THE IMPACT OF COVID-19 ON SMALL AND MEDIUM ENTERPRISES (SMEs) ACCESS TO FINANCE IN THE WESTERN AREA OF SIERRA LEONE

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Abstract:

The objective of this study is to investigate the impact of COVID-19 on Small and Medium Enterprises (SMEs) access to finance, measured as access to bank credit, for expansion of business. A survey was conducted with a total of 450 registered SMEs randomly selected from the list of registered SMEs in the Western Area of Sierra Leone for the years 2018, 2019 and 2020. The model draws from El-Said *et al.* (2013) approach. We also applied a quantitative approach, through the estimation of a probability model for the access to finance determinants. However, we used a panel data framework where we investigated the determinants of access to bank credit for the periods 2018, 2019 and 2020, which are the most recent three-year periods prior to our survey. We also investigated whether this access was stronger during the COVID-19 pandemic period (2020) than the 2018 and 2019 which were pre-pandemic periods. The results show that the year COVID-19 (2020) has the same chance of getting a bank loan as the pre-COVID-19 years (2018 and 2019), in spite of the business uncertainty and the downturn associated with such a pandemic. In this regard, a robust mechanism for strong SME support outside the bank is imperative. This requires strong government and donor support, driven by coordination among the Ministry of Trade, Central Bank, Ministry of Finance, SMEDA and donor partners. The process may require a strong FinTech application in a peer-to-peer framework to achieve its goal efficiently.

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JEL: F13, F15

Keywords: COVID-19, small and medium enterprises, access, finance, Sierra Leone

1. Introduction

SMEs around the world play a pivotal role in national economies, generating employment and value-added and contributing to innovation. They are central to achieving environmental sustainability and inclusive growth. Although their contributions vary widely across firms and across countries and sectors, better access to global markets and knowledge networks can strengthen their contributions. However, trade and investment barriers undermine their participation, coupled with poor physical and ICT infrastructure which prevent them from operating efficiently and accessing international markets at competitive costs. Digitisation offers new opportunities for SMEs to participate in the global economy, but SMEs are lagging behind in the digital transition and disruptive effects need to be considered (OECD, 2017). Shumpeter (1934) emphasizes the role of the entrepreneur, as a prime cause of economic development through innovation. Thus, if the entrepreneur has an important role in development, this is achieved through the Firm. There are several sources of finance that SMEs can access although these are not without challenges.

It is well acknowledged that small and medium-sized enterprises (SMEs) play a great role in the sustainable growth process and job creation. However, they are challenged with a number of problems, including access to finance, which keep revolving across studies on the search for their problems. The problem is acute in developing countries. Thus, a search for how their access to finance can be improved is imperative as it can sustain economic growth and job creation.

In Sierra Leone, there has been increasing financial integration with respect to foreign Direct Investment (FDI) in the banking system since the early 2000s. Today, there are about 14 commercial banks and 17 community banks in Sierra Leone. However, there is still a problem accessing or serving the SME sector with finance for development. This situation is really an endogenous outcome as the suppliers of loans, which are the banks, fear default and have to work on maximizing their corporate profits. This stems from the fact that financing SMEs is risky and the transaction cost of doing that is high and therefore not strongly compatible with profit maximization.

Poverty is still a challenge in Sierra Leone, as in most sub-Saharan African countries. As most SMEs around the world, especially the developing countries, started out of the need to have a private sector and self-approach to poverty reduction, through enhancing incomes, they are often constrained by access to finance to start business or expand businesses. In Sierra Leone like in most developing countries, the financial sector is dominated by banks and the system is less developed with limited financial instruments. Bank credit remains the most important source of funding for enterprises and SMEs dominate the enterprise structure. But most of the credits go to large

enterprises and not the SMEs. While there are opportunities that SMEs can signal to the banks, the fear of failing is high risk, which can raise defaults and hence non-performing loans, making banks to be reluctant to lend to a number of SMEs. This has encouraged the emergence of microcredit schemes from various jurisdictions to support both SMEs and households. However, SMEs remain largely unregistered and difficult to grow and poverty remains a challenge to policymakers.

SMEs dominate the private sector of the Sierra Leone economy, but almost all of them are starved of funds (Mambula, 2002)). According to Mambula (2002), the persistent lack of finance for the establishment and operation of SMEs caused by the inability of banks to give out credit facilities to them warranted the establishment of development finance institutions, such as microfinance institutions, and the introduction of numerous funding programmes for the development of SMEs in Sierra Leone. Despite the establishment of these institutions and funding programmes, there continues to be a persistent cry against inadequate finance for the development of the sector.

Some of the support institutions and opportunities created by the government of Sierra Leone to enable SMEs access funding include: Credit Guarantee Fund, established in 1974, Sierra Leone Investment and Export Promotion Agency in 2007, Pilot SME job creation scheme and Sierra Leone Business Forum.

The objective of this study is to investigate the impact of COVID-19 on Small and Medium Enterprises' (SMEs) access to finance, measured as access to bank credit, for the expansion of business. The importance of such a study lies in the fact that it can provide the government and other stakeholders with key issues to address in the Sierra Leone context when educating SMEs on how to access finance. In addition, it can guide government efforts and non-governmental organisations entrusted with the responsibilities of SME development for job creation and sustainable growth in Sierra Leone. Also, there are a number of studies on SMEs' access to finance in other developing countries, including Chowdhury and Alam (2017) for Bangladesh, Gamage (2013) for Sri Lanka and for Egypt and El-Sahid *et al.* (2013) and McKenzie and Woodruff (2008) for Mexico. However, in Sierra Leone, we are not aware of any published study on the issue. In addition, while descriptive statistics and frequency tabulation dominate the literature, some authors have used a quantitative framework to ascertain what determines the probability of getting a bank loan. However previous studies focused on only one period of study and could not determine whether the probability of loan granting is different during a global crisis like the COVID-19 pandemic.

It is therefore imperative to carry out a study that accounts for these issues, for example, by gathering data for 2018, 2019 and 2020 while noting that 2020 is the COVID-19 pandemic period.

2. Literature Review

2.1 Theoretical Literature
A. SME Financing Models

The Pecking order theory is the theory that outlines the preference of firms for financing investments. According to the Pecking Order Theory or pecking order model in corporate finance, the cost of financing increases with asymmetric information. The theory posits that financing comes from three sources, internal funds, debt and new equity. Companies prioritize their sources of financing, first preferring internal financing, then debt and lastly raising equity when the first two methods seem not likely. Hence, internal financing is used first; when that is depleted, then debt is issued; and when it is no longer sensible to issue any more debt, equity is issued. This theory maintains that businesses adhere to a hierarchy of financing sources and prefer internal financing when available, and debt is preferred over equity if external financing is required. Thus, the form of debt a firm chooses can act as a signal of its need for external finance.

The sources of finance on the external front are: bank lending, capital gaps, crowdfunding, equity finance, hybrid instruments and venture capital and angel investing (Pecking Order Theory- Myers, S. C. (1984), Myers and Majluf (1984)).

The most common source of external finance for many SMEs and entrepreneurs, which are often heavily reliant on straight debt to fulfill their start-up, cash flow and investment needs, is bank lending. While it is commonly used by small businesses, traditional bank finance poses challenges to SMEs, in particular to newer, innovative and fast-growing companies, with a higher risk-return profile. Debt securitisation and covered bonds exist as instruments for the refinancing of banks and their portfolio risk management.

Another type of financing for businesses is capital gaps. This helps companies undertake important transitions in their activities and control changes whilst SMEs de-leverage and improve their capital structure. Asset-based financing helps firms obtain funding based on the value of specific assets, including accounts receivables, inventory, machinery, equipment and real estate, rather than on their credit standing which helps young and small firms that have difficulties in accessing traditional lending. It provides more flexible terms than collateralised traditional lending.

Crowdfunding serves to finance specific projects rather than an enterprise. It is useful for non-profit organisations and the entertainment industry where non-monetary benefits or an enhanced community experience represent important motivations for donors and investors. Donations, rewards and pre-selling represent the most widespread forms of crowdfunding.

Equity finance is very important for companies that seek long-term corporate investment to sustain innovation, value creation and growth. Companies that have a high risk-return profile, such as new, innovative and high-growth firms will find this very useful. Seed and early-stage equity finance can boost firm creation and development, whereas other equity instruments, such as specialised platforms for SME public listing,

can provide financial resources for growth-oriented and innovative SMEs. Public Equity Markets are available as funding agencies although they failed to attract sufficient companies for listing or to achieve sufficient trading to maintain active markets because of their high listing and maintenance costs, administrative and regulatory burden for SMEs and also the lack of an equity cultural and inadequate management practices in small businesses. On the investor side of the market, high monitoring costs relative to the level of investment and low levels of liquidity act as a deterrent. Across OECD and non-OECD countries, private equity investments have developed substantially over the last decades. Buyout is the prevalent form of investment in private equity markets and concerns SMEs only to a limited degree, although interest in upper-tier SMEs has increased in recent years, as investors look for yields and diversification within their portfolios.

Hybrid instruments combine debt and equity features into a single financing vehicle. This has developed unevenly in OECD countries. It is an appealing form of finance for firms that are approaching a turning point in their life cycle. It is considered worthwhile when the risks and opportunities of the business are increasing and capital injection is needed, but they have limited or no access to debt financing or equity, or the owners do not want the dilution of control that would accompany equity finance. This is common with young high-growth companies, established firms with emerging growth opportunities, companies undergoing transitions or restructuring, as well as companies seeking to strengthen their capital structures, especially in developing countries.

Venture capital and Angel Investing have been created to provide new financing opportunities for innovative, high-growth potential start-ups, mainly, though not exclusively, in high-tech fields. They are characterised by different motivations, targets, scale and operating models, but are highly complementary in the financing continuum for early-stage firms. Business angels need a well-functioning venture capital market to provide the follow-on finance that some of the businesses they support will require. At the same time, a well-developed angel market can create more investment opportunities and increase the deal flows for venture capital.

Even though these different sources of finance are available for SMEs to access funds for their operations, the conditionality under which these funds can be accessed makes it impossible for these SMEs to be able to access them. Hence, the SMEs largely depend on their own internally generated funds, which are never enough and stifles their operations.

Despite what the funding requirement may be, SMEs often prioritize the source of financing from internal (cash flow or entrepreneur's own capital) to external, depending on the relative availability and opportunity cost (Ogujiuba, Ohuche and Adenuga, 2004). This is because, for most firms, the internal funds are always insufficient to undertake the required level of transactions for profitable projects hence the call for external finance to fill the finance gap.

B. SME Financing Constraints

Irrespective of the fact that SMEs play pivotal roles in the economies of both developing and developed countries, they have traditionally had difficulty in obtaining formal credit or equity. Commercial banks and investors are expected to be reluctant to service SMEs for a number of reasons, which include:

1) SMEs are regarded by creditors and investors as high-risk borrowers because of insufficient assets and low capitalization, vulnerability to market fluctuations and high mortality rates;

2) Information asymmetry arising from SMEs' lack of accounting records, inadequate financial statements or business plans makes it difficult for creditors and investors to assess the creditworthiness of potential SME proposals;

3) High administrative/transaction costs of lending or investing small amounts do not make SME financing a profitable business.

As a result of the aforementioned drawbacks, commercial banks are generally biased towards large corporate borrowers, which provide better business plans, more reliable financial information, better chances of success and higher profitability for the banks and have credit ratings. Whenever SMEs obtain credits from banks, they tend to charge them a premium for assuming risk and apply tougher screening measures, thus driving up costs on all sides. Hence commercial banks in developing countries and countries with economies in transition often prefer to lend to the government which makes the public sector crowd out the private sector. Lastly, there is also the problem of insider lending and/or cronyism, which diverts finance away from SMEs.

C. Access to Finance and Firm and Environmental Linkages

The theoretical literature on access to finance falls under three strands. These are entrepreneur characteristics, institutional characteristics and firm-level characteristics.

- **Entrepreneur Characteristics**

According to Irwin and Scott (2010) and Cassar (2004), the personal characteristics of the owner-manager make a difference in the firm's ability and likelihood of accessing external finance. Vos *et al.* (2007) found that younger owner–managers tend to use more bank overdrafts and loans, credit cards, own savings, and family sources than older owners who appear to be more dependent on retained profits. Mijid (2009) found higher loan denial rates and lower loan application rates among female entrepreneurs. Coleman (2007) opined that there is credit discrimination against female entrepreneurs as they were more frequently charged higher interest rates and asked to pledge additional collateral in order for loans to be granted. Harrison and Mason (2007) observed that the differences between men and women entrepreneurs concerning access to finance can therefore be categorised into discrimination, abilities and preferences, and competition. Bates (1990) in the US, examined the impact of owner–manager's personal characteristics on SME longevity across a wide sample of SMEs owned and managed by men across the US between 1976 and 1986 and concluded that owner-managers who had higher levels of education were more likely to retain their firms operating throughout the period of

study. He further emphasized that the level of education of entrepreneurs is a contributing factor to access to bank loans to SMEs. Concerning the demand side, Storey (1994) asserts that higher levels of education provide entrepreneurs with greater confidence in dealing with bankers and other funders when applying for loans.

- **Institutional Characteristics**

Richard (2010) advised that credit terms are one of the institutional characteristics that considerably influence the financial decisions of SME borrowers. These are the conditions under which credit is granted and include interest rate, credit limit and loan period. Credit terms control the monthly and total credit amount, the maximum time allowed for repayment, the discount for cash or early payment, and the amount or rate of late payment penalty. Rate of interest is a key determinant of access to finance as it influences investment. According to Sacerdoti (2005), at a higher deposit rate saving will be attractive and similarly, banks will extend more loans, but investors will reject further loans as interest rises. Schmidt and Kropp (1987) revealed that the type of financial institution and its policy plays a critical role in determining access. Where credit duration, terms of payment, required security and the provisions of supplementary services do not fit the needs of the target group, potential borrowers will not apply for credit even where it exists and when they do, they will be denied access.

- **Firm Level Characteristics**

As regards firm-level characteristics, Mabhungu *et al.* (2011) observed that formality, value of assets, business sector, operating period, financial performance and size are all important factors in determining SMEs' access to finance. They realized that financial institutions are more likely to approve loans to firms that can provide collateral and to those firms that have established long-term relationships with lenders. Due to the existence of asymmetric information, banks base their lending decisions on the amount of collateral available as this reduces the problem of uncertainty since the lender can theoretically recover some, or all, of his loan in the event of default. Moreover, the borrowers will find it costly to put valuable collateral if they intend to default on the proceeds of the loan because they will lose their collateral. Thus, the collateral requirement can also help to weed out rogues from honest borrowers, leaving only those bona-fide applicants who fully intend to repay the loan. Martin and Daniel (2013) found out that firm age plays a critical role in firms' access to finance. More specifically, firms that are older were found to have more access to finance. These results were not unexpected because older firms have the network capital generated over time and also credit history that can be used by lenders to assess their creditworthiness. In contrast, younger firms are perceived to lack the necessary connections with the providers of finance and also the historical performance of the firm may be lacking. Klapper *et al.* (2002), suggest that younger enterprises (those established less than four years) are more reliant on informal financing and far less on bank financing. This is supported by Cassar (2004), Quartey (2003) and Storey (1994). Petersen and Rajan (1994) in their estimation

argued that as firms grow, they develop a greater ability to enlarge the circle of banks from which they can borrow. Martin and Daniel (2013) suggested that the reason for the effect of the size of the business on the ability to access finance is that larger firms are likely to have collaterals that act as a security in securing finances. Abor (2007) in Ghana examined the effect of industry classification on the capital structure of Ghanaian SMEs. The results of the study revealed some differences in the funding preferences of the Ghanaian SMEs across industries. SMEs in the agriculture sector and medical industries rely more on long-term and short-term debt than their counterparts in manufacturing. Abor (2007) buttressed this and concluded that short-term credit is more used in wholesale and retail trade sectors compared with manufacturing SMEs, whereas construction, hotel hospitality, and mining industries appear to depend more on long-term finance and less on short-term debt. He (Abor, 2007) also observed that SMEs in the agricultural sector exhibit the highest capital structure and asset structure or collateral value, while the wholesale and retail trade industry has the lowest debt ratio and asset structure.

2.2 Empirical Literature

The literature on SMEs emphasises that there is a rapid growth in the number of small and medium-sized enterprises (SMEs) worldwide; however, this category of business is beleaguered by several issues that hinder their growth. A key challenge for most SMEs is the problem of financing. According to Da Silva *et al.* (2007), all small firms live under tight liquidity constraints, therefore making finance a major dilemma for them. Generating an entrepreneurial idea is one thing but accessing the necessary finance to translate such ideas into reality is another. Many novel entrepreneurial ideas have been known to die simply because their originators could not fund them, and banks could not be convinced that they were worth investing in. Finance, whether owned or borrowed, is needed to expand so as to maximize profit and given the nature of SMEs, there is a need for financing. As described by the South African Reserve Bank (2004), SMEs generally have four key funding requirements: initial infrastructure investments, lumpy operations costs, "next-step" expansions, and unexpected opportunities requiring quick access to funds. In this regard, there is a plethora of empirical studies on the factors that determine SMEs' access to finance for expansion.

Harelimana (2017) found from a survey of firms that in Rwanda, the factor influencing access to external finance was simple application procedures for loans with 84 percent. Also, the results confirmed the role of access to finance such as improved profitability (91 percent), improved firm efficiency (87 percent), prevented liquidity problems (72 percent), improved firm solvency (69 percent) and increased asset quality (64 percent). Another role of access to finance by SMEs is to meet expenditures which accounted for 39 percent of the responses. Built on current literature and research on SMEs, especially concerning their ability to access finance, the study captures the information relating to problems identified by SMEs in having access to finance and

suggesting the ways and means needed for strengthening the SMEs' access to finance for their expansion and growth.

Based on a survey of 487 SMEs in Hanoi, Nguyen *et al.* (2015) in Vietnam found that SMEs account for up to 98 percent of the total number of enterprises, contributing about 48 percent to the country's GDP, 20 percent to export value and provide jobs for 77 percent of the country's labor force. However, the majority of SMEs are micro-enterprises with very limited access to resources such as advanced technology and formal credit, etc. Despite their significant contributions to social and economic development. The results show that owner characteristics, educational level and gender are the most important factors in determining access to credit, followed by SMEs' relationships with banks and customers. With regards to the loan interest rate, the owner characteristics variables are non-significant. The most expensive source of financing is from private money lenders, followed by commercial bank loans and microfinance. SMEs are often regarded as "the missing middle" they are usually not the subject of interest for commercial banks while their loans might be too large to borrow from microfinance institutions.

Gamage (2013) in Sri Lanka focused on what determines access to bank finance in small and medium-sized enterprises and found location of the firm, availability of audited financial statements and the owner-manager's perception of access to finance are critical to access to finance. Harrison and McMillan (2003) and Beck *et al.*, (2006) found that listed firms and foreign-owned firms faced lesser financial constraints from their SME survey. Moreover, Storey (1994) found that corporate status at start-up appears to be associated with a greater likelihood of bank lending: *"...from the bank's point of view, a limited company status can offer benefits if it reflects the 'seriousness' of the business activity and also means that the owner's personal collateral can be lodged with the bank in the event of failure"* (Storey, 1994).

Chowdhury and Alam (2017) in Bangladesh found out that firms' size, age of firms, education and skills of the owners and unfavorable credit terms such as high interest rates, lack of collateral security, and corruption by bank officials etc. are some of the biggest hurdles that SMEs face in getting loans from financial institutions. Thus, access to finance involves two viewpoints and is based on demand-side and supply-side factors that determine access to external finance. The first viewpoint attributes the cause of financial constraints primarily to supply-side factors. The main tenet of this perspective is that information asymmetries and opaqueness of SMEs compromise financial institutions' supply of funding. Even when funds are available, the same factors are bound to increase transaction costs making it too expensive, and consequently unprofitable, for SMEs to access. As regards the demand-side factors, the preferences and knowledge gaps on the viable sources of finance available are the primary factors that account for inadequate finance for SMEs.

Njue *et al.* (2017) in analyzing the demand side factors highlighted that collateral requirement, lack of creditworthiness information, lack of insufficient net value of assets, liability and entrepreneurial characteristics were the barriers that inhibit SMEs from accessing external finance. They note that in accessing financial products and services

geographical location of the firm and infrastructure play key roles. Zhao and Jones-Evans (2016) in the United Kingdom studied 11 economic reigns and concluded that regional-specific factors such as distance between bank headquarters and branches play a key role and increasing the constraining effect. Also, Ghimire and Abo (2013) in Cote D'Ivoire found that in the case of SME's information asymmetry and insufficient collateral are the biggest obstacles. As regards the supply-side factors, Thornsten (2007) opined that these factors are beyond the control of owners and could only be alleviated by policymakers, government policies and public support. Park *et al.*, (2017) advised that the difference between the demand for funds and the supply of funds by SMEs, also known as the financing gap, occurs because of the following reasons: (i) the peculiar characteristics of the SMEs, (ii) their market imperfections on the supply side, and (iii) combination of reasons originating from both the supply and demand sides. The supply side comprises of the providers of finance (financial institutions and investors), while the demand side refers to the SMEs who require financing from financial institutions and other providers of finance. According to Park *et al.* (2008), the financing gap for SMEs is most prominent in capital market financing. Most countries, including the developed ones, have problems in SME financing through capital markets.

McKenzie and Woodruff (2008) in Mexico used controlled experiments as an alternative method to identify the impact of access to credit on firms. They designed a field experiment in Mexico that administered treatments of cash or equipment to randomly selected microenterprises in their sample, hence generating shocks to capital stock that are uncorrelated with the entrepreneurial ability or growth opportunities. Their results suggest returns to the capital of 20–33 percent a month, which are much higher than market interest rates and even higher than returns from a similar experiment in Sri Lanka (de Mel, McKenzie, and Woodruff 2008). Furthermore, interacting the treatment effect with different measures of financial constraints and access to finance, they find that the return is much higher (70–79 percent per month) for firms that report themselves as financially constrained.

Watson and Wilson (2002), in the UK using UK data, find that the pattern of coefficients in their study is consistent with pecking order model predictions that retained earnings are the most preferred source of finance, then debt and finally the issue of new shares to outsiders. Cassar and Holmes (2003) in Australia, using a large Australian nationwide panel survey, suggest that asset structure, profitability and growth are important determinants of capital structure and financing. Their results generally support static trade-off and pecking order arguments. However, Frank and Goyal (2003) in America, using data for publicly traded American firms from 1971 to 1998, suggest that their results are contrary to the pecking order theory, in that net equity issues track the financing deficit more closely than do net debt issues. In a study by Vos *et al.* (2007), using UK and US data, they find that SME financial behaviour demonstrates substantial financial contentment, or 'happiness', mainly due to the fact that most SMEs in the UK do not seek high growth while US SMEs do not have problems in accessing working capital. Their analysis also finds that financial performance indicators (such as

growth, return on assets and profit margin) are not determinants of SME financing activities. They also find that younger and less educated SME owners more actively seek external financing, while older and more educated SME owners are less likely to seek external funding. Growth-oriented SMEs are more active in the use of and access to external sources of funds in comparison to low-growth firms. In addition, they find that social networks (connections) are important to accessing finance. These findings are consistent with the view that in developed economies the issue of access to finance is less pressing than for SMEs operating in emerging or developing economies. Beck *et al.* (2006) found that small firms and firms in countries with poor institutions use less external finance, especially bank finance, leasing or trade finance compared with larger firms. They also found that larger firms more easily expand their external financing when they are financially constrained than do small firms and find suggestive evidence supporting the pecking order hypothesis across countries.

Nofsinger and Wang (2011) studied the determinants of external financing in initial firm start-ups in 27 countries. They suggest that information asymmetry and moral hazard problems complicate access to start-up capital. They find that entrepreneurial experience helps obtain financing from institutional investors and that the legal environment is important for access to external financing. The amount and diversity of sources of external financing are associated with high levels of property rights, contract enforcement, and corruption protection. Le and Nguyen (2009) in Asia emphasize the role of networking in bank finance for SMEs in Vietnam. Firth *et al.* (2009) in China use firm profitability, and political connections via state minority ownership as criteria in granting loans and in determining loan size in China. They found that in the absence of credit bureaux and exchange of loan information across the banking sector, banks rely on corporate governance as a signal of borrowers' quality in a lending environment with severe asymmetric information. Good corporate governance can serve as organizational collateral to facilitate access to bank loans.

Fowowe (2017) using data from 10,888 firms across 30 African countries conducted an empirical investigation of the effects of access to finance on the growth of firms and made use of a new rich enterprise-level data set from the World Bank's Enterprise Surveys employing both subjective and objective measures of access to finance. The subjective measure of access to finance is obtained from the ranking of access to finance as no obstacle or severe obstacle to business operations. The objective measure of access to finance is a variable that measures whether firms are constrained in obtaining credit or not. The results using the subjective measure show that the access to finance constraint exerts a significant negative effect on firm growth. Also, the results using the objective measure show that firms that are not credit-constrained experience faster growth than firms which are credit-constrained.

According to Beck *et al.* (2008), access to finance favorably affects firm performance along a number of channels. Using cross-country efforts to collect consistent firm-level survey data has allowed researchers to explore the mechanisms through which finance affects economic growth and the structure of the economy. Beck *et al.* (2006) and Beck,

Demirgüç-Kunt, and Maksimovic (2005) found out that using these firm-level surveys has shown that improvements in the functioning of the formal financial sector reduce financing constraints more for small firms. Klapper, Laeven and Rajan (2006) also found out that access to finance promotes more start-ups and that smaller firms are often the most dynamic and innovative. Better access to the financial system also enables incumbent firms to reach a larger equilibrium size by enabling them to exploit growth and investment opportunities (Beck, Demirgüç-Kunt, and Maksimovic 2006). Furthermore, Claessens and Laeven (2004) found out that greater financial inclusion allows the choice of more efficient asset portfolios and innovation whilst Demirgüç-Kunt, Love, and Maksimovic (2006) found out that financial deepening can also increase incentives for firms to incorporate, thus reaping benefits from the resulting opportunities of risk diversification and limited liability.

Banks are institutions that help SMEs around the world in financial issues but small businesses are still unable to take full advantage of banks. Small businesses are constrained due to institutional factors and weaknesses in the financial system of developing countries. Thus, the barriers to external finance are information asymmetry, insufficient collateral, complexity in the loan application process and less experience in the industry.

2.3 Conclusions from the Literature

Previous studies on determinants of access to finance by SMEs focused on descriptive statistics and frequency distributions to determine the factors that rank top on SME access to finance, while some have estimated quantitative models of SME determinants, and are able to determine whether the differences in the constraints are significant, their focus has been on a one period survey. This study diverges from previous studies in two folds:

1) We also applied a quantitative approach, through the estimation of a probability model for the access to finance determinants. However, we used a panel data framework where we investigated the determinants of access to bank credit for the periods 2018, 2019 and 2020, which are the most recent three-year periods prior to our survey.

2) We also investigated whether this access was stronger during the COVID-19 pandemic period (2020) than the 2018 and 2019 periods, which are pre-pandemic periods. This is important because the pandemic period has been described as a period of depression as great as the one in the 1930s- all economies have been affected, including SMEs around the world.

3. Methodology

3.1 Model Specification

To investigate the factors that determine access to finance by SMEs in the Western Area of Sierra Leone, Pearce and Bah (2023) in the Western Area of Sierra Leone used an econometric model to investigate the determinants of SME access to finance from 2018 to

2020. This study leverages on that approach. We define access to finance as access to a successful application for credit to expand the business. The model draws from El-Said *et al.* (2013). Equation (3.1) is the specified model.

$$(Bank\_Loan\_Dummy)_{it} = \beta_0 + \beta_1 Ln(Net\ Earnings)_{it} + \beta_2 Ln(Capital)_{it} + \beta_3 Ln(Labour)_{it} + \beta_4 Ln(Leverage)_{it} + \beta_5 Ln(Liquidity)_{it} + \beta_6 Experience_{it} + \beta_7 Location_{it} + \gamma' X_{it} + U_{it} \qquad (3.1)$$

Where:

i and t are firm and time subscript for firm i and time t

Bank_Loan_Dummy is a dummy variable taking the value of 1 for a firm that gets a bank loan in a given year and zero for a firm that does not get any bank loan in a given year.

Net Earnings is the Net Annual Business Earnings of the firm, which are taken as sales or total revenue minus expenditure.

Capital is the capital of the SME this is taken as the value of the tangible assets of the SME

Labour is the number of employees of the SME.

Leverage is the leverage of the SME, which is the total debt of the SME divided by total assets.

Liquidity is short-term liquidity of the SME, which is the current ratio or current asset divided by current liabilities.

Experience is the experience of the SME, which is taken as the age in months of the existence of the SME

Location is a dummy variable taking the value of 1 for a firm located in the urban part of Western Area Sierra Leone and 0 for those located in rural Western Area of Sierra Leone. X is a vector of firm-specific dummy variables covering the ownership structure and sector of operation of the firm. Ownership structure categories covered are sole proprietorship, partnership, and private limited liability. Separate dummies for sole proprietorship, partnership and private limited liability with sole proprietorship as the reference category. For the sectors of operation of the SMEs, the following sectors are used: trade, real estate, education, construction, medical and research. There was a provision for others and trade was used as the reference sector. A dummy was created for each sector without the inclusion of the trade dummy in the model so it could be the reference category.

γ' is a row vector of coefficients of the dummy variables for ownership type and sector of operations.

U is the disturbance term that has a firm-specific and the traditional disturbance term component that changes over time and firm.

It is expected that when net earnings increase, the probability of getting a bank loan increases when firms have higher net earnings, larger capital, more experience in the business more short-term liquidity and more labour (Calomiris and Hubbard, 1990 Beck *et al.*, 2006). According to Calomiris and Hubbard (1990), smaller firms face greater restrictions on credit. While labour and capital are strong indicators of how big a firm is, reflecting its stability, larger net earnings are an indication of a strong ability to pay if

shocks are not expected. Moreover, higher short-term liquidity is an indication of the illiquidity nature of the firm at least in the short run. Also, firms with higher experience are expected to have more innovation in order to be able to withstand business shocks and operate to pay banks.

Firms with more debt may be the ones that cannot succeed in paying banks and hence the ones with a lower probability to repay further loans given to them, a negative effect of leverage on the probability of getting a bank loan. However, they may be the ones who can push hard to get bank loans, especially where these loans are not recorded in their accounts and if some are really informal. Where the loan application and approval processes have some internal processes and pictures that are difficult to snap, the ones with more debts may have a higher probability of getting loans, especially where covert commissions may apply. In this regard, leverage may have a positive effect on the probability of getting a bank loan.

3.2 Estimation Procedure

The model estimated, equation (3.1), has a dependent variable that is a dummy variable, taking the value of 1 for a firm that is successful in getting a bank loan in a particular year and 0 for an unsuccessful loan application. In this regard, the probit model is useful in order to predict the probabilities of firms having a bank loan, given the independent variables. The years 2018, 2019 and 2020 are the years considered for the survey. Hence, the survey data produces panel data of firms surveyed on information on 2018, 2019 and 2020. To the extent that the data set is panel data, the individual and time dimension deserves special treatment in order to account for firm heterogeneity. In this regard, a panel probit model is estimated. However, in dealing with panel data estimation, the fixed effect or the random effect model can be estimated. While the fixed effect is a within estimator in the sense that it explains why a firm grows by assuming that the unobserved heterogeneity among firms is fixed over time, it wipes out the factors that are fixed over time but are included in the model (that is, those that are invariant to time). These factors include location, gender and sector of operation of a firm. The random effect however estimates the coefficients of the time-invariant factors while considering that the unobserved heterogeneity factors that are not included in the model are random. Hence, the random effect probit model was applied in order to have coefficients of the time-invariant factors such as the location of the SMEs, the ownership dummies and sector dummies. It is worth noting however that in estimating the panel probit model, while a number of dummies may be included, the convergence property can be such that for estimation to be concluded some dummies are not estimated and are dropped in the estimation process.

The coefficients of the panel probit model give the change in the probability of an SME getting a bank loan when a continuous variable (for example, net earnings) increases by one unit or 1 percent (when it is in the log). For the dummies, a coefficient gives the difference between the probability of getting a bank loan when a firm is in one category and the probability of getting the loan when it is not in that category.

3.3 Data Issue

Pearce and Bah (2023) used an econometric model to investigate the determinants of SME access to finance in the Western Area of Sierra Leone from 2018 to 2020. This study leverages on that approach. The data is based on a survey of 450 registered SMEs in the Western Area of Sierra Leone and in what follows we discuss the core data issues.

A. Sample Design

A survey was conducted for 450 randomly selected registered SMEs and analysis was done based on the survey data. We discuss the survey design here. The sampling of SMEs in the Western Area of Sierra Leone was done such that ownership structure, main structure of operation, geographical location (urban or rural) if they operate a bank account, how they get external funding for expansion of the business, the limiting factors of obtaining external financing and if they use mobile account. A list of all SMEs was obtained from the register of the formal SMEs (that is, registered SMEs) from SMEDA[ii] which was used as the sample frame. A simple random sampling technique was applied to have the representative of the population, with the idea of capturing differences in the location of firms, the sector of operation of the firms and their access to finance for the expansion of their business. However, given the low activity of registered SMEs in Agriculture and Mining, these were not considered in the survey.

B. Sample Size Determination

Pearce and Bah (2023) in the Western Area of Sierra Leone carried out a survey of 538 registered SMEs based on the sampling frame. The sample size was determined using a marginal error of 2 percent and a confidence level of 95 percent, which gave a sample size of 440. However, as this is only the minimum sample size, we rounded it to 450 to account for non-responses. A random sample was used by assigning numbers to the 538 SMEs in the population before a random selection of the 450 sample.

4. Empirical Results

4.1 Results of the Estimated Probit Models

In order to investigate the determinants of access to finance, we defined access to finance in terms of access to borrowing facilities from commercial banks in order to expand the SME business. In this regard, a limited dependent variable model where the dependent variable is a dummy variable was estimated. The dependent variable takes a value of one when an SME has a loan facility and zero when the SME does not have a loan facility. The Probit model was estimated for the specified model as the linear probability model is not appropriate given that it can predict negative probabilities and is characterised by heteroscedasticity. The predicted values from this model give the probability of getting a loan from a bank given the values of the independent variables.

[ii] Small and Medium Enterprises Development Agency.

The data was collected from the surveyed firms for the period 2018, 2019 and 2020. The independent variables were the natural log of net earnings, SME capital, labour, leverage, liquidity and experience. Firm-specific characteristics in the form of dummy variables were also included. These firm-specific characteristics are location (whether urban or rural), firm structure and sector of operation of the firm.

Both a static version and the dynamic model of the access to finance model were estimated. Table 4.1 shows the results of the static version of the Access to Finance Model. Model (3) of the table is the preferred model because, in this model, the firms are considered heterogeneous, in which case a Panel Probit Model was estimated using the random effects model. The random effects model was used because firm-specific characteristics are in the model and their effects need to be estimated, which cannot be done by the fixed effects model. In addition, in Model (3), robust standard errors are used to solve potential heteroscedasticity problems. Model (1) and Model (2) are presented in the table only for comparison purposes.

Table 4.1: The Static Model of Access to Finance Determinants

Variables	(1) Pooled Probit	(2) Random Effect Probit	(3) Random Effect Probit (Robust SE)
Ln(Net Earnings)	0.124***	0.212***	0.212**
	(0.0459)	(0.0696)	(0.0933)
Ln(capital)	-0.0185	-0.0437	-0.0437
	(0.0504)	(0.0721)	(0.102)
Ln(Labour)	0.106*	0.207**	0.207
	(0.0598)	(0.0819)	(0.142)
Experience	0.00204***	0.00516***	0.00516***
	(0.000623)	(0.000851)	(0.00192)
Ln(leverage)	0.179***	0.314***	0.314***
	(0.0445)	(0.0603)	(0.104)
Ln(liquidity)	0.116**	0.150**	0.150
	(0.0477)	(0.0646)	(0.0989)
dummy_urban	0.0895	0.168	0.168
	(0.0972)	(0.133)	(0.291)
dummy_Private_limited	-0.0176	-0.0856	-0.0856
	(0.167)	(0.227)	(0.461)
dummy_Parnership	-0.0132	0.0869	0.0869
	(0.103)	(0.142)	(0.301)
dummy_education	-0.307	-0.479	-0.479
	(0.446)	(0.616)	(1.361)
dummy_transport	-0.369	-0.793**	-0.793
	(0.240)	(0.331)	(0.779)
dummy_medical	-0.0328	0.237	0.237
	(0.204)	(0.274)	(0.586)
dummy_others	0.925**	1.946***	1.946
	(0.409)	(0.564)	(1.276)
2019.year	0.0217	0.0651	0.0651
	(0.100)	(0.135)	(0.0598)

2020.year	0.0723	0.106	0.106
	(0.102)	(0.137)	(0.0784)
Constant	-2.478***	-4.344***	-4.344**
	(0.772)	(1.075)	(1.899)
Observations	1,051	1,051	1,051
Number of id		372	372
LR Chi2	71.41		
Wald chi2(19)		135	44.82
Prob>chi2	0.000	0.000	0000
Log Likelihood	-630.934	-218.6	-218.6
Sigma_u		1.123	1.129
Rho		0.560	0.560
LR Test of Rho chi(1)		824.65	824.65
P-Value for Rho LR Test		0.000	0.000

Note: Standard errors are in parentheses.

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

The static model of access to finance determinant shows that the factors that determine access to finance by SMEs in the Western Area of Sierra Leone are (i) net earnings of the firm, (ii) experience of the firm, which was measured by the age of the firm in months and (iii) leverage of the firm, which was measured by the debt of the firm relative to its total assets. It thus indicates that in the Western Area of Sierra Leone, firm-specific characteristics such as the location of the SME (urban or rural), the structure of the firm (sole proprietorship, partnership or private limited company) and sector of operation do not determine the probability of getting loans from banks for their expansion.

The time dummies for 2019 and 2020 have positive coefficients but they are not significant, this implies that both 2019, a pre-pandemic period like 2018, and 2020 which is a COVID-19 pandemic period, have the same probabilities as 2018 of an average SME getting loan from a commercial bank. Hence, the pandemic and pre-pandemic periods had the same probabilities of SMEs getting bank loans.

As the dynamic model captures the delayed effect (lagged effect) as well as the contemporaneous (same period) effect, the preferred model is the dynamic model. The dynamic model was therefore estimated.

Table 4.2 shows the dynamic model of access to finance determinants. As in the static model, the Pooled Probit (Model 1) and Random Effect Model without standard error adjustment (Model (2)) have been presented together with the preferred model (Model (3)) for comparison only. Model (3) which captures the panel nature of the data and also adjusts the standard errors of the coefficient is the preferred model.

Table 4.2: The Dynamic Model of Access to Finance Determinants

Variables	(1) Probit Pooled Model	(2) Probit Random Effect Model	(3) Probit Random Effect Robust SE Model
Ln(Net Earnings)	-0.0104	0.0400	0.0400
	(0.0928)	(0.115)	(0.122)
Ln(Net Earnings) Lag1	0.201**	0.367***	0.367***
	(0.0997)	(0.123)	(0.121)
Ln(capital)	-0.228*	-0.423**	-0.423**
	(0.136)	(0.181)	(0.191)
Ln(capital) Lag 1	0.121	0.161	0.161
	(0.124)	(0.168)	(0.142)
Ln(Labour)	0.177	0.320*	0.320*
	(0.141)	(0.174)	(0.167)
Ln(Labour) Lag 1	-0.0366	0.00472	0.00472
	(0.143)	(0.176)	(0.169)
Experience	0.00171**	0.00436***	0.00436**
	(0.000777)	(0.000953)	(0.00186)
Ln(leverage)	0.0632	0.145	0.145
	(0.0905)	(0.108)	(0.105)
Ln(leverage) Lag1	0.144	0.236**	0.236**
	(0.0925)	(0.110)	(0.110)
Ln(liquidity)	0.0426	0.217**	0.217**
	(0.0833)	(0.0978)	(0.103)
Ln(liquidity) Lag1	0.126	0.134	0.134
	(0.0860)	(0.103)	(0.107)
dummy_urban	0.00252	0.0173	0.0173
	(0.127)	(0.154)	(0.313)
dummy_Private_limited	-0.0565	-0.220	-0.220
	(0.212)	(0.257)	(0.474)
dummy_Parnership	-0.0482	-0.0593	-0.0593
	(0.130)	(0.160)	(0.303)
dummy_education	-0.293	-0.536	-0.536
	(0.552)	(0.684)	(1.249)
dummy_transport	-0.390	-0.725**	-0.725
	(0.297)	(0.349)	(0.747)
dummy_medical	-0.145	-0.239	-0.239
	(0.262)	(0.324)	(0.605)
dummy_others	1.039**	2.319***	2.319*
	(0.518)	(0.640)	(1.249)
2020.year	0.0168	0.0305	0.0305
	(0.103)	(0.126)	(0.0415)
Constant	-1.985*	-3.980***	-3.980*
	(1.021)	(1.246)	(2.228)
Observations	680	680	680
Number of id		356	356
LR chi 2	55.95		
Wald chi2(19)		134.3	40

Prob>chi2	0.000	0.000	0.003
Log Likelihood	-407.794	-116.176	-116.176
Sigma_u		0.972	0.972
Rho		0.486	0.486
LR Test of Rho chi(1)		583	583
P-value for Rho LR Test		0.000	0.000

Note: Standard errors in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

The dynamic model of access to finance by SMEs in the Western Area of Sierra Leone shows that the determinants of access to finance are net earnings of the firm, experience, leverage, liquidity and capital. However, while net earnings, experience, leverage and liquidity affect firms' access to finance positively, the capital of firms affects their chances of getting loans negatively. In addition, both the net earnings of firms and firm leverage affect their access to finance with a one-year lag while liquidity and capital affect firms' access to finance in a contemporaneous sense (in the same year).

The result shows that when the net earnings of firms increase in a given year by 1 percent, the probability of getting a loan in the following year increases by 0.40. However, in the same year, there is no significant effect on the probability of getting a bank loan for expansion. In the case of leverage, which measures the effect of debt on firms' chances of getting a bank loan, when debt relative to assets (leverage) increases in a given year by 1 percent, the chances of getting a loan in the following year increase by 0.24 but in the same year, there is no significant effect. This result implies that firms that increase their net earnings have higher chances of getting bank loans than those whose debt increases. The fact that leverage increases the probability of getting loans could be due to the fact that firms with higher debts are likely to be the more distressed ones, thus they tend to put more effort and search for bank loans to support their businesses. The fact that net earnings have a higher impact could be due to the fact that banks, which are the supplier of the loans, tend to put more emphasis on firms that are doing well and thus tend to give more premium to those firms that are doing well on their businesses.

The liquidity of firms, in this case, the short-term liquidity, has a positive contemporaneous effect on the probability of firms getting loans. The coefficient shows that when short-term liquidity increases by 1 percent, the probability of getting a bank loan increases by 0.21. This also implies that firms with short-term liquidity do not put much effort into searching for bank loans in comparison with those who are in debt. Experience is found to have a positive effect on the probability of getting the loans-every additional month of experience increases the chance of getting a loan by 0.004. Hence experience is found to have the least impact on the chances of getting loans, though it has a positive effect on access to finance. The capital of firms is found to have a negative effect on the chances of getting the loan. Specifically, when the capital of a firm increases by 1 percent in a given year, the chances of getting a loan decrease by 0.42. This implies that the variable with the highest effect on access to finance is SME capital and this effect is

negative, suggesting that banks consider higher SME capital as a factor that increases the probability of default.

The result further shows that labour, location, firm structure and sector of operation do not determine access to finance by SMEs. In addition, the year dummy was found to be insignificant. This implies that 2020 and 2019 were not different in terms of the probability of an average firm getting a bank loan. This implies that since 2020 was the COVID-19 pandemic year, the pre-COVID-19 and COVID-19 pandemic years were not different in terms of the probability of getting a loan by the average SME in the Western Area of Sierra Leone.

4.2 Synthesis of Objective with Main Findings Objective

The objective of the study was to investigate the impact of COVID-19 on Small and Medium Enterprises (SMEs) access to finance in the Western Area of Sierra Leone.

4.2.1 Main Findings

The determinants of access to finance are net earnings of the firm, experience, leverage, liquidity and capital. While net earnings, firm leverage (debt-assets ratio), short-term liquidity and experience have positive effects on the probability of a successful loan application by an SME, capital has a negative effect on it.

Net earnings and leverage affect the probability of a successful loan application with a year lag while capital and liquidity affect it in the same year. Moreover, labour and all firm-specific characteristics, which are location, structure of ownership and sector of operation of the SME do not explain access to finance in the Western Area of Sierra Leone. A decrease in the capital has the greatest chance of increasing the success of loan applications, with a probability of 0.42 for a 1 percent decline in capital. An increase in net earnings has the greatest chance of increasing the probability of a successful loan application, with a probability of 038 for a 1 percent increase in net earnings. This is followed by leverage and short-term liquidity with probabilities of 0.24 and 0.22 for a 1 percent increase in leverage and liquidity respectively and for every month of increase in experience of the firm, the probability of a successful loan increases by 0.004.

The result also shows that firms had equal probabilities of getting loans from commercial banks in 2018, 2019, and 2020.

Thus, the pandemic did not affect the chances of SMEs securing loans during that period.

4.3 Agenda for Future Research

While the study investigated the determinants of access to finance, we defined access to finance as access to bank loans for the business expansion of SMEs. The focus was on SMEs in the Western Area of Sierra Leone. Areas for investigation that we could not consider are:

- taking access to finance in an ordered response form to cover the frequency of a bank loan per year as SMEs may take short-term loans in multiple months in a year; and
- carry the study for various regions and districts in Sierra Leone and at a national framework.

5. Conclusion and Recommendations

5.1 Conclusion

Small and Medium Enterprises (SMEs) are important in the development of every economy. However, in sub-Saharan Africa, they have challenges including access to finance for business expansion. In Sierra Leone, as in a number of developing countries, the financial systems are small and shallow. In addition, the cost of credit is often high due to infrastructure costs and macroeconomic performance, including high inflation rates. Moreover, due to limited outreach only a small percentage of the total population normally has access to credit for business expansion. Thus, many SMEs rely on self-financing or colleagues and friends for capital.

While the cost of administering small loans to SMEs reduces the profits of the creditors and weak laws to enforce payment by financial defaulters are binding constraints on the supply side, there are firm-specific factors that affect access to finance SMEs.

The objective of the study was to investigate the impact of COVID-19 on Small and Medium Enterprises (SMEs) access to finance in the Western Area of Sierra Leone.

Access to finance was measured as the success of a bank loan for the expansion of the SME business as all SMEs considered were the registered ones and they all had bank accounts with a commercial bank.

Data on firm-level net earnings, capital, labour, leverage, short-term liquidity, and experience in months of existence, as measured by age, firm-specific factors such as location, ownership structure, and sector of operation was obtained through a survey of registered firms in the Western Area of Sierra Leone. Data on whether a firm had a successful credit application or not was also collected, through a dummy variable taking one for a successful loan application and zero for an unsuccessful loan application. A time dummy variable was explicitly included in the model to determine how 2018, 2019 and 2020 were different in terms of chances of an SME getting a bank loan. A Probit model was estimated as it determined the probability of getting a successful loan application given the values of the explanatory variables.

A number of results were obtained. These were:

1) the determinants of access to finance are net earnings of the firm, experience, leverage, liquidity and capital. While net earnings, firm leverage (debt-assets ratio), short-term liquidity and experience have positive effects on the probability of a successful loan application by an SME, capital has a negative effect on it;

2) net earnings and leverage affect the probability of a successful loan application with a year lag while capital and liquidity affect it in the same year;

3) labour and all firm-specific characteristics, which are location, structure of ownership and sector of operation of the SME do not explain access to finance in the Western Area of Sierra Leone;

4) a decrease in capital has the greatest chance of increasing the success of a loan application, with a probability of 0.42 for a 1 percent decline in capital. An increase in net earning has the greatest chance of increasing the probability of a successful loan application, with a probability of 038 for a 1 percent increase in net earnings. This is followed by leverage and short-term liquidity with probabilities of 0.24 and 0.22 for a 1 percent increase in leverage and liquidity respectively and for every month of increase in experience of the firm, the probability of a successful loan increase by 0.004; and

5) the result also shows that firms had equal probabilities of getting loans from commercial banks in 2018, 2019, and 2020. Meaning that the pandemic did not affect the SMEs' chances of securing loans.

5.2 Recommendations

As net earnings, which captures the profitability of SMEs, has a significant positive effect on the probability of getting a bank loan by the SMEs, domestic monetary and fiscal policies in the form of interest rates on bank borrowing and taxes levied on SMEs should be designed such that they can highly favour SMEs. An alternative is for SMEs to have special rates on these policies, especially tax rates. In the case of interest-rate loans meant for SMEs, these need to be coordinated by the central bank on a regular basis, especially during downturns. This can raise net earnings by reducing financing costs and thus net earnings increase with its attendant impact on the probability of access to finance for expansion. Continued support and search for mechanisms that can reduce SME operational costs are also imperative in this light.

Another important policy implication of the result is that as experience has a positive significant effect, on the probability of getting a bank loan by the SMEs, it is useful for the Cooperate Affairs, City Council, SMEDA and the Ministry of Trade in collaboration with the commercial banks to have an SME financing forum where SMEs can be educated on the need to persevere in business operation since as they get more business experience their chances of obtaining bank loans increases.

As leverage is found to have a positive effect on the chances of getting bank loans, which is more likely to be the case when SMEs have unreported informal sector loans and are highly committed to pushing bank loan applications in spite of other hurdles, it is useful for the domestic financing environment to be systematically built such that successful SMEs do not see it necessary to take the high-cost informal sector loans.

The impact of short-term liquidity on bank lending is positive and significant. In this regard, SMEs require some form of training whereby they can be informed about the positive role savings in their accounts have on their chances of borrowing.

The year of COVID-19 (2020) in the study data shows to have the same chance of getting a bank loan as the pre-COVID-19 years (2018 and 2019), in spite of the business uncertainty and the downturn associated with such a pandemic. In this regard, a robust mechanism for strong SME support outside the bank is imperative. This requires strong government and donor support, driven by coordination among the Ministry of Trade, Central Bank, Ministry of Finance, SMEDA and donor partners. The process may require a strong FinTech application in a peer-to-peer framework to achieve the desired result.

Conflict of Interest Statement
The authors declare no conflicts of interest.

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