the value 25.00 is shown in the table of upper extremes.

b. Only a partial list of cases with the value 8.00 is shown in the table of lower extremes.

c. Only a partial list of cases with the value 4.00 is shown in the table of upper extremes.

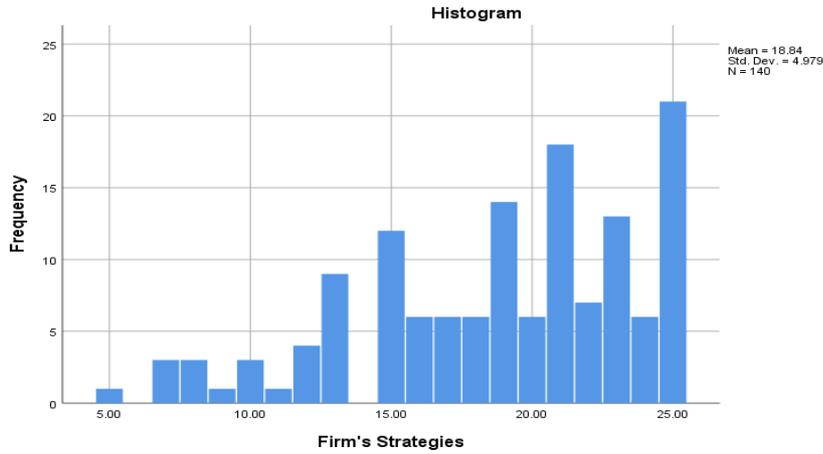
d. Only a partial list of cases with the value 1.00 is shown in the table of lower extremes.

Tests of Normality

| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|----------------------|---------------------------------|-----|------|--------------|-----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Firm characteristics | .132 | 140 | .000 | .930 | 140 | .000 |
| Firm age | .264 | 140 | .000 | .800 | 140 | .000 |

a. Lilliefors Significance Correction

Firm strategies



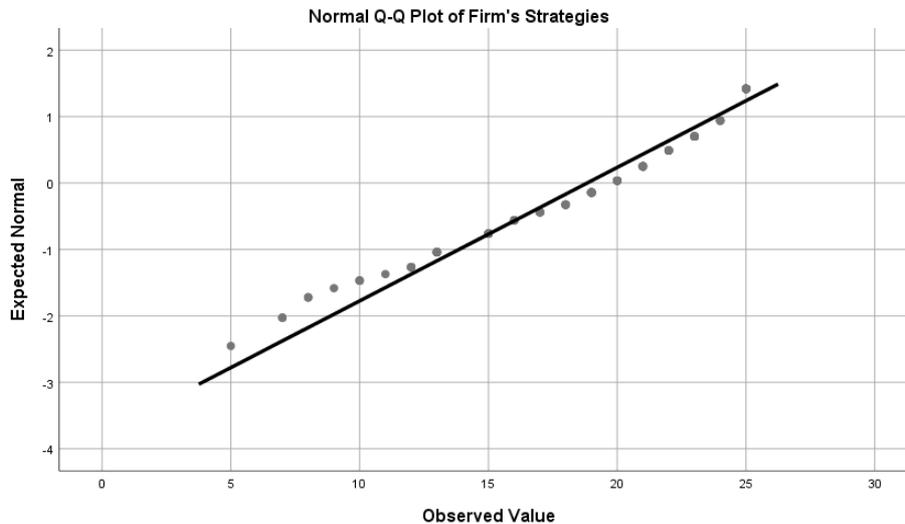
Firm strategies Stem-and-Leaf Plot

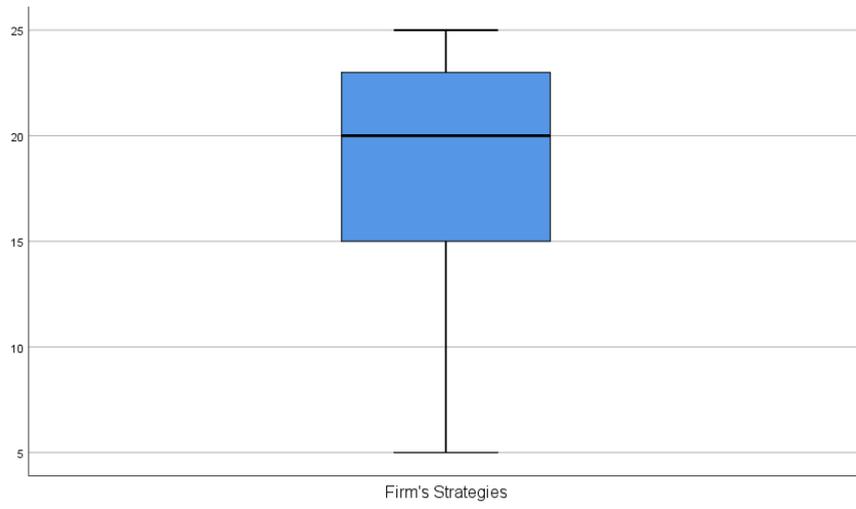
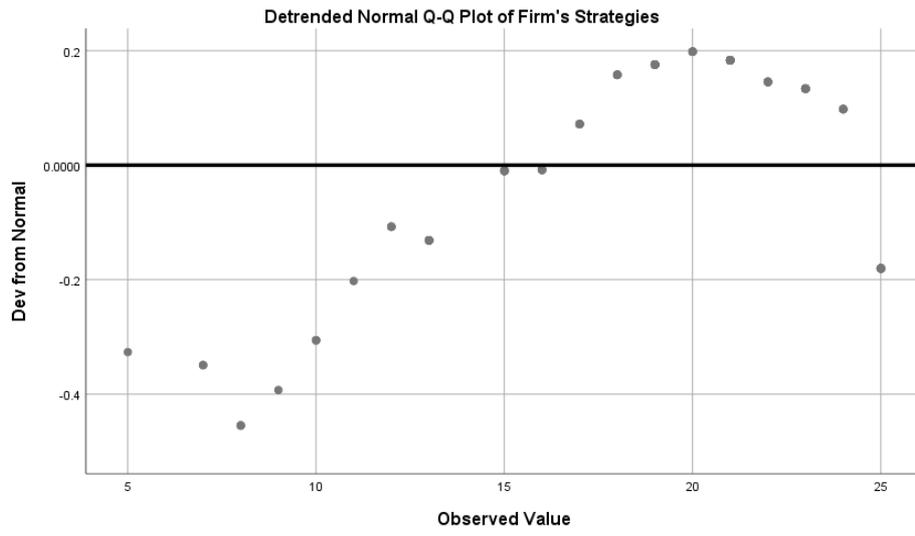
Frequency Stem & Leaf

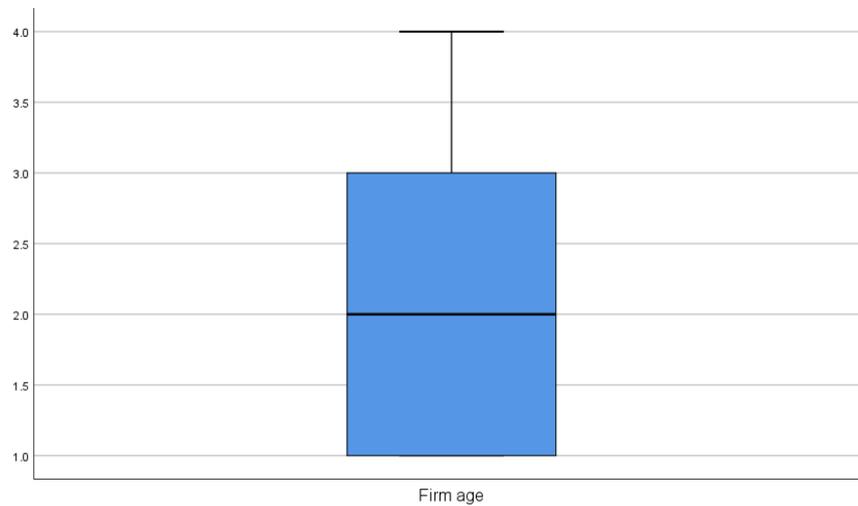
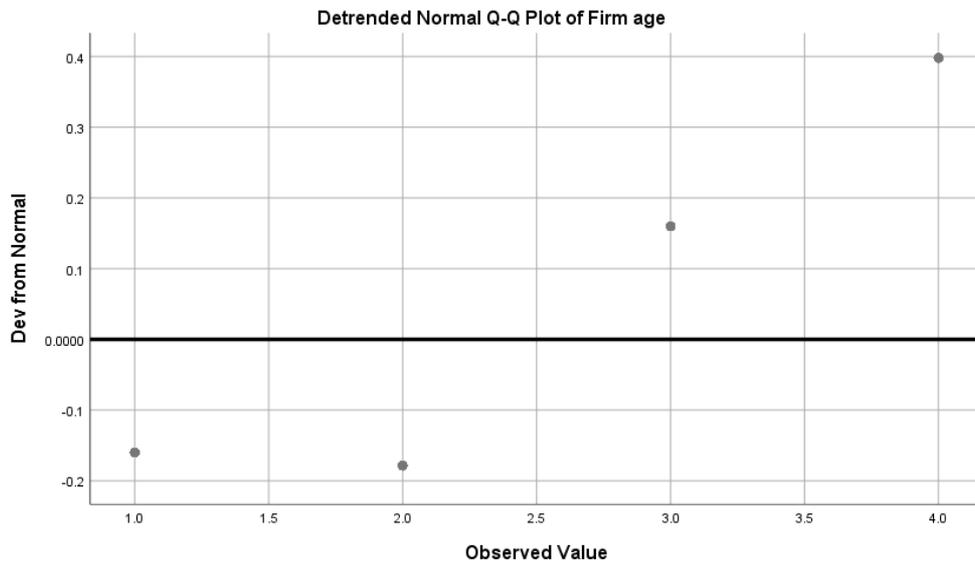
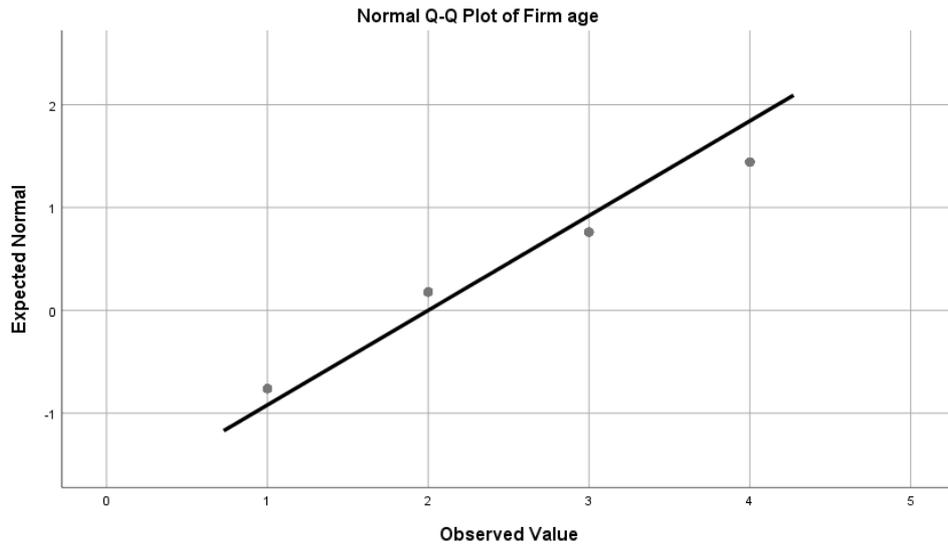
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1.00  0 . 5
3.00  0 . 777
4.00  0 . 8889
4.00  1 . 0001
13.00  1 . 22223333333333
12.00  1 . 55555555555555
12.00  1 . 66666677777777
20.00  1 . 88888899999999999999
24.00  2 . 000001111111111111111111
20.00  2 . 22222233333333333333
27.00  2 . 4444445555555555555555555555
    
```

Stem width: 10.00
Each leaf: 1 case(s)







Case Processing Summary

| | Valid | | Cases Missing | | Total | |
|------------------------------|-------|---------|---------------|---------|-------|---------|
| | N | Percent | N | Percent | N | Percent |
| SME growth (employment) | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |
| SME growth (annual revenues) | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |

Descriptive

| | | Statistic | Std. Error | |
|------------------------------|----------------------------------|-------------|------------|--|
| SME growth (employment) | Mean | 2.5357 | .06283 | |
| | 95% Confidence Interval for Mean | Lower Bound | 2.4115 | |
| | | Upper Bound | 2.6599 | |
| | 5% Trimmed Mean | 2.5317 | | |
| | Median | 2.0000 | | |
| | Variance | .553 | | |
| | Std. Deviation | .74342 | | |
| | Minimum | 1.00 | | |
| | Maximum | 4.00 | | |
| | Range | 3.00 | | |
| | Interquartile Range | 1.00 | | |
| | Skewness | .356 | .205 | |
| | Kurtosis | -.353 | .407 | |
| SME growth (annual revenues) | Mean | 2.3071 | .05058 | |
| | 95% Confidence Interval for Mean | Lower Bound | 2.2071 | |
| | | Upper Bound | 2.4072 | |
| | 5% Trimmed Mean | 2.2302 | | |
| | Median | 2.0000 | | |
| | Variance | .358 | | |
| | Std. Deviation | .59852 | | |
| | Minimum | 2.00 | | |
| | Maximum | 4.00 | | |
| | Range | 2.00 | | |
| | Interquartile Range | .00 | | |
| | Skewness | 1.806 | .205 | |
| | Kurtosis | 2.108 | .407 | |

Extreme Values

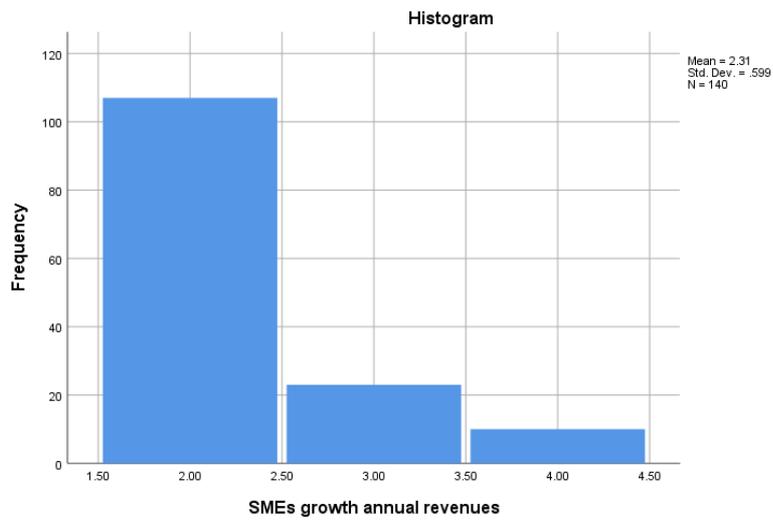
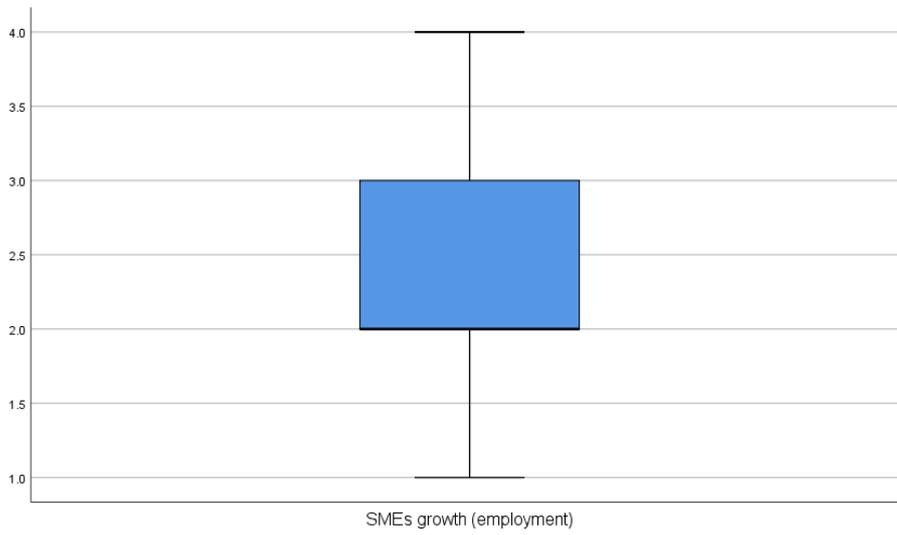
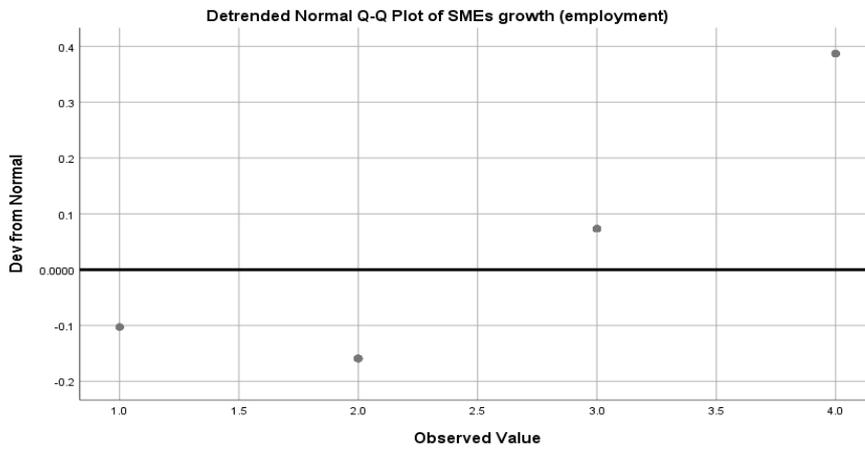
| | | Case Number | | Value |
|------------------------------|---------|-------------|-----|-------------------|
| SME growth (employment) | Highest | 1 | 48 | 4.00 |
| | | 2 | 50 | 4.00 |
| | | 3 | 58 | 4.00 |
| | | 4 | 91 | 4.00 |
| | | 5 | 98 | 4.00 ^a |
| | Lowest | 1 | 136 | 1.00 |
| | | 2 | 135 | 1.00 |
| | | 3 | 134 | 1.00 |
| | | 4 | 100 | 1.00 |
| | | 5 | 82 | 1.00 ^b |
| SME growth (annual revenues) | Highest | 1 | 7 | 4.00 |
| | | 2 | 91 | 4.00 |
| | | 3 | 98 | 4.00 |
| | | 4 | 99 | 4.00 |
| | | 5 | 109 | 4.00 ^a |
| | Lowest | 1 | 139 | 2.00 |
| | | 2 | 138 | 2.00 |
| | | 3 | 137 | 2.00 |
| | | 4 | 136 | 2.00 |
| | | 5 | 135 | 2.00 ^c |

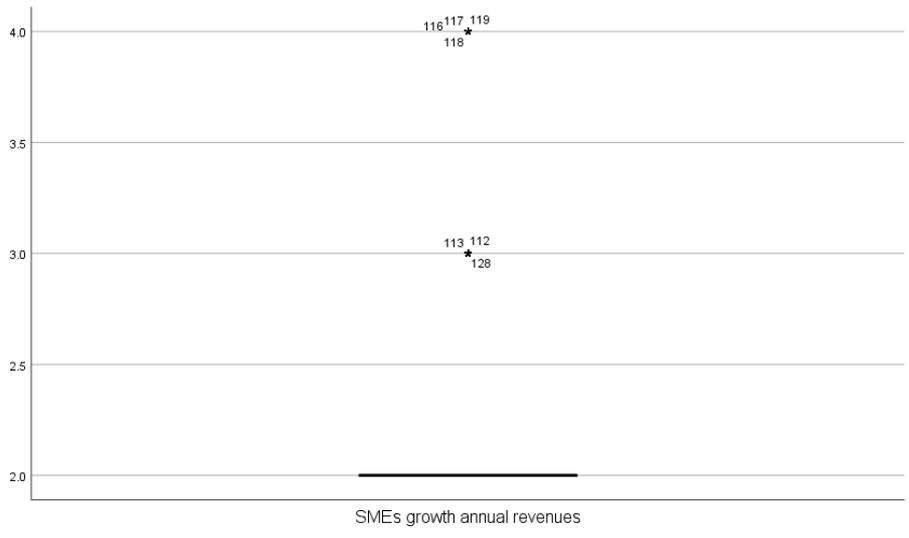
- a. Only a partial list of cases with the value 4.00 are shown in the table of upper extremes.
- b. Only a partial list of cases with the value 1.00 are shown in the table of lower extremes.
- c. Only a partial list of cases with the value 2.00 are shown in the table of lower extremes.

Tests of Normality

| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|-------------------------------|---------------------------------|-----|------|--------------|-----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| SMEs growth (employment) | .293 | 140 | .000 | .827 | 140 | .000 |
| SMEs growth (annual revenues) | .460 | 140 | .000 | .555 | 140 | .000 |

a. Lilliefors Significance Correction





Appendix (8) Outputs of the statistical tests for the first question in the research

Nonparametric Correlations

Correlations

| | | Resource access via government institutions | |
|----------------|---|---|--------|
| Spearman's rho | Network Size (government institutions) | Correlation Coefficient | .574** |
| | | Sig. (2-tailed) | .000 |
| | | N | 140 |
| | Network Density (government institutions) | Correlation Coefficient | .228** |
| | | Sig. (2-tailed) | .007 |
| | | N | 140 |

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

Nonparametric Correlations

Correlations

| | | Resource access via private institutions | |
|----------------|--|--|--------|
| Spearman's rho | Network size (Private institutions) | Correlation Coefficient | .605** |
| | | Sig. (2-tailed) | .000 |
| | | N | 140 |
| | Network Density (private institutions) | Correlation Coefficient | .295** |
| | | Sig. (2-tailed) | .000 |
| | | N | 140 |

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

Kruskal-Wallis Test

| | | Ranks | |
|---|----------------|-------|-----------|
| Location | | N | Mean Rank |
| Resource access via government institutions | North region | 13 | 67.15 |
| | Eastern region | 36 | 70.35 |
| | Western region | 30 | 55.32 |
| | Central region | 50 | 76.20 |

| | | | |
|--|-----------------|-----|-------|
| | Southern region | 11 | 90.45 |
| | Total | 140 | |
| Resource access via private institutions | North region | 13 | 68.04 |
| | Eastern region | 36 | 60.67 |
| | Western region | 30 | 64.37 |
| | Central region | 50 | 77.51 |
| | Southern region | 11 | 90.45 |
| | Total | 140 | |

Test Statistics ^{a,b}

| | Resource access via government institutions | Resource access via private institutions |
|------------------|--|---|
| Kruskal-Wallis H | 8.870 | 7.437 |
| df | 4 | 4 |
| Asymp. Sig. | .064 | .115 |

a. Kruskal Wallis Test

b. Grouping Variable: Location

Means

Case Processing Summary

| | Included | | Cases Excluded | | Total | |
|---|----------|---------|----------------|---------|-------|---------|
| | N | Percent | N | Percent | N | Percent |
| Resource access via government institutions* Location | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |
| Resource access via private institutions* Location | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |

Report

| Location | | Resource access via government institutions | Resource access via private institutions |
|----------------|----------------|--|---|
| North region | Mean | 1.3077 | 1.4615 |
| | N | 13 | 13 |
| | Std. Deviation | 1.70219 | 1.12660 |
| Eastern region | Mean | 1.3056 | 1.2778 |
| | N | 36 | 36 |
| | Std. Deviation | 1.43067 | 1.23314 |
| Western region | Mean | .7333 | 1.3667 |

| | | | |
|-----------------|----------------|---------|---------|
| | N | 30 | 30 |
| | Std. Deviation | 1.17248 | 1.15917 |
| Central region | Mean | 1.6400 | 1.9200 |
| | N | 50 | 50 |
| | Std. Deviation | 1.66304 | 1.53649 |
| Southern region | Mean | 2.2727 | 2.3636 |
| | N | 11 | 11 |
| | Std. Deviation | 1.73729 | 1.50151 |
| Total | Mean | 1.3786 | 1.6286 |
| | N | 140 | 140 |
| | Std. Deviation | 1.55692 | 1.37471 |

Kruskal-Wallis Test

Ranks

| | Sector | N | Mean Rank |
|---|--------------------------------|-----|-----------|
| Resource access via government institutions | Trade | 43 | 65.99 |
| | Manufacturing | 11 | 89.86 |
| | Real estate | 9 | 69.94 |
| | Construction and contracting | 10 | 79.55 |
| | Hotels, apartments and tourism | 9 | 66.61 |
| | Health services | 7 | 91.57 |
| | Education | 13 | 82.31 |
| | Technical sector | 15 | 76.73 |
| | Other | 23 | 50.33 |
| | Total | 140 | |
| Resource access via private institutions | Trade | 43 | 65.67 |
| | Manufacturing | 11 | 91.91 |
| | Real estate | 9 | 62.94 |
| | Construction and contracting | 10 | 88.20 |
| | Hotels, apartments and tourism | 9 | 59.00 |
| | Health services | 7 | 71.21 |
| | Education | 13 | 82.27 |
| | Technical sector | 15 | 73.67 |
| | Other | 23 | 60.11 |
| | Total | 140 | |

Test Statistics ^{a,b}

| | Resource access via government institutions | Resource access via private institutions |
|------------------|--|---|
| Kruskal-Wallis H | 14.135 | 9.884 |
| df | 8 | 8 |
| Asymp. Sig. | .078 | .273 |

a. Kruskal Wallis Test

b. Grouping Variable: Sector

Means

Case Processing Summary

| | Cases | | | | | |
|--|----------|---------|----------|---------|-------|---------|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Resource access via government institutions * Sector | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |
| Resource access via private institutions * Sector | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |

Report

| Sector | | Resource access via government institutions | Resource access via private institutions |
|-----------------------------------|----------------|---|--|
| Trade | Mean | 1.2558 | 1.4884 |
| | N | 43 | 43 |
| | Std. Deviation | 1.59004 | 1.43713 |
| Manufacturing | Mean | 2.3636 | 2.4545 |
| | N | 11 | 11 |
| | Std. Deviation | 1.96330 | 1.57249 |
| Real estate | Mean | 1.3333 | 1.3333 |
| | N | 9 | 9 |
| | Std. Deviation | 1.65831 | 1.32288 |
| Construction and contracting | Mean | 1.7000 | 2.2000 |
| | N | 10 | 10 |
| | Std. Deviation | 1.63639 | 1.39841 |
| Hotels, apartments and tourism | Mean | 1.3333 | 1.2222 |
| | N | 9 | 9 |
| | Std. Deviation | 1.80278 | 1.30171 |
| Health services | Mean | 2.1429 | 1.5714 |
| | N | 7 | 7 |
| | Std. Deviation | 1.77281 | 1.13389 |
| Education | Mean | 1.6923 | 2.0769 |
| | N | 13 | 13 |
| | Std. Deviation | 1.25064 | 1.49786 |

| | | | |
|------------------|----------------|---------|---------|
| Technical sector | Mean | 1.5333 | 1.7333 |
| | N | 15 | 15 |
| | Std. Deviation | 1.50555 | 1.38701 |
| Other | Mean | .5217 | 1.2174 |
| | N | 23 | 23 |
| | Std. Deviation | .84582 | 1.04257 |
| Total | Mean | 1.3786 | 1.6286 |
| | N | 140 | 140 |
| | Std. Deviation | 1.55692 | 1.37471 |

Kruskal-Wallis Test

| Ranks | | | |
|---|-----------------|-----|-----------|
| | Location | N | Mean Rank |
| Resource availability via government institutions | North region | 13 | 76.65 |
| | Eastern region | 36 | 72.43 |
| | Western region | 30 | 55.78 |
| | Central region | 50 | 67.78 |
| | Southern region | 11 | 109.41 |
| | Total | 140 | |
| Resource availability via private institutions | North region | 13 | 70.65 |
| | Eastern region | 36 | 62.90 |
| | Western region | 30 | 63.27 |
| | Central region | 50 | 73.45 |
| | Southern region | 11 | 101.50 |
| | Total | 140 | |

| Test Statistics ^{a,b} | | |
|--------------------------------|---|--|
| | Resource availability via government institutions | Resource availability via private institutions |
| Kruskal-Wallis H | 15.736 | 9.796 |
| df | 4 | 4 |
| Asymp. Sig. | .003 | .044 |

a. Kruskal Wallis Test

b. Grouping Variable: Location

Means

Case Processing Summary

| | Included | | Cases Excluded | | Total | |
|--|----------|---------|----------------|---------|-------|---------|
| | N | Percent | N | Percent | N | Percent |
| Resource availability via government institutions * Location | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |
| Resource availability via private institutions * Location | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |

Report

| Location | | Resource availability via government institutions | Resource availability via private institutions |
|-----------------|----------------|---|--|
| North region | Mean | 2.6154 | 2.5385 |
| | N | 13 | 13 |
| | Std. Deviation | 1.60927 | 1.61325 |
| Eastern region | Mean | 2.4722 | 2.2778 |
| | N | 36 | 36 |
| | Std. Deviation | 1.42400 | 1.52336 |
| Western region | Mean | 1.8333 | 2.3333 |
| | N | 30 | 30 |
| | Std. Deviation | 1.28877 | 1.42232 |
| Central region | Mean | 2.2800 | 2.6800 |
| | N | 50 | 50 |
| | Std. Deviation | 1.64180 | 1.54444 |
| Southern region | Mean | 3.8182 | 3.6364 |
| | N | 11 | 11 |
| | Std. Deviation | .60302 | 1.20605 |
| Total | Mean | 2.3857 | 2.5643 |
| | N | 140 | 140 |
| | Std. Deviation | 1.51532 | 1.51829 |

Kruskal-Wallis Test

| | | Ranks | | |
|---|--------------------------------|--------|-----|-----------|
| | | Sector | N | Mean Rank |
| Resource availability via government institutions | Trade | | 43 | 65.24 |
| | Manufacturing | | 11 | 88.55 |
| | Real estate | | 9 | 60.83 |
| | Construction and contracting | | 10 | 67.65 |
| | Hotels, apartments and tourism | | 9 | 67.72 |
| | Health services | | 7 | 93.00 |
| | Education | | 13 | 83.00 |
| | Technical sector | | 15 | 80.90 |
| | Other | | 23 | 57.11 |
| | Total | | 140 | |
| Resource availability via private institutions | Trade | | 43 | 62.29 |
| | Manufacturing | | 11 | 90.64 |
| | Real estate | | 9 | 68.50 |
| | Construction and contracting | | 10 | 84.40 |
| | Hotels, apartments and tourism | | 9 | 72.94 |
| | Health services | | 7 | 82.00 |
| | Education | | 13 | 83.04 |
| | Technical sector | | 15 | 72.07 |
| | Other | | 23 | 58.39 |
| | Total | | 140 | |

Test Statistics^{a,b}

| Means | Resource availability via government institutions | Resource availability via private institutions |
|-------------|---|--|
| | Kruskal-Wallis H | 11.133 |
| df | 8 | 8 |
| Asymp. Sig. | .194 | .229 |

a. Kruskal Wallis Test

b. Grouping Variable: Sector

Case Processing Summary

| | Cases | | | | | |
|--|----------|---------|----------|---------|-------|---------|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Resource availability via government institutions * Sector | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |
| Resource availability via private institutions * Sector | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |

Report

| Sector | | Resource availability via government institutions | Resource availability via private institutions |
|--------------------------------|----------------|---|--|
| Trade | Mean | 2.1860 | 2.2558 |
| | N | 43 | 43 |
| | Std. Deviation | 1.48414 | 1.54447 |
| Manufacturing | Mean | 3.0000 | 3.2727 |
| | N | 11 | 11 |
| | Std. Deviation | 1.73205 | 1.42063 |
| Real estate | Mean | 2.0000 | 2.4444 |
| | N | 9 | 9 |
| | Std. Deviation | 1.93649 | 1.74005 |
| Construction and contracting | Mean | 2.3000 | 3.1000 |
| | N | 10 | 10 |
| | Std. Deviation | 1.56702 | 1.19722 |
| Hotels, apartments and tourism | Mean | 2.2222 | 2.5556 |
| | N | 9 | 9 |
| | Std. Deviation | 1.71594 | 1.81046 |
| Health services | Mean | 3.2857 | 3.0000 |
| | N | 7 | 7 |
| | Std. Deviation | 1.11270 | 1.52753 |
| Education | Mean | 2.8462 | 2.9231 |
| | N | 13 | 13 |
| | Std. Deviation | 1.46322 | 1.70595 |
| Technical sector | Mean | 2.8000 | 2.6667 |
| | N | 15 | 15 |
| | Std. Deviation | 1.42428 | 1.58865 |
| Other | Mean | 1.9130 | 2.2174 |
| | N | 23 | 23 |
| | Std. Deviation | 1.27611 | 1.24157 |
| Total | Mean | 2.3857 | 2.5643 |
| | N | 140 | 140 |
| | Std. Deviation | 1.51532 | 1.51829 |

Appendix (9) Outputs for the statistical tests for the second question in the research

Nonparametric Correlations

| | | | Correlations | |
|---|--------------------------------|-----------------|----------------------------|-------------------------------|
| | | | SME growth (employment) | SME growth annual revenues |
| Spearman's rho | Entrepreneur's Characteristics | Correlation | .270** | .336** |
| | | Coefficient | | |
| | | Sig. (2-tailed) | .001 | .000 |
| | | N | 140 | 140 |
| | Firm strategies | Correlation | .224** | .250** |
| | | Coefficient | | |
| | | Sig. (2-tailed) | .008 | .003 |
| | | N | 140 | 140 |
| | Firm age | Correlation | .423** | .489** |
| | | Coefficient | | |
| | | Sig. (2-tailed) | .000 | .000 |
| | | N | 140 | 140 |
| Resource access via government institutions | Correlation | .244** | .326** | |
| | Coefficient | | | |
| | Sig. (2-tailed) | .004 | .000 | |
| | N | 140 | 140 | |
| Resource access via private institutions | Correlation | .284** | .373** | |
| | Coefficient | | | |
| | Sig. (2-tailed) | .001 | .000 | |
| | N | 140 | 140 | |

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

Kruskal-Wallis Test

| Ranks | | | |
|----------------------------|-----------------|-----|-----------|
| | Location | N | Mean Rank |
| SME growth (employment) | North region | 13 | 60.54 |
| | Eastern region | 36 | 69.76 |
| | Western region | 30 | 66.28 |
| | Central region | 50 | 70.06 |
| | Southern region | 11 | 98.18 |
| | Total | 140 | |
| SME growth annual revenues | North region | 13 | 75.27 |
| | Eastern region | 36 | 70.74 |
| | Western region | 30 | 60.50 |
| | Central region | 50 | 68.96 |
| | Southern region | 11 | 98.36 |
| | Total | 140 | |

| Test Statistics ^{a,b} | | |
|--------------------------------|----------------------------|-------------------------------|
| | SME growth (employment) | SME growth annual revenues |
| Kruskal-Wallis H | 7.478 | 13.244 |
| df | 4 | 4 |
| Asymp. Sig. | .113 | .010 |

a. Kruskal Wallis Test

b. Grouping Variable: Location

Means

Case Processing Summary

| | Cases | | | | | |
|------------------------------|----------|---------|----------|---------|-------|---------|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| SME growth (employment) * | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |
| Location | | | | | | |
| SME growth annual revenues * | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |
| Location | | | | | | |

Report

| Location | | SME growth (employment) | SME growth annual revenues |
|-----------------|----------------|----------------------------|----------------------------|
| North region | Mean | 2.3077 | 2.3846 |
| | N | 13 | 13 |
| | Std. Deviation | .63043 | .65044 |
| Eastern region | Mean | 2.5556 | 2.3611 |
| | N | 36 | 36 |
| | Std. Deviation | .80868 | .72320 |
| Western region | Mean | 2.4333 | 2.1000 |
| | N | 30 | 30 |
| | Std. Deviation | .50401 | .30513 |
| Central region | Mean | 2.5200 | 2.2600 |
| | N | 50 | 50 |
| | Std. Deviation | .81416 | .52722 |
| Southern region | Mean | 3.0909 | 2.8182 |
| | N | 11 | 11 |
| | Std. Deviation | .70065 | .75076 |
| Total | Mean | 2.5357 | 2.3071 |
| | N | 140 | 140 |
| | Std. Deviation | .74342 | .59852 |

Kruskal-Wallis Test

Ranks

| | Sector | N | Mean Rank |
|----------------------------|--------------------------------|-----|-----------|
| SME growth (employment) | Trade | 43 | 62.64 |
| | Manufacturing | 11 | 89.05 |
| | Real estate | 9 | 69.72 |
| | Construction and contracting | 10 | 69.85 |
| | Hotels, apartments and tourism | 9 | 87.50 |
| | Health services | 7 | 87.71 |
| | Education | 13 | 65.92 |
| | Technical sector | 15 | 62.53 |
| | Other | 23 | 72.80 |
| | Total | 140 | |
| SME growth annual revenues | Trade | 43 | 60.05 |
| | Manufacturing | 11 | 93.95 |
| | Real estate | 9 | 84.72 |
| | Construction and contracting | 10 | 75.15 |
| | Hotels, apartments and tourism | 9 | 79.33 |
| | Health services | 7 | 84.21 |
| | Education | 13 | 75.27 |
| | Technical sector | 15 | 62.67 |
| | Other | 23 | 66.02 |
| | Total | 140 | |

Test Statistics^{a,b}

| | SME growth (employment) | SME growth annual revenues |
|------------------|----------------------------|-------------------------------|
| Kruskal-Wallis H | 9.071 | 18.259 |
| df | 8 | 8 |
| Asymp. Sig. | .336 | .019 |

a. Kruskal Wallis Test

b. Grouping Variable: Sector

Means

Case Processing Summary

| | Cases | | | | | |
|-------------------------------------|----------|---------|----------|---------|-------|---------|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| SME growth (employment) * Sector | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |
| SME growth annual revenues * Sector | 140 | 100.0% | 0 | 0.0% | 140 | 100.0% |

Report

| Sector | | SME growth (employment) | SME growth annual revenues |
|--------------------------------|----------------|----------------------------|-------------------------------|
| Trade | Mean | 2.3721 | 2.0930 |
| | N | 43 | 43 |
| | Std. Deviation | .48908 | .29390 |
| Manufacturing | Mean | 2.9091 | 2.8182 |
| | N | 11 | 11 |
| | Std. Deviation | 1.13618 | .87386 |
| Real estate | Mean | 2.5556 | 2.5556 |
| | N | 9 | 9 |
| | Std. Deviation | 1.23603 | .72648 |
| Construction and contracting | Mean | 2.5000 | 2.4000 |
| | N | 10 | 10 |
| | Std. Deviation | .84984 | .69921 |
| Hotels, apartments and tourism | Mean | 2.8889 | 2.5556 |
| | N | 9 | 9 |
| | Std. Deviation | .78174 | .88192 |
| Health services | Mean | 2.8571 | 2.5714 |
| | N | 7 | 7 |
| | Std. Deviation | .69007 | .78680 |
| Education | Mean | 2.4615 | 2.3846 |
| | N | 13 | 13 |
| | Std. Deviation | .66023 | .65044 |
| Technical sector | Mean | 2.4000 | 2.1333 |
| | N | 15 | 15 |
| | Std. Deviation | .63246 | .35187 |
| Other | Mean | 2.5652 | 2.2174 |
| | N | 23 | 23 |
| | Std. Deviation | .72777 | .51843 |
| Total | Mean | 2.5357 | 2.3071 |
| | N | 140 | 140 |
| | Std. Deviation | .74342 | .59852 |