

ENTREPRENUERIAL ORIENTATION AND ACCESS TO BANK CREDIT BY SMALL AND
MEDIUM ENTERPRIZES AMONG KATWE METAL FABRICATORS

BY

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DECLARATION

I Yiyo Babulya declare that this dissertation is my original work and has not been published or submitted to any university or institution of higher learning for any award.

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APPROVAL

This work has been done under our supervision and has met the research requirements of Kyambogo University and is now ready for submission.

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DEDICATION

This dissertation is dedicated to my lovely wife; Mrs. Nambidde Rebecca and as well as to my brothers and sisters.

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LIST OF ACRONYMS

BOU	Bank of Uganda
C.V.I	Content Validity Index
GDP	Gross Domestic Product
KCCA	Kampala Capital City Authority
KMFAR	Katwe Metal Fabrication Association Report
MoFPED,	Ministry of Finance Planning and Economic Development
OECD	Organisation for Economic Co-operation and Development
SMEs	Small and Medium Enterprises
SPSS	Statistical Package for Social Science
UIA	Uganda Investment Authority
UMA	Uganda Manufacturers Association
UMRA	Uganda Microfinance Regulatory Authority
UK	United Kingdom
VIF	Variance Inflation Factors

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ABSTRACT

The study examined the entrepreneurial orientation and Access to Bank credit controlled by the size of the firm among Metal Fabrication Small and Medium Enterprises; a Case of Katwe.

The study was motivated by the dwindling low rate uptake of access to bank credit among Metal Fabrication SMEs in Katwe. The objectives of the study were to examine the influence of networking on access to bank credit among metal fabrication SMEs in Katwe, to determine the influence of innovativeness on access to bank credit among metal fabrication SMEs in Katwe, to assess the influence of risk-taking on access to bank credit among metal fabrication SMEs in Katwe. Three research question were generated based on the objectives. The study adopted the credit rationing theory to conceptualize the variables as used in the study. A cross sectional survey design was adopted where both quantitative and qualitative data was collected. A sample of 169 Metal Fabrication SMEs were determined using Krejcie & Morgan table out of a population of 300 SMEs was selected. Using a simple random sampling 169 questionnaires were administered to collect quantitative data, only 129 questionnaires were filled and returned constituting a response rate of 76.33%. Qualitative information was collected using an interview guide for triangulation purposes from SME owners, Branch managers, relationship Manager (SMEs), and Chairperson of Katwe metal fabrication association, representative from Uganda development Bank using an interview guide and selected using a purposive sampling method. Diagnostics tests were performed as a prerequisite for the parametric analysis for example data was tested for normality and multicollinearity. In the study, analysis was done at different levels first with descriptive statistics and by a multiple regression analysis. The findings of the study revealed a positive significant influence of networking on access to bank credit (Beta =0.390, P value =0.006), a negative significant influence of innovativeness on access to bank credit (Beta =-0.228, P value =0.008) and a negative significant influence of risk-taking on access to bank credit (Beta =-0.218, P value =0.046). The study recommended that efforts should be made to ensure that these metal fabrication SMEs should connect because networking provides avenues through which the government can channel money such as the “Emyoga Scheme” introduced by His Excellence the President of the Republic of Uganda Additionally, every SMEs should include innovativeness in the organization’s core values. SMEs should work hand in hand with financial providers to understand their level of risk appetite and develop a follow-back position in case of losses for business continuity purposes for example taking insurance. Future study could be directed to finding the moderating effect of financial characteristics between entrepreneurial orientation and access to bank credit

Key words: Entrepreneurial orientation, Networking, Innovativeness, Risk-taking, firm size, Access to bank credit and Small and Medium Enterprises

CHAPTER ONE

INTRODUCTION

1.0 Introduction

Micro, Small, and medium enterprises play a vital role in nation-building by contributing economically towards the nation's economy (Beck, Demirgüç-Kunt and Ross, 2006). In Uganda SMEs create employment, pay taxes, wealth creation, increasing industrialization, balance resource utilization, a ground for labour-intensive technologies, serve as a major tool for poverty alleviation, social-economic development, and they do offer a ground to tap into the international resources from sources world bank (Thuku, 2017; 2008; Mullei, 2013; Obanda, 2018).

It is believed that as they grow and expand the economy, SMEs require working capital to grow and survive (OECD, 2014). However, the biggest number of Small and medium enterprises in Uganda don't stand to celebrate their second birth year and this is possibly due to the difficulty accessing to bank credit from the banks which cause the SMEs to revert using the residual income and shareholders resources hence being unable to take risk-project resulting in no innovative products and ideas subsequently not benefiting from the social capital (MOFPED, 2018). Therefore, this research intended to examine the entrepreneurial orientation that influences access to bank credit among SMEs in Uganda and controlled by the size of the firm using a case of metal fabricators in Katwe area. The chapter was reviewed under followings; the background of the study, the problem statement of the study, purpose of the study, research objectives, research questions, scope of the study, significance of the study, justification of the study and definition of operational key terms.

1.1 Background to the study

This chapter comprised of the historical, theoretical, conceptual and contextual aspects as

explained under.

1.1.1 Historical perspective

The origin and evolution of credit can be traced many years ago to Ancient Mesopotamia, whereby capital borrowing was by seeds and grains and repayment was by livestock (Mwembe, 2019). Both nationally and internationally, credit availability is of paramount importance in the growth and sustainability of the small and medium enterprises sector as they contribute to nation's economic growth and development (Kira, 2013).

World over small, and medium businesses significantly contribute to different country's gross domestic product and total employment meaning to say 55% of GDP for high-income countries, over 60% of GDP in low-income countries (OECD, 2004).

Baguma (2010) established that 90 per cent of the businesses in Uganda close in the inauguration year notably due to lack of access to bank credit as notably and the largest population don't have access to bank credit with less than 2 million people who can ably access bank credit. With an aim of financial inclusion to solve credit accessibility challenges of the SMEs, several credit institutions has been established to offer affordable credits to Uganda's lowest-income enterprises SMEs are considered riskier by these financial institutions for reasons often related to the inability to innovative, control risk and networking and low capitalization, vulnerability to market fluctuations (Arinaitwe and Mwesigwa, 2015).

1.1.2.0 Theoretical perspective

The theory of credit rationing was adopted as advanced by (Stiglitz and Weiss, 1981). Nanyondo,

Tauringana and Mullineux (2016) Kimaiyo (2016); Fuseini (2015 and Magembe (2017) are amongst the studies that acknowledges the contribution of this theory. Credit rationing theory enlist numerous reasons which deter lenders to offer the required credit to the clients that to say borrowers are dishonest, and high degree of information asymmetry hence causing lenders increasing their cost of lending (Stiglitz and Weiss, 1981). Further, this theory suggests that certain characteristics of the firm for instance an audited financial statements, and having no required collateral can impede the firm from getting the facility from the lending institutions (Besanko and Thakor, 1987). Cowling, Liu, and Ledger (2012) suggest that borrowers who are willing not to lose their collateral are the only one willing to take loan against their collateral and the ground that will they have to clear the obligation in order to claim the collateral back. Additionally, theory shows that firms' length of relationship with its bankers can result into credit facility approved as this helps to offer lenders to understand behavior of the firm in detail during the course of the relationship.

1.13. Conceptual background

The predictor variable of the study was entrepreneurial orientation measured by networking, innovativeness and risk-taking and access to bank credit as a predicted variable operationalized by the amount of credit and borrowing frequency with which SMEs get money from banks. Size of the firm was conceptualized as a controllable variable. These concepts have been applied and defined differently by previous studies as expounded here below;

According to Kung'u (2011) entrepreneurial orientation is a key factor in running an enterprise successfully and they have profound consequences once not met. In this study, predictor (entrepreneurial orientation) was measured using three variables namely, networking,

innovativeness and risk-taking.

According to Watson (2007) and Hallèn and Johanson (2004) networking is the cordial relationship between individuals and businesses intended for the mutual benefits and this is done through formal and formal networks. Networking is a mean through firms coordinate, cooperate, collaborate, devote resources, exchange ideas with another firm (Chipika and Wilson, 2006; Sawyerr, McGee and Peterson, 2003). On the other hand, (Scalera and Zazzaro (2009), observed that networking are formed purposely for economic motives which are cost effectively to manage amongst the parties involved. According to Owualah (2002) networking bridges the gap between the lenders and the business hence rendering to minimal information asymmetry which simplify credit accessibility.

“The study conceptualized networking as the level of SMEs connection to source finance, suppliers, customers, government agencies, competitors and learning institutions”.

Innovativeness refers to the firms’ ability support and introducing of new products, technological, ideas, leadership, and business re-engineering within the industry or doing existing things in new ways (Lumpkin and Dess,1996; Schumpeter, 1947; and Miller,1983)

“The study conceptualized SMEs innovativeness in terms of their new ways of reaching out to their customers, new idea implementation, offering unique services, doing new design, use of new machine and new ways of competing”.

According to Miller (1983) denoted the firm’s desire to maximize high returns in a bold way is risk taking. Additionally, Lumpkin and Dess (1996) they term risk-taking propensity as the

magnitude of committing large resources in return for higher gains and opportunities from the environment.

“The study conceptualized risk-taking as the SMEs level to take decision under situations of uncertainty, no fear coming up with extremely design, ability to take on high risk project, making huge investment capital and minimal mentality of wait and see”.

In practice and theory world over credit is the lifeblood of any business to survive and growth is bank credit. According to De la Torre, Martinezand and Schmukler (2009), the degree to which an entity is able to get the required money from the lending institution in order to undertake its intended operation is termed as “access to bank credit”. According to studies conducted by World Bank (2011) and Frascch (2013), credit accessibility refers to a situation where there is no discrimination in the credit availability by the financial institution in the services they offer.

According to studies conducted by Nanyondo, Kamukama, Nkundabanyanga. and Taunugana, (2014) credit accessibility is referred to as the provision of financial services to the customers at a competitive cost. However, Akudugu, Egyir, and Mensah (2009) they established access to credit is an attempt to have the credit and one’s ability to agree with the lender to repay the acquired facility as scheduled and a person deem to lack credit availability if attempts were made and denied. “Access to bank credit was operationally defined as the frequency of borrowing, and amount of money accessed by SMEs from banks”.

In different jurisdictions firm size is conceptualized differently theoretically and by empirical studies which has rendered to divergent views on the same (McLeayand Trigueiros,2002). Several

studies conceptualize firm size as an approximation of entity's assets, employees and market share (Bujaki, Richardson and Merridee, 1997).

1.1.4. Contextual background

The study context is SMEs in Uganda and particularly metal fabricators in Katwe area.

Scholarly the contextual meaning of Small & Medium Enterprises is still lacking (Quartey, 2003; Oteh, 2010). The commonly used meaning of SMEs spread from number of staffs, market share, sales turnover, investment to asset turnover across different nations and businesses hence rendering to subjective views of interpretation (OECD, 2000). The latter definition has been acknowledged by a number of studies for instance, Kurokawa, Tembo and Velde (2008); De la Torre et al, (2009); and Torre, Soledad, Periaand Schmukler (2010). According to Srinivas (2015) any registered business which contributes to the economic and development by offering jobs to capacity turn of less than two hundred employees is termed as SMEs and they characterized by vulnerability to marginal access to. World Bank and Zavatta (2008) contextualizes SMEs by (300) workers and with revenue of United State Dollar of 15 Million These explanations thus results into different contextualization of SMEs by different countries to make their definition to suit what they categorize as SMEs.

In the context of Uganda an entity with total market capitalization of fifty million (UGX 50M) employing fifty employees maximum, trading on average revenue turnover of thirty Million (UGX 30 M) is deem to be an SMEs (Mbaguta,2003; Kasekende and Opondo, 2012). Additionally, UIA (2008) gave a more detailed description of an SMEs as these are entities with total market capitalization and revenue turnover of (UGX 360M), and employing fifty or more employees. As noticed the empirical context and the UIA definition of SMEs is not synonymous, this renders to

a differing definition of SMEs, in Uganda SMEs are commonly identified as a small business (Uganda Investment Authority, 2013)

SMEs constitutes a share in every sector in Uganda for instance in the service, trade, manufacturing and other sectors they are 49%, 33%, 10% and 8% respectively.in others(UIA Report, 2018). SMEs they are the key drivers in fostering innovation and new product development, occupy the biggest percentage of the private sector, enabling people earn a living and providing a wide range products to the country at large (UIA Report, 2018). According to a study conducted by Mbabazi (2012), over 50% of the businesses in Uganda closes their shops before they celebrate their second birth year. It's important to appreciate that business failure in Uganda is very high despite the key importance and contributions they make in Uganda.

The area of Katwe hosts a good number of SMEs over 100,000 and about over 300 metal fabricators (KCCA Report, 2018). This study targeted metal fabricators employing 4 – 200 employees which are categorically (micro, small and medium) fabricators. The study area was chosen because the Katwe area is the harbour area for “Juakail” which means that an entrepreneur who can undoubtedly fix or practically do anything upon request. According to KCCA Report (2018), Katwe area is at the outskirts of the central business area, hosts innovative younger people making their end to meet especially in metal fabrication and this is driven by the increased population demand for the products these people make.

According to Katwe Metal Fabrication Association Report (2018), metal fabricators in the area are characterized by free entry and exit; requires the minimum capital to start; requires basic education

level, they have different products, they depend more on the client's credit which limits their expansion and growth. Despite the numerous efforts, the enormous fabricators' exit is unprecedented due to failure to access bank credit from the regulated financial institution.

1.2 Statement of the problem

There are numerous efforts that have been made to increase SMEs' access to credit such as presidential donations to some groups in the society, the establishment of the Microfinance Support Centre, licensed thirty-two regulated financial institutions, more than one hundred licensed tier 4 Microfinance institutions, the increased funding in the Uganda Development Bank, two established Credit Reference Bureaus and stable Central Bank rate maintained at 10%, all these intended for financial inclusion in support of meeting Vision 2040 (BoU, 2018; UMRA, 2018).

Although these efforts were to improve credit accessibility, these efforts do not yield the desired output as SMEs still register low access to bank credit and Katwe metal fabricators are not an exception of this (AKMFAR, 2019; Namyondo et al, 2014). According to BOU Report (2018), frequency of borrowing and amount borrowed by SMEs is still very low at only ten point four per cent (10.4%) in manufacturing industry in Uganda which encompasses the fabrications sector which entails that accessing bank credit is still a major challenge for the SMEs.

However, search for the correct predictors of the predicted (access to bank credit) are still emerging, the controllable influence of firm size between entrepreneurial orientation that is to say networking, innovativeness and risk-taking on access to bank credit from both a qualitative and quantitative perspective in the SMEs fabrication sector in Uganda has been not fully explored. Therefore, it can be argued that the amiable amount of credit received by SMEs could be attributed

to the influence of these entrepreneurial orientations of networking, innovativeness and risk-taking controlled by the firm size and this is what prompts the study.

1.3 Purpose of the study

To examine the influence of entrepreneurial orientation on access to bank credit by metal fabrication SMEs in Katwe.

1.4 Objectives of the study

- i. To examine the influence of networking on access to bank credit by metal fabrication SMEs at Katwe.
- ii. To determine the influence of innovativeness on access to bank credit by metal fabrication SMEs at Katwe.
- iii. To assess the influence of risk-taking on access to bank credit by metal fabrication SMEs at Katwe.

1.5 Research questions

- i. What is the influence of networking on access to bank credit by metal fabrication SMEs at Katwe?
- ii. What is the influence of innovativeness on access to bank credit by metal fabrication SMEs at Katwe?
- iii. What is the influence of risk-taking on access to bank credit by metal fabrication SMEs at Katwe?

1.6 Scope of the study

The scope of the study encompassed of the content scope, geographical scope and time scope

1.6.1 Contentscope

The study focused on the entrepreneurial orientation in terms of networking, innovativeness and risk-taking and their influence on access to bank credit controlled by the size of the small and medium enterprises

1.6.2 Geographical scope

The study covered Small and Medium Enterprises dealing in fabrications in Katwe area. Katwe is located in Makindye Division and Makindye division is of the six divisions of Kampala Capital City Authority, having many metal fabrications SMEs whose access to bank credit need to re-address in order to stimulate growth and survival.

1.6.3 Time scope

The study covered only fabrications SMEs at Katwe in Makindye division which had been existence for a period of 5 years from 2015- December 2019. This was considered to offer a good of experience of SMEs that would have lived for such a good period

1.7 Significance of the study

The findings of the study may be beneficial to associations like UMA, Uganda small scale business association, financial providers and as it may help them in designing the right procedures and guidelines. The investigators' knowledge was improved owing to the outcome of the findings on as far as the influence of entrepreneurial orientation on access to bank credit by SMEs in Uganda is concerned.

Furthermore, the significance of the study may be used to add to body of information which is existing on the topic studied. Lastly, the recommendations of this study may benefit the entrepreneurs who may wish now to align their characteristics in order to to access to bank credit.

1.8 Justification of the study

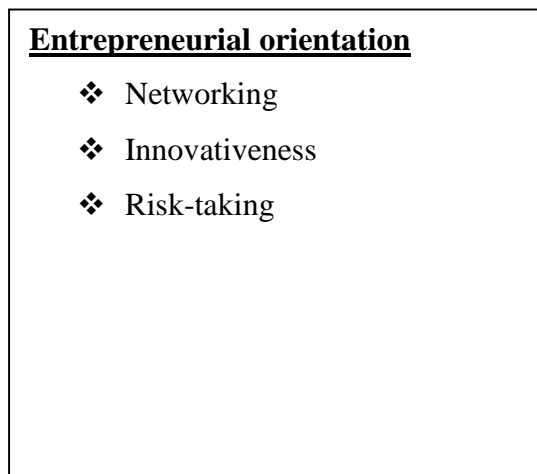
Due to the critical role access to credit play towards improving the business success, growth, survival and profitability of SMEs, the study was carried out. Once SMEs survive they become paramount to the development of Uganda’s Economy by contribution to National GDP, Creation of employment, and breeding area for innovation. Despite these contributions, it is such problem for SMEs to access the required credit. The study finding may businesses to position out rightly in formulating policies and strategies that will facilitate them acquire the required loan amount from the lenders to sustain their growth.

1.9 Conceptual framework

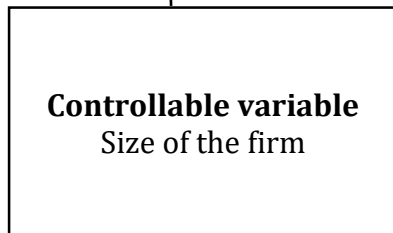
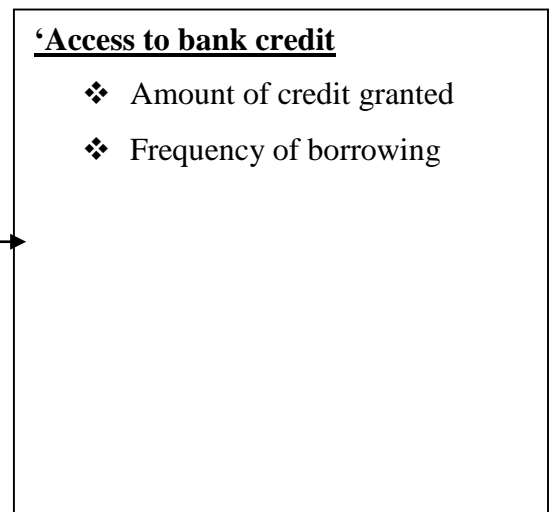
The model below explains the causal relationship between the entrepreneurial orientation and access to bank credit. This relationship can be graphically conptulaized as in Figure 1 below.

“Figure 1: Conceptual framework showing the relationship among variable”

Independent Variable



Dependent Variable



“Source: Covin and Slevin, 1988; Lechner, Dowling and Welpel, 2006, Nanyondo et al., 2014; as modified by the investigator”.

The conceptual framework above considers the entrepreneurial orientation as the independent variable which was measured in terms of innovativeness and risk-taking (Covin and Slevin, 1988) and networking (Lechner et al., 2006). Accordingly Akudugu et al., (2009) and Nanyondo et al., (2014), access to bank credit was regarded the as predicted variable with loan amount received and frequency of taking loans as the constructs which guided the study following previous related empirical reviews.

According to Bartov, Gul and Tsui (2000), noted that studies should control confounding variables in order to derive at the correct hypothesis either being reject or accepted awesomely. Owing to this, the study did controlled for firm size as seemed to be significant factor which draws the difference in networking, innovativeness and risk-taking among SMEs which in turn influence access to bank credit (Namyondo et al, 2014). According to studies done by Word Bank Report (2015) Nanyondo et al., (2014), indicated that smaller firms are less constrained from accessing credit due to the lack of collateral security. Consequently, the study controlled for firm size measured by number of employee as it may influence access to bank credit guided by credit rationing theory.

1.10 Definition of the concepts

Small and Medium Enterprise (SMEs)

SMEs are categorically defined into Micro enterprises based on total market capitalization of maximum UGX 100M, Small enterprises these entities with total market capitalization of greater UGX 100M, and Medium enterprises these entities with total market capitalization of greater than UGX 360M (UIA, 2018)

Access to Credit, refers to the ease with which SMEs can secure financial assistance or loans from lending institutions (Nganda, Wanyonyi and Kitili, 2014).

Entrepreneur characteristics: These are personalities that exposes an individual towards entrepreneurial behaviors (Robson, Akuetteh, Westhead and Wright, 2012)

Entrepreneurial orientation (EO) refers to the attributes explored by entrepreneurs while carrying out their strategic management decision making in form of methods, practices, and styles while managing businesses in order to compete favorably (Lumpkin and Dess, 1996)

Networking is defined as ability of an entity to connect and collaborate with another for the benefit of a common goal, financing needs, belonging, and social captial (Pandula, 2011; Kumah, 2011; and Jackson, 2008).

Credit rationing, according to Jaffee & Modigliani (1976), credit rationing is when the loans available at prevailing market rate cannot meet the demand of the available demand from the market. Additionally, Credit rationing refers to a policy advanced the lending institutions to offer loans to selective borrowers despite the borrowers are willingly to pay at the stated interest rate. (Nanyondo et al., 2014).

1.11 Organization of the report

This report comprises five chapters: Chapter one introduced the historical, conceptual, theoretical and contextual aspects of the study and these included entrepreneurial orientation, firm size and access to bank credit among Metal Fabrication Small and Medium Enterprises in Katwe. This draws up the basis for presenting the research problem, the research objectives and the value for the study to support the research. This chapter also presented the organization of the report which encompasses five chapters.

Chapter two made provision for a review of theory and empirical literature that explains the association among study variables. The Credit Rationing Theory was covered. A summary of the conceptual review, empirical studies and research gaps have also been availed in this chapter.

The third chapter presented the methodology used in the study and included the research design, study population, sample size and sampling technique. The chapter discussed reliability and validity and also considered the diagnostic tests that were used in the study. The chapter also presented methods adopted in data collection, measurement of research variables, data analysis techniques, analytical models, ethical issues and limitation for the study.

Chapter four presented the background information of enterprises used in the study, descriptive statistics for entrepreneurial orientation of networking, innovativeness and risk-taking on access to bank credit was presented. Various diagnostic tests were carried out and a multiple regression analysis presented. This chapter also presented the research questions and the interpretation of findings. Finally, chapter five revealed the summary and discussion of findings, the conclusion of the study, recommendations and areas for further research.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The section discussed the theoretical review, the conceptual review and review of existing related literature on entrepreneurial orientation, and access to bank credit among small and medium enterprises with the aim of portraying contributions, inconsistencies, faults and gaps. Therefore, this chapter was arranged according to the objectives of the study starting with a theoretical and conceptual review.

2.1 Theoretical review

A credit rationing theory was used to effectively guide the study. This theory underpins the multiple applications in dynamics related to predictor variable (entrepreneurial orientation) and predicted variable (access to bank credit).

Nanyondo et al., (2014) referring to Stiglitz and Weiss (1981) suggested this theory under pins the most the reasons why some business are objecting from accessing the requested loan amount and while others get. Lenders requires two most important aspect from the borrower for instance first the interest they receive on the loans advanced and secondly the risk the loan adds to the loan portfolio (Stiglitz and Weiss, 1981). Lenders credit ration their borrower due to the risks they possess onto their business such occurs due to market imperfections that constrain lending to enterprises (Gelos and Werner, 2002; Beck et al., 2006). Characteristics of the firm for instance financial characteristics, managerial capacity, and marketing orientation has been observed as lacking in most of the business hence facilitating lenders refusal to grant credit to the borrowing

entity (Chala & Forssbaeck, 2018; Besanko and Thakor, 1987). This is so because entities fear to lose their collaterals and so they have ensure that they clear all outstanding obligations pledged against those asset (Cowling, 2010). The theory suggests that borrower should strengthen their relationship with the lenders as basis to eliminate information gap and winning trust from the lender to trust them with their loan amount (Bhattacharya and Thakor, 1993; Cenni, Monfeera, Salotti, Sangiorgi and Torluccio, 2015). Firms which hoard on information are prone to be denied credit from the lenders in an effort to avoid risk of moral hazard and adverse selection.

2.2 The conceptual review

2.2.1 Networking

Previous studies stated that networking results into business learning opportunities and problem-solving; facility sharing knowledge; enables firms to gain edge over the competition; it offers a mutual ground to share interests through cooperation, coordination and collaboration; a platform to exchange rich and thoughtful experiences; help to provide advice and act as a source of capital (Atieno, 2009; Talavera, Xiong and Xiong, 2012; Farinda, 2009; Levitt and March, 1998). Belonging to a network helps SMEs to strengthen their ties with bankers hence making lending very easy (Pandula, 2011).

2.2.2 Innovativeness

For the business to thrive and pass a test of time it should be a culture of being innovative as this will lead to notable growth, increase in market share and market size hence creating its unique advantage over the competitor which in turn improves the financial performance of the entity (Baregheh, Rowley and Sambrook, 2009). Most of the times entities do not invest in innovativeness due to the unknown returns on investment the investor is expected receive on the

investment injected into it the innovation (Hall, 2002).

According to studies conducted by Zahra and Covin (1995); and Lumpkin and Dess (1996), as the more innovative the entity becomes, it's readiness towards the market changes increases and this is achieved through introducing news, products or services using robust research development activities which leads to outstanding performance and survival of the entity overtime.

2.2.3 Risk-Taking

Previous studies noted once the firm embraces new ways of doing things, this encourages risk taking and hence fostering excellent performance (Hughes and Morgan, 2007). While, Haung, Wang, Chen and Yien (2011), they observed that entrepreneurs with high risk-taking behaviors are willing to borrow more than their counter part. According to studies done by Breeziabher and Tadesse (2014); Jalali, Jaafar and Ramayah (2014); and Segal, Borgia and Schoenfeld (2005) observed that risk-taking and credit are statistically negatively related contradicting the main objective of investing in risky projects. Traditionally, entrepreneurs are uphold for taking risk than the non-entrepreneurs (McAdam and McClelland, 2002). Additionally, benefits accrual to the entity in form of seized opportunities due to the involvement into risk undertakings (Frese, Brantjes and Hoorn, 2002). Davis, Greg, Payne and Kreiser (2010) established that performance of entities whose managers had high desire to undertake risk was extremely great compared those that do not take risk was lipping.

2.2.4 Access to bank credit

The literature on the significance of bank credit has been well suggested and smaller firms find it difficult than their counterpart the bigger firms (Richard and Mori, 2012; Kira, 2013). The major

key impediment to SMEs growth and survival is access to bank credit (Belanova, 2013; Evans, Josephine and Yeboah, 2015). Additionally, the strategic objectives of the entity are not achieved accordingly if the financial resources are not sufficient (Tang, Tang, Marino, Zhang and Li, 2008)

2.2.4 Firm size

Carpenter and Petersen (2002) indicated that large firms can easily get credit than the small medium-sized firms. The traditional neoclassical resource-based view approach links firm size to access to credit by employees (Barney, 2001; Barney, Wright. and Ketchen, 2001; Berger and Udell, 2002). Barney et al. (2001) and Paul and Whittam and Wyper (2007), firms should value their employees as one of the important asset for the business because they provide, intellectual capital, financial management expertise, marketing expertise and notably these are amongst the requirements to access formal facility from the lending institutions. Smaller firms lack the capacity to hire qualified personnel's with financial management skills to match available financing choices (Jappelli and Pagano, 2005).

2.3 Empirical review of related basing on the study objectives

2.3.1 The influence of networking on access to bank credit

According to studies conducted by Vos (2005); Atieno (2009); Pandula (2011) and Kumah (2011) their findings agreed that belonging to a group increase SMEs' access to bank credit. This is so used by lending institution to hedge specific individual failure in the group to meet the required obligation repayment (McKenzie, De and Woodruff, 2009).

According to Talavera et al., (2012) observed that networking increases the learning opportunities, enables owners to obtain key information, gain knowledge about the sources of credit, and

enhances the probability of access to the loan

Athuman (2013) done a study in Kenya which showed that there was no relationship between social networks and access to b credit.

2.3.2 The influence of innovativeness on access to bank credit

SMEs in Europe they are in for bank credit as it seems easier than other sources of finance in support of their innovative ideas (Lee, Sameen and Cowling, 2015; Freel, 2007). However, the unwillingness of the lenders to encourage innovative firms affect their actions negatively (Mohnen and Roller, 2005). In United Kingdom innovative firms find it difficult to access credit than non-innovative firms (Lee et al., 2015). Pederzoli, Thoma and Torricell (2013) established that innovative firms are prone default on their loan obligation as this is attributed to less cash flows generated from the investment made. In Italian highly technological innovative firms are credit rationed due to the fact lenders cannot establish the future growth of these firms appropriately Brancati (2015)

2.3.4 The influence of risk-taking on access to bank credit

Empirical studies show that high risk borrowers are prone to be granted less amount, being financially constraint and rationed (Kirschemann, 2016). Ortiz-Molina and Penas (2008) showed that lender hedge their risk by giving risky borrowers loans which are payable for instance within 2 months, 3 months; and one year. Godlewski and Weill (2011) established that for lenders to offer credit to the high risk borrowers they have pledge a lot of collaterals than their counterpart the less-risky entities for the same facility. Hanedar, Broccardo and Bazzana (2014) observed that firms which lose products and are into criminal cases are likely to be denied credit by lending institution in far of the high risk they possess their business.

2.3.4 The control influence of firm size between entrepreneurial orientation and access bank credit

Pandula (2011) done a study in Australia confirms the finding of (Bebczuk and Galindo, 2008) showed that there was no relationship between size of the firm and access to bank credit. Fatoki and Asah (2011) they found out that size of the firm was amongst the key determinants by commercial banks amongst their parametric indicators for a facility to be approved whereby small enterprises are less favored to large firms. Beck et al., (2006), they observed that size of the firm is positively related to the amount of credit consumed by the business.

The results of the findings of Abdesamed and Wahab (2012) conquers with the previous findings of Oliveira and Fortunato (2006); Schiffer and Weder (2001) that size of the firm negatively affect access to bank credit

According to Thuku (2017) in Kenya, she found that size of the firm negatively affect access to bank credit at average mean of 4.41. Additionally, Nanyondo et al., (2016) established that there was a significant positive association between the size of the firm and credit as bigger firms are favored more

2.4. Literature summary and gap

This study has reviewed a number of related studies about entrepreneurial orientation and access to bank credit by small and medium enterprises. However, conclusions are drawn premised on generalization and not specific to particular area and sector hence there is a contextual gap. The search for an exact predictor of access to bank credit by SMEs is still evolving as numerous reasons accountable for inadequate access to have been identified in the literature. Moreover, although

empirical studies have been carried out to explain the sub-optimal access to bank credit using different predictor variables, the influence of innovativeness, risk-taking and networking both qualitatively and quantitatively have not been excessively studied in the context of Ugandan. This study, therefore, contends that the sub-optimal access to bank credit by SMEs' could be attributed to innovativeness, risk-taking and networking as they are controlled by the firm size. Finally, there are limited tight studies that have analyzed the controllable influence of co-founding variables like the firm size on entrepreneurial orientation and access to bank credit. The study, therefore, intended to fill both the contextual and conceptual gaps by examining the influence of entrepreneurial orientation on access to bank credit controlled by the firm size by among small and medium enterprises in Uganda concentrating on Katwe metal fabricators in Katwe area.

2.5 Chapter summary

The chapter indicates the literature review that the study explored. The arrangement of chapter two was according to the objectives of the study starting with a theoretical, conceptual review, empirical review, literature summary and gap. This chapter leads to chapter three –Methodology.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents methodology that was used to carry out the study. Specifically, the chapter describes the research design, procedure and methods that were used in carrying out the study, the determination of the sample size from the total population, and the methods that were adopted in data processing and analysis. Measures of the variables and ethical considerations as part of this section”.

3.2 Research design

A descriptive cross-sectional survey was used for the study. This was motivated due to the fact that descriptive research helps the investigator to understand the nature of the research problem and it supports the effective gathering of data at once from many SMEs, (Kothari, 2004; Sekeran, 2013; Mugenda and Mugenda, 2003; Burns and Bush, 2010). Further, quantitative data was collected to numerically explain the phenomena by analyzing the influence between predictor variable and predicted variable; on the other hand qualitative data were collected to understand the phenomena in depth. Amin (2004), this triangulation approach makes it feasible for the researcher to make well-informed findings and conclusions.

3.3 Study and target population

SMEs in the fabrication sector in Uganda was targeted. SMEs in fabrications at Katwe was studied. According to the Association of Katwe Fabrication Report (2018) a total of 300 SMEs operating in Katwe and this guided the quantitative aspect of the research. Additionally, qualitatively the study targeted resourceful respondents from the banks at Katwe. According to BOU (2018), five

regulated financial institutions operate bank branches in Katwe.

3.4 Sample size determination and sampling technique

3.4.1 Quantitative sample

A sample size of 169 metal fabrication SMEs was obtained from the list provided by the KCCA and Association of Katwe Metal fabrication and questionnaires distributed was computed using Krejcie and Morgan (1970) statistical table in appendix four. However, 129 questionnaires were collected back making an effective response rate of 76.33%. This response rate was considered ideal to carry out the study to them. The SMEs were selected using a simple random sampling.

3.4.2 Qualitative sample

Qualitatively, the common method used to establish the sample was getting to the point of saturation. In this study, this approach was utilized to obtain the sample size of 17 key informants that were selected using a purposive sampling technique. This is because they were deemed knowledgeable about the study and their informed views would enable the researcher to clearly answer the objectives of the study. The respondents on which interviews were conducted included bank (branch manager, credit supervisors & SME relationship manager), chairperson of the association and one member from Uganda Development Bank.

3.5 Data Collection Methods

3.5.1 Quantitative method

The study employed a survey approach where quantitative data was collected using a survey questionnaire. The primary data for this study was collected using closed-ended questionnaires. The questionnaires were administered to SMEs owners or managers. The questionnaires covered entrepreneurial orientation as the independent variable and access to bank credit as the dependent variable.

Entrepreneurial orientation was measured using innovativeness, risk-taking and networking. Access to bank credit was measured using amount of credit granted and the frequency of borrowing from the bank

3.5.2 Qualitative method

The study adopted an interview method using an interview guide. The primary sources included data from key informants. According to Amin (2004), and Sekeran (2013) suggest that this enable attainment of in-depth information from the targeted respondents through forms of face to face conversations and probing of the respondents to gain detailed explanations on entrepreneurial orientation and access to bank credit by SMEs in Katwe as suggested by (Amin, 2004 and Sekeran, 2013) to collect qualitative data.

3.6 Data collection instruments

Questionnaires and interviews were the only instruments used by the study to collect data

3.6.1 Self-administered questionnaire

The study used a close-ended self-administered questionnaire divided into sections of background information, entrepreneurial orientation and access to bank credit. The respondents responses from instruments were measured on scale of 1-5 as guided by the Likert namely “5-Strongly agree; 4- Agree; 3- Not sure; 2- Disagree and 1- Strongly disagree”. The rationale for instrument questionnaire, it allows the collection of quantifiable primary data from many respondents within a short period of time and very flexible for the respondents to answer at any time they want (Kombo and Tromp, 2006; Saunders, Lewis and Thornhill, 2009).

3.6.2 Interview guide

An in-depth oral interview was conducted using the interview guide. The motivation for this tool interview guide helps to ensure that reliable qualitative information is gathered because it

facilitates the investigation into the topic under study and collection of accurate information from the respondents was selected to participate as key informants due to their the wealth of experience and knowledge (McNamara, 2009; Charmaz, 2002; Hunter and Schmidt, 1996)

3.7 Validity and Reliability of data instruments

3.7.1 Quantitative study

Quantitatively the study adopted a content validity control. The rationale for this validity, content validity allows the development of questionnaires specific to the study objectives from existing literature then channeled to Likert scale, elicit the desired responses from the study sample and allows expert opinions of the supervisors on total inclusion of the constructs under review (Kothari, 2004). The questionnaires were pretested and after which the content was measured to ensure validity done using the content validity index (C.V.I) and based on the Amin (2003).

An instrument is considered valid if the CVI is 0.7 and above to establish the accuracy of the measures (Amin, 2004; Mugenda and Mugenda, 2003). For this study, only items whose factor loadings met the threshold of 0.5 above was considered for further analysis. The table corresponding to factor analysis has been put in Appendix 3.

Reliability

Quantitatively the study used a Cronbach's Alpha Coefficient. The rationale for this coefficient, Cronbach yields stability and consistency. Further, it indicates the extent to which the measures are without bias or error and offers consistent results across time and various items. The Cronbach's Alpha Coefficient (K) was determined by a computer program Special Package for Social Scientists (SPSS) to ascertain the true reliability of the instrument. According to DeCoster (2004); Mugenda and Mugenda (2003), suggests the commonly accepted rule for describing internal consistency using Cronbach's alpha as follow:

Table 1: Cronbach Alpha for the study variables

Variables	Cronbach's Alpha Coefficient
Networking	0.916
Innovativeness	0.939
Risk-Taking	0.866
Access to bank credit	0.943

“Source: Primary data 2020”

Basing on the results in Table 1, all the variables used in the study met the expected threshold of 0.7 Cronbach's Alpha

3.7.2 Qualitative study validity and reliability of the data instrument

Validity

Qualitatively the study adopted creditability control. This control ensures that the instrument covers all required contents under review and it underpins the expert judgement (Sekeran, 2013). The investigator ensured that the interview questions asked covered the relevant content required to generate the required responses from the key informants (Graneheim and Lundman, 2004)

Reliability

Qualitatively the study adopted both dependability and transferability. The motivation for dependability, dependability determines the stability, consistency, and accuracy of data over time (Catanzaro, 1988; Graneheim and Lundman, 2004). Lincoln and Guba (1985) suggests that consistency and accuracy can be achieved through responses grouping by coding them categorically. Transferability reliable helps to investigator to examine the instrument he or she can get the same responses from different respondents at unknown if examined using the same tool through the selection of the required sample in order to reach general conclusion (Krippendorf, 2004).

3.9 Procedure of data collection

A letter of introduction obtained from Kyambogo University. This letter was used to obtain permission from SMEs owners or managers and key informants to conduct a survey and interview in their respective areas of jurisdiction. The researcher made necessary introductions out of the objectives of the study for permission to carry out the investigations within their organization.

3.9.1 Pilot study

12 respondents were randomly selected outside the actual sample for the study and 10 questionnaires were administered to 10 respondents and 2 respondents were interviewed to ensure that the language used in is easily understood, and restructuring of the constructs aimed at achieving internal consistency in addressing the research purpose. The data collected the 12 respondents analyzed, reviewed, revised, edited, and modify before final the instrument was printed to be used in the main study.

3.9.2 Main study

The researcher briefed the respondents about his intentions to carry out a study on their businesses. The administration of the questionnaires was done by research assistants where she ensured that each respondents was given one questionnaire and this helped in collecting quantitative data and the interview was conducted by the principal investigator. The questionnaires were retrieved after 2 days and check for completeness of all answers. Additionally, prior appointment were secured from the key informants and scheduled accordingly for the interviews that were conducted. Finally, both the questionnaires and interviews were then arranged for data analysis.

3.10. Measurement of variables

3.10.1 Measurement of the predictor

The independent variable of the study was entrepreneurial orientation and was measured using networking (Hallèn and Johanson, 2004 & Scalera and Zazzaro, 2009), Innovativeness (Lumpkin and Dess, 1996, Schumpeter, 1947) and risk-taking (Miller,1983). The items that were used to measure these constructs were put on a five-point Likert scale ranging from “strongly disagree” to “strongly agree” and means were computed to enable the analysis. A list of the constructs used in this study along with the set of items/indicators used to measure each construct can be found in Appendix One.

3.10.2 Measurement of the predicted

The dependent variable of the study was access to bank credit and was measured using flexibility, borrowing cost and the amount of loan with which SMEs get money from banks following previous related empirical studies such as (Akudugu et al., 2009; De la Torre, et al., 2009, World Bank, 2011 & Nanyondo et al., 2014). Using a scaled questionnaire and interview data was collected on both variables and their means were computed to enable the analysis. A list of the constructs used in this study along with the set of items/indicators used to measure this construct can as well be found in Appendix one.

3.10.3 Measurement of the co-founding variable

Using number of employees as a measure, size of the firm was conceptualized as the controllable variable. The end result is that size of the firm has a controllable influence on access to bank credit

3.11 Data analysis techniques

3.11.1 Quantitative data

Data collected was carefully compiled, sorted, edited, classified, coded and checked for accuracy and relevancy. The Statistical Package for Social Scientists (SPSS) was used to perform the analysis of the quantitative data. The research questions were analyzed using descriptive and inferential statistics. The researcher reverse coded answers of some questions in order to have them in the same direction and this was especially on access to bank credit

The motivation for the descriptive statistics is that descriptive analysis enables the investigator to understand the sample characteristics, discuss findings, measures the entrepreneurial orientation and access to bank credit using frequency distribution tables, mean, and standard deviation. The rationale for the inferential statistics is that the inferential analysis helps the investigator to examine the relationship then the influence between access to bank credit and innovativeness, risk-taking and networking.

Due to multiple predictors, a multiple linear regression analysis helped to guide the analysis. However, this data analysis data was based on the assumption that there is no outlier which may cause non-normality hence leading to incorrectness and alteration of findings. In this study, outliers were identified by exploring using box plots

In order to ensure that data is bell-shaped different tests were performed as elucidated below.

The Shapiro – Wilk Test was done to test for normality in the data and it's good for samples which fall between 3 and 2,000 respondents (Shapiro and Wilk, 1965).

Table 2: Tests of Normality for networking, innovativeness, risk-taking and access to bank credit

	Shapiro-Wilk		
	Statistic	Df	Sig.
Networking	.770	129	.609
Innovativeness	.707	129	.081
Risk-taking	.805	129	.285
Access to bank credit	.791	129	.456

“Source: Primary data 2020”

Basing on the results in table 2, the p-value (Shapiro Wilk test) for the different variables used in the study was above 0.05 level of significance indicating that the data was normally distributed.

The homoscedasticity test was executed to examine the variability between the predicted values and observed values of the variables along the line of the best fit and it’s premised on the assumption that variation should be relatively the same or similar and this was done using the Analysis of variance. Lastly, Multi-collinearity test was done to establish the correlation between the independent variables. The study used a variance inflation factor (VIF) to detect the correlation between the networking, innovativeness and risk-taking. Furthermore, it’s suggested that multicollinearity is present if the VIF is greater than 10.

Table 3: Collinearity diagonistics for networking, innovativeness and risk-takig

Model	Collinearity statistics	
	Tolerance	VIF
Networking	0.375	2.667
Innovativeness	0.588	1.701
Risk-Taking	0.321	3.115

The

a. Dependent Variable: Access to bank credit

“Source: Primary Data 2020”

results in table 3 revealed that the independent variables (networking, innovativeness and risk-taking were not highly correlated since the Variance Inflation Factor (VIF) was below the threshold of 5.

3.11.2 Model specification

The influence of innovativeness, risk-taking and networking on access to bank credit was analyzed by performing a simple regression to determine the influence of these variables and later on a multiple regression analysis to examine the overall influence of these entrepreneurial orientation on access to bank credit. The dependent variable was access to bank credit. The average means computed for the innovativeness, risk-taking and networking used as the predictor variables and regressed on the means computed for access to bank credit as the dependent variable.

Specifically, the models below tested to analyze the influence of innovativeness, risk-taking and networking on access to bank credit

Simple linear regression

$ABC = \beta_0 + \beta_1 INN + \epsilon_i$, $ABc = \beta_0 + \beta_2 RT + \epsilon_i$, $ABC = \beta_0 + \beta_3 NE + \epsilon_i$, where ABC represents the dependent variable access to bank credit, INN represents innovativeness, RT

represents risk-taking, NE represents networking, β_0 represents the intercept, $\beta_1 \dots \dots \beta_3$ represents the coefficients and ϵ_i represent the error term.

Multiple regression analysis model $ABC = \beta_0 + \beta_1 INN + \beta_2 RT + \beta_3 NE + \epsilon_i$

The controllable influence of the firm size on the relationship between innovativeness, risk-taking and networking on access to bank credit analyzed and included the multiple regression in order to examine the influence of a co-founding variable.

3.11.3 Qualitative data analysis

Qualitative data was analyzed using the content analysis technique. It was compiled, edited, coded and categorized through finding patterns, trends and relationships from the information gathered. This was used to describe and draw conclusions on the entrepreneurial orientations which influence access to bank credit. Primary data that was collected like interviewees responses were analyzed for content and discussed in line with the research objectives in order to establish areas of convergence and divergence. According to Mugenda and Mugenda (2003), the researcher's interest was to analyze information in a systematic manner so as to come up with meaningful conclusions and recommendations.

3.12 Ethical Considerations

Research ethics are established rules and guidelines that define the conduct that researchers use in the process of carrying out research activities – ethics, established and followed with an aim of protecting the dignity of the work that research produces and the information that is used in the entire research process In this study the following components of ethics was observed by the researcher:

Confidentiality (Privacy): The information provided by participants was not shared without their will and there was no intrusion of their privacy as anonymity upheld. Participants were assured of confidentiality verbally and in the written consent form.

Plagiarism: Although the variables have been researched on by a number of scholars including academicians & writers; this dissertation is an original product of my own writing with reference to secondary documents like reports, journals, and textbook study. The dissertation is not a duplication of any writer or scholar's work. Any work that is another writer was declared to be so.

Fair Treatment: The selected participants' inclusion was based on the requirement of research. There was non-prejudicial treatment of participants who refuse to take part or those who withdraw. More so sensitivity to and respect for the participants' beliefs, habits, lifestyles, culture and emotions was adhered to and courteous treatment accorded to them at all times.

3.13 Limitations of the study

Instrumentation: The research instruments were not standardized. Therefore, validity and reliability tests were done to produce a credible measurement of research variables

Testing: The use of research assistants can bring about inconsistency in the administration of the questionnaires in terms of administration, understanding of the items in the questionnaires and explanations were given to the respondents. To minimize this limitation, the research assistants were oriented and verified on the procedure to be done in data collection

Attrition: Not all questionnaires were returned neither correctly answered nor even retrieved back due to circumstances on the respondents such as travels, sickness, hospitalization and

refusal/withdrawal to participate. In the anticipation of this, the researcher reserved more respondents by exceeding the minimum sample size

3.14 Chapter Summary

“The chapter presented the methodology that the study used. The study employed a cross-sectional survey design. A population of 300 Metal fabrication SMEs was used with a sample size of 169 which was based on Krejcie and Morgan (1970) table. Primary data were obtained from 129 SMEs giving a response rate of 76.33 %. Data was collected using a questionnaire and interviews were later conducted for triangulation purposes. Reliability and validity tests were considered for the variables used, measurement of the research variables was made and model specifications were generated. Finally, ethical considerations and limitations of the study were presented”.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

4.0 Introduction

This chapter presents background information of enterprises included in the study, descriptive statistics of the research variables, and inferential findings based on the specific objectives of the study. The first section presented the background information of the enterprises included in the study, this was followed by the descriptive analysis for entrepreneurial orientation (networking, innovativeness and risk-taking) and access to access to bank credit. Thereafter, the results of the multiple regression analysis were presented after taking in considerations all the diagnostic tests required to run a regression and these quantitative results are interpreted.

4.1 Background Information of enterprises included in the study

Respondents of the enterprises included in the study were asked about, the position held in the firm, firm's registration status, age of the firm and size of the firm. Responses regarding this information is shown in table 4 below;

Table 4: background information of the respondents

	Category	Frequency	Percentage %
Position held in the firm	Owner	36	28
	Manager/supervisor	93	72
	Total	129	100
Firm's registration status	Sole proprietorship	63	49
	Partnership	60	46
	Private limited company	6	5
	Public limited company	-	-
	Total	129	100
Age of the firm	Less than 5 years	6	5
	5-10 years	42	33
	Above 10 years	81	62
	Total	129	100
Firm Size	Less than 5 Employees	-	-
	5-10 Employees	51	40
	11-40 Employees	75	58
	Above 40 Employees	3	2
	Total	129	100

“Source: Primary Data 2020”

As can be seen in table 4 above, in terms of the position held in the firm the responses given by the respondents about the position held in the enterprise indicated that majority of the respondents were managers/supervisors representing 78 per cent and 28 per cent of the enterprises were managed by their owners.

In terms of the firm's registration status, the majority of the firms were sole proprietorship representing 49 per cent this was followed by the partnership representing 46 per cent and lastly private limited company 5 per cent and this was so because SMEs registered as sole proprietorship enables the owners to enjoy the business secrets.

In terms of age of firm the responses given by the respondents about the number of years for which

the enterprise has been in existence indicated that 62 per cent of the enterprises had been in existence for a period above 10 years, 33 per cent for a period between 5 to 10 years and lastly, those that had existed for a period less than 5 years constituted 5 per cent. This demonstrated an even distribution of the enterprises included in the study.

Lastly, in terms of firm size, the majority of the firms employed between 11 to 40 employees representing 58 per cent this was followed by the firms employing between 5 to 10 employees representing 40 per cent, those employing above 40 employees constituted 2 per cent.

4. 2 Descriptive statistics of the variables included in the study

The entrepreneurial orientation (networking, innovativeness and risk-taking) and access to bank credit were statistically described using computed mean and standard deviation. The constructs under these variables were measured on a Likert scale of 1-5 where 1 is for strongly disagree and 5 is for strongly agree where respondents were requested to indicate their level of agreement or disagreement with each sentence, by ticking the option which best represented their personal feelings and understanding towards the networking, innovativeness and risk-taking statements that influence access to bank credit.

4.2.1 Networking

The constructs for networking studied were based on the ability of enterprises to connect with competitors, suppliers, customers, government agencies, source of finance and institution of high learning and the extent to which the network is perceived as relevant. The computed mean and standard deviation values of the statements on the networking is given in table 5 below.

Table 5: Networking

Statement	Mean	Std. Deviation
Our fabrication has strong connection to the different learning institutions such as universities and polytechnic	4.59	.494
Our fabrication has strong connection to different suppliers e.g. those in our neighborhood and beyond	4.55	0.499
Our fabrication is connected to different customers e.g. Customers from the building sites, site engineers around and beyond	4.55	0.499
Our fabrication has strong connection to different government agencies e.g. police, local council (LC 1)	4.50	.502
Our fabrication is connected to different competitors in our neighborhood and beyond Grand mean= 4 .53	4.44	.496

“Source: Primary data 2020”

As indicated in Table 5 above, the findings reveal that generally, respondents perceive all the constructs of networking studied to be above average on the scale of 1 to 5. It can however be seen that there are notable differences on the various constructs evaluated.

For instance, in terms of connection to the different learning institutions such as universities and polytechnic the mean score by the respondents was 4.59 with the standard deviation of 0.94, in relation to all the other aspects of networking this constituted the highest mean score. This was followed with strong connection to different suppliers (mean = 4.55, standard deviation= 0.499) and enterprise connection to different customers (mean = 4.55, standard deviation= 0.499). All three items were above the grand mean of 4.53 suggesting that SMEs did accord much importance to measure networking.

The level of enterprise’s connection to different government agencies with a mean = 4.50, standard

deviation= 0.502 and enterprise connection with different competitors in the neighbourhood and beyond had a mean of 4.44 and a standard deviation of 0.496, had least scores in relation to other items and they were also below the grand mean of 4.53 suggesting that respondents did not accord much importance to measure networking.

In terms of frequent of meeting to make a strong networking, one interviewee had this to say,

“To be able to obtain a bank credit from their institution, SMEs owners must be a member of a group and the group members meet every Monday at 8.00 Am. Unfortunately, this is achieved in a short time and thus a lot of the members are lost along the way before qualifying to be guaranteed by the other members as surety.”

According to one Interviewee,

“The enterprise’s strong connection to customers increases the chances to access bank credit from banks. However, the regulation of the sector is still a challenge because it’s free entry and exit which destabilizes the market due to rapid competition.”

4.2.2 Innovativeness

The constructs for innovativeness studied were based on new ways of reaching out customers, unique services, new design, the new idea implementation from employees, new ways of doing things and complicated. The descriptive statistics showing the mean and standard deviation of the statements on the level of innovativeness is given in table 6 below.

Table 6: Level of Innovativeness

Statement	Mean	Std. Deviation
We have implemented all new ideas of our workers more than what our competitors do	4.60	0.497
In our workshop we offer very unique services which our competitors can't easily offer e.g. repairing car, adding guards on cars	4.59	0.494
We are able to do new designs for our customers that our competitors can't easily do	4.53	0.501
In this workshop we have adopted new ways of reaching out to our customers (e.g. we are now mostly on WhatsApp, Facebooks, YouTube) more than our competitors (neighbors)	4.52	0.502
Grand Mean = 4.56		

Primary data source 2020

As specified in Table 6 above, the findings reveal that generally, respondents perceive all the constructs on innovativeness studied to be above average on the scale of 1 to 5. It can however be seen that there are remarkable differences on the various items of innovativeness evaluated.

The enterprise's ability to implement all new ideas of employee more than their competitors scored the highest mean of 4.60 and a standard deviation of 0.497 and the ability of the enterprise to offer very unique services which their competitor can't easily offer (Mean= 4.59 and SD=0.494). These particular items were above the grand mean of 4.56 implying that the respondents agreed that the items were measuring innovativeness.

The enterprise's level of ability to be able to do new designs for the customers that their competitors can't easily do with a mean = 4.53, standard deviation= 0.501 and enterprise level of

adoption of new ways of reaching to customers had a mean of 4.52 and standard deviation of 0.502, had least scores in relation to other items and they were also below the grand mean of 4.56 implying that the respondents didn't attach much relative importance to these items used to measure innovativeness.

In relation to enterprise's ability to implement all new ideas of their employees more than what their competitors' one interviewee had this to say;

“We normally value all kind of new ideas brought in by the employees and this motivates the employees to perform accordingly and because it's more convenient and accessible.”

In relation to offering unique services compared to other competition, one interviewee had this to say;

“Normally, these unique services offered differentiates them from the competition. However, gaps exist on what constitutes services in the fabrication sector.”

4.2.3 Risk-Taking

The constructs for risk-taking studied were based on sum of investments in fixed assets (capital investment), extremely new ideas, decision making under uncertainty, opportunity and going for high risk projectys. The descriptive statistics showing the mean and standard deviation of the statements on the level of risk-taking is given in table 7 below.

Table 7: Level of Risk-Taking

Statement	Mean	Std. Deviation
When opportunities are present, we don't adopt cautious "wait and see" mentality	4.60	0.491
The operations of our fabrication include high risk projects compared to our competitors	4.60	0.491
If we are confronted with decision making situations involving uncertainty, in our workshop we are not afraid of taking up those decisions	4.58	0.495
We don't have fear of coming up with extremely new design in our operations	4.54	0.500
In this metal fabrication workshop, we have committed huge capital investments obtaining the machines necessarily without paying attention to the fears Grand Mean = 4.55	4.43	0.498
Valid N (listwise)= 129		

2020 primary data source

As specified in Table 7 above, the findings reveal that generally, respondents perceive all the constructs on risk-taking studied to be above average on the scale of 1 to 5. It can however be seen that there are remarkable differences on the various items of risk-taking evaluated.

The enterprise's which don't adopt cautious "wait and see" mentality when opportunities are present and the willingness by the enterprise's take on high risk projects had the same mean of 4.60 and a standard deviation of 0.491 and the extent to which enterprise's if we are confronted with decision making situations involving uncertainty in their business they are not afraid of taking up those decisions with a mean of 4.58 and a standard deviation of 0.495. These particular

items were above the grand mean of 4.55 implying that the respondents attach much relative importance to these items used to measure risk-taking

The enterprise's level of not fearing coming up with extremely new design in their operation with mean of 4.54 and a standard deviation of 0.495 and commitment of capital investment in machines had a mean of 4.43 and standard deviation of 0.498. These particular item were below the grand mean of 4.55 implying that the respondents didn't attach much relative importance to these items used to measure risk-taking.

In relation to enterprise's which don't adopt cautious "wait and see" mentality when opportunities are present one interviewee had this to say;

"We normally grab such new opportunities because they offer the business a lot of return before they became known to everyone."

In relation to including high risk projects in the business operation two interviewees had this to say;

"First interviewee: These high risk projects ripe high profits for the business and we invest in them wisely,

Second Interviewee: Financial institutions are not in tandem extending bank credits to enterprises involved in high risk projects that they only take calculative risks."

In relation to enterprise's if are confronted with decision making situations involving uncertainty, they are not afraid of taking up those decisions business one interviewee had this to say;

"That for an enterprise to move to the next level, it has learn from its past experience of

such decision could have made under such uncertainty situations.”

4.2.4 Access to bank Credit

The constructs for access to bank credit studied were based on flexibility, the frequency of borrowing, loan accessibility from the bank and costs. The descriptive statistics showing the mean and standard deviation of the statements on the level of access to bank credit is given in table 8 below.

Table 8: Level of access to bank credit

	Mean	Std. Deviation
In this workshop, we don't run our operations using loans e.g. from the banks, microfinance	4.14	1.345
Our workshop is not able to get all the loan amount we request for e.g. from the banks, microfinances	4.21	1.254
Our workshop can't request for the loan as many times as needed e.g. twice a year, thrice a year	4.05	1.386
Bank officers don't normally request for bribes from our workshop in form token to speed up the loan processing	4.12	1.180
Grand Mean = 4.13		
Valid N (listwise)= 129		

“Source: Primary data 2020”

The enterprise is not able to get all the loan amount they request for example from banks, microfinances scored the highest mean of 4.21 and a standard deviation of 1.254 and the enterprise don't run their operations using loans (Mean= 4.14 and SD=1.345). These particular items were above the grand mean of 4.13 implying that the respondents agreed that the items were not

measuring access to bank credit.

Bank officers don't normally request for bribes from the enterprise in form token to speed up the loan processing with a mean = 4.12 and standard deviation of 1.180 and the enterprise can't request for the loan as many times as needed majority of the enterprises included in the study were in agreement in this regard it had a the least mean score of 4.05 and a standard deviation of 1.386. These particular items were below the grand mean of 4.13 implying that the respondents didn't attach much relative importance to these items used to measure access to bank credit.

In relation to the enterprise not to being able to get all the loan amount they request from the banks one interviewee had this to say;

“The enterprise don't meet all the evaluation criteria's mention of credit capacity, better credit history report, collateral, capital, conditions and character and these makes the process very difficult hence leading to a different loan mount advanced from the original request.”

In relation to the enterprise not running their operations using loans one interviewee had this to say;

“The enterprise running their operations using others forms of credit for example borrow from the relatives and friends, use client's credit, use company savings and personal savings. That most banks charge high interest, requires to have a land title, having audited financial statements, company full registered and the turnaround time they take to offer money is too long while the need is urgent.”

“Follow up interviews on the why enterprise are not able request as loan as many times as needed revealed that this may not be possible as respondents don’t come to the financial institutions to request for the credit, possibly the enterprise request for the whole amount it’s eligible for in one request and mostly financial institutions prefer advancing new credit to the enterprise unless it first clears the outstanding amounts.”

In relation to bank officers don’t normally request for bribes from the enterprise in form token to speed up the loan processing enterprise one interviewee had this to say;

“Taking bribes from clients is prohibited as it’s considered unethical practice as may result in being terminated from the job unless such tokens are declared and registered.”

4.3 Regression Analysis

In order to address objective one, objective two and objective three, a number of test were performed for instance normality, homoscedasticity, and collinearity on predictors and predicted variable purposely to aid in running the multiple regression.as indicated table 2 and 3.

Table 9: Model summary of multiple regression analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.730 ^a	.533	.532	0.68878
a. Predictors: (Constant), Networking, Innovativeness, Risk-taking, Firm size				

“Source: Primary Data 2020”

The results of the model summary in Table 9 above indicate that the four variables explain 53.2 percent variance in access to bank credit (adjusted R-square =.532)

Table 10: ANOVA Model Summary

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	79.469	4	19.867	23.456	.000 ^b
	Residual	105.237	124	0.847		
	Total	184.706	128			
a. Dependent Variable: Access to Bank credit						
b. Predictors: (Constant), Networking, Innovativeness, Risk-taking, Firm size						

“Source: Primary Data 2020”

In testing the significance of the model, the value obtained was 0.000 which was less than 0.025 at 5% level in a two-tailed test this indicates that the model was statistically significant in predicting the influence of the predictor variables on access to bank credit. Findings also indicate the calculated F-value was 23.456 which is greater than the F critical at 5% level of significance.

Table 11: Results of the Multiple Regression Coefficients

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	6.801	.405		11.748	.264	4.249	9.353
	Networking	.334	.306	.390	1.092	.006	-1.475	2.385
	Innovativeness	-.185	.231	-.228	-.800	.008	-2.071	.844
	Risk-Taking	-.202	.233	-.218	-.865	.046	-1.735	1.203
	Firm size	.036	.063	.052	.573	.029	-.672	.121
a. Dependent Variable: Access to Bank Credit								

“Source: Primary data 2020”

As indicated in Table 11, the findings of the study revealed that networking, innovativeness, risk-taking and firm were strong predictors of access to bank credit ($p < .05$).

Networking emerged the strongest predictor of access to bank credit finance (Beta =0.390, p-value =0.006). This means that any efforts made by the management of these small and medium enterprises to networking would increase access to bank credit by 0.390. The coefficient of

networking was statistically significant at $p < .05$, this implies that the research question one- can be concluded that networking has a positive significant influence on access to bank credit among metal fabrication SMEs in Katwe.

Innovativeness was also found to significantly predict access to bank credit (Beta = -0.228, p-value = 0.008). This means that any move by the management of these small and medium enterprises to innovativeness would decrease access to bank credit by 0.228. The coefficient of innovativeness was statistically significant at $p < .05$ testing, this implies that the research question two can be concluded that innovativeness has a negative significant influence on access to bank credit finance by Metal fabrication SMEs in Katwe.

Risk-taking was also found to significantly predict access to bank credit (Beta = -0.218, p-value = 0.046). This means that the management's desire for these small and medium enterprises to risk-taking would decrease access to bank credit by 0.218. The coefficient of risk-takings was statistically significant at $p < .05$ testing, this implies that the research question two can be concluded that risk-taking has a negative significant influence on access to bank credit finance by Metal fabrication SMEs in Katwe.

Firm size was also found to significantly predict access to bank credit (Beta = 0.052 p-value = 0.029). This means that effort by the management of these small and medium enterprises to have a sizeable firm would lead to an increase of access to bank credit by 0.052. The coefficient of firm size was statistically significant at $p < .05$ testing, this implies that the failure to control firm size as a cofounding variable would make us draw diverging conclusions about our interpretations.

4.4 Chapter Summary

Background information about the enterprises included in the study was presented. Descriptive statistics of the variables of networking, innovativeness and risk-taking and access to bank credit were also presented and interpreted.

The analysis was performed in order to answer the research questions (i, ii and iii). The results from objective one and objective two were significant likewise, the results from objective three were also significant.

CHAPTER FIVE

SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presented a summary of the key findings, discussion of findings, conclusion, recommendations; and areas for future research. The summary of key findings, discussion of the findings regarding the influence of networking, innovativeness and risk-taking on access to bank credit.

5.2 Summary of key findings

The main purpose of the study was to examine the influence of entrepreneurial orientation on access to bank credit among Metal Fabrication SMEs controllable by the size of the firm in Katwe. The study specifically aimed at answering the influence of networking, innovativeness and risk-taking on access to bank credit. The data for the study was collected from 129 Metal fabrication SMEs in Katwe.

Study findings revealed that majority of the Metal fabrication SMEs in Katwe agreed that networking, innovativeness, innovativeness and risk-taking were key entrepreneurial orientation influence of access to bank credit, the computed descriptive mean statistics for this entrepreneurial orientation were all above the average of 4 on a scale of 1 to 5 implying that respondents agreed that these items were highly important in explaining access to bank credit.

In order to address the study objectives one, two and three, the research questions were using multiple regression analysis. The first objective was to examine the influence of networking on

access to bank credit among Metal fabrication SMEs in Katwe. Results revealed a positive significant influence of networking on access to bank credit (Beta =0.390, P-value =0.006) at 5% level of significance.

The second objective was to determine the influence of innovativeness on access to bank credit among Metal fabrication SMEs in Katwe. Results revealed a negative significant influence of innovativeness on access to bank credit (Beta =-0.2280, P-value =0.008) at 5% level of significance.

The three objective was to assess the influence of risk-taking on access to bank credit among Metal fabrication SMEs in Katwe. Results revealed a negative significant influence of risk-taking on access to bank credit (Beta =-0.2180, P-value =0.046) at 5% level of significance.

5.3 Discussion of the findings

5.3.1 The influence of networking on access to bank credit

The first specific objective of the study was to examine the influence of networking on access to bank credit among metal fabrication SMEs at Katwe. Results of multiple regression analysis revealed a statistically significant influence of networking on access to bank credit. One interviewee stated that the enterprise's strong connection to customers increases the chances to access bank credit from banks. However, the regulation of the sector is still a challenge because it's free entry and exit which destabilizes the market due to rapid competition. Another interviewee stated that to be able to obtain a bank credit from their institution, SMEs owners must be a member of a group and the group members meet every Monday at 8.00 Am. Unfortunately, this is achieved

in a short time and thus a lot of the members are lost along the way before qualifying to be guaranteed by the other members as surety

The results of the objective was in agreement with the findings of previous scholars such as; Vos (2005); Atieno (2009); Pandula (2011) and Kumah (2011) their findings indicated that membership with an association increase SMEs' access to bank credit. The findings of the study also concur with those of Talavera et al., (2012) where they found out that that membership in business associations increase the probability of having a loan by 14.8 per cent

5.3.2 The influence of Innovativeness on access to bank credit

The second specific objective of the study was to determine the influence of innovativeness on access to bank credit among metal fabrication SMEs in Katwe. Results of multiple regression analysis revealed a statistically significant influence of innovativeness on access to bank credit. One interviewee stated that they normally value all kind of new ideas brought in by the employees and this motivates the employees to perform accordingly and because it's more convenient and accessible. Another interviewee stated that normally unique services offered by their business differentiate them from the competition. However, gaps exist on what constitutes services in the fabrication sector.

The results of the objective was in agreement with the findings of Brancati (2015) who studied the financing possibilities for innovative firms in the Italian market and found that hi-tech firms are credit rationed by banks more than the non-technological or non-innovative firms. The study also concur with those of Lee et al. (2015) in the context of UK showed that innovative firms look for more external sources of finance than the non-innovative firms. They also show that innovative firms are more likely to be credit rationed than the non-innovative ones.

5.3.3 The influence of Risk-Taking on access to bank credit

The third specific objective of the study was to assess the influence of risk-taking on access to bank credit among metal fabrication SMEs in Katwe. Results of multiple regression analysis revealed a statistically significant influence of risk-taking on access to bank credit. One interviewee stated that for an enterprise to move to the next level, it has learn from its past experience of such decisions could have made under such uncertainty situations. Another interviewee stated that including high risk projects in their operations ripe high profits for the business and they invest in them wisely and lastly that financial institutions are not in tandem extending bank credits to enterprises involved in high-risk projects that they only take calculative risks

The results of the objective was in agreement with the findings of Kirschmann (2016) found that banks reduce amount of loan to the customer if the client borrowing has a higher risk and hence, SMEs may face more credit rationing. This is also in line with the findings of Ortiz-Molina and Penas (2008) where he found that at risky borrowers receive loans with shorter maturity.

5.4 Conclusions

Generally entrepreneurial orientation in SMES contributes to 53.2% increase in access to bank credit. It can be concluded that strengthening of the SME's networks increases access to bank credit; investing in physical assets improves the financial position of the SMEs and having innovativeness included in SMEs core values improves access to bank credit;

5.5 Recommendations

The study found out that networking had a significant influence on access to bank credit. The study recommends that SMEs should expand their networks, for instance strengthening their connections

with suppliers, sources of finance, local political leaders, customers and learning institutions

This is so because networking opens the window for collaboration with different learning institutions which supplies skilled labour force. Additionally, networking increase SMEs access to trade credit, bulk discounts and collective bargaining with suppliers. Further, networking improves the cordial relationship with financial providers for some banks belonging to a borrowing group is considered a surety to lending. Lastly, networking provides avenues through which the government can channel money such as the “Emyoga Scheme” introduced by His Excellency the President of the Republic of Uganda.

The study also found that innovativeness had a negative significant influence on access to bank credit. Owing to this, the study recommends that that metal fabrication SMEs should have innovativeness embedded in their organizational core values. Additionally, study recommended that SMEs should encourage innovative ideas for instance rewarding best innovative employee of the year

The study also found that risk-taking had a negative significant influence on access to bank credit. Drawing to this, the study recommends that metal fabrication SMEs should invest in physical assets, for instance investing in property, plant and equipment's. This can strengthen their financial position and hence they can pledged as collateral to secure bank credit

5.6 Areas for further research

The sample was composed of Metal Fabrication SMEs that operate in Katwe area, which means that other SMEs and SMEs operating in other regions of Uganda were not investigated. Therefore,

the findings cannot be generalized to all the SMEs across the entire country. Studies in future can extend to encompass other SMEs and other parts of the country

Future study could be directed to finding the moderating effect of financial characteristics between entrepreneurial orientation and access to bank credit

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APPENDICES

APPENDIX I: QUESTIONNAIRE

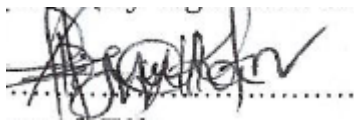
RESEARCH TITLE: “ENTREPRENEURIAL ORIENTATION AND ACCESS TO BANK CREDIT AMONG SMALL AND MEDIUM ENTERPRISES METAL FABRICATORS”

Dear Respondent,

I am Yiyo Babulya, a student of Kyambogo University, pursuing a Master’s in business administration Studies (Accounting and Finance Option). The questionnaire is intended to help the researcher get information on the influence of entrepreneurial orientation on access to bank credit by metal fabricators SMEs, Katwe. The purpose of the study is purely academic and information given was treated with the highest degree of confidentiality. You have been randomly selected as a key respondent for this study. Please tick the answer which represents your opinion on the subject or the most appropriate to you.

I appreciate your participation in this effort.

Thank you,

A handwritten signature in black ink, appearing to read 'Yiyo Babulya', is written over a horizontal dotted line.

Yiyo Babulya

Principle researcher

Section A: BACKGROUND INFORMATION

A1. Position: What position do you hold in this fabrication workshop?

- a. owner
- b. Manager supervisor

A2. Status: What is the registration status of this fabrication workshop?

- (1) sole proprietorship
- (2) Partnership
- (3) Private limited company
- (4) Public limited company

A3. Age: How long has this fabrication workshop been in existence?

- (1) Less than 5 Years
- (2) 5-10 Years
- (3) Above 10 Years

A4. Size: How many employees work for this fabrication workshop? (including you)

- (1) Less than 5 workers
- (2) 5-10 workers
- (3) 11-40 workers
- (4) Above 40 workers

From questions B – D: ENTREPRENEURIAL ORIENTATION ASSOCIATED WITH ACCESS TO BANK CREDIT

Entrepreneurial orientation considered for this study have been measured in terms of innovativeness, risk-taking and networking. On a scale of 1-5 where 1 is for strongly disagree and 5 is for strongly agree, please indicate how much you agree or disagree with each sentence, by ticking the option which best represents your personal feelings and understanding towards the innovativeness, risk-taking and networking that influence access to bank credit

	SECTION B. NETWORKING	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
NE1	Our workshop has strong connection to different suppliers e.g. those in our neighborhood and beyond	1	2	3	4	5
NE2	Our workshop has a connection to the different learning institutions such as universities and polytechnic	1	2	3	4	5
NE3	Our workshop is connected to different customers e.g. Customers from the building sites, site engineers around and beyond	1	2	3	4	5
NE4	Our workshop has strong connection to different government agencies e.g. police, local council (LC 1)	1	2	3	4	5
NE5	Our workshop has strong connection with different competitors in our neighborhood and beyond	1	2	3	4	5
NE6	Our workshop is highly connected and maintains good relationship with different sources of finance e.g. banks, Sacco's, money lenders	1	2	3	4	5
	SECTION C: INNOVATIVENESS					
INN1	In this workshop we have adopted new ways of reaching out to our customers (e.g. we are now mostly on WhatsApp, Facebooks, YouTube) more than our competitors (neighbors)	1	2	3	4	5
INN2	We have implemented all new ideas of our workers more than what our competitors do	1	2	3	4	5
INN3	In our workshop we offer very unique services which our competitors can't easily offer e.g. repairing car, adding guards on cars	1	2	3	4	5
INN4	We are able to do new designs for our customers that our competitors can't easily do	1	2	3	4	5
INN5	In this workshop we use new machines which are complicated than our competitors (neighbors)	1	2	3	4	5
INN6	In this workshop our basis of competing is looking for new ways as opposed to what our competitors (neighbors) are doing	1	2	3	4	5
	SECTION D: RISK-TAKING					

RT1	If we are confronted with decision making situations involving uncertainty, in our workshop we are not afraid of taking up those decisions	1	2	3	4	5
RT2	We don't have fear of coming up with extremely new design in our operations	1	2	3	4	5
RT3	The operations of our workshop include high risk projects compared to our competitors	1	2	3	4	5
RT4	When opportunities are present, we don't adopt cautious "wait and see" mentality	1	2	3	4	5
RT5	In this metal fabrication workshop, we have committed huge capital investments obtaining the machines necessarily without paying attention to the fears	1	2	3	4	5

SECTION E: ACCESS TO BANK CREDIT

Access to bank credit has been measured by flexibility and the ease with which SMEs get money from banks in terms of frequency of loan acquisition and amount of loan borrowed. On a scale of 1-5 where 1 is for strongly disagree and 5 is for strongly agree please indicate how much you agree or disagree with each sentence, by ticking the option which best represents your personal feelings and understanding towards the statements on access to bank credit.

		Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
	SECTION E: ACCESS TO BANK CREDIT					
ABC1	In this workshop, we don't run our operations using loans e.g. from the banks, microfinance	1	2	3	4	5
ABC2	Our workshop is not able to get all the loan amount we request for e.g. from the banks, microfinances	1	2	3	4	5
ABC3	Our workshop can't request for the loan as many times as needed e.g. twice a year, thrice a year	1	2	3	4	5

ABC4	Bank officers don't normally request for bribes from our workshop in form token to speed up the loan processing	1	2	3	4	5
ABC5	Our workshop uses other sources of credit e.g. company savings, customers credit, owner's equity, borrowing from friends and relatives	1	2	3	4	5
ABC6	Our workshop is able to get the money needed from e.g. friends & relatives, customers credit, company savings	1	2	3	4	5
ABC7	Our workshop is able to get money e.g. from friends and relatives as many times as needed e.g. twice a year, thrice a year	1	2	3	4	5
ABC8	When our workshop gets money e.g. from our savings we don't bribe anyone	1	2	3	4	5
ABC9	Our workshop rely mostly on these other forms of credit because don't require us to have land titles	1	2	3	4	5

Appendix II: Interview guide

Dear respondent,

This is an academic study examining the entrepreneurial orientation among metal fabrication SMES in Katwe Area. Your responses shall be confidential and used only for academic purposes.

Therefore you are amiably requested to spare some time and share your responses.

An interview guide schedule for the interviews with bank branch manager, credit supervisor and SME relationship Manager to obtain information about access to bank by SMEs.

- 1) Talk, about your credit process?
- 2) Describe, how you understand Metal fabrication SMEs in terms of
 - a) Networking

- b) Innovativeness
 - c) Risk-taking
- 3) Describe reasons as to why metal fabricator don't want come for the credit from this bank on the basis that they are innovative, risk-taking and well connected?

Appendix III: Results for factor analysis of the study variables

Networking	Factor Loading
Our workshop has strong connection to different suppliers e.g. those in our neighborhood and beyond.	0.893
Our workshop has a connection to the different learning institutions such as universities and polytechnic.	0.880
Our workshop is connected to different customers e.g. Customers from the building sites, site engineers.	0.862
Our workshop has strong connection to different government agencies e.g. police, local council (LC 1).	0.854
Our workshop has strong connection with different competitors in our neighborhood and beyond.	0.838
Eigen value	3.747
Total Variance Explained	74.923
Kaiser-Meyer-Olkin (KMO)	0.878
Bartlett's Test of Sphercity	434.783**
Innovativeness	Factor Loading
In this workshop we have adopted new ways of reaching out to our customers (e.g. we are now mostly on WhatsApp, Facebooks, YouTube) more than our competitors (neighbors).	0.937
We have implemented all new ideas of our workers more than what our competitors do.	0.927
In our workshop we offer very unique services which our competitors can't easily offer e.g. repairing car, adding guards on cars	0.916

We are able to do new designs for our customers that our competitors can't easily do	0.899
Eigen value	3.383
Total Variance Explained	84.579
Kaiser-Meyer-Olkin (KMO)	.836
Bartlett's Test of Sphercity	464.187***
Risk-Taking	Factor Loading
If we are confronted with decision making situations involving uncertainty, in our workshop we are not afraid of taking up those decisions.	0.832
We don't have fear of coming up with extremely new design in our operations.	0.819
The operations of our workshop include high risk projects compared to our competitors.	0.815
When opportunities are present, we don't adopt cautious "wait and see" mentality.	0.803
In this metal fabrication workshop, we have committed huge capital investments obtaining the machines necessarily without paying attention to the fears.	0.766
Eigen value	3.26180
Total Variance Explained	65.223
Kaiser-Meyer-Olkin (KMO)	.865
Bartlett's Test of Sphercity	276.873***
Access to bank credit	Factor loading
In this workshop, we don't run our operations using loans e.g. from the banks, microfinance	.884
Our workshop is not able to get all the loan amount we request for e.g. from the banks, microfinances	.847
Our workshop can't request for the loan as many times as needed e.g. twice	.810

a year, thrice a year

Bank officers normally don't request for bribes from our workshop in form .699
 token to speed up the loan processing

Eigen value	2.86
Total Variance Explained	71.594
Kaiser-Meyer-Olkin (KMO)	.677
Bartlett's Test of Sphericity	341.92***

N=129, ***p<0.00, **p<0.01, *p<0.05, α is Cronbach Alpha coefficient computed for scales with three items and more.

Appendix IV: Determination of sample size

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370

65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384