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# Financial inclusion and the growth of small medium enterprises in Uganda: empirical evidence from selected districts in Lango sub-region

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## Abstract

The growth and failure of small and medium enterprises has been a topic of discussions world over among policymakers and researchers. This study was guided by the following objectives: to examine the contributions of small medium enterprises (SMEs), to determine the challenges affecting small medium enterprises, to examine how financial inclusiveness supports the growth of small medium enterprises, and to establish the relationship between financial inclusion and growth of small medium enterprises. The study used a cross-sectional research design. Descriptive design was used and supplemented by inferential statistics. Correlation and regression analysis were adopted. The study revealed that financial inclusion is significant in supporting SME growth. The study further also revealed that the cost of acquiring and servicing financial services is high; there is also difficulty in using some of the financial services, and the way financial providers treat financial users, some lacked some degree of respect and dignity. The study recommends that financial providers should continue sensitizing the public on the available financial services beyond credit services, which are common and known. Digital financial service providers should encourage their clientele to use digitalized financial services which are cheap, secure, and risk averse. The cost of capital should also be reduced to encourage borrowing while SMEs should innovatively produce goods that can be competitive at both domestic and international markets.

**Keywords:** Financial inclusion, Financial services, SMES, Business failures

## Introduction

Financial inclusion (FI) has gained immense recognition in many upcoming economies as well as at the international level as far as policy is concerned (IME, 2017). Financial inclusion (FI) is the process of access to and usage of diverse, convenient, affordable financial services (Nwanko & Nwanko, 2014). This is viewed as the ability of some individuals to access and use basic financial services like savings, loans, and insurance, which is designed in a manner that is reasonably convenient, flexible, and reliable. FI has taken a center stage on economic growth and development in an effort to create

wealth among citizens of developing countries (IMF, 2018). FI is an important financial literacy program, which creates the communities' ability to improve on the usage of any kind of financial service from formal financial institutions, which affects the citizen's standards of living, and economic fundamentals which are the major indicators of financial inclusion (Terzi, 2015). The 2010 G20 Summit in Seoul endorsed the Financial Inclusion Action Plan (FIAP).

Garikai (2011) defines SMEs by capital invested, number of workers employed, and sales turnover. The number of employees working in that business and asset value also classifies SMEs (UIA, 2016). The definition of small medium enterprises (SMEs) differs from country to country. In some countries, the criteria for classification are based on capital, and in other countries, they are based on the number of employees. Financial inclusion is an antecedent to economic growth through wide participation in various economic activities by the citizenry through numerous startups of small and medium enterprises. In the context of Uganda, SMEs are regarded as an engine of economic growth, development, and transformation through innovation and wealth creation (NDPII 2015/16-2019/20). The promotion of SMEs has been a key area of government intervention. SMEs dominate much of the country's economy, for example, 10% are active in the manufacturing sector, 33% in commerce, 49% in service, and 8% in other fields (UIA, 2016), and all these are contributing to approximately 90% in employment which is close to 2.5 million people of the entire private sector employment and 80% of manufactured products accounting for 20% of GDP (UIA, 2016). The development of SMEs in Uganda is one of the policy agendas of the government in order to boost economic growth and development. One of the key areas of government interventions is the creation of The Microfinance Support Centre, Uganda, which offers programs that support the growth and expansion of SME through access to cheap and affordable finance. Some researchers argue that SMEs globally are seen as an engine of economic growth and development, and its success has a direct effect on the economic growth and development in both developing and developed economies as they have the potential to create jobs (Kristiningsih & Trimarjono, 2014; ). OECD (2010) posits that not all SMEs have the ability to be innovative; however, small businesses are often the driving force behind the new radical innovations that are very significant in the economic growth and development. SMEs are also able to exploit the opportunities available at their disposal which had been neglected by already established firms.

Eton, Mwosi, Ogwel, Edaku, and Obote (2018) note that SMEs should receive full backing legal protection and stimulus from all stakeholders so that they can sustain the economic growth and development which would lead to job creation, therefore driving investment into the economy as well as generate revenue to government through taxation. SMEs have strong attachments to the local environment, which may represent their source of expertise, networks, business opportunities, and access to funding which would be very important to consider as factors that support its existence at a macro level, and therefore, one needs to know how policies which are developed in a country can work and how the SMEs adopt these policies which shape their business at the territorial and regional level (OECD, 2016). The failure by SMEs to deliver good products and services in time to the customers at all levels as a result of challenges such as inadequate funding for their businesses therefore results in a debate on whether they are well prepared in creating sustainable economic growth and development in a country

(Bowen, Morara, & Muraithi, 2009). The study conducted by Abanis and Arthur (2013) establishes that SME performance in Uganda was largely hampered by inadequate funding characterized by a high cost of finance. However, a lack of competition among formal financial institutions for financial services reduces access to financing for SMEs. Increased competition and market diversification consequently play a major role in promoting the financial inclusion and productivity of SMEs in the country. Love and Martinez Peria (2015) establish a positive impact on FI which depends on the coverage of credit bureaus. Strong competition among the financial institutions and low information asymmetries would facilitate financial inclusion among SMEs. The key characteristics of an economy which promotes favorable conditions for SME investment and financial inclusion are economic diversification, adequate infrastructural development, and healthy competition across all sectors.

This research was inspired by the increasing significance of small and medium enterprises in Uganda's economy and the enduring constraints faced by the SMEs in their operations. This is because the contribution of SMEs to the gross domestic product (GDP) and overall economic contribution to Uganda's economy has been a subject of discussion by many scholars (Abanis & Arthur, 2013). However, no studies have been conducted in SME growth in Lango sub-region, and this research will help identify the specific areas to be addressed if the growth of SMEs is to be achieved. Besides, appreciating the influence of financial inclusion is important in wealth distribution and overall growth of the economy (Nwanko & Nwanko, 2014). The problems associated with inadequate access to finance do not only cripple SMEs, but also leads to an eventual decline in economic development (IMF, 2017).

The growth, development, and survival of SMEs are affected by various factors that may exist in their operations and management of the businesses. SMEs are created and nurtured in various ways and supported by various stakeholders using different laws and regulations which support their creation. The operations of SMEs in Sub-Saharan Africa, Uganda, and Lango sub-region in particular has contributed to the economic growth across the country (UBOS, 2016), and there are many successful entrepreneurs in the country. The increase in the number of many financial institutions in the region would indicate an increase in the access to finance which would mean more support to the growth of businesses. However, SMEs in the region are still disproportionately affected by inadequate financing. Adcorp (2014) observes that the mortality rate of SMEs among African countries remains very high with five out of seven new businesses failing in their first year. This is too high which needed an intervention to reverse the trend. SMEs in developing countries are stagnating, and if not supported by developing good policies, they will not survive for a long time, yet their contribution to economic growth would be enormous (Reeg, 2013). Over the years, there is a declining pattern in the number of growth of SMEs in the region, and this can be associated to various factors. SMEs have often cited some impediments to the smooth performance and operation which may lead to others performing below optimum levels or collapse. Olowe, Moradeyo, and Babalola (2013) posit that most SMEs are greatly affected by inadequate financing of their businesses, and as a result, they die before reaching the growth stage of their life cycle. It has remained regrettable that in spite of the role that SMEs play in the economy and the support extended to the entrepreneurs in the SME sector, most of these SMEs collapse within the first 3 years after their establishment (Fatoki & Smit, 2011). The high failure

rates of these SMEs in the region have prompted this study to find ways of redirecting the continuous worrying trends in the SME business sector. This study was guided by the following objectives: (1) to examine the contributions of small medium enterprises, (2) to determine the challenges affecting small medium enterprises, (3) to examine how financial inclusiveness supports the growth of small medium enterprises in the region, and (4) to establish the relationship between financial inclusion and small medium enterprises. The purpose of the study was to assess the contribution of FI to the growth of SMEs.

This study is structured in the following ways: Abbreviations, Introduction, Literature review, Methodology, Results, Discussion, Conclusion and practical implications, Contribution to the study, Recommendation, Acknowledgements, Authors' contributions, Funding, Author information, Declarations, Competing interests, and References.

## **Literature review**

### **Financial inclusion**

The World Bank (2018) defines financial inclusion (FI) as the process by which all households and businesses regardless of income level have access to and can effectively use the appropriate financial services they need in order to improve their lives. CFI (2018) also defines financial inclusion as a state at which individuals access a full suite of financial services at affordable prices, in a convenient manner and with respect and dignity. Such services have to be availed in a responsible and safer manner to consumers and sustainably provided in an appropriately regulated environment (Demirguc-Kunt, Klapper, Singer, & Oudheusden, 2015). Global and national level policymakers are taking up financial inclusion as an important development agenda and the priority it deserves. For example, the G20 included financial inclusion as the main pillar at the 2009 Pittsburg Summit (Cull, Ehrbeck, & Holle, 2014). There are four dimensions of financial inclusion, namely, access, quality, usage, and welfare (Aguera, 2015). At a macro level, financial inclusion can result in a diversified base of deposits creating a resilient financial system and increased stability (Garcia, 2016). IMF revealed that within a country's level, financial inclusion is affected by the limitations arising from numerous macroeconomic outcomes which include stability, equality, and economic growth (Sahay et al., 2015). Information and communication technology has greatly improved digital financing. The delivery of financial services through digital means of service provision has been increasingly emphasized by governments, development partners, and service providers themselves as a good step towards financial inclusiveness (Gabor & Brooks, 2017). The provision of services like mobile banking has provided easy ways for electronic transfer payment to the financially excluded people, and this method can help reduce theft and financial crimes which are related to cash transactions and reduce the risk of loss. Digital financing appears to be a better solution for those financially and socially excluded (GSMA, 2017). The attempt to support financial inclusiveness will address the challenges of access to finance that may likely hinder the growth of SMEs.

The Financial Inclusion Alliance (FIA) (2018) states that the usage of smartphones and broadband Internet is now important for supporting access to secure and affordable financial services such as money transfers, credit and saving, and payments both domestic and international. Alexandre and Eisenhart (2013) observe that mobile

technologies have provided a true imperfection of finance. The development and the adaptation of digital innovations through partnership for financial inclusion would accelerate the delivery of financial services. Improved financial inclusion propels and plays a vital role in promoting access to credit, use of mobile and automatic teller machine (ATM), savings, and easy access to payments (Dorfleitner and Roble, 2018). The high increase in financial inclusion can be associated with increased investment level, employment opportunity, higher income level, and lower poverty level and that economic growth can only be sustained if a good number of people have access to formal financial services (Umar, 2013). In order to increase financial inclusiveness to the majority of the population, financial service providers should lower down the costs of operating accounts, particularly citizens from rural areas (Eton, Mwosi, Ogwel, et al., 2018). There are high transaction costs in lowly populated areas coupled with rigid and complex methods of assessing the risk profile of clients in rural areas, and these have been a challenge for the formal financial institutions with a business model to sustainably offer adequate and effective financial services to rural populations (FAO, 2016a). Addressing the challenges like information and communication technology especially how cash transfer, cost of capital, usage, and access to finance will definitely play a key role in the growth of SME.

Across-country evidence suggests that at a macro level, the financial institutions have developed a wide range of products and services being offered with greater outreach and depth, and this can reduce inequality among the population and increase economic growth and development (Sarma & Pais, 2011). Similarly, Martinez (2011) establishes that financial inclusion helps to increase the pace of inclusive growth and development which has to be sustainable with effective and efficient distribution mechanisms of scarce resources for the well-being of the society. CBN (2012) observes that financial service mobilizes greater household savings, leverages capital for investment, and expands the class of entrepreneurs. Such financial services may include loans, overdraft, pension, insurance services, and modes of payments. According to Damodaran (2013), financial inclusion helps to channel the flow of money in the economy so that both the rich and the poor access it with ease. Financial inclusiveness at the household level may support more effectively the macroeconomic policy frameworks. IMF (2018) establishes that financial inclusion at a household level is associated with higher revenue and expenditure of gross domestic product (GDP), and it would equally increase the size of the fiscal multiplier and therefore would indicate that the output elasticity to interest rates will be higher for the countries with greater household financial inclusion. FI therefore covers the cost-effectiveness and meaningful financial services for those who are underprivileged and those who find it a challenge to access financial services, and most of them are rural dwellers. Ibor, Offiong, and Mendie (2017) argue that much effort should be made by all stakeholders to increase financial access points to more rural areas and develop infrastructural services which promote financial inclusiveness. The government should also develop policies for the expansion of financial services to those who are financially excluded in rural areas, and this will ultimately address the growth of SMEs.

### Small medium enterprises

Aga, Francis, and Rodriguez-Meza (2015) posit that SMEs are described as the nucleus to economic growth and development and are major sources of employment. Studies also note that SMEs are major players in economic growth and development since it provides employment opportunities to citizens, and this increases their household income (Kamunge, Njeru, & Tirimba, 2014; Palmarudi & Agussalim, 2013). However, Turyakira and Mbidde (2015) posit that inadequate research on SMEs' contribution in networking influences competitiveness alongside limited resources. Rahman (2015) demonstrates that networking among SMEs, in addition to increasing competitiveness, allows sharing of employee training costs and cuts costs on consultancy and research and development, production, export and human resource, and financial support. While Breda and Fahy (2011) do not find causal links between networking of resource combinations, information sharing, and international performance, their research supports a positive relationship between a firm's human capital network and international performance. Most SMEs operating in Sub-Saharan Africa and in Uganda in particular are faced with many challenges, which affect their operations and long-term survival. It is noted that the business failure rates are alarming with very few businesses surviving for a year of their operation. Kazimoto (2014) opines that governments should support SMEs by ensuring that they play their roles in helping them improve their economies. The stronger the countries' economies, the bigger are the opportunity for the citizens of those countries. Kongolo (2010) posits that globally, SMEs operate in a similar way, have the same characteristics, and face almost the same challenges but differ in their understanding of how they contribute to the economic growth and development. Hatch and Cunliffe (2012) observe that most of the African SMEs are operating in highly hostile and difficult conditions compared to their counterparts in more developed economies of the world. Olawale and Garwe (2010) establish that SMEs in Africa find various obstacles in doing business due to unfavorable business conditions arising from unrealistic requirements like higher taxes, higher inflation rates, fluctuation, and unstable exchange rates thus making it very difficult for their operation. Ocioo, Akaba, and Worwal-Brown (2014) observe that SMEs are faced with the challenge of competition. Globalization has also ushered in technological changes where new products are being developed, and this creates stiff competition within the SME sector. Egesa (2010) notes a correlation between technological uptake and higher business failure rates in Uganda. Notably, the constraints SMEs are faced with could also include weak operational capabilities and limited resources (Sok, Snell, WJT, & Sok, 2017) and particularly in Africa with higher challenges such as technology, innovation, and human capital are a big obstacle to business enterprises (Akeyewale, 2018).

The study conducted by Tinarwo (2016) also established that some of the challenges hampering the growth of SMEs were stiff competitions, lack of markets, unfair treatment exhibited by local authorities and lack of government support, and inadequate information and communication technology and training, which have greatly affected most of our SMEs. Dugassa (2012) establishes that inadequate training and market size have been the major challenges among the SMEs in the region. The lack of training makes the SMEs produce substandard products, which eventually affected the marketing of their products. Therefore, training of the SMEs would help sort out this mess and solve such a challenge. Katua (2014) argues that the government should open up

institutions specifically to support the training of entrepreneurs that would offer them relevant skills that would improve the performance of SMEs. Sempala and Mukoki (2018) observe that there is a need to train enterprise owners, managers, and other operators in order to equip them with the relevant skills and knowledge specially those tailored towards impacting various business management practices. Eton, Okello-Obura, Mwosi, Ogwel, and Ongia (2019) argue that training institutions should strengthen the information and communication technology training programs by aligning them to the required job demands as dictated in the field of business. Gombarume and Mavhundutse (2014) posit that SMEs had the challenge of accessing cheaper loans from the formal financial institutions, and this has been a limiting factor in the growth sector. Inadequate access to cheaper credit is recognized world over as a major challenge facing SMEs, and these therefore constraint the growth of the existing SMEs. Shah, Nazir, Zaman, and Shabir (2013) opine that it is very difficult to access financial services from formal financial institutions due to their unrealistic demand for collateral, loan guarantees and securities, and high interest rates. Prohorovs and Beizitere (2015) posit that access to finance and financial services has been some of the major factors constraining the growth and development of SMEs. Fowowe (2017) establishes that the inadequacy of capital is believed to be one of the major factors affecting SMEs to reach their full potential. Credit availability is very significant for the growth and survival of SMEs (Eton, Mwirumubi, & Edaku, 2017). They also revealed that policymakers should advocate for financial sector policies that support financial intermediaries that design relevant products and services for SMEs which are flexible and affordable and thus creating a favorable environment that supports creativity and innovation. he government should avail funds to SMEs at low interest rates since SMEs are the driving force in the economy which should be supported (Taiwo, Temitope, & Agwu, 2016).

The cost of electricity is abnormally high in Uganda as compared to other countries in the region which affects the SME businesses (Turyahikayo, 2015). The increasing cost of electricity eventually affects the price of the products where the consumer bears the final burden. Reliability of electricity is also a challenge in doing business in Uganda; business owners complain a lot, and until now, no substantial answer can be given. The World Bank (2010) establishes that electricity is still a challenge faced by SMEs in Africa, followed by access to capital. Enterprises in Uganda are still small with limited resources at their disposal, and they are left with the only option of leveraging on the synergy of resources to complement each other. Fujita and Thisse (2013) observe that accessibility of resources and their availability to SMEs can help them maximize the benefit and market share as a result of economies of scale as well as internationalization. Sorasalmi and Tuovinen (2016) argue that SMEs are confronted with diverse challenges which include technological know-how and hostile business environment that affects their survival as compared to developed economies. Kamukama (2013) observes that technological advancement is growing at a faster rate, and therefore, SMEs should recognize and appreciate technology to compete favorably in the market. The level of competition is increasing on a daily basis; therefore, SMEs need to be creative and innovative and focus on the improvement of their products and services, quality, and quantity, and this would motivate employees (Farrokhian & Soleimani, 2015). SMEs with effective technological capabilities can easily adapt to the changing market environment whose consumer tastes and preferences are rapidly

changing (Ajonbadi, 2015). According to Murrithi (2017), the study establishes that inadequate information is an obstacle facing SMEs in Africa, and these challenges affect Uganda as well. The information related would include marketing, laws regulating their operations, and any other information, which can be of help to their businesses. Eton, Mwosi, Mutesigensi, and Ebong (2017) argue that information is critical since financial institutions would want information related to personal characteristics and credit worthiness of information on guarantors which are very essential in giving out loans. Based on the above, researchers have established that SMEs have failed to achieve their long-term targets in the economy. For example, Ali, Rashid, and Khan (2014) establish a negative impact of small-scale industries on poverty output in Pakistan. They recommended simplification of lending procedures, enforcement of credit rights, and reduction in credit costs. Beck, Demirguc, and Levine (2003) demonstrate that SMEs are not robust in reducing poverty. The authors could not establish a causal link between SME growth and poverty. The growth impact is rather spread across both large and small firms. Similarly, Straka, Birciakova, and Stavkova (2015) show that the argument for SMEs' contribution to household income is a relative one in Pakistan. Households' opinion that SMEs contribute to standards of living depends on the environment in which households live and work. SMEs in Uganda, northern Uganda, and more specifically Lango sub-region need the required support to meet the growth of SMEs.

#### **Financial inclusion and small medium enterprises**

Financial inclusion (FI) refers to a change in one's mindset as an economic agent on how to see money and profit, and aims to eliminate any barrier in accessing and utilizing financial services, and this is supported by the existing infrastructure. It is noted that more than half of the world's economically challenged adults do not have bank accounts, and this therefore leave them vulnerable to exploitation and theft, and this results to heavy losses (World Bank, 2012). Promoting FI in a global perspective would widen economic inclusion, and this would improve the financial condition of the population and thus uplift the standard of living of those disadvantaged SMEs who are financially excluded (Khan, 2011). The intermediation between savings and investments with efficient financial inclusion are most likely to improve the efficiency of SMEs and facilitate a better financial system (Aduda & Kalunda, 2012). While we have noted that underutilizing capital is one of the causes of growth constraints among the SMEs, they are very important in the investment strategy and expansion of small and macro enterprises among the rural therefore increasing financial inclusiveness of the citizens (Aldaba, 2011). SMEs are financially constrained, and the relaxation of credit constraints or accessibility to finance among the SMEs compared to larger firms would most likely lead to employment and the gains in labor productivity, therefore contributing to the economic growth and development (Ayyagari, Demirguc-Kunt, & Maksimovic, 2016). It is observed that the establishment and growth of SMEs would lead to employment and labor productivity across the country which leads to access to formal finance. The World Bank (2018) notes that the gains found from the implementation of policy reforms geared towards boosting the growth of SMEs by establishing credit bureaus across the country that would improve the financial inclusiveness of the

citizens. Beck and Cull (2014) observe that financial inclusiveness is significant for the growth of SMEs in Sub-Saharan Africa.

There are various factors that affect the level of a country's financial inclusiveness and financial development, including the quality of the formal financial institutions, availability of relevant information, income per capita, governance, and the regulatory framework (Park & Mercado, 2015). Most SMEs in Sub-Saharan Africa do not even attempt to apply for a bank loan due to the challenges of complicated collateral requirements, high interest rates, and complicated documentations. UNIDO (2015) opines that the cost associated with the capital transaction is always too high which greatly affects the performance of SMEs. The World Bank (2016) establishes that high concentration, weak competition, and the prevalence of public ownership in the financial intuitions are specifically some of the key constraints in financing SMEs. Financial inclusiveness supports the principle of financial stability which provides strong risk management and financial facilities. It would also close the financial inclusion gap within the SMEs, and these can bring a significant gain in the growth. However, a very low financial inclusion in the region suggests important untapped potential for the growth of increased access to finance by SMEs. Popov and Rocholl (2016) posit that increased constraints to financing during recession may put more pressure on employment by SMEs than by large firms. Kazimoto (2014) observed that governments and other stakeholders should therefore avail financial facilities and access to finance at a reasonable interest rate and use up-to-date information and communication technology in business and marketing, and these can be through improved network and training. Lega (2015) establishes that SMEs in Africa face a lot of challenges, and among them includes financial inclusion, non-favorable laws, regulations, and poor infrastructure, which affect the growth of SMEs. The government should take the responsibility of providing SMEs with a conducive environment for their growth and development, seeking international and local opportunities for its SMEs, developing fair and encouraging policies, and making it easy for SMEs to access financial facilities at a fair and affordable rate (Fariza, 2012). Moreover, the existing literature does not offer substantial information on the financial inclusion and growth of small and medium enterprises in Uganda thus making the current study timely.

## **Methodology**

The research design was a cross-sectional survey. This is a study design in which the researcher interacts with respondents in a single count. The design is useful in describing a phenomenon as it stands at the time of investigation (Kumar, 2011). The design was appropriate to study the relationship between financial inclusion and growth of SMEs in Lango sub-region as it stood at the time of the investigation. The study was conducted in Lango sub-region comprising SME sectors in manufacturing, services, production, and merchandise operating in Lira, Apac, and Dokolo districts. The study was based on a sample size of 320 (Krejcie & Morgan, 1970), drawn from a target population of 1900 business units (UBOS, 2018). The area under survey was divided into districts that were purposively selected. However, simple random sampling was used to select individual SME owners into the study. The study used a structured questionnaire, which comprised close-ended questions to understand the extent of financial inclusion and growth of SMEs. The questionnaire had four sections: the first section

constituted 5 items that sought to understand participants' background information. These items were designed according to nominal and ordinal scales of measurement. The second section constituted 13 items that sought to understand the FI contributions to the growth of SMEs. These items were designed according to a 5-point Likert scale. The third section constituted 20 items that sought to understand the challenges faced by SMEs in Lango sub-region. These items were also designed according to a 5-point Likert scale. The fourth section had 13 items that sought to understand the extent of financial inclusion in Lango sub-region. The items were also designed according to a 5-point Likert scale. All the interval items were based on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Financial inclusion was operationalized in terms of accessibility, degree of usage, adaptability to, and cost of financial products. The growth of SMEs was itemized using various elements of the contribution of financial inclusion to the growth of SMEs. The items were developed basing on the statements gleaned from the respective sub-sections of the literature review. The instrument was tested for reliability using Cronbach's alpha coefficient, as shown in Table 1.

Table 1 shows an overall reliability coefficient of 0.824. This implies that the items used in this instrument are internally stable and consistent. Therefore, the instrument can be used for the conclusion and generalizability of the results.

The study used factor analysis to reduce the items to a few that could explain the variables uniquely. For example, the items on the contribution of SMEs were reduced to 8 items, and the challenges of SMEs were reduced to 13 items, while financial inclusion was reduced to 10 items. After isolating out the items with high factor loadings, the study adopted descriptive statistical measures (mean and standard deviation) to portray the level of SMEs, their challenges, and financial inclusion. The study used correlation analysis to determine the strength of the relationship between the study variables. Regression analysis was conducted to provide a linear prediction in the growth of SMEs as a result of the changes in financial inclusion.

## Results

The overall participation indicates that 62.9% were males while 37.1% were females. This implies that the study was dominated by males more than females. The dominance of men over women derives from the fact that men have higher access to financial services than women do. Men have the required collateral security compared to women, who struggle to identify potential guarantors. Most of the participants (57.7%) belonged to the 30–39 years age bracket, followed by 33.3% who belonged to the 18–34 years age bracket. Little participation was observed among those who were 50 years

**Table 1** Reliability

Variable list	Cronbach's alpha	Cronbach's alpha based on standardized items	No. of items
Contribution to growth of SMEs	.710	.760	13
SMEs challenges	.879	.885	20
Financial inclusion	.883	.899	13
<b>Overall</b>	<b>0.824</b>	<b>0.848</b>	<b>46</b>

Source: field data, 2020

above. The statistics imply that the adults, followed by the youths, dominated the study. This is a variation in the participation of ages at which Ugandans accumulate financial wealth to engage in business. Most of the youths do not have adequate financial capital to start a business. Participation according to education level indicates that the majority had secondary education (45.0%) followed by those whose education was above secondary (37.1%) while 17.9% had primary education. The dominance of participants with secondary education derives from the effects of the Lord's Resistance Army war that crippled the education of many. However, a participant whose education was above secondary suggests the trend of turning away from white-collar jobs' expectations to blue-collar. In terms of experience, 46.7% had over 10 years' experience in business, followed by those with 5–9 years' business experience (36.1%). The statistics suggest that the study participants had noticeable experience in business. Matching this experience and their level of education suggests some stability in the growth and expansion of SMEs in the region. The study also indicates that most of the participants operate merchandise (36.8%), followed by those who provide services (29.2%), manufacturers (18.2%), and least of all production (15.8%). The variation in participation based on the nature of business derives from the fact that merchandise and service businesses require lower capital to establish and operate than manufacturing and production.

### **Factor analysis**

The researchers raised many claims in the instrument, some of which were highly correlated. To eliminate redundancy, factor analysis was adopted to remove the highly correlated while leaving out those that were unique yet accounting for a greater portion of the original variable list (Tables 2, 3, and 4).

The system extracted three factors accounting for about 58% of the original. The extracted variables were used in further analysis. High factor loadings were evident in becoming popular ( $r = .786$ ), accumulating some property like land ( $r = .717$ ), maintaining a close contact with customers ( $r = .707$ ), and networking ( $r = .706$ ).

The extracted variables account for about 67.4% of the original variables. High factor loadings were evident in unrealistic demands for collateral securities ( $r = .716$ ), competition from foreign firms ( $r = .683$ ), stiff competition from domestic firms ( $r = .669$ ), small market size ( $r = .698$ ), and unfair treatment from market authorities ( $r = .676$ ).

Three factor components were extracted, accounting for 68.4% of the original variables. In the first component, the largest factor loading was evident in making it easy to make deposits with financial providers ( $r = .812$ ) while the least factor loading was evident ( $r = .708$ ); ease of transferring using a mobile phone.

### **Objective 1: Contributions of SMEs**

To understand the contributions of SMEs, this paper adopted descriptive measures of the mean and standard deviation. The mean scores above 3.5 indicated challenges that affect SMEs the most, and the mean scores below 3.5 indicated challenges that affect SMEs the least while the mean scores from 2.5 to 3.4 indicated challenges that affect SMEs moderately (Table 5).

**Table 2** Factor analysis on the contribution to the growth of SMEs

Variable list	Component		
	1	2	3
1. I enjoy interacting with my customers.			0.472
2. Allow proper money flow.			0.460
3. It teaches me to be entrepreneurial.		0.747	
4. It increases my household income.		0.606	
5. It has made me become popular.	0.786		
6. I have accumulated some property, like land.	0.717		
7. It has helped me stay in close contact with potential customers.	0.707		
8. It has taught me to build networks with important people.	0.706		
<b>Total</b>	<b>4.67</b>	<b>1.74</b>	<b>1.12</b>
<b>% of variance</b>	<b>35.94</b>	<b>13.42</b>	<b>8.59</b>
<b>Cumulative %</b>	<b>35.94</b>	<b>49.36</b>	<b>57.96</b>

Source: field data, 2020

Participants identified building networks (mean = 4.29; Std. = .847), remaining in close contact with potential customers (mean = 4.20; Std. = .884) and interacting with customers (mean = 4.18; Std. = .767) as key among the contributions of SMEs to business operators. The statistics indicate most of the enterprises investigated are customer-oriented. The possibility of maintaining a close contact with customers might arise from the fact SMEs do not have many resources to devote to advertising, which might attract many customers. On the lower end, participants identified 'increase in household income' (mean = 1.73; Std. = .835) as a contribution to SME business operators. The statistics imply that increasing household income is no longer a motivator to SMEs. It is more of a short-term goal

**Table 3** Factor analysis on the challenges of SMEs

Variable list	Component					
	1	2	3	4	5	6
1. Unrealistic demand for collateral securities	0.716					
2. Competition from foreign firms	0.683					
3. Stiff competition from domestic firms	0.669					
4. Small market size	0.698					
5. Unfair treatment from local authorities	0.676					
6. Unrealistic demand for loan guarantees		0.612				
7. Inadequate access to cheaper credit		0.502				
8. High inflation rates			0.723			
9. Inadequate training in ICT				0.459		
10. Expensive loans				0.587		
11. High taxes					0.557	
12. Unreliable electricity					0.563	
13. Ever-changing technology						0.446
<b>Total</b>	<b>6.49</b>	<b>2.05</b>	<b>1.39</b>	<b>1.32</b>	<b>1.22</b>	<b>1.01</b>
<b>% of variance</b>	<b>32.43</b>	<b>10.26</b>	<b>6.97</b>	<b>6.61</b>	<b>6.09</b>	<b>5.04</b>
<b>Cumulative %</b>	<b>32.43</b>	<b>42.68</b>	<b>49.66</b>	<b>56.27</b>	<b>62.36</b>	<b>67.40</b>

Source: field data, 2020

**Table 4** Factor analysis on the financial inclusion

Variable list	Component		
	1	2	3
1. I find it easy using the available financial services.			0.970
2. My financial service providers serve me with respect and dignity.		0.564	
3. I find it easy to make deposits with my financial providers.	0.812		
4. I have easy access to an automatic teller machine (ATM).	0.805		
5. I find it easy to make payments to my service providers.	0.768		
6. I find it cheap to operate a bank account.	0.764		
7. I find it switching from one bank to the other.	0.755		
8. I find it cheap to operate a mobile money account.	0.733		
9. My financial service providers are supervised by a superior bank.	0.727		
10. I find it easy to transfer money via my mobile phone.	0.708		
<b>Total</b>	<b>6.30</b>	<b>1.52</b>	<b>1.08</b>
<b>% of variance</b>	<b>48.43</b>	<b>11.70</b>	<b>8.28</b>
<b>Cumulative %</b>	<b>48.43</b>	<b>60.13</b>	<b>68.41</b>

Source: field data, 2020

than a long-term goal in business and particularly, SMEs. Generally, the statistics suggest that participating in SME business offers important gains. Actually, a close examination of the standard deviation does not show significant deviations in participants' opinions. Nearly all the participants seem to support the claims raised in the study.

### Objective 2: Challenges faced by small and medium enterprises

To understand the challenges faced by SMEs, this paper adopted descriptive measures of the mean and standard deviation. The mean scores above 3.5 indicated challenges that affect SMEs the most, and the mean scores below 3.5 indicated challenges that affect SMEs the least while the mean scores from 2.5 to 3.4 indicated challenges that affect SMEs moderately (Table 6).

Participants indicated stiff competition from foreign firms as the problem that mostly challenges the operation of SMEs in Lango (mean = 4.41; Std. = .835). Most of the goods and services produced and sold in the sub-region provide the

**Table 5** Contribution to the growth of SMEs

Variable list	Mean	Std. deviation
1. It has taught me to build networks with important people.	4.29	.847
2. It has helped me stay in close contact with potential customers.	4.20	.884
3. I enjoy interacting with my customers.	4.18	.767
4. Allow proper money flow.	3.94	.857
5. It has made me become popular.	3.90	.992
6. I have accumulated some property, like land.	3.75	.981
7. It teaches me to be entrepreneurial.	2.35	.951
8. My household income increased.	1.73	.835
<b>Average</b>	<b>3.54</b>	<b>0.889</b>

Source: field data, 2020

same consumer tastes, designs, and preferences that as imported goods. In the wood manufacturing firms, for example, they assemble wall units, office counters, beds, chairs, tables, and doors out of imported softwood. Such products made in Uganda cannot beat the utility a consumer is likely to maximize if one bought a similar imported good. Our markets are flooded with imported commodities offered at very low prices while providing expected consumer tastes. Participants indicated competition from domestic firms (mean = 4.29; Std. = .761) is the second challenge to SMEs' operation in the region. Nearly, the goods and services produced and sold by SMEs are more of a duplication of imported commodities. We have some manufacturing firms in Lira, producing cooking oil and toilet paper. The numbers of companies in Uganda that produce goods are many. Participants also pointed to the small market size (mean = 4.13; Std. = .977). Least affecting challenges pointed to expensive loans (mean = 3.35; Std. = 1.015), high inflation rates (mean = 3.66; Std. = 1.091), and unrealistic demand for loan guarantees (mean = 3.76; Std. = 1.059). Participants regarded expensive loans as affecting SMEs the least. However, going for loans is optional. Secondly, apart from those who operate on loaned money, the need for guarantors is an optional problem. Thirdly, a high inflation rate increases the costs of borrowing. This is also optional and affects a limited set of SMEs. Whereas the mean scores indicate "competition from foreign firms" as key among the challenges of SME businesses, standard deviation suggests "stiff competition from foreign firms".

### Objective 3: Relationship between financial inclusion and SMEs

To understand how financial inclusion supports the growth of SMEs, it was important to understand the state of financial inclusion in Lango sub-region. This paper adopted descriptive measures of the mean and standard deviation to examine the state of financial inclusion in Lango sub-region. The mean scores above 3.5 indicated challenges that

**Table 6** Challenges of SMEs

Variable list	Mean	Std. deviation
1. Competition from foreign firms	4.41	.835
2. Stiff competition from domestic firms	4.29	.761
3. Small market size	4.13	.977
4. Unreliable electricity	4.05	.927
5. Unfair treatment from local authorities	3.99	.958
6. High taxes	3.97	.909
7. Inadequate training in information and communication technology (ICT)	3.90	.777
8. Unrealistic demand for collateral securities	3.88	.875
9. Inadequate access to cheaper credit	3.87	.772
10. Ever-changing technology	3.86	.973
11. Unrealistic demand for loan guarantees	3.76	1.059
12. High inflation rates	3.66	1.091
13. Expensive loans	3.35	1.015
<b>Average</b>	<b>3.93</b>	<b>0.918</b>

Source: field data, 2020

affect SMEs the most, and the mean scores below 3.5 indicated challenges that affect SMEs the least while the mean scores from 2.5 to 3.4 indicated challenges that affect SMEs moderately (Table 7).

The statistics indicate that most of the participants find it easy to make payments to their financial service providers (mean = 4.23; Std. = .839), they have easy access to automatic teller machines (mean = 4.21; Std. = .865), and they find it easy switching from one bank to another (mean = 4.21; Std. = .909). These statistics imply that financial inclusion has simplified their business operations. However, participants seem not to find it easy using available financial services (mean = 2.53; Std. = 1.342). The statistics imply that some of the financial services are technical and not user-friendly, or they are user friendly but users lack acquaintance to using them. Generally, the results indicate a high level of financial inclusion in Lango sub-region (mean = 3.96). This seems to suggest that most of the SMEs have benefited from the governments’ efforts to promote financial inclusion. The results indicate that participants find financial inclusion relevant in their business operations. Scrutiny of standard deviations does not show significant deviations in participants’ opinions on the issues raised in the study relating to the contributions of financial inclusion.

To understand the relationship between financial inclusion and the contribution of SME growth, this paper adopted the correlation tests. Correlation is the statistical measure of the degree of the strength of the relationship between two numerical variables. Table 8 shows the relationship.

Table 8 ( $r = .362$ ; sig.  $< .05$ ) shows that the relationship between financial inclusion and contribution to the growth of SMEs is weak. The statistics suggest that a change in financial inclusion is associated to a weak change in the contribution to the growth and operations of SMEs. Extension of financial services such as formal banking, mobile money, automatic teller machines, and agent banking bears a weak change in SME growth and consequently their operations. Moreover, the significant value, which is below 0.05, suggests that financial inclusion and growth of SMEs are linearly related.

To understand how financial inclusion supports the growth of SMEs in the region, the paper adopted linear regression. Linear regression is a mathematical function that

**Table 7** Financial inclusion

Variable list	Mean	Std. deviation
1. I find it easy to make payments to my service providers.	4.23	.839
2. I have easy access to an automatic teller machine (ATM).	4.21	.865
3. I find it switching from one bank to the other.	4.21	.909
4. I find it easy to make deposits with my financial providers.	4.19	.796
5. I find it cheap to operate a mobile money account.	4.11	.955
6. My financial service providers are supervised by a superior bank.	4.08	.848
7. I find it cheap to operate a bank account.	4.06	.926
8. I find it easy to transfer money via my mobile phone.	4.01	.906
9. My financial service providers serve me with respect and dignity.	3.94	.896
10. I find it easy using the available financial services.	2.53	1.342
<b>Average</b>	<b>3.96</b>	<b>0.928</b>

Source: field data, 2020

**Table 8** Correlation tests

		Financial inclusion	Contribution
Financial inclusion	Pearson correlation	1	.362(**)
	Sig. (2-tailed)		.000
	N	291	291
Contribution of SMEs	Pearson correlation	.362(**)	1
	Sig. (2-tailed)	.000	
	N	291	291

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

shows the relationship between the independent variable (financial inclusion) and the dependent variable (SMEs) (Tables 9, 10, 11, and 12).

This paper used  $R^2$  to measure the effect of financial inclusion on the growth and operations of SMEs. The  $R^2 = .131$  indicates that financial inclusion in Lango sub-region accounts for as low as 13.1% of the growth and operations of SMEs. Even when the variables are standardized, (adjusted  $R^2 = .128$ ), the change in SMEs accountable to financial inclusion remains as low as 12.8%. These statistics suggest that financial inclusion accounts for a small portion of the growth and operations of SMEs in the region. There must be another set of factors that provide interplay in the growth and operations of SMEs in the region.

The analysis of variation (ANOVA) shows whether the independent variable can be used to explain the variation changes in the dependent variable. Using the regression sum of squares, the statistics indicate a smaller regression sum of squares (8.843) than the residual sum of squares (58.808). The statistics suggest that financial inclusion is not adequate in explaining the changes in the growth and operations of SMEs in the region. However,  $p$  value = .000 indicates that there exists a linear relationship between financial inclusion and growth of SMEs in the region.

The beta coefficient ( $B = .286$ ) indicates that a change in financial inclusion by a single unit is likely to vary SME growth and operations by approximately (28.6%) about 0.3 units. When the variables are standardized, a change in financial inclusion is likely to vary SME growth and operations by (36.2%) about 0.4 units, evidence from beta = .362. The statistics agree with ANOVA results of the low contribution of financial inclusion in the growth and operations of SMEs in Lango sub-region.

## Discussion

The study examined the contributions of small medium enterprises in Lango sub-region. Evidence shows that SMEs promote networking between business owners and important people. The important people might range from owners of production materials to owners of financial products. This study offers support to Breda and Fahy (2011) who found that networking in business improves business performance in terms of human capital, information, and access to resources. Networking helps business firms to identify areas complementary resources and level of information exchange. Networking encourages sharing of cost of training and cost of consultants, research and development, export, production, human resources, and financial capital, which improve a firm's competitive advantage (Rahman, 2015; Turyakira & Mbidde, 2015). Firms in Lango sub-region that demonstrate networking include Gracious Palace

**Table 9** Model summary

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. error of the estimate
1	.362 <sup>a</sup>	.131	.128	.45109

<sup>a</sup>Predictors: (constant), financial inclusion

Company Limited and Ngetta Tropical holdings, among others. While the findings indicate the importance of networking, there is a dearth of research on networking especially among SMEs in northern Uganda. Our research further demonstrates a close link of networking to maintaining close contacts with customers. Unlike large firms, SMEs have to keep close contact with their customers lest they lose them to their competitors. This agrees with Ludmila and Stanislava (2015) who emphasize the necessity of SMEs to know their business relationships with suppliers and customers. Relationships with customers build a competitive advantage and enlarge the market size, especially with manufacturing businesses. The findings further support Fourie (2015) who establishes that a close contact with customers helps firms to identify and satisfy customer needs, which saves the firm from the costs of acquiring new customers. Participants showed that SMEs contribute little to their household income. Increasing household income is a short-term goal that no longer motivates business owners. In Uganda, living standards among business owners are highly daunting. The fact that most SMEs collapse before their first birthday affirms the finding. The findings agree with Straka, Birciakova, and Stavkova (2015) who found that SME owners perceive differently its importance in standard of living. They would not see any difference based on income level or job possibility. Not to underestimate the government’s effort in promoting SMEs in Uganda, their impact on household income is rather relative. The findings of the current study support Beck, Demircuc, and Levine (2003) who argue that as much as the association between SMEs development and economic growth appears positive (Ali, Rashid, and Khan, 2014), cross-country comparisons do not indicate significant relations between SMEs and measures of depth and breadth of poverty.

The study sought to determine the challenges affecting small medium enterprises. The findings show that SMEs suffer stiff competition from foreign firms; they also suffer competition from domestic markets and have a small market size. Most of the SMEs engage in the production of goods that are similar to imported goods such as cooking oil, timber products, and detergents, to mention a few. They have no option than to strive for a market share, which turns small in the end. The findings agree with Ocioo, Akaba, and Worwal-Brown (2014); Tinarwo (2016); and World Bank (2016) who support the view that SMEs suffer from stiff competition and are weak competitors in both domestic and foreign markets, a factor that is more driven by their lack of innovative ideas. However, the findings slightly disagree with Dalberg (2011) and Fjose, Grunfeld, and Green (2010) who demonstrated that SMEs in developing countries lack

**Table 10** ANOVA<sup>b</sup>

Model		Sum of squares	Df	Mean square	F	Sig.
1	Regression	8.843	1	8.843	43.457	.000 <sup>a</sup>
	Residual	58.808	289	.203		
	Total	67.651	290			

<sup>a</sup>Predictors: (constant), financial inclusion

<sup>b</sup>Dependent variable: contribution to growth

**Table 11** Coefficients<sup>a</sup>

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta	B	Std. error
1	(Constant)	2.408	.174		13.854	.000
	Financial inclusion	.286	.043	.362	6.592	.000

<sup>a</sup>Dependent variable: contribution

financial capital for growth and expansion. The disagreement was slightly correct because SMEs still suffer financial challenges, but the case of Lango demonstrates severe challenges from competition, both foreign and domestic, example is imported cooking oil vs locally manufactured oil.

The study examined how financial inclusiveness supports the growth of small medium enterprises in the region. Financial inclusion eases payments to service providers, access to ATM services, and switching from one bank to another. These services make the transaction very easy. The findings agree with Gabor and Brooks (2017), Dorfleitner and Roble (2018), and Eton, Mwosi, Edaku, Ogwel, and Obote (2018). The presence of multiple providers of financial services increases the flow of money in the economy and reaching it to the “unbanked” population (Damodaran, 2013). The findings justify the government’s action to promoting financial inclusion across all social and economic sectors in the country. However, participants indicate some difficulty in using some of these financial services. The fact that some of the SME owners are not highly educated, they find it difficult to interact with some of these financial services. The study found that financial inclusion plays a significant role in SME growth. However, the role played appears low, which suggests an influence on other factors in the relationship. The findings support Ayyagari et al. (2016) who assert that SMEs are constrained financially and find it hard to access credit compared to large firms. Though they might have access to credit, they often fall short of such requirements like guarantors, collateral security, and business profile, which agree with Eton, Mwosi, Mutesigeni, and Ebong (2017). Most of the SMEs lack such information that financial providers need to assess their creditworthiness. While such process requirements save financial providers from losses and properly manage credit provision, SMEs view them as bureaucratic with tough regulations (Park & Mercado, 2015). We, therefore, argue that as much as financial services appear to be available to SMEs, the cost associated to acquiring and servicing them affects their financial performance (UNIDO, 2015). In

**Table 12** Summary of findings

Objectives	Major findings
1. Contribution of SMEs	<ul style="list-style-type: none"> <li>✓ Promotes networking with important people</li> <li>✓ Promotes close customer contact</li> <li>✓ Promotes high-level interaction with potential customers.</li> </ul>
2. Challenges of SMEs	<ul style="list-style-type: none"> <li>✓ Stiff competition from both domestic and foreign firms</li> </ul>
3. Relationship between financial inclusion and SME growth	<ul style="list-style-type: none"> <li>✓ Significant and weak</li> </ul>
4. Predictive role of financial inclusion on SME growth	<ul style="list-style-type: none"> <li>✓ Very low, accounting for only 12.8% of the level of SME growth</li> </ul>

Source: field data 2020

addition, the platforms on which some of the financial services are provided are too technical for SME owners to operate. The findings, however, disagree with GSMA (2017) who asserts that financial service providers allow for easy transfer of payments from SMEs to suppliers and service providers and reduce theft, financial crimes, and the risk of loss. Unlike SMEs in urban areas, SMEs in rural areas are highly vulnerable to financial risks and theft. Financial inclusion is likely to increase the level of investment, employment opportunity, and poverty reduction, which are the core functions of SMEs in the economy. Finally, the study established a weak relationship between financial inclusion and SME growth; however, the relationship was statistically significant.

### **Conclusion and practical implications**

The study sought to establish the relationship between financial inclusion and SME growth in Lango sub-region. SMEs are important to economic growth at the macro level since they provide employment and improve household income. At the micro level, SME owners are able to build networks with important people, which help them source quality human capital and access cheap sources of raw materials and capital. Additionally, networks help SME owners to maintain contact with suppliers and customers. This paper presents a new look at SMEs as contributors to the economy; they promote networking in addition to their traditional contribution to employment and household income. Despite the contributions of SMEs, this paper demonstrates that SMEs struggle to out compete their rivals at both local and international markets, which narrows down their market size. This conclusion differs from previous studies that present expensive loans as the greatest obstacle to SME operations. This paper has not generalized the outcome on expensive loans as least among the challenges to SME growth because of its lack of categorization of financial products and financial providers, which is likely to present contradicting results. The major outcome of the study is that financial inclusion is significant in supporting SME growth, however, is generally weak. The weakness stems from the cost of acquiring and servicing financial services, the difficulty in using some of the financial services, and the way financial providers treat financial users, which demonstrate some lack respect and dignity.

### **Contribution to the study**

This study contributes to the existing literature on financial inclusion and SME growth but explicitly contributes unique evidence from northern Uganda. This study offers an original and evidence-based support for promoting ATM and shared-banking platforms that allow clients to switch through banks. The study provides testable relationships between financial inclusion and SME growth that extend research on financial inclusion in developing economies. The study provides networking as one of the important contributions of SMEs as it links them to owners and suppliers of production resources and customers. While networking is a concept that is common to corporate organizations, this study reveals its importance in small and medium enterprises. Business managers and entrepreneurs would recognize the importance of networking in growing businesses. This study has shown the roles of finance providers and how financial inclusion would be improved and may redirect SMEs in adopting better strategies in the growth and development of the SME sector in the region. The study may help managers adopt best practices in their managerial decisions.

## Recommendation

The study took a cross-sectional survey to collect data on financial inclusion and SME growth in northern Uganda. There is a need for a longitudinal study on financial inclusion with a focus on financial providers and their impact on SME growth. Financial providers should continue sensitizing the public on the available financial services beyond credit services, which are common and known. Since the world is turning digital, financial service providers should encourage their clientele to use digitalized financial services, which are cheap, secure, and risk averse. The Bank of Uganda, which is the supervisor of financial intermediaries, should monitor these institutions on costs of loans. SMEs should be innovative while they produce goods that stand the competition at both domestic and foreign markets. This study has shown how SMEs contribute to networking in business, yet studies that relate networking and growth of SMEs are still scanty. Future researchers should consider investigating the relationship between SMEs and networking in the growth of SMEs.

## Abbreviations

CBN: CenBank; CFI: Center for Financial Inclusion; FAO: Food and Agricultural Organization; GDP: Gross domestic product; IMF: International Monetary Fund; NDP/II: National Development Plan Two; OECD: Organizations of Economic Corporations and Development; UBOS: Uganda Bureau of Standard; UIA: Uganda Investment Authority; UNIDO: United Nations Industrial Development Organizations

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## Authors' contributions

All authors contributed adequately to this study from the start to the end. They all read the final document and approved it.

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## Declarations

### Competing interests

The authors declare that they have no competing interests.

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