Financing Constraints of Nepalese Small and Medium Enterprises

Shreya Joshi*

ABSTRACT

The major objective of the study is to examine the financing constraints of Nepalese SMEs. The study's specific goals are to examine respondents' perceptions of bank lending technologies, firm characteristics, firm owner characteristics, SME financial information, loan characteristics, and loan access and repayment capacity. To determine the relationship between loan characteristics, loan repayment capacity, SME financial information, firm characteristics, firm owner characteristics, and bank lending technologies and loan access to loan. To find the most important factors influencing loan access for Nepalese SMEs and to examine the effects of loan characteristics, loan repayment capacity, SME financial information, firm characteristics, firm owner characteristics, and bank lending technologies.

KEYWORDS: Loan characteristics, Loan repayment capacity, SME financial information, Firm characteristics, Firm owner characteristics.

^{*}Shreya Joshi is a Faculty Member at Global College International.

1. INTRODUCTION

Financial constraints are one of the most important obstacles to start and run a business for small and medium enterprises (SMEs), particularly in less developed and transition economies. Small and Medium Enterprises (SME) are usually enterprise that employ more than 250 workers. The technical definition varies from country to country in the Asia Pacific region but is usually based on employment, assets or a combination of two (Kotelnikov, 2007). Small and Medium Enterprises (SMEs) contribute immensely to the socio-economic development of a country by generating an employment base, greater business competition, stimulus for innovation and a wider distribution of economic wealth and business opportunities (Demirguc-Kunt, 2008).

In Nepalese context, Small and medium-sized enterprises (SMEs) comprise a substantial part of the economic activity of developing countries. Bhusal (2016) showed that a majority of SMEs do not know about various programs that exist for SMEs loans.

1.1 Objectives of the study

The main intent of this study is to examine the financing constraints of Nepalese SMEs.

1.2 Theoretical Framework

The following conceptual model is framed to summarize the main focus and scope of this study in terms of variables included.

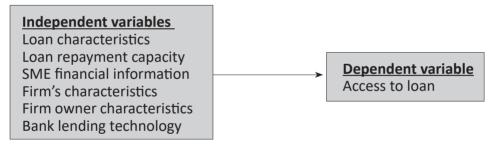


Figure 1: Theoretical Framework

1.3 Hypothesis

The banks preferred to finance SMEs for shorter duration as short term loans are cost effective and low-risk, enabling banks to recover their investment faster than long term loans (Chittenden et al., 1996). Similarly, Zambaldi et al.(2011) reported that tougher lending terms like higher interest rates and collateral had adverse effects on the lenders themselves, because risky borrowers are more likely to accept these stringent lending terms and conditions.

 H_i : There is a positive relationship between loan characteristics and access to loan.

The term loan repayment capacity refers to the borrower's ability to repay term debt on time. Typically repayment capacity is not considered a measurement of a firm or business' performance because repayment capacity also uses a borrower's non-business and/or non-farm sources of income (Keith, 2000).

H,: There is a positive relationship between loan repayment capacity and access to loan

A survey of Chinese SMEs revealed that owner's funds were the major source of finance for more than three-quarters of SME population and has positive relationship with loan approval decision (Okura ,2008). Likewise, Timmons(2004)showed a positive relationship of factors (experience, ability, knowledge) with the owners' financial statements based decisions.

H_i: There is positive relationship of SME financial information with access to loan.

Firm characteristics (FC)

There is a positive relationship between firms' characteristics (size, age, and sector) and the capital structure determined by their accessibility to finances from different sources (Berger &Udell, 2006). According to Bhaird&Lucey(2010), a firm's accessibility to external finance was directly proportional to its physical characteristics defined in terms of its size and age.

 H_4 : There is a positive relationship between firm's characteristics (size, age, and sector) and access to loan

The age, education level and experience of SME owners were positively correlated to debt accessibility, as these traits created higher value for the firm (Neeley&Auken, 2009). The study indicated a strong positive relationship between SME owner's age and its accessibility to external financing (Altman et al., 2008).

 H_s : There is a positive relationship between firm owner's characteristics (age, gender and educational qualification) and access to loan.

Nigerian firms' access to finance showed that most commercial banks are reluctant to provide long-term credit to SMEs (Abosede and Arogundade, 2011). The study showed positive relationship between access to loan and lending technology. This is because of perceived risks and uncertainties.

 $H_{\rm G}$: There is a positive relationship between bank lending technologies and access to loan.

1.4 Limitations of the study

» The study is completely based on the primary sources of data regarding financing constraints of Nepalese SME.

- » Less sample size might lead to the less significant result as expected.
- » The study is based on the assumptions of linear regression between dependent and explanatory variable. The study excluded the non-linear regression assumptions.
- » This study follows the quantitative approach for the data analysis and inferences.

2. LITERATURE REVIEW

Ashiqur&Jaroslav(2017) examined the determinants of collateral for small and medium enterprises (SMEs)in the context of Visegrad countries: Czech Republic, Slovak Republic, Hungary and Poland. The results showed that risky borrowers need to pledge collateral and the reduction of asymmetric information can lower the incidence of collateral for SMEs. Moreover, the study found that female borrowers are more likely to pledge collateral than male borrowers.

Hadi and Kamaluddin (2015) examined the loan characteristics of Malaysian microfinance institutions and their relationships to access to loan by using group influences and training to encourage borrowers. The study used descriptive- analytical cross-sectional study which was performed on 30microfinanceowners in one Malaysian city. The study showed significant relationships between loan characteristics and access to loan of the Malaysian microfinance institutions.

Wangmo (2015) investigated the impact of SME bank financing constraints on access to bank loan. The study showed immense support which indicated positive relationship between SME and bank loan. The study provided strong support for a positive effect of a firm's repayment capacity and financial credibility on its accessibility to bank loans.

Shihadeh (2019) examined the influence of banks' credit to SMEs on non-performing loans. Data were presented for 15 banks in Palestine, covering the period 2006 to 2016. The panel data contained 165 observations on non-performing loans as percentage from net direct credit, bank size (number of branches), total assets, and total capital. The study showed that encouraging banks to lend more money to SMEs through the use of a guarantee fund could decrease their risk. The study showed that access to banks credit have a positive effect on SME financial information.

Goeij&Kappert (2012) examined relationship between firms' characteristics (size, age, and sector) and the capital structure. Data were collected using the personal contact approach. Questionnaires were distributed to a sample of 100 SMEs. In the questionnaire, Likert's five-point scale was employed to determine scores, where respondents were asked to rate each attribute on 5-point scale ranging from highly satisfied to highly dissatisfied, the data so collected was subjected to factor analysis. The study revealed strong associations between factors endogenous to SMEs, such as firm and owner characteristics and loan repayment capacity and their accessibility to external financing. The study concluded that access to finance is more flexible if the size and age of the firm is more and vice versa.

Suryani (2018) examined how the relationships between a borrower and his potential lender affect the decisions of potential lender. The study employed descriptive qualitative data to analyze and examine the research questions. The result showed that borrowers who build their commercial transactions with their lender on intensive relationships are more likely to receive and extend loans. Jianmu&Kulathunga(2019)determined the role of the knowledge-based lending technology in promoting sustainability in small and medium enterprises (SMEs). The sample included 291 chief financial officers (CFOs) of SMEs in Sri Lanka. The output of structural equation modeling revealed direct positive effects of financial literacy, access to finance and financial risk attitude on SMEs' lending technology. Moreover, access to finance and financial risk attitude were found to be partial mediators of the relationship between financial literacy and SMEs' lending technology.

Allows&Wangui (2017) determined the benefits that commercial banks gain and the role played by the relationship the bank has with the customer, when they finance small and medium enterprises. Data were collected through semi structured interviews conducted with SME bank managers who work closely with SMEs and those data were analyzed using content analysis. The study found that commercial banks employ both relationship lending and transaction lending when dealing with the SME customer because they allow the loan manager to evaluate both the ability and the willingness to repay the loan. The study showed positive relationship between transaction and lending methodologies for SME lending by commercial banks in Kenya.

Thapa (2018) analyzed the factors affecting the loan decision of the customers of capital city of Nepal. This study aimed at finding the factors that customers consider while taking out a bank loan. The research design adopted in this study was a descriptive and analytical design. The study used the quantitative method to find the facts regarding the customer's preference towards the factors affecting loan taking decision. The sample size for this study includes 219 respondents although the questionnaire was distributed to 250 respondents. A Five points Likert scale was used to record the responses in each sub-variables of the independent variables. Google document, Microsoft Excel, and SPSS were the main tools used for the analysis of the data. There is no significant relation between the insurance and guarantee and the loan decision of the customer of Kathmandu. Further, the condition of the insurance and guarantee requirement is not significant on the loan decision-making process as the insurance of the underlying asset is must for the betterment of both the BFIs and customers while the insurance policy of the borrower may be genuine on a case to case basis.

Subedi (2017) investigated whether the Nepalese SME depend on their internal funds to finance their investment or not. World Bank Enterprise Survey data set were employed to examine the investment and financing policies of Nepalese SME. The data set consist of financial information of 968 firms across multiple size, sector and age category. Simple measures of descriptive statistics like frequencies, percentage and arithmetic mean

the average of a set of numerical values were used to analyze the data by sorting the observations to various portfolios. The study result showed that the SME heavily depend on their internal funds to finance their investment. The study found the imperfection of the Nepalese capital market and highlight the differential impact of financing constraints across young and smaller firms. Theoretical propositions of size variable are negatively related with information asymmetry between borrowers and lenders.

3. RESEARCH METHODOLOGY

3.1 Research Plan and Design

This study has employed descriptive research design and causal comparative research design to deal with the fundamental issues associated financing constraints of Nepalese SMEs. The descriptive research design helps in a fact finding, searching for adequate information about access to loan of Nepalese SMEs. Descriptive statistics is used with respect to variables like loan characteristics, loan repayment capacity, SME financial risk, firm characteristics, firm owner characteristics and bank lending technologies to describe the nature of data of the Nepalese SMEs.

This study also employs causal comparative research design to analyze the relationship of access to loan on Nepalese SMEs. Causal comparative research design help to determine the cause and effect relationship between the different dependent and independent variables.

3.2 Description of the Sample

The study is based on primary sources of data and designed to measure the financing constraints of Nepalese SMEs. The targeted population for this study was the owners of the SMEs in Nepal. Well-constructed questionnaires were distributed to different age group people to collect their responses through online or survey. Total number of observations for the study consists of respondents related to SMEs for analyzing the relationship of loan characteristics, loan repayment capacity, SME financial information, firm characteristics, firm owner characteristics and bank lending technologies with access to loan of Nepalese SME. For the selection of the sample respondents, convenience sampling has been used.

3.3 Instrumentation

This study is based on primary data. Self-administered survey questionnaire was used as the main primary data gathering instrument to assess the opinion of SME owners regarding financing constraints of Nepalese SME. A coded file was prepared and analyzed through Microsoft Excel and SPSS package in order to obtain the meaningful results from the primary data. Correlation and linear regression tools were used in SPSS package in order to derive Financing Constraints of Nepalese SME.

3.4 Method of Data Analysis

The main purpose of data analysis in this study is to analyze the impact of loan characteristics, loan repayment capacity, SME financial information, firm characteristics, firm owner characteristics and bank lending technologies on financial constraints faced by the owners of Nepalese SME. First, all the data were collected through questionnaire and then it was managed. After gathering all the completed questionnaires from the respondents it was analyzed and presented in proper tables. The questionnaire includes personal information about respondent such as gender, age, family size, designation, marital status, year of service and qualification. Descriptive, correlation and regression methods of analysis are used in the study. The data are analyzed by using SPSS. The descriptive statistics include mean, standard deviations; minimum and maximum values of the variables are used to describe the characteristics of respondents. Correlation analysis is used to evaluate the direction of relationship between the dependent and independent variables. Along with this, regression analysis is used to find out the influence of independent variable over dependent variable.

4. RESULTS AND DISCUSSION

4.1 Alpha Test

Table 1: Coefficient of Cronbach's Alpha

| Variables | Number of questions | Cronbach's Alpha |
|-----------------------------|---------------------|------------------|
| Access to loan | 5 | 0.809 |
| Loan characteristics | 5 | 0.840 |
| Loan repayment capacity | 5 | 0.832 |
| SME financial information | 5 | 0.860 |
| Firm characteristics | 5 | 0.724 |
| Firm owners characteristics | 5 | 0.837 |
| Bank lending technology | 5 | 0.904 |
| Overall | 35 | 0.829 |

Source: Responses on Survey Likert Questionnaire

Table 1 shows the reliability test for all the component of questionnaire regarding the financial constraints of Nepalese SME which were computed by using SPSS. Cronbach's Alpha greater than 0.7 is considered as reliable data, the Cronbach's alpha of 35 quantitative data is 0.829, which means 82.9% of the data taken for the study is reliable and 17.1% of data is error.

4.2 Respondent's Profile

Table 2: Demographic characteristics of the respondents

| Respondents character | Number of response | Percentage |
|------------------------------------|--------------------|------------|
| Gender | | |
| Male | 80 | 57.14 |
| Female | 60 | 42.86 |
| Total | 140 | 100 |
| Age group (in years) | | |
| 18-25 | 38 | 27.14 |
| 26-35 | 45 | 32.14 |
| 36-45 | 35 | 25 |
| 46-55 | 18 | 12.85 |
| 55 above | 4 | 2.87 |
| Total | 140 | 100 |
| Academic Qualification | | |
| SLC and +2 | 17 | 12.14 |
| Bachelors | 63 | 45 |
| Master's and Above | 60 | 42.86 |
| Total | 140 | 100 |
| Stage of Business | | |
| Early Start- up (Less than 1 year) | 23 | 16.42 |
| Young(1 - 5 years) | 57 | 40.71 |
| Establish More than 5 years | 60 | 42.87 |
| Total | 140 | 100 |
| Number of Employee | | |
| 1 Employee | 11 | 7.85 |
| 1-2 Employee | 35 | 25 |
| 2-5 Employee | 38 | 27.16 |
| 5 and above | 56 | 40 |
| Total | 140 | 100 |

Table 2 shows the personal profile of the respondents based on their gender, age group, academic qualification, stage of business and number of employees. The demographic factors are frequently used as a basis for understanding the characteristics of SME owners.

Regarding the gender of the respondents, majority of the respondents (57.14%) are males. Females consist of (42.86%). The age of the respondents is divided into five groups. The majority of the respondents (32.14%) belong to the age group 26-35. Similarly, 27.14 % of total respondent belongs to the age group between 18-25 years. It is followed by 25 %

in age group 36-45 and 12.85 % of respondents belongs to the age group 46-55 and 2.87 % of total respondents are 55 above. In the category of academic qualification, majority of respondents (42.86 %) are master's and above followed by bachelor degree (45 %), and intermediate (12.14%). Majority of the business (42.87 %) are establish (more than 5 years) followed by Young 1-5 years(40.71 %) and Early Start- up Less than 1 year (16.42%). The total number of employees is divided into five groups. The majority of the firms (40 %) have 5 and above number of employees followed by 27.16 % have 2-5 numbers of employees. Similarly 25 % have1-2 numbers of employees, and 7.85% have1 employee.

4.3 Respondents' Opinions

Table 3: Respondents' opinions regarding Access to Loan

| Statements | | 5 | 4 | 3 | 2 | 1 | N | Mean |
|--|----|-------|-------|-------|-------|------|--------|------|
| Loan characteristics | F | 17 | 78 | 27 | 11 | 7 | 140 | 3.62 |
| determines the decision | % | 12.14 | 55.71 | 19.28 | 7.85 | 5.02 | 100.00 | |
| of access to loan to SME owners | A% | 67.85 | | 19.28 | 12.87 | | | |
| Loan repayment capacity | F | 55 | 49 | 18 | 11 | 7 | 140 | 3.95 |
| is the pre-requisite for | % | 39.28 | 35 | 12.85 | 7.85 | 5.02 | 100.00 | |
| getting loan. | A% | 74.28 | | 12.85 | 12.87 | | | |
| Firm with strong | F | 30 | 76 | 22 | 6 | 6 | 140 | 3.84 |
| financial statement get | % | 21.43 | 54.29 | 15.72 | 4.28 | 4.28 | 100.00 | |
| loans easily | A% | 75.72 | | 15.72 | 8.56 | | | |
| SME face unfair | F | 20 | 54 | 41 | 22 | 3 | 140 | 3.47 |
| competition from large | % | 14.28 | 38.57 | 29.28 | 15.72 | 2.15 | 100.00 | |
| enterprise in competing for bank loans | A% | 52.85 | | 29.28 | 17.87 | | | |
| High interest rate | F | 10 | 63 | 44 | 17 | 6 | 140 | 3.38 |
| is charged on SME | % | 7.15 | 45 | 31.43 | 12.14 | 4.28 | 100.00 | |
| borrowing by banks | A% | 52.15 | | 31.43 | 16.42 | | | |
| Weighted average mean | | | | | | | 3.65 | |

Table 3 reveals that majority of the respondents (67.85%) agreed that Loan characteristics determines the decision of access to loan to SME owners. However, some respondents (12.87%) disagreed that Loan characteristics determines the decision of access to loan to SME owners and the rest (19.28%) of the respondents were indifferent to the statement.

Regarding the statement, "Loan repayment capacity is the pre-requisite for getting loan", majority of the respondents (74.28%) agreed that loan repayment capacity is the pre-requisite for getting loan. However, some respondents (12.87%) disagreed that loan repayment capacity is the pre-requisite for getting loan and the rest of the respondents

(12.85%) were neutral on the statement.

Likewise, regarding the statement, "Firm with strong financial statement get loans easily", majority of respondents (75.72%) agreed that Firm with strong financial statement get loans easily. However, some respondents (8.56%) disagreed that Firm with strong financial statement get loans easily and the rests of the respondents (15.72%) were neutral on the statement.

Similarly, majority of the respondents (52.85%) agreed SME face unfair competition from large enterprise in competing for bank loans However, some respondents (17.87%) disagreed that SME face unfair competition from large enterprise in competing for bank loans. The rests of the respondents (29.28%) were indifferent on the statement.

Similarly, majority of the respondents (52.15%) agreed that high interest rate is charged on SME borrowing by banks whereas some respondents (16.42%) disagreed that High interest rate is charged on SME borrowing by banks. However, rest of the respondents (31.43%) was indifferent on the statement.

The mean of the access to loan ranges from a minimum value of 3.38 to maximum value of 3.95. Among them, the most significant observations of the respondents regarding workload is "Loan repayment capacity is the pre-requisite for getting loan." with mean value of 3.95 whereas, the most insignificant observation is "High interest rate is charged on SME borrowing by banks" with mean value of 3.38.

Weighted average mean value for access to loan is 3.65, which indicate that access to loan is high in Nepalese SME.

Table 4: Respondents' opinions regarding Loan characteristics

| Statements | | 5 | 4 | 3 | 2 | 1 | N | Mean |
|----------------------|----|-------|-------|-------|-------|------|--------|------|
| SME loan request | F | 3 | 23 | 52 | 51 | 11 | 140 | 2.68 |
| is too small to be | % | 2.15 | 16.42 | 37.15 | 36.42 | 7.86 | 100.00 | |
| worth considering | A% | 18.57 | | 37.15 | 44.28 | | | |
| SMEs face unfair | F | 14 | 67 | 33 | 19 | 7 | 140 | 3.44 |
| competition from | % | 10 | 47.85 | 23.58 | 13.57 | 5 | 100.00 | |
| large enterprises in | | | | | | | | |
| competing for bank | A% | 57.85 | | 23.58 | 18.57 | | | |
| loans | | | | | | | | |
| It is easier to get | F | 13 | 80 | 29 | 16 | 2 | 140 | 3.61 |
| short-term loan than | % | 9.28 | 57.15 | 20.72 | 11.42 | 1.43 | 100.00 | |
| long term | A% | 66.43 | | 20.72 | 12.85 | | | |

| Banks charge SMEs | F | 13 | 52 | 47 | 20 | 8 | 140 | 3.3 |
|--------------------------|-----|-------|-------|-------|-------|------|--------|------|
| higher interest than | % | 9.28 | 37.15 | 33.58 | 14.28 | 5.71 | 100.00 | |
| bigger firms. | A% | 46.43 | | 33.58 | 19.99 | | | |
| Loan application | F | 26 | 75 | 26 | 8 | 5 | 140 | 3.77 |
| procedure is | % | 18.57 | 53.58 | 18.57 | 5.71 | 3.57 | 100.00 | |
| complex & time consuming | A% | 72.15 | | 18.57 | 9.28 | | | |
| Weighted average me | ean | | | | | | 3.36 | |

Table 4 reveals that majority of the respondents (44.28%) disagreed that SME loan request is too small to be worth considering, whereas some respondents (18.57 percent) agreed that SME loan request is too small to be worth considering. However, the rest (37.15%) of the respondents were indifferent to the statement.

The table also shows that majority of the respondents (57.85%) agreed that SMEs face unfair competition from large enterprises in competing for bank loans, whereas some respondents (18.57%) disagreed that SMEs face unfair competition from large enterprises in competing for bank loans and however, the rest (23.58%) of the respondents were indifferent to the statement.

Likewise, regarding the statement "It is easier to get short-term loan than long term", majority of the respondents (66.43%) agreed that It is easier to get short-term loan than long term. However, some respondents (12.85%) disagreed about the statement and the rest of the respondents (20.72%) were indifferent about the statement.

Regarding the statement, "Banks charge SMEs higher interest than bigger firms", majority of respondents (46.43%) agreed Banks charge SMEs higher interest than bigger firms. Some respondents (19.99%) disagreed about the statement. However, the rest of the respondents (33.58%) were neutral on the statement.

Similarly, majority of the respondents (72.15%) agreed that Loan application procedure is complex & time consuming. Some respondents (9.28%) disagreed that Loan application procedure is complex & time consuming. However, the rest of the respondents (18.57%) were indifferent on the statement.

The mean of the Loan characteristics ranges from a minimum value of 2.68 to maximum value of 3.77. Among them, the most significant observations of the respondents regarding supervisory support is "Loan application procedure is complex & time consuming" with mean value of 3.77 whereas, the most insignificant observation is "SME loan request is too small to be worth considering" with mean value of 2.68.

Weighted average mean value for loan characteristics is 3.36, which indicate that loan characteristics in Nepalese SME.

Table 5: Respondents' opinions regarding Loan repayment capacity

| Statements | | 5 | 4 | 3 | 2 | 1 | N | Mean |
|------------------------------------|----|-------|-------|-------|-------|------|--------|------|
| The loan should be | F | 30 | 79 | 21 | 7 | 3 | 140 | 3.9 |
| affordable | % | 21.43 | 56.43 | 15 | 5 | 2.14 | 100.00 | |
| | A% | 77.86 | | 15 | 7.14 | | | |
| Borrower should | F | 23 | 72 | 33 | 10 | 2 | 140 | 3.74 |
| keep tenure short and sweet | % | 16.43 | 51.42 | 23.57 | 7.15 | 1.43 | 100.00 | |
| | A% | 67.85 | | 23.57 | 8.58 | | | |
| The loan-to income | F | 39 | 69 | 23 | 4 | 5 | 140 | 3.95 |
| ratio must be kept | % | 27.86 | 49.30 | 16.42 | 2.85 | 3.57 | 100.00 | |
| within limit by the SME owners | A% | 77.16 | | 16.42 | 6.42 | | | |
| A certain percentage | F | 22 | 82 | 26 | 7 | 3 | 140 | 3.80 |
| of owner's equity is | % | 15.71 | 58.57 | 18.57 | 5 | 2.14 | 100.00 | |
| a requirement to get loan. | A% | 74.28 | | 18.57 | 7.14 | | | |
| The most influencing | F | 60 | 46 | 17 | 12 | 5 | 140 | 4.02 |
| factors of access | % | 42.86 | 32.86 | 12.14 | 8.57 | 3.57 | 100.00 | |
| to loan is loan repayment capacity | A% | 81.72 | | 12.14 | 12.14 | | | |
| Weighted average mea | ın | | , | | | | 3.88 | |

Table 5 reveals that majority of the respondents (77.86%) agreed that the loan should be affordable whereas some respondents (7.14%) disagreed that the loan should be affordable. However, rest (15%) of the respondents was indifferent to the statement.

The table also shows that majority of the respondents (67.85%) opined that Borrower should keep tenure short and sweet, whereas (8.58%) of the respondents disagreed that Borrower should keep tenure short and sweet and the rest (23.57%) of the respondents were indifferent to the statement.

Regarding the statement, "The loan-to income ratio must be kept within limit by the SME owners", majority of respondents (77.16 %) agreed that the loan-to income ratio must be kept within limit by the SME owners. Some respondents (6.42%) disagreed on that the loan-to income ratio must be kept within limit by the SME owners. However, the rests of the respondents (16.42%) were neutral on the statement.

Likewise, regarding the statement "A certain percentage of owner's equity is a requirement to get loan", majority of the respondents (74.28%) agreed that certain percentage of owner's

equity is a requirement to get loan. Some respondents (7.14 percent) disagreed about the statement and the rests of the respondents (18.57%) were indifferent about the statement.

Similarly, majority of the respondents (81.72 %)agreed that the most influencing factors of access to loan is loan repayment capacity. Some respondents (12.14%) disagreed to the statement. The rests of the respondents (12.14%) were indifferent on the statement.

The mean of loan repayment capacity value ranges from a minimum value of 3.74 to maximum value of 4.02. Among them, the most significant observations of the respondents regarding Loan repayment capacity is "The most influencing factors of access to loan is loan repayment capacity" with mean value of 4.02 whereas, the most insignificant observation is "Borrower should keep tenure short and sweet" with mean value of 3.74.

Weighted average mean value for loan repayment capacity is 3.38, which indicate that loan repayment capacity is an important factor for measuring financing constraints of Nepalese SME.

Table 6: Respondents' opinions regarding SME financial information

| Statements | | 5 | 4 | 3 | 2 | 1 | N | Mean | |
|----------------------------|------|-------|-------|-------|-------|------|--------|------|--|
| Providing more | F | 27 | 69 | 26 | 12 | 6 | 140 | 3.70 | |
| information helps | % | 19.29 | 49.28 | 18.57 | 8.58 | 4.28 | 100.00 | | |
| the bank to make | | | | | | | | | |
| loan approval | A% | 68.57 | | 18.57 | 12.86 | | | | |
| decisions | | | | | | | | | |
| Financial | F | 5 | 42 | 63 | 26 | 4 | 140 | 3.12 | |
| information | % | 3.57 | 30 | 45 | 18.58 | 2.85 | 100.00 | | |
| management in | A% | 33.57 | | 45 | 21.43 | | | | |
| SME is very poor | 11/0 | | | | | | | | |
| SMEs are usually | F | 8 | 54 | 47 | 23 | 8 | 140 | 3.22 | |
| too young to have | % | 5.71 | 38.57 | 33.57 | 16.44 | 5.71 | 100.00 | | |
| enough information | A% | 44.28 | | 33.57 | 22.15 | | | | |
| Accounting systems | F | 5 | 75 | 34 | 20 | 6 | 140 | 3.37 | |
| used by SMEs is | % | 3.57 | 53.57 | 24.29 | 14.29 | 4.28 | 100.00 | | |
| under standard. | A% | 57.14 | | 24.29 | 18.57 | | | | |
| SMEs financial | F | 42 | 52 | 33 | 10 | 3 | 140 | 3.85 | |
| information has a | % | 30 | 37.15 | 23.58 | 7.14 | 2.14 | 100.00 | | |
| positive association | A% | 67.15 | | 22.59 | 0.28 | | | | |
| with access to loan. | A%0 | 67.15 | | 23.58 | 9.28 | | | | |
| Weighted average mean 3.45 | | | | | | | | | |

Table 6 reveals that majority of the respondents (68.57%) agreed that providing more

information helps the bank to make loan approval decisions, whereas (12.86 %) of the respondents disagreed that providing more information helps the bank to make loan approval decisions. However, rest (18.57%) of the respondents was indifferent to the statement. The table also shows that majority of the respondents (33.57%) agreed that financial information management in SME is very poor, some respondents (21.43%) disagreed that financial information management in SME is very poor and the rest (45%) of the respondents were indifferent to the statement.

Table 7: Respondents' opinions regarding Firm characteristics

| Statements | | 5 | 4 | 3 | 2 | 1 | N | Mean |
|--|-----|-------|-------|-------|-------|------|--------|------|
| Smaller firms are | F | 7 | 39 | 35 | 52 | 7 | 140 | 2.90 |
| associated with | % | 5 | 27.85 | 25 | 37.15 | 5 | 100.00 | |
| high risk and high transaction cost | A% | 32.85 | | 25 | 42.15 | | | |
| SME face severe | F | 5 | 42 | 63 | 26 | 4 | 140 | 3.12 |
| form of credit rationing while | % | 3.57 | 30 | 45 | 18.57 | 2.86 | 100.00 | |
| trying to raise capital from external source | A% | 33.57 | | 45 | 21.43 | | | |
| SME at early | F | 8 | 54 | 47 | 23 | 8 | 140 | 3.22 |
| stage experience difficulties in access | % | 5.71 | 38.57 | 33.57 | 16.44 | 5.71 | 100.00 | 3.22 |
| to loan because of information disparities | A% | 44.28 | | 33.57 | 22.15 | | | |
| SME sector faces | F | 5 | 75 | 34 | 20 | 6 | 140 | 3.37 |
| difficulties to access to loan because of | % | 3.57 | 53.57 | 24.28 | 14.28 | 4.28 | 100.00 | |
| lack of assets to be pledged as collateral | A% | 57.14 | | 24.28 | 18.56 | | | |
| Firm size is | F | 20 | 58 | 37 | 17 | 8 | 140 | 3.46 |
| important. Bigger | % | 14.28 | 41.43 | 26.43 | 12.15 | 5.71 | 100.00 | |
| firms are preferred | A% | 55.71 | | 26.43 | 17.86 | | | |
| Weighted average me | ean | | | | | | 3.214 | |

Table 7 reveals that majority of the respondents (42.15%) disagreed that smaller firms are associated with high risk and high transaction cost whereas (32.85%)of the respondents agreed that smaller firms are associated with high risk and high transaction cost. However, rest (25%) of the respondents was indifferent to the statement. The table also shows that

majority of the respondents (33.57%) opined that SME face severe form of credit rationing while trying to raise capital from external source. Some respondents (21.43%) disagreed that SME face severe form of credit rationing while trying to raise capital from external source and the rest (45%) of the respondents were indifferent to the statement.

Regarding the statement, "SME at early stage experience difficulties in access to loan because of information disparities", majority of respondents (44.28%) agreed that SME at early stage experience difficulties in access to loan because of information disparities However, some respondents (22.15%) disagreed about the statement and the rest of the respondents (33.57%) were neutral on the statement.

Likewise, regarding the statement "SME sector faces difficulties to access to loan because of lack of assets to be pledged as collateral", majority of the respondents (57.14%) agreed that SME sector faces difficulties to access to loan because of lack of assets to be pledged as collateral. However, some respondents (18.56%) disagreed about the statement and the rest of the respondents (24.28%) were indifferent about the statement.

Similarly, majority of the respondents (55.71%) agreed that firm size is important, bigger firms are preferred However, some respondents (17.86%) disagreed to the statement. The rest of the respondents (26.43%) were indifferent on the statement.

The mean of the firm characteristics ranges from a minimum value of 2.90 to maximum value of 3.46. Among them, the most significant observations of the respondents regarding work life balance is "Firm size is important. Bigger firms are preferred" with mean value of 3.46 whereas, the most insignificant observation is "Smaller firms are associated with high risk and high transaction cost" with mean value of 2.90.

Weighted average mean value for firm characteristics is 3.214, which indicate that firm characteristics is the most important factor to measure financing constraints of Nepalese SME.

Table 8: Respondents' opinions regarding Firm owner characteristics

| Statements | | 5 | 4 | 3 | 2 | 1 | N | Mean |
|--------------------|----|-------|-------|-------|-------|------|--------|------|
| Banks prefer older | F | 26 | 73 | 28 | 8 | 5 | 140 | 3.76 |
| applicants with | % | 18.57 | 52.15 | 20 | 5.71 | 3.57 | 100.00 | |
| good track record | A% | 70.72 | | 20 | 9.28 | | | |
| Gender of loan | F | 39 | 53 | 29 | 17 | 2 | 140 | 3.78 |
| applicant is not | % | 27.86 | 37.86 | 20.71 | 12.14 | 1.43 | 100.00 | |
| important. | A% | 65.72 | | 20.71 | 13.57 | | | |

| 0 1:6: | F | 8 | 27 | 50 | 48 | 7 | 140 | 2.86 |
|--|------|-------|-------|-------|-------|------|--------|------|
| Qualification is not important factor. | % | 5.71 | 19.29 | 35.71 | 34.29 | 5 | 100.00 | |
| important factor. | A% | 25 | | 35.71 | 39.29 | | | |
| Firm owner's | F | 34 | 68 | 26 | 8 | 4 | 140 | 3.85 |
| access to loan | % | 24.29 | 48.57 | 18.57 | 5.71 | 2.86 | 100.00 | |
| plays vital role | | | | | | | | |
| in success of | A% | 72.86 | | 18.57 | 8.57 | | | |
| business | | | | | | | | |
| Owners with | F | 24 | 78 | 26 | 7 | 5 | 140 | 3.77 |
| better knowledge | % | 17.14 | 55.72 | 18.57 | 5 | 3.57 | 100.00 | |
| are more likely | | | | | | | | |
| to know if their | A 07 | 72.86 | | 10 57 | 0.57 | | | |
| application will be | A% | 72.86 | | 18.57 | 8.57 | | | |
| rejected. | | | | | | | | |
| Weighted average m | iean | | | | | | 3.60 | |

Table 8 reveals that majority of the respondents (70.72%) agreed that banks prefer older applicants with good track record, whereas (9.28%) of the respondents disagreed that banks prefer older applicants with good track record and the rest (20percent) of the respondents were indifferent to the statement. The table also shows that majority of the respondents (65.72%) opined that gender of loan applicant is not important, whereas some respondents (13.57%) disagreed that gender of loan applicant is not important and the rest (20.71%) of the respondents were indifferent to the statement.

Regarding the statement, "Qualification is not important factor", majority of respondents (39.29%) disagreed qualification is not important factor. However, some respondents (25%) agreed with the statement and the rests of the respondents (35.71%) were neutral on the statement

Likewise, regarding the statement "Firm owner's access to loan plays vital role in success of business", majority of the respondents (72.86%) agreed that firm owner's access to loan plays vital role in success of business However, some respondents (8.57%) disagreed to the statement and the rest of the respondents (18.57%) were indifferent about the statement.

Similarly, majority of the respondents (72.86%) agreed that firm owner's access to loan plays vital role in success of business However, (8.57%) of the respondents disagreed to the statement. The rests of the respondents (18.57%) were indifferent on the statement.

The mean of the firm owner characteristics ranges from a minimum value of 2.86 to maximum value of 3.85. Among them, the most significant observations of the respondents regarding employee's performance is "Firm owner's access to loan plays vital role in

success of business" with mean value of 3.85 whereas, the most insignificant observation is "Qualification is not important factor" with mean value of 2.86.

Weighted average mean value for employee's performance is 3.60, which indicate firm owners characteristics is high in Nepalese SME

Table 9: Respondents' opinions regarding bank lending technologies

| Statements | | 5 | 4 | 3 | 2 | 1 | N | Mean |
|--|----|-------|-------|-------|-------|------|--------|------|
| Due to advanced | F | 10 | 50 | 44 | 32 | 4 | 140 | 3.21 |
| lending technology, | % | 7.14 | 35.72 | 31.42 | 22.86 | 2.86 | 100.00 | |
| I keep on facing difficulties. | A% | 42.86 | | 31.42 | 25.72 | | | |
| Access to loanhas | F | 34 | 62 | 32 | 10 | 2 | 140 | 3.82 |
| positive influence | % | 24.28 | 44.29 | 22.86 | 7.14 | 1.43 | 100.00 | |
| on bank lending technologies. | A% | 68.57 | | 22.86 | 8.57 | | | |
| Collateral security | F | 36 | 55 | 27 | 19 | 3 | 140 | 3.72 |
| is the most suitable | % | 25.72 | 39.28 | 19.28 | 13.58 | 2.14 | 100.00 | |
| solution to ensuring bank lending technologies for SMEs. | A% | 65 | | 19.28 | 15.72 | | | |
| Bank lending | F | 15 | 80 | 29 | 14 | 2 | 140 | 3.65 |
| technology saves time. | % | 10.71 | 57.14 | 20.72 | 10 | 1.43 | 100.00 | |
| | A% | 67.85 | | 20.72 | 11.43 | | | |
| Innovative lending | F | 35 | 60 | 32 | 12 | 1 | 140 | 3.82 |
| technology has a | % | 25 | 42.86 | 22.86 | 8.57 | 0.71 | 100.00 | |
| higher chance of having access to loan. | A% | 67.86 | | 22.86 | 9.46 | | | |
| Weighted average mean | ı | | | | | | 3.64 | |

Table 9 reveals that majority of the respondents (42.86%) agreed due to advanced lending technology, they keep on facing difficulties, whereas (25.72%) of the respondents disagreed to the statement and the rest (31.42%) of the respondents were indifferent to the statement. The table also shows that majority of the respondents (68.57 percent) opined that access to loan has positive influence on bank lending technologies, whereas some respondents (8.57%) disagreed that access to loan has positive influence on bank lending technologies, and the rest (22.86 percent) of the respondents were indifferent to the statement.

Regarding the statement, "Collateral security is the most suitable solution to ensuring bank lending technologies for SMEs", majority of respondents (65%) agreed that collateral security

is the most suitable solution to ensuring bank lending technologies for SMEs. However, some respondents (15.72%) disagreed that with the statement and the rests of the respondents (19.28%) were neutral on the statement.

Likewise, regarding the statement "Bank lending technology saves time", majority of the respondents (67.85%) agreed that bank lending technology saves time. However, some respondents (11.43%) disagreed that bank lending technology saves time and the rest of the respondents (20.72%) were indifferent about the statement.

Similarly, majority of the respondents (67.86%) agreed that innovative lending technology has a higher chance of having access to loan. However, (9.46%) of the respondents disagreed that innovative lending technology has a higher chance of having access to loan. The rests of the respondents (22.86%) were indifferent on the statement.

The mean of the bank lending technology ranges from a minimum value of 3.21to maximum value of 3.82. Among them, the most significant observations of the respondents regarding employee's performance are "Access to loan has positive influence on bank lending technologies" and "Innovative lending technology has a higher chance of having access to loan. "with mean value of 3.82 whereas, the most insignificant observation is "Due to advanced lending technology, I keep on facing difficulties" with mean value of 3.21.

Weighted average mean value for bank lending technology is 3.64, which indicate bank lending technology is high in Nepalese SME.

4.4 Correlation Analysis

Table 10: Kendall's Tau correlation coefficients matrix

| Variables | MEAN | SD | AL | LC | LRC | FI | FC | FOC | BLT |
|-----------|-------|-------|---------|---------|---------|---------|---------|---------|-----|
| AL | 3.364 | 0.417 | 1 | | | | | | |
| LC | 3.886 | 0.114 | 0.418** | 1 | | | | | |
| LRC | 3.460 | 0.314 | 0.506** | 0.358** | 1 | | | | |
| FI | 3.490 | 0.345 | 0.426** | 0.385** | 0.505** | 1 | | | |
| FC | 3.610 | 0.420 | 0.432** | 0.413** | 0.448** | 0.444** | 1 | | |
| FOC | 3.652 | 0.257 | 0.276** | 0.290** | 0.400** | 0.380** | 0.435** | 1 | |
| BLT | 3.656 | 0.241 | 0.353** | 0.298** | 0.537** | 0.493** | 0.450** | 0.442** | 1 |

Table 10 shows, the Kendall's Tau correlation coefficients of dependent variable and independent variables for Nepalese SME. The correlation matrix indicates that loan characteristics is positively correlated to access to loan. This reveals that higher loan characteristics leads to higher access to loan. The result also reveals that loan repayment capacity is positively correlated to access to loan. This implies that higher level of loan repayment capacity leads to higher level of access to loan. Moreover, SME financial information is positively correlated to access to loan indicating that better SME financial

information leads to higher access to loan. Likewise, firms characteristics is positively correlated to access to loan indicating that higher level of firms characteristics leads to higher level of access to loan. Similarly, firms owner's characteristic is positively correlated to access to loan indicating that better firms owners characteristics leads to higher access to loan. The result also implies that bank lending technology is positively correlated to access to loan indicating that better bank lending technology leads to higher access to loan.

4.5 Regression Analysis

Table 11: Regression results of loan characteristics, loan repayment capacity, SME financial information, firms characteristics, firms owners characteristics and bank lending technology on access to loan in Nepalese SME

The results are based on 140 observations using linear regression model. The model $AL=\beta_0+\beta_1LC+\beta_2LRC+\beta_3FI+\beta_4FC+\beta_5FOC+\beta_6BLT+\epsilon$. The dependent variable is(AL)access to loan. The independent variables are LC(loan characteristics),LRC(loan repayment capacity),FI(SME financial information),FC(firms characteristics),FOC(firms owners characteristics) and BLT(bank lending technology).

| Model | Intercept | Regression coefficients of | | | | | | Adj. | SEE | F-value |
|-------|---------------------|----------------------------|---------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------|---------|
| | • | LC | LRC | FI | FC | FOC | BLT | R_bar ² | | |
| 1 | 0.1 (4.93)** | 0.005 (6.649)** | | | | | | 0.347 | 0.004 | 74.802 |
| 2 | 0.005 (2.812)** | | 0.006 (13.312)** | | | | | 0.559 | 0.003 | 117.208 |
| 3 | 16.971 (31.10)** | | | 0.005 (9.917)** | | | | 0.412 | 0.002 | 98.352 |
| 4 | 0.009 (5.042)** | | | | 0.05 (9.877)** | | | 0.410 | 0.041 | 97.553 |
| 5 | 0.009 (4.556)** | | | | | 0.005 (8.258)** | | 0.326 | 0.005 | 68.189 |
| 6 | 0.009 (5.329)** | | | | | | 0.005 (9.53)** | 0.393 | 0.004 | 90.825 |
| 7 | 0.002 (1.00)* | 0.002 (3.791)** | 0.004 (9.339)** | | | | | 0.598 | 0.002 | 104.375 |
| 8 | 0.001 (0.595)* | 0.002 (3.177)* | 0.004 (6.486)** | 0.001 (2.261)* | | | | 0.612 | 0.004 | 73.375 |
| 9 | 0.001 (0.433)* | 0.001 (2.228)* | 0.003 (5.487)** | 0.001 (1.823)* | 0.001 (1.68)* | | | 0.615 | 0.003 | 56.474 |
| 10 | 0.001 (0.33)* | 0.001 (2.515)* | 0.003 (5.163)** | 0.001 (1.767)* | 0.001 (1.51)* | 0.01 (0.315)* | | 0.612 | 0.003 | 44.898 |
| | | | | | | | | | | |

| 11 | 0.001 | 0.001 | 0.003 | 0.001 | 0001 | 0.015 | 0.0 | 0.612 | 0.003 | 37.166 |
|----|----------|----------|----------|----------|----------|----------|---------|-------|-------|--------|
| | (0.322)* | (2.504)* | (4.75)** | (1.693)* | (1.399)* | (0.250)* | (0.26)* | | | |

Notes:

- » Figures in parenthesis are t-values
- » The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.
- » Access to loan is dependent variable.

The regression results show that the beta coefficients for loan characteristics are positive with access to loan. It indicates that loan characteristics has a positive impact on access to loan.

5. CONCLUSION AND IMPLICATION

5.1 Conclusions

The study provided an insight into the ground reality of inaccessibility to finance in emerging economies of Nepalese SME. The study shows that the main cause of inaccessibility to bank loan is high information asymmetry between the SMEs and the banks leading to other financing constraints. In absence of required information, the banks adopted strict lending mechanism to overcome the high risk involved in SME lending by increasing loan interest rates, business aggravating the financial distress of the SMEs. The small size of the study sample was limited to the urban areas only and therefore, a larger sample size of SME owners covering both urban and rural region is recommended for future research to achieve more in-depth information about the SME financing constraints.

The major conclusion of the study is that loan characteristics, loan repayment capacity, SME financial information, firms characteristics, firms owners characteristics and bank lending technology positive impact on access to loan on Nepalese SME. In addition, the most influencing factors affecting the financing constraints of Nepalese SME is loan repayment capacity followed by SME financial information followed by firm's characteristics.

5.2 Implications

The study has been conducted to examine the financing constraints of Nepalese SMEs. The descriptive research design has been adopted for fact and finding and searching adequate information about the financing constraints of Nepalese SMEs. The study is based on primary data collected from 140 owners of SME. There are various methodologies, tools and techniques to analyze the causal comparative relationship between SME related variables. Further studies could be done using more robust methodology adding more SME related variables. In detail, future studies could include some of the issues:

» The sample size and time period taken for the study is limited ie 140 owners of

SME; so future study can be conducted by taking larger sample size and longer time period.

- » This study is based only on primary data and by including limited SME owner. Therefore, further studies can be conducted using secondary data.
- » Future research is needed to better understand internal and external barriers encountered by SMEs to access the finance at the stages of business life cycle.
- » For future researchers it is suggested to test this relationship with increased sample size and better sampling techniques to generalize the findings.
- » The model used in this study is limited to simple linear regression models. For example, future studies can use non-linear statistical tools and bidirectional causality tools.
- » As this research has been conducted solely for academic purpose, the cost and time to carry out this study was limited but the barriers can be reduced to undertake further research in order to get more reliable results and there is always a scope for betterment in whatever we do later with some modifications.

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