

Economic Impact Analysis of Credit Guarantee Schemes in Eswatini: A Case of the Small Scale Enterprise Loan Guarantee Scheme (SSELGS)

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Abstract

Using data from 315 beneficiaries of the Small Scale Enterprise Loan Guarantee Scheme, this study assesses the impact of the Small Scale Loan Guarantee Scheme. The study assessed both the financial and economic additionality of the scheme. The study used a structured questionnaire and face-to-face interviews to elicit data from beneficiaries whereas key informant interviews were used to elicit data from participating banks. The study also assessed visibility of the scheme as well as its efficiency in terms of loan approval period and claim processes. From the sampled beneficiaries, 174 SMEs would not have accessed credit if the scheme was non-existent. Collectively, these SMEs received E42, 918,616.00. On the other hand, 72 of the 174 started new businesses and at the time of the interview, they collectively employ 681 people. The study found that the default rate is high at 44.3 %. The approval period of loan application varies widely, with some respondents reporting a period of less than a month while others reported a period of up to four years. The study concludes that the scheme has made a positive impact in both financial and economic additionality. However, two factors (inefficiency in scheme's operation and high default rate) threaten the scheme's existence. It is therefore a recommended that scheme managers should put measures to curb the default rate and improve the efficiency and visibility of the scheme.

Key Words: Small Scale Enterprise Loan Guarantee Scheme, Small and Medium Enterprises, Economic additionality, Financial additionality

1. INTRODUCTION

1.1. Small and Medium Enterprises in Eswatini entrepreneurial environment

The SME National Policy of Eswatini of 2009 defines small and medium enterprises (SMEs) as companies with no more than 60 employees and a maximum turnover of E8 million. SMEs play a critical role in the economy of Eswatini, accounting for 90% of the country's businesses and providing around three-quarters of all private sector jobs. According to statistics from the Micro, Small, and Medium Enterprise (MSME) survey by FinMark Trust, at the end of 2017, the number of SMEs in Eswatini was 68,536 with 92,643 employees, which accounts for 63.2% of total employment in the country.

However, in the process of development, SMEs in Eswatini face many difficulties and challenges. According to the FinScope survey 2017, the major limitations of the SME sector in Eswatini are:

- Fragmented enterprise structure (nearly 80% of Eswatini companies are micro-enterprises);
- Lack of a strong stratum of medium-sized enterprises (the proportion of Eswatini medium-sized enterprises is below 1%);

- The majority of companies lack sufficient/acceptable collateral; high rate of tax evasion; many enterprises were founded out of necessity;
- Relatively low productivity (weak ability to create added value);
- Ageing management (succession problems);
- Insufficient financial knowledge;
- Lack of access to market;
- Low willingness-to-innovate.

One of the major difficulties of SMEs is accessing capital from banks and credit institutions due to lack of acceptable collateral. To solve this problem, Eswatini has used different financial tools to help SMEs easily access finance. One of the effective financial instruments Eswatini has applied is the loan guarantee system.

1.2. Loan guarantee schemes in Eswatini

Eswatini currently has two guarantee schemes that are housed at the Central Bank of Eswatini (CBE); the Small Scale Enterprise Loan Guarantee Scheme (SSELGS) and the Export Credit Guarantee Scheme (ECGS). Established in 1990 and re-launched in 2010, the main objective of the schemes is to circumvent, largely, the issue of collateral by acting as an assurance to banks in the absence of acceptable collateral from SMEs that want to access finance through the country's banks.

The SSELGS has three specific objectives. Firstly, to establish a loan guarantee fund that would encourage participating financial institutions (commercial banks) to increase lending to small-scale enterprises in Eswatini. This reduces the financial risk faced by lending institutions. The second objective is to promote increased participation of Emaswati in the economic activities, particularly in sectors suitable for small-scale operations, and to improve their competitiveness. The last objective of the scheme is to stimulate efficient localisation of small-scale businesses by providing adequate capital to take over existing shops and workshops or to establish new ones.

According to information sourced from the SSLEGS main report of 2016, the target group for the scheme is small-scale domestic enterprises that are start-ups or already engaged in business. For businesses to qualify for the scheme, they should have a total turnover that does not exceed E8 million per annum and should be owned either by a national of Eswatini or by a legal entity in which Eswatini nationals have at least 75% ownership and effective control.

The scheme does not guarantee the entire load and the portion of the loan guaranteed depends on whether the business is a start-up or already existing. For start-up businesses, up to 95% of the loan is guaranteed, and for existing businesses up to 85% of the loan is guaranteed. The report further reveals that the guarantee remains active until the credit is repaid in full, unless the financial institution and the Fund (Guarantor) agree otherwise, in writing.

The participating financial institutions are responsible for assessing a proposed project if it is financially and technically sound before giving out a loan. The maximum amount to be loaned should not exceed E500,000.00 per loan application whilst the repayment period is up to five years for short-term loans and up to ten years for long-term loans. Each business is eligible to use the scheme only twice. Owners of start-up businesses undergo entrepreneurship training and mentoring (provided by a Government accredited service

providers) for a minimum of four weeks. Once a borrower fails to repay the loan and the lending financial institution has exhausted all efforts to recover it, the financial institution can invoke the guarantee fund to settle the loan or part of it.

Information sourced from the SSLEGS main report (thereafter referred to as the SSLEGS Report), suggests that as at June 2016, the total number of loans guaranteed had reached 1,191 (251 outstanding loans) for a total value of loans amounting to E100.5 million. Of these, 59.7% (E60 million) was for paid-up loans while the remainder represents the outstanding loan portfolio guaranteed at E40.5 million (40.3% of the total value of the scheme). In terms of the largest beneficiaries of the scheme, the retail sector came first at 58.6% of issued loans, with the remainder going to the manufacturing (5.5%), transport (3.9%), services (24.1%), and agriculture (1.3%) sectors. The SSLEGS Report further documents that the default rate stood at 5.28% in June 2016.

Given that SMEs have come to be seen as major players in stimulating economic growth and increasing employment (OECD, 2000), providing support and other ancillary services to SMEs is therefore crucial for stimulating economic growth. To be clear, the government of Eswatini sees SMEs as key in the fight against unemployment, poverty, and hunger (NDS of 1997, revised 2014). However, issues of financial exclusion due to primarily lack of collateral and targeted support to SMEs have meant that the sector contributes very little to GDP production in Eswatini. The literature shows that for a country to develop, it has to have a vibrant SME sector (Grater *et al.*, 2017).

Moreover, for SMEs to perform well and contribute to economic growth they need to have access to financial services. Recognising this, the Government of Eswatini through the Central Bank of Eswatini (CBE) introduced the SSELGS. Implicit to the introduction of the scheme is the assumption that the major stumbling block for SMEs when applying for loans is the lack of collateral. However, even with the presence of the scheme, SMEs in Eswatini still face some difficulties when it comes to accessing loans. Available evidence shows that in most cases SMEs are either not given the loans at all or the loans are issued very late, which becomes a great inconvenience to the entrepreneurs, thus raising questions regarding what more can the government do to support SMEs. Given that the scheme has been operational for 27 years without any comprehensive and documented evaluation, it is undeniable that an evaluation exercise is long overdue. Against this backdrop, this study seeks to evaluate the SSELGS through assessing the additionality effect of the scheme.

The rest of the paper is organised as follows; section 2 presents the review of related literature. Section 3 presents data and methods used while section 4 presents the results and discussion. Lastly, section 5 presents the conclusion and recommendations.

2. LITERATURE REVIEW

2.1. SMEs in Eswatini and their role

There is no single global definition for SMEs, mainly due to divergences in economic structures and stages of development. Globally, most countries have developed their own definitions in an effort to craft appropriate and effective policies and programmes for SMEs to fit its context and economic circumstances. The European Commission defines a SME as any business characterised as micro, small or medium. . However, it is only proper to define SMEs in the context of Eswatini where the SME National Policy classifies these entities as a continuum, from informal micro-enterprises to formal medium-sized enterprises.

The distinctions within the continuum are not important, only the ease with which enterprises can change within the scale is more critical, that is, a micro-enterprise deciding to formalise its operations and a medium-sized enterprise downscaling its businesses operations. Table 1 below provides the classification;

Table 1: SMEs categories in Eswatini

Category	Number of Employees	Value of Assets (E)	Turn-over (E)
Micro-Enterprise	0 to 10	Under 50,000	Up to 60,000
Small Enterprise	11 to 20	Over 50,000 to 2 million	Up to 3 million
Medium Enterprise	21 to 60	Over 2 million to 5 million	Up to 8 million

Source: Revised SME National Policy of Eswatini (2009)

A study conducted by the United Nations in Eswatini in 2012 on “Opportunities and Constraints to Youth Entrepreneurship” found that during the business start-up phase, access to finance is the biggest problem as 84% and 82% of the young and adult entrepreneurs respectively indicated that they had difficulties in getting enough capital. Finance is also identified as a key obstacle to running a business as 35% of both young and adult entrepreneurs, stated in the study.

The findings further reveal that when these entrepreneurs are in need of finance, they are most likely to turn to their personal savings to fund their businesses or else turn to family funds if the shortage persists and all of these alternatives are in minimal supply. Young Emaswati entrepreneurs are less likely, compared to adult entrepreneurs, to apply for credit from a formal financial institution either during the start-up or operation phases of their businesses. Those who do apply are more likely than the adult entrepreneurs to have their loan application denied. Lack of collateral is the most frequently cited reason (mentioned by 50% of young entrepreneurs) for having their application for credit denied, followed by a poor business plan (cited by 19% of young entrepreneurs).

2.2. Importance of SMEs

SMEs account for 60 to 70 per cent of jobs in most OECD countries, with a particularly large share in Italy and Japan, and a relatively smaller share in the United States (OECD, 2000). It is an admitted fact that encouraging entrepreneurship is key to improve competitiveness, boost trade volume, fostering economic activities and creation of job opportunities (Sattar, et al., 2013). According to the SME National Policy of Eswatini, in most countries SMEs play an important in job creation, and Eswatini is no different. SMEs provide a route where the nation of Eswatini can own a larger percentage of the economy; SMEs offer an opportunity and a way in which a larger manufacturing base can be established in Eswatini; and more SMEs mean that more of the wealth generated in Eswatini will stay within the country and not be exported.

2.3. History of Loan Guarantee Schemes

In order to lessen the financing constraints faced by SMEs, governments, NGOs and the private sector have developed initiatives such as loan guarantee schemes (LGSs) worldwide. LGSs first emerged in Europe in the 19th and the early 20th centuries. Currently, there are over 2,250 schemes implemented in different forms in almost 100 countries (Green, 2003). LGSs provide guarantees to groups that do not have access to credit by covering a share of

the default risk of the loan. In case of default, the lender recovers the value of the guarantee (Saldana, 2000).

2.4. Types of Loan Guarantee Schemes

According to (Green, 2003), Credit Guarantee Schemes can be differentiated into four major types, which are: public guarantee schemes, corporate funds, international schemes, and mutual guarantee associations. Below are detailed descriptions of each LGS type as stated by (Green, 2003).

- *Public Guarantee Schemes*: Public guarantee schemes are established by public policy and they usually involve state subsidies, especially when they are started. Usually, they are managed by a private organisation or an administrative unit of the government. An advantage of this system is that, in case of loan default, the guarantee is paid out directly from the government budget and that gives such a type of scheme higher credibility within the banking sector.
- *Corporate Guarantee Schemes*: Corporate guarantee schemes are generally funded and operated by the private sector, e.g. the commercial banks. They have the advantage of being managed by experienced corporate leaders, and generally benefit from the direct involvement of the banking sector.
- *International Schemes*: International schemes are typically bilateral or multilateral government or NGO initiatives, e.g. the ILO, UNIDO or the European Investment Fund. In most cases, international schemes combine both a guarantee fund with technical assistance to businesses.
- *Mutual Guarantee Schemes*: They are private and independent organisations formed and managed by borrowers with limited access to bank loans. Although they are largely funded from membership fees, in many instances, they operate with some form of government support. Mutual guarantee schemes benefit from the active involvement and experience of their members.

2.5. Usefulness of Loan Guarantee schemes

The Ministry for Economic Cooperation and Development in Germany, under the topic “SMEs’ Credit Guarantee Schemes in Developing and Emerging Economies”, argues that guarantee schemes have the social function and economic role to promote access to more credit and/or a better credit to micro-entrepreneurs and SMEs by providing substitute collaterals, which are complementary to theirs (SMEs). In doing so, they can overcome various obstacles to bring credit to viable but non bankable projects, due to information asymmetry and lack of collateral. The goal of a sound credit guarantee programme design is to adopt programme implementation policies that align the economic incentives of the guarantor and the creditor so that they simultaneously achieve their respective social and private objectives (Saldana, 2000). This practice of Credit Guarantee Scheme (CGE) may actually make the entire financial sector more efficient and some of the reasons for that are as follows:

- *Reduction of the overall risk in an economy*: Guarantee schemes can contribute to the reduction of specific risks in an economy by promoting the diversification of risks thus reducing the overall risk. Credit Guarantee Schemes increase access to credit for many SMEs, which in turn means the risk is spread over a large number of businesses thus the significance of defaulters is reduced (BMZ, *et al.*, 2012).
- *Mitigating an inefficient distribution of wealth*: Guarantee schemes can offset the adverse effects of this non-match between entrepreneurship and ownership of assets to be devoted to the project or given as collateral to lenders. They can do that through

their decision-making mechanisms by the weight they give to the qualitative aspects of applications: training, experience, sponsor's motivation, economic value of the project (BMZ, *et al.*, 2012).

- *Compensation for lack of competition among banks:* In many countries, competition among banks is not strong especially in developing countries (Assiamah *et al.*, 2008). Therefore, banks do not have much interest in looking for new customers especially when it comes to financing SMEs. Guarantee mechanisms increases the willingness of banks to finance SMEs as they reduce the risk inherent in lending on SMEs thus making them an attractive market (BMZ, *et al.*, 2012).

2.6. Difficulty in measuring the contribution of the scheme to the economy

Measuring the impact of LGSs accurately remains technically challenging (World Bank, 2010). Numerous studies have concluded that LGSs have been able to extend finance to SMEs that otherwise would have remained constrained. According to Ridding and Haines (2007), a study conducted in Canada reveals that 75% of SMEs who use guarantees would not have been able to obtain a loan otherwise. Another study conducted in Chile by (Larraín and Quiroz, 2006) found that LGSs increase the probability of SMEs getting loans by 14%. Honohan (2008) argues that poorly designed LGSs may add limited/minimum value and prove costly. Honohan (2008) highlights factors that may result to this scenario which include; loose eligibility criteria, low fees, and overly generous coverage ratios. Such factors then lead to enterprises that could obtain credit without the scheme into using the scheme anyway.

The impact of a programme difference between the level of improvement after implementing the programme and what would have been achieved did receive treatment, if they had not received treatment (Oh, *et al.*, 2006). This means factual and counterfactual situations have to be compared but then that is not possible because participants can only be observed in one factual state. Therefore, the closest approach to use is to compare those who participated in the programme or support to those who did not participate. The accuracy of such an approach depends on the similarities of the two subjects under comparison (Oh , *et al.*, 2006).

Oh , *et al.*, (2006) further note that another problem that is likely to exist in measuring the contribution of a support programme is the selectivity problem. This implies that the projects that are the best candidates to be funded or benefit - in the sense of maximising the impact of public support - are also the projects that would have the highest expected output in the absence of funding. Therefore, such contributes to the inaccuracy of the participants and non-participants' comparison approach.

2.7. Objectives of loan guarantee schemes

The most common policy objectives of LGSs are small-medium enterprise development, post-war economic recovery, youth employment, women entrepreneurship, and mutual assistance. However, in many cases these overall policy objectives are too broad to work with. They have to be translated to clear eligibility criteria (Deelen and Molenaar, 2004). Furthermore, in their survey of 76 LGSs from 46 countries, Beck, *et al.*, (2008) found that the most frequently cited objective of LGSs was to assist SMEs (45% of loan guarantee schemes were established to assist SMEs). Whereas in most cases loan guarantee schemes focus on access to financial services (especially for micro and small enterprises in developing and emerging economies), they may also aim to improve the terms of a loan (mostly in the case of medium enterprises that already have access to credit). At the same time, LGSs pursue social goals, such as reducing social tensions, empowering marginalised groups or assisting post-

war reconstruction. Whereas in industrialised countries they are mostly seen as correctors of the market for credit, they are also applied as development instruments in emerging economies (Green, 2003).

2.8. The role of loan guarantee schemes for SMEs

For SMEs, loan guarantee schemes support them by facilitating easier access to capital and increasing loan availability (Nitani and Riding, 2005); reducing the cost of borrowing (Beck *et al.*, 2010); and strengthening access to finance for SMEs (Beck, Klapper and Mendoza, 2010). Loan guarantee schemes also help SMEs develop and expand production and business (Levitsky, 1997b; Nitani and Riding, 2005; Roodman and Qureshi, 2006); and supports them by offering advice and consultancy services on financial management, financial reporting, etc.

2.9. Challenges in financing SMEs

A study conducted by McKinsey and Company and International Finance Corporation (IFC) revealed that the total unmet need for credit by all formal and informal SMEs around the world in emerging markets today is in the range of E30.4 trillion to E36.2 trillion. In fact, of the estimated 365 million to 445 million formal and informal SMEs in the developing world, approximately 70 percent do not use external financing from financial institutions, although they are in need of it (World Bank, 2010). Approximately 15 percent are underfinanced. Approximately 70 percent of all emerging-market SMEs (roughly 255 million to 310 million enterprises) do not use any formal credit at all (that is, neither overdrafts nor bank loans) yet they want it. Some of the challenges that make it so hard for SMEs to access finance are as follows:

- 1) **Information asymmetries:** SMEs are unable to provide information on their creditworthiness, they tend to lack appropriate accounting records and collateral. This leads to uncertainty on the enterprise's expected rates of return and the integrity of the borrower. Gathering such information on SMEs can be challenging and costly for the financial institutions (OECD and European Union, 2010). Information asymmetries then lead to the following problems:
 - a) *Lending administrative* costs tend to be higher for smaller firms. Obtaining information requires more resources as a percentage of the underlying loan. Visiting borrowers and monitoring their activities is expensive and not always economically rational when a loan size is small (Green, 2003). This is most likely with SMEs because in most cases they lack proper record keeping skills.
 - b) *Adverse selection* is another problem caused by information asymmetries. This theory postulates that the probability of default increases with the interest rate. As interest rates increase, safer borrowers are driven out of the lending pool while riskier borrowers remain (Green, 2003). This leads to an increasingly riskier portfolio of loans. Adverse selection on one hand impedes the ability of the market to allocate credit through prices (interest rates) only, because it increases the proportion of high-risk investors in the pool of prospective borrowers (Stiglitz and Weiss , 1981). For this reason, financial institutions are reluctant to raise the interest rate above a certain level. Instead, they prefer to maintain the quality of the borrower pool. However, the financial institutions' inflexibility in increasing interest rates prevents many SMEs, which are typically riskier investments, from obtaining loans even if they would be willing to pay the higher interest rate. This results in a situation called "credit rationing" (OECD and European Union, 2010).

- 2) **Transfer of risk:** SMEs are more vulnerable during harsh economic conditions, and their mortality rates are relatively high, thus lending to SMEs may carry higher risks (OECD and European Union, 2010).
- 3) **Collateral requirements:** Financial institutions' lending decisions tend to be based on the amount of collateral available. Collateral reduces lending risk, and a borrower who is willing to offer a higher level of collateral has a higher intention of repaying the underlying loan (Saldana, 2000). Additionally, collateral provides insurance to a bank and whenever the borrower defaults, then the bank turns to the collateral used to obtain the loan thus it can sell in order to recover a part or all of the defaulted loan (OECD and European Union, 2010).

3. METHODOLOGY

3.1 Research Design

The study employed explanatory research design with quantitative and qualitative methods. The qualitative aspect of the data focused on description of socioeconomic and demographic characteristics. The quantitative analysis was used to analyse the relationship among the dependent and explanatory variables for the study.

3.2 Data sources and instruments

The study used questionnaires to collect data from the SSELGS beneficiaries and detailed discussions with key informants. The structured questionnaire was used to capture vital data that enabled the researcher to address the problem statement. There was one questionnaire used for SSELGS beneficiaries and detailed discussions with key informants from the four banks that participate under the SSELGS and persons with experience in the SME sector. Face-to-face interviews were conducted with the SSELGS beneficiaries targeted. Detailed discussions were conducted with key informants occupying the positions of head of credit in their respective banks' SME units and persons with knowledge in the SME sector, and notes were transcribed and included in the data analysis as qualitative data.

3.3 Sampling techniques and sample size

The study employed stratified random sampling for the owners of SMEs. This was possible through stratifying SMEs according to the nature of their business. This enabled the researcher to get the right respondents who had the information to deliver the study objectives. The study target population were beneficiaries that had their loans guaranteed by the SSELGS. About 400 sample respondents were selected from a list of the SSELGS beneficiaries with active contact details.

3.3.1 Collection of Quantitative and Qualitative data

The quantitative data was collected through a questionnaire given to the SSELGS beneficiaries. This enabled the researcher to generate sufficient data to deliver the study's objective. The questionnaire also provided space to generate the qualitative data, which later was organised and yielded sufficient information to deliver the study objective. In addition, the key informants who included credit managers from the commercial banks and persons with experience and knowledge of the SMEs sector gave qualitative data to assist in the study objective.

3.4 Analytical framework

The study made use of the logistic regression model. Logistic regression is based on binomial probability theory. It is a mathematical modelling approach used in describing the relationship of several independent variables to a dichotomous dependent variable or a limited dependent variable. The logit function was employed because the dependent variable ‘default’ is dichotomous, whereas the proposed covariates were a mixture of continuous and categorical random variables. Thus the model was chosen over others due to the data structure and purpose. Also, the independent variables need not be interval, nor normally distributed, nor linearly related, nor equal variance within each group. The logit model is a derivative of the odds function. The odd of a function is the ratio of the probability of success to that of failure. Thus,

$$Odds(Y = 1) = \frac{P(Y=1/X=x)}{P(Y=0/X=x)} \quad (1)$$

Where $Odds(Y = 1)$ is the odds of default; $(Y = 1)$ is the probability that default occurs given a set of explanatory variables and $(Y = 0)$ is the probability of non-default given a set of explanatory variables. If the odds of default is greater than one, it means there is a higher probability of default compared to that of non-default. A value less than one indicates a higher probability of non-default than that of default. Given the binary response variable (default or non-default), the probability distribution of the number of defaults in a given loan portfolio size, for given values of explanatory variables is binomial.

The Maximum Likelihood Estimate (MLE) is the empirical estimation of the logit model; it assumes large sample properties of efficiency, consistency, normality of parameter estimates and validity of the t-test significance (Studenmund, 2001; Green, 1993). Besides these properties, the logit model could help to avoid the major problem associated with Ordinary Least Square (OLS) which estimates the standard linear probability model (Hair, et al., 1998). The MLE coefficient estimates from the logit analysis have no direct interpretation with respect to the probability of the dependent variable (Loan default =1) other than indicating a direction of influence of probability.

Maddala and Liao, (2005) recommend calculating the changes in probabilities to indicate the magnitude of the marginal effect. It refers to the partial derivatives of the non-linear probability function at each variable’s sample mean (Liao, 1994; Pindyck and Rubinfeld, 1991; Hosmer and Lemeshow, 1989). In order to identify the most and the least important variables influencing loan default of SSELGS beneficiaries, the marginal effect for each of the estimated coefficients in the empirical model are calculated. The marginal effect reveals the marginal change in the dependent variable given a unit change in a selected independent variable, holding other variables constant (Liao, 1994). The marginal effect indicates the level of importance for the estimated coefficients in the empirical model.

3.5 The Model

The study adopted the logistic regression analysis in order to predict an outcome variable that is categorical from predictor variables that are categorical. This method was also used because having a categorical outcome variable violates the assumption of linearity in normal regression, since logistic regression deals with this problem by using a logarithmic transformation on the outcome variable which allows us to model a nonlinear association in a linear way. This methodology also expresses the linear regression equation in logarithmic terms. The relative effect of each explanatory variable on the likelihood that the SSELGS beneficiaries will be able to repay their loan is given by:

$$\ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k$$

(2)

Where: p is the probability of observing outcome 1 (default), then $1-p$ is the probability of an outcome of 0 (repay loan), X_1 to X_k are regressors of the model, and β s are parameters to be estimated. Table 2 presents a description of the variables used in the model.

Table 2: Description of variables used in the model

Variable	Definition	Coding of Variable	Category
X_1	Gender	1 if male, 0 if female	Dummy
X_2	Age	Number of years	Continuous
X_3	Household size	Number of family members	Continuous
X_4	Size of business	Number of employees	Continuous
X_5	Sector of business	1 if Agriculture	Categorical
		2 if Retail	
		3 if Manufacturing	
		4 if Transport	
		5 if Services	
X_6	Purpose of loan	1 if Business expansion	Categorical
		2 if To buy new assets	
		3 if To use as a start-up capital	
		4 if To increase production	
		5 if To hire more labour	
		6 if To cover short falls in running	
X_7	Monthly expenses	Amount in Emalangeni	Continuous
X_8	Business trainings	1 if yes, otherwise 0	Dummy

4. RESULTS AND DISCUSSION

4.1 Descriptive statistics of the demographic characteristics of the SSELGS beneficiaries.

Table 3 presents descriptive statistics for a sample of 315 respondents (SSELGS beneficiaries). The table shows that 33.8% of the respondents were female and 66.2% were male. The study found that a majority (58.4%) of the respondents had high school education, 18.6% had diploma certificates while 12.2% had primary education. Only 7.7% of the respondents acquired a Bachelor's degree and a paltry 1.6% of the respondents had no formal education.

Education is thought to instil knowledge in individuals on how to make informed decisions in life. This may not be an exception to the SME's operation, loan investment, and management. "The SSELGS beneficiaries require knowledge and skills to formulate calculated strategies

that will avert high risks in their business transactions. The education level influences adaptation of technology and innovation necessary for the business to thrive," stated some key informants.

The findings show that only a few (13.1%) of the SME owners who benefited from the SSELGS are single and a majority (74.5%) are married. Divorced and widowed respondents collectively make up 12.4% of the sample. The results show that 14.6% of the SSELGS beneficiaries have dependants ranging from zero to four (0 – 4) while 77.5% of them have dependants ranging from five to nine (5 – 9) members. This shows that a greater percentage of the SSELGS beneficiaries have larger household sizes, which could likely raise their total expenses and negatively affect their loan repayment ability. Only 7.9 % of the SSELGS beneficiaries have household sizes ranging from ten to fourteen (10 – 14) members (see Table 3 below).

The study also found that 41.3% of the businesses operate in the Manzini region, 25% in the Hhohho region, 16.83 % in the Lubombo region, and 16.84% in the Shiselweni region. Among the different sectors in which the businesses are operating in, the study established that 28.3% are in the agriculture sector, 37.3% in the retail sector, 1.6% in the manufacturing sector, 16% in the transport sector, and 20% in the services sector.

It is apparent from the distribution of the loans that the value creating sectors (agriculture and manufacturing) do not attract much funding. This implies that a considerable portion of merchandise distributed by the retail sector is imported, thus rendering the sector extractive. Out of all the sampled SSELGS beneficiaries, the study found that 87.6 % are still operating whilst 12.4% are no longer operational.

Table 3: Descriptive characteristics of sampled SSELGS beneficiaries

Variable	Statistics
Respondents' gender (% of sample)	
Male	66.2
Female	33.8
Number of dependents' (% of sample)	
0 – 4	14.6
5 – 9	77.5
10 – 14	7.9
Respondents' sector of business (% of sample)	
Agriculture	16
Retail	33.7
Manufacturing	5.7
Transport	24.6
Services	20
Respondents' education level (% of sample)	
No formal education	1.6
Primary school	12.2
High school	59.2
Diploma	18.7
Bachelor's degree	7.7
<i>Sebenta National Institute</i>	0.6
Respondents' distribution by region (% of sample)	

Manzini	41.2
Hhohho	25.1
Lubombo	16.8
Shiselweni	16.8
Respondents' current status of business (% of sample)	
Still operating	87.6
Not operating anymore	12.4
Loan repayment status	
Repaid loan	55.7
Defaulted	44.3

4.2 Perception of SME owners towards businesses management practices

4.2.1. Record keeping

From the key informant interviews, the study found that lack of proper management of information and poor record keeping are key issues affecting small businesses in Eswatini. A considerable proportion of the sampled SSELGS beneficiaries do not see value in record keeping. They cite time constraints and the small size of their businesses as the main reason for not keeping records. These are some of the sentiments shared by some of the sampled SSELGS beneficiaries:

"I would wish to do that but there is never enough time. The business is very small; my working capital is not even close to E50,000, so why should I keep records? I can tell you without any doubt all my expenses and profits in a day without looking through a book..."

The literature provides evidence that adequate management (keeping updated records, recording all business affairs, including documents, finances, and storing data) is a critical factor for the success of SMEs (Ejemobi, 2013). The importance of record keeping is explored by Peacock (1988), who found that many businesses fail due to the absence or inefficiency of accounting records. Almost three-quarters of the failed businesses he surveyed either lacked records, or only kept taxation records. Similarly, Williams (1986) evaluated the adequacy of record keeping among 10,570 SMEs in Australia. He found that most of the failed entrepreneurs kept inadequate account records. The scenario shows that the keeping of records is an important activity in SME management.

4.2.2. Differentiating business from personal income

Apart from the reality of not keeping records, a considerable portion of those who kept records had one bank account for both personal and business use. This is in line with the findings of Olatunji (2013) who noted that many businesses in developing economies tend to use working capital for personal use. These are some views that respondents held concerning business accounts:

"I know that a business should have its own account to promote accountability, but the process of opening an account is stressful... Especially, I don't believe SMEs like mine should keep separate accounts. In case my business grows bigger, I will open a separate account."

Yusuf (1997) and Ishak, *et al.* (2012) note that management of business funds is a key problem among SMEs. In consonance with their findings, Assiamah *et al.*, (2008) stated that access to formal sources of credit is virtually non-existent when a business does not have a separate bank account. He argued that most financial institutions consider lending money to SMEs a time-consuming process since small businesses do not have any proper accounting

skills and the business owners fail to separate their business accounts from personal finances, thus making the financial statements unreliable.

4.3 Factors associated with loan repayment status

Table 4 below presents factors associated loan repayment status. The study found that the number of dependents is positively associated with the probability to default on the guaranteed loan. As expected, a large number of dependent implies that more money should be set aside for taking care of the family thus compromising the ability of a beneficiary to repay the loan. Also, an increase in age was found to reduce the probability to default on the guaranteed loan. For older beneficiaries, the odds of defaulting on the guaranteed loan are 0.501 times lower than the odds of younger beneficiaries defaulting on the guaranteed loan.

The logistic regression results show that male beneficiaries are more likely to be in the defaults category ($p < 0.01$) compared to female beneficiaries. For male beneficiaries, the odds of defaulting on the guaranteed loan are 2.26 times larger than the odds of female respondents defaulting. Hence, it concurs with most previous results by Karani (2015) that found female borrowers as more creditworthy than male borrowers. But, the result was in contradiction with the findings of Fikirte (2011) and Nawai and Shariff (2012). This means that the business environment in Eswatini is quite different from other countries and more support in handling loans should be directed to men.

The number of employees were found to increase the probability for a beneficiary to default (odds ratio > 1). This implies that the owners of SMEs with more employees are more likely to default compared to those with fewer employees, *ceteris paribus*.

With regards to business sector, agriculture is the base sector, therefore all coefficients are interpreted relative to agriculture. The results show that beneficiaries in the retail and services sectors are more likely to default (odds ratio > 1) compared to beneficiaries in the agriculture sector.

Holding other factors constant, its odds ratio (4.98) result indicates that the probability of the beneficiaries in the retail sector to default on a guaranteed loan is 4.98 times higher than those in agriculture.

To default on a guaranteed loan that was used to cover shortfalls in running the business is found to be positive and statistically significant at 1%. Its odds ratio shows that the probability of a beneficiary to default on a guaranteed loan that was used to cover shortfalls in running the business is 7.25 times higher than of a loan that was used to expand the business.

Table 4: Factors associated with loan repayment status

VARIABLE	Odds Ratio	Std. Err
Gender	1.84*	0.644
Number of employees	1.14***	0.043
Age	0.544***	0.734
Number of dependants	1.41***	0.134
Retail	4.98***	2.18
Manufacturing	0.312	0.261
Services	3.52*	1.96
Transport	2.03	0.957
To buy new assets	3.86	3.22
To use as a start-up capital	2.04	1.30

To increase production	1.21	0.851
To hire more labour	4.68*	4.33
To cover shortfalls in running the business	7.25**	5.70

Source: Authors' survey, 2018

4.4 Probability of the SSELGS beneficiaries to default on the guaranteed loan

The study estimated the probability of default associated with the different factors and/or their categories. The male category of the “gender” variable was found to be 11.8% more likely to default on the guaranteed loan compared to female beneficiaries. On average, a one-year increase in age was found to decrease the probability to default by 10%. Therefore, on average, older beneficiaries are less likely to default compared to younger beneficiaries. This may be explained by the notion that, in general, young people are more inclined to squander money on frivolous things, which then compromises their ability to repay the loan. This might also imply that older SME owners manage their businesses better, thus making better profits which put them in a better position to repay the loan compared to when the profits are wafer-thin.

A unit change in family size leads to an increase in the probability of the SSELGS beneficiaries to default on the guaranteed loan by 5.1%. This finding indicates that as family size in the household of the SSELGS beneficiary increases they then dedicate a significant portion of the business income to cover different household expenses. It was also found that a unit increase in the number of employees leads to an increase in the probability of the SSELGS beneficiaries to default on the guaranteed loan by 1.9%.

As alluded to earlier, the base category for the variable “business sector” is agriculture. On average, businesses operating in the retail and transport sectors are more likely to default (25.9% and 19.3%, respectively) compared to those operating in the agriculture sector. On the contrary, businesses operating in the manufacturing sector are 19.7% less likely to default compared to businesses in the agriculture sector.

In the economy of Eswatini, there are relatively fewer manufacturing businesses; therefore, SMEs who dare venture into this sector are likely to prosper since the sector is not yet saturated.

Table 5 presents estimates of beneficiaries' probability to default on the guaranteed loan. The results show that all the significant variables for the intended purpose of the loan were found to be positively associated with the likelihood to default. This means that if the primary purpose of the guaranteed loan was to buy new assets, the probability to default on that loan increases by 23.4% as compared to diversifying into another enterprise. Moreover, if the primary purpose of the guaranteed loan was to hire more labour in the business, the probability to default on that loan increases by 26.4%. Lastly, if the primary purpose of the guaranteed loan was to cover shortfalls in running the business, the probability to default on that loan increases by 33.8%. These results confirm speculations from key informants who noted that there seem to be an association between the purpose for which the loan was acquired and the possibility to default.

Table 5: SSELGS beneficiaries' probability to default on the guaranteed loan

Variable	Change in probability to default on loan (%)	Std. Err
Number of dependants	5.1	0.013

Gender	9.2	0.052
Age	-8.5	0.018
Number of employees	1.9	0.005
Sector		
Retail	25.9	0.071
Manufacturing	-19.7	0.117
Transport	19.3	0.095
Purpose of loan		
Buy new assets	23.4	0.137
Hire more labour	26.4	0.144
Cover shortfalls	33.8	0.117

4.5 Contribution of the SSELGS to the SME sector

4.5.1 Purpose for which loan was obtained, by sector of business

Table 6 below presents the purposes, by sector of business, for which the loans were acquired. In the agricultural, retail, manufacturing, and services sector, a majority (52.7%, 39.4%, 53.3%, and 40.4%, respectively) of the loans were for start-ups. However, within the transport sector, a vast majority of the loans (71.2%) were for buying new assets.

Table 6: Purpose of loan, by sector of business

Sector of business	Purpose of loan			
	Business expansion	Buy new assets	Start-up capital	Cover short-falls
Agriculture	40.5	6.8	52.7	0
Retail	27.9	11.5	39.4	21.2
Manufacturing	6.7	20	53.3	20
Transport	11.5	71.2	13.5	3.9
Services	10.5	31.6	40.4	17.5

4.5.2. Additionality effect of the SSELGS

The study also found that 174 of the sampled beneficiaries had the scheme as the only option for obtaining the loan. From this number, the total amount of money that was made available for lending (financial additionality of the scheme) is E42,918,616.00. On the other hand, 72 new businesses that benefited from the scheme (and had no alternative source of credit) created 681 jobs (economic additionality of the scheme).

4.5.3. Sources of information about the scheme

It is apparent from Table 7 below that a vast majority (69.2%) of the beneficiaries learnt about the scheme at the bank at which they applied for a loan. Word of mouth is another main source of information about the scheme, with business partners, friends, neighbours, and other beneficiaries collectively accounting for 29.3%. Media platforms and SEDCO together account for a paltry 1.7%. Worth noting is that these individuals went to the bank with the hope that their collaterals were acceptable, only to find that they were not. Fortunately, the bank consultants informed them about the scheme. If these applicants knew beforehand that

their collaterals were not acceptable, they would not have gone to the bank and they would not have heard of the scheme hence they would not have accessed the loans.

Table 7: Sources of information about the scheme

Source of information	Percentage of respondents
Bank	69.2
Business partner	0.7
Friend	13.0
Neighbour	8.1
Other beneficiary	7.5
Media	0.7
SEDCO	1.0

Regarding the loan approval period, responses seem to be concentrated within the range of 1 to 8 months. However, a few respondents reported that their loans were approved in less than a month while others reported a period of up to four years. Table 8 below provides a detailed presentation of the distribution of loan applications' approval period.

4.5.4. Efficiency of the loan application process

Table 8: Loan application approval period

Approval period (months)	Frequency	Percentage
0.25	3	0.98
0.5	1	0.33
0.75	8	2.62
1	15	4.92
1.5	1	0.33
2	43	14.10
3	40	13.11
4	57	18.69
5	44	14.43
6	54	17.70
7	7	2.30
8	11	3.61
9	2	0.66
10	3	0.98
11	3	0.98
12	4	1.31
14	2	0.66
24	3	0.98
48	4	1.31

4.6 Summary of key informants interviews (KIIs)

Twelve key informant interviews, distributed evenly across the four banks, were conducted with the view to elicit information about issues pertaining to performance of the SSELGS. The one thing that stood out in all the interviews is that it is not only prohibitively costly for the banks to process claims but it is also difficult to process the claim to the end. Regardless of the reality that several SME owners have defaulted, no claim has been paid out by the scheme. This, according to the key informants, erodes the banks' propensity to participate in the scheme.

It also came out during the interviews that the loan approval process is marked with duplication in that the bank and two personnel managing the scheme independently screen the loan applications. Considering the range of business concepts, it is highly unlikely that the two personnel will have sufficient skills to objectively evaluate applications from all sectors.

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The SSELGS has made a positive impact in terms of incremental lending and job creation. However, there is still an adequate opportunity for improvement in the way the scheme is managed. Visibility of the scheme is very low, restricted to mainly banks and word of mouth from other beneficiaries. Variations in the loan approval process are considerably high and the longer approval period disadvantages the entrepreneurs. The application screening process is marked with duplication of tasks. Owing to the claim process being a non-starter, banks' willingness to participate in the scheme is diminishing. The high default rate of 44.3% is a threat to the scheme's sustainability. The pool of disbursed loans is dominated by the extractive retail sector (accounting for 33.7% of approved applications), with a paltry 5.7% in the manufacturing sector.

On the part of the SMEs, there is room to improve their business management practices. The current management practices adopted by several SMEs threaten their sustainability. Loans are mainly used for start-up capital, with the exception of the transport sector where most of the loans are used to buy new assets.

5.2 Recommendations

From the results, it is clear that public awareness about the scheme is low; therefore, the study recommends that stakeholders managing the scheme should organise awareness programmes. This could be achieved through the establishment of Business Information Centres (BCIs) in all towns of Eswatini. Regarding the application screening process, the study recommends that there be clearly defined roles of each party involved and if the SSELGS personnel are to screen the loan applications, there is need to ensure that the staff is capable of objectively screening applications from all sectors. The study also recommends that the stakeholders managing the scheme should put measures in place to improve efficiency (shortening the approval period) of the screening process. From the finding that the scheme funds mainly the extractive retail sector, the study recommends that there should be attempts to target value creating sectors such as manufacturing and agriculture.

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