

## Decision Making Approach and Criteria of SME Financing by Commercial Banks of Bangladesh

Tasmia Anwar<sup>1\*</sup> and Md. Asaduzzaman<sup>2</sup>

<sup>1,2</sup> East Delta University, Chattogram.

### ABSTRACT

*This paper attempts to analyze the approach and criteria used for decision making by commercial banks at the time of issuing loans to SMEs. Primary survey was conducted by using convenience sampling method from 60 respondents who were either bank managers or senior loan officers specializing in SME through a pre-tested structured questionnaire. The study concludes commercial banks follow conservative approach while granting credit to SMEs and they also show reluctance in providing loans to these businesses. Their focus and interest is on collateral and securities 'Information Asymmetry' has been identified as the main reason for banks to follow a conservative approach. The study also focuses on bankers' decision making regarding providing loans to SMEs. The results show banks emphasize on loan characteristics, profitability and collateral offered.*

**Keywords:** SME, Commercial Bank, Information Asymmetry, Conservative Approach.

### 1. INTRODUCTION

The contribution of SMEs is prominent in development of employment in many developing countries and across the world, SMEs account for nearly 50% of GDP and 60% of employment (Chowdhury, Azam and Islam 2015). SMEs contribute a high amount to the overall economic growth and the GDP across South Asia. In Bangladesh, SMEs are likely to contribute 50% of industrial GDP and provide employment to 82% of the total industrial sector employment (Hussain, Farooq and Akhtar 2012). Hence, reducing poverty, and economic growth, for Bangladesh (Akterujjaman 2010) as a result Government is also taking interest in SMEs.

When it comes to financing, SMEs look forward to commercial banks as their main source of finance (Berger & Udell, 2002) and banks need to make sure that credit is approved for the ones who are able and interested to repay the loan (Burns and Fletcher 2008). As a result, it becomes crucial for banks to device methods that will reduce risks. However, the loaning decision is a combination of the rules, regulations, policies and instructions from the head office as well as the experience of the manager; this explains the differences in decision. (Burns & Fletcher, 2008).

Ahmed & Chowdhury (2009) detected that lack of finance is one of the main constraint in the establishment and development of SMEs in Bangladesh. It was found that only around 10% SMEs are funded by banks and the rest are managed by self-funding or through microfinance institutions (Mahmud 2006). Banks are not interested to expand their SME credit portfolio as they do not find loaning to SMEs as profitable. As SMEs have low capital, high administrative costs, inadequate assets, banks view lending to SMEs as high risk, and moreover SMEs might not be able to comply with the collateral requirement expected by the banks.

---

\* Corresponding Author: [tasmia@eastdelta.edu.bd](mailto:tasmia@eastdelta.edu.bd)

Hoque, Sultana & Thalil (2016) came across that 89% of the firms from their sample size of 200 firms are financed by microfinance institutions which pose that commercial bank loans are not taking much heed. Bangladesh being a developing country and the increase interest in SMEs from the Entrepreneurs, access to finance has to play an important role. Thus it is essential for SME entrepreneurs to gain a detailed understanding regarding the criteria used by the bankers while granting credit so there is more chance in getting the loans approved. Hence in this paper the researchers attempt to find out the approach followed by commercial banks while loaning to SMEs as well as analyze the criteria used for decision making by the managers while approving loans to SMEs.

## 2. LITERATURE REVIEW

SMEs often find it tough getting loans from commercial banks because banks lack knowledge about the SMEs' business and many SME entrepreneurs lack of knowledge regarding the lending criteria and process those banks follow (Tucker & Lean, 2001). Durani, Hussain, Kouser (2012) found banks loaning to SMEs are costly and time consuming due to following rules and procedures. The main barrier for SMEs in getting loans from banks is the financial documentation. Most of the SMEs do not maintain financial documentation and as a result banks cannot measure the performances of SMEs. Bruns & Fletcher (2008) found banks follow three types of approaches when deciding to lend to SMEs. These are character-lending approach, income-based approach and capital-based approach.

In character-lending approach, information regarding the characteristics of the borrower is collected in order to find out the probabilities of a default. Variables considered in this approach are age, gender, longevity of the enterprise, trading experience and earlier track record with the bank. North, Baldock & Ekanem (2010) found age of entrepreneur and longevity of the enterprise are most important decision making by the banks. In case of gender, Carter, Shaw, Lam & Wilson (2007) found gender doesn't matter in case of accessing finance but there are researches which showed gender of entrepreneur could be important, like women are more likely to get their application rejected than their male counterparts (North *et al.*, 2010). Deakins, North, Baldock & Whittam (2008) found experience of the entrepreneur is also an important factor. Financial performance is also considered to be an important variable. SMEs with high performances have higher chance of convincing the lending officer in granting credit (Bruns & Fletcher, 2008). However banks can adopt a capital based approach where fear of asymmetries of information exists. (Berry, Grant & Jarvis, 2001)

Banks follow a very conservative approach, checking capital invested and collateral provided. As a result the amount of required external funding is reduced, and thus the credit risk is less (Bruns & Fletcher, 2008). Aghion and Bolton (1992) mentioned collateral plays an important part in favor of the lender, that the borrower will repay loan as promised. So in case the borrower defaults the banks will have less chance of default from their part and more the strength of the collateral provided, the higher the chance of banks to support the loan.

Commercial banks follow conservative approach while granting credit. Banks are reluctant in providing loans; they are focusing on collateral, characteristics of loan and profitability. SMEs have to pay high interest rate and don't even get adequate cash credit limit for working capital. Main reason behind following a conservative approach was Information Asymmetry (Bhalla & Kaur 2012; Mishra 2015). Cowling and Westhead (1996) found payback period of loan and purpose of loan is also important while financing SMEs. Shorter payback period and loans on fixed investment are found to have positive impact on the loan approval.

From the above literature it can be found that past studies have covered various features of decision-making criteria of commercial banks. In this study researchers focused on criteria used

by financial institutions when granting credits to SMEs as well as attitude of commercial banks towards SMEs in Bangladeshi context. An understanding of the decision-making process used by bankers in approving loans to SMEs small business loan can help SME borrowers when it comes to apply for credit from commercial banks.

### 3. RESEARCH METHODOLOGY

In this study, authors analyze the attitude of bankers towards and the criteria used for decision making used while issuing loans. The survey was conducted using a sample size of 60 respondents consisting bank managers and senior loan officers specializing on SME, from the branches of a number of private commercial banks in Bangladesh. Primary data was collected using a pre tested structured questionnaire containing questions regarding attitude of bankers towards and the criteria used for decision making while approving credit to SMEs. The questions were answered on a 5-point Likert scale which range from 1 (strongly disagree) to 5 (strongly agree). Percentages and weighted average scores (WAS) were calculated and factor analysis have been carried out for the analysis and get to the conclusion.

### 4. FINDING AND ANALYSIS

#### 4.1 The Approach of Commercial Banks towards SMEs

Seven variables were used to analyze the approach of bankers towards SME which were answered on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

**Table 1** Approach of commercial banks towards SMEs

Variables	N	Mean	Std. Deviation
Banks provide loans to SMEs in order to meet priority sector loaning targets	60	2.7333	1.32597
SMEs are our profitable customers	60	3.4000	1.29143
Conservative approach is followed while granting credit to SMEs as they are seen to be risky	60	3.1000	1.23096
Collateral/securities offered by SME entrepreneurs are checked	60	3.5000	1.29536
Loans granted are always 80-90% of collateral offered.	60	2.8000	1.17603
Loan decision is sanctioned at branch level	60	1.4000	.49403
If loan exceeds branch limits, upper level takes the decision of while sanctioning loans.	60	3.4333	1.59837

**Source:** Authors' calculations.

From Table 1 it can be inferred that banks serve SMEs in order to meet priority sector loaning targets and also agreeing that SMEs are their profitable customers, the WAS is 3.40.

However banks follow a conservative approach because of their concern regarding the security due to information asymmetry. Loan that they usually provide is provided up to 80-90 per cent of the collateral/security offered by the SMEs. From the mean scores of the variables also it can also be conclude that banks are reluctant in financing SMEs.

#### 4.2 Reasons Behind Following a Conservative Approach

In order to figure out the reasons behind following a conservative approach, 13 statements were asked, on a 5-point Likert scale, range used were 1 (strongly disagree) to 5 (strongly agree). The questions were all regards to the problems they face while financing SMEs. Factor analysis using SPSS 20.0 is applied to all of the variables. Reliability was confirmed through Cronbach alpha, value of which is 0.736.

**Table 2** Kaiser-Meyer-Olkin measure of sampling adequacy and bartlett's test of sphericity

<b>KMO</b>	<b>.519</b>
Bartlett's Test Approximate Chi-Square	248.601
df	78
Sig.	.000

Source: Authors' calculations.

From Table 2 can be seen that the value of KMO is 0.519 and the Bartlett's test of sphericity as 248.601 and its significant at 1 per cent,  $p < 0.000$ , justifying the application of factor analysis. Principal component extraction method with varimax rotation and Eigen value above 1 is considered. The results of the analysis are displayed in Table 3.

From Table 3, it can be concluded that four factors have resulted as reasons why banks follow a conservative approach while financing SMEs. Three items were loaded on 'Information Asymmetry' accounts for 18.797% variance with three items, 'Collateral Offered & Rural Dispersal' accounts for 17.402% variance with three items, 'Extent of Skills & Experience' accounts for 12.897 % variance with four items, and 'Lack of Finance' accounts for 11.916% variance which has three items, the cumulative variance comes to a value of 60.994%.

**Table 3** Factor analysis

S. No	Factor-wise Dimensions	Factor Loadings	Eigen Value	Percentage of Variance Explained	Cumulative Percentage of Variance explained
F1	<b>Information Asymmetry</b>				
a.	Financial statements are not properly audited	.646	2.444	18.797	18.797
b.	Information supplied by SME entrepreneur is not adequate	.840			
c.	Financial Information provided by SMEs are limited	.697			
F2	<b>Collateral Offered and Rural Dispersal</b>				
a.	SMEs are unable to give guarantees	.513	2.262	17.402	36.199
b.	SMEs are unable to offer enough collateral/security	.807			
c.	SMEs market is usually limited and mostly scattered in rural areas.	.511			
F3	<b>Extent of Skills and Experience</b>				
a.	SME entrepreneur are incapable of making certain business plans	.779	1.674	12.879	49.078
b.	SME entrepreneurs might lack in experience	.771			

	because of their young age and business might be at starting stage.				
c.	SME entrepreneurs lack skills in management, technology and marketing	.646			
d.	SMEs tend to be mostly situated in rural areas	.645			
F4	<b>Lack of Finance</b>				
a.	SMEs prefer a longer payback period	.592	1.549	11.916	60.994
b.	Capital contributions by SMEs are less thus they are more inclined towards relying on banks for loans.	.804			
c.	Possibility of NPA ( non-performing assets) always exists	.793			

Source: Authors' calculations.

From the results, 'Information Asymmetry' has been found as the major reason for banks to follow conservative approach. Deakins, Whittam & Wyper (2010) have also found that information asymmetry is a reason for the demand of collateral by banks and also why banks are reluctant to provide credit. The following reason of conservative approach for following a conservative approach was 'Collateral Offered & Rural Dispersal' which is consistent with finding of Deakins *et al.* (2008) as well as North *et al.* (2010), who mentioned that collateral is an important consideration and SMEs lacking to offer collateral might will find their loan application rejected. Therefore, those SMEs which are willing to be financed by commercial banks should provide them with enough information in order to remove any information asymmetry that might hamper in getting a loan

#### 4.3 Analysis of Decision Making Criteria Followed by Bankers of Commercial Banks Regarding Financing SMEs.

As per SME credit policy by Bangladesh bank, banks/financial institutions should formulate their own credit policy following the guidelines of the Central Bank as minimum benchmark. 14 variables were used in order to analyse the decision making criteria of commercial banks towards SME financing. 5-point Likert scale was used for the survey, ranging from 1 (very important) to 5 (least important).

Table 4 KMO and Bartlett's test

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</b>		<b>.531</b>
Bartlett's Test of Sphericity	Approx. Chi-Square	250.302
	df	91
	Sig.	.000

Source: Authors' calculations.

Cronbach's alpha 0.682 and KMO measure of sampling adequacy as 0.531 and Bartlett's test of sphericity is 250.302 (significant at 1 per cent,  $p < 0.000$ ) and are found appropriate for factor analysis.

Factor analysis was conducted and the factors were reduced to five factors having Eigen value above 1 was determined, which gave a precise interpretation. Item with factor loading with a value of less than  $\pm 0.30$  was removed. The factors were named accordingly with the highest factor loadings. The values are presented in Table 5.

From this process, Five factors have been identified which explains 67.793 per cent of the variability amongst the variables those were used.

**Table 5** Factor analysis

S.N	Factor –wise Dimensions	Factor Loadings	Eigen Value	Percentage of Variance Explained	Cumulative Percentage of Variance explained
<b>F1</b>	<b>Characteristics of Loan</b>				
a	Size of Loan	.476	2.781	19.861	19.861
b	Loan repayment source	.737			
c	Payback period	.510			
<b>F2</b>	<b>Financial Performance and Security Offered</b>				
a	Financial plan and risk management of SME	.344	2.131	15.224	35.085
b	Financial records of SME	.605			
c	Turnover and profitability of SME	.549			
d	Security/Collateral offered by SME	.584			
<b>F3</b>	<b>Capital invested and Past Credit History</b>				
a	Amount of capital invested by the SME entrepreneur	.780	1.831	13.078	48.163
b	Past credit history	.359			
<b>F4</b>	<b>Characteristics of entrepreneur</b>				
a	Gender	.543	1.624	11.597	59.760
b	Age	.612			
c	Longevity of the enterprise	.605			
<b>F5</b>	<b>Skills of Entrepreneur and Loan Purpose</b>				
a	Technical expertise and qualification of the entrepreneur	.352	1.125	8.033	67.793
b	Reason for loan requirement	.535			

**Source:** Authors' calculations.

The explanation of the analysis is given below.

- i. *F1*: Three factors were loaded onto this factor and named as “Characteristics of Loan’. It is considered as the main factor that influences decisions of the bankers when it comes to financing SMEs.
- ii. *F2*: The next factor is labelled as ‘Financial Performance & Security Offered’. Amongst the variables loaded onto this factor the maximum loading is for financial records of enterprise, then security/collateral offered, turnover and profitability and financial plan and risk management of SME.
- iii. *F3*: The factor is labelled as ‘Capital invested and Past Credit History’. Here the highest loading is for the amount of capital invested by the SME entrepreneur followed by past credit history.
- iv. *F4*: This factor is labelled as ‘Characteristics of entrepreneur’. Gender, age and longevity of the enterprise were loaded onto this factor.

- v. F5: The factor is named 'Skills of Entrepreneur and Loan Purpose'. Technical expertise and qualification of entrepreneur and reason for loan requirement were loaded onto this factor.

From the findings, can be deduced that characteristics of loan and financial performance and collateral/offered are major consideration for banks in approving loans to SMEs. Banks prefer approving smaller loans with payback periods those are short so as to avoid the risk, the findings are consistent with Cowling and Westhead (1996), and Bhalla and Kaur 2012.

In case of financial performance, good financial performance increases chance to getting accepted, Bruns and Fletcher (2008) also mentioned the same. Collateral and guarantees are considered to be important when approving loans. The results comply with those of North *et al.* (2010) and Bhalla and Kaur (2012) who concluded that stronger collateral help in getting loans. Therefore, in order to avoid risk banks focus on characteristics of loans, financial performance and security offered

## 5. CONCLUSION AND IMPLICATIONS

The study concludes commercial banks follow conservative approach while granting credit to SMEs and are unenthusiastic in granting credit to SMEs. Their focus and interest is on collateral and securities 'Information Asymmetry' has been identified as the main reason behind banks to follow a conservative approach. This problem raises the cost of financing SMEs and thus banks demand collateral and could even refuse granting credit to SMEs. (Deakins *et al.*, 2010). Therefore SMEs hoping to get their loan request approved should help banks, by providing adequate information so that bankers can be well decisive in granting the loan.

The study also focuses on decision making ability of the bankers regarding financing about SMEs. The study concludes that banks emphasizes on the characteristics of loan, financial performance and security offered. The outcomes of this study will help SMEs to improve knowledge on the criteria used for decision making by commercial banks, which may increase the probability of getting their loan application approved.

## REFERENCES

- Aghion, P., & Bolton, P. (1992). An incomplete contracts approach to financial contracting. *The review of economic Studies*, 59(3), 473-494.
- Ahmed, K., & Chowdhury, T. A. (2009). Performance evaluation of SMEs of Bangladesh. *International journal of Business and Management*, 4(7), 126.
- Akterujjaman, S. M. (2010). Problems and Prospects of SMEs Loan Management a Study on Mercantile Bank Limited, Khulna Branch.
- Berger, A. N., & Udell, G. F. (2002). Small business credit availability and relationship lending: The importance of bank organisational structure. *The economic journal*, 112(477), F32-F53.
- Berry, A., Grant, P., & Jarvis, R. (2001). Can European Banks Plug the Finance Gap for UK SMEs?. In *NATIONAL SMALL FIRMS POLICY AND RESEARCH CONFERENCE*, 2, 1095-1114. Leeds; ISBA; 1997.
- Bhalla, A., & Kaur, M. (2012). SMEs' Access to Finance: An Analysis of Attitude and Decision-making Criteria of Commercial Banks. *Asia-Pacific Journal of Management Research and Innovation*, 8(1), 69-76.
- Bruns, V., & Fletcher, M. (2008). Banks' risk assessment of Swedish SMEs. *Venture Capital*, 10(2), 171-194.
- Carter, S., Shaw, E., Lam, W., & Wilson, F. (2007). Gender, entrepreneurship, and bank lending: The criteria and processes used by bank loan officers in assessing applications. *Entrepreneurship Theory and Practice*, 31(3), 427-444.

- Chowdhury, M. S. A., Azam, M. K. G., & Islam, S. (2015). Problems and prospects of SME financing in Bangladesh. *Asian Business Review*, 2(2), 51-58.
- Cowling, M., & Westhead, P. (1996). Bank lending decisions and small firms: does size matter?. *International Journal of Entrepreneurial Behavior & Research*, 2(2), 52-68.
- Deakins, D., North, D., Baldock, R., & Whittam, G. (2008). SMEs' Access to Finance: Is there still a debt finance gap. *Institute for Small Business & Entrepreneurship*, 24.
- Deakins, D., Whittam, G., & Wyper, J. (2010). SMEs' access to bank finance in Scotland: an analysis of bank manager decision making. *Venture Capital*, 12(3), 193-209.
- Hoque, M. Z., Sultana, N., & Thalil, T. (2016). Credit rationing's determinants of small and medium enterprises (SMEs) in Chittagong, Bangladesh. *Journal of Global Entrepreneurship Research*, 6(1), 1.
- Hussain, I., Farooq, Z., & Akhtar, W. (2012). SMEs development and failure avoidance in developing countries through public private partnership. *African Journal of Business Management*, 6(4), 1581.
- Kouser, R., Durani, A., Hussain, F. Z., & Hassan, M. (2012). Investigation of Banker's Lending Criteria to SMEs and Assessment Thereof. *International Research Journal of Finance and Economics*, 4(89), 158-186.
- Mahmud, W. (2006). Local business dynamics: ground realities and policy challenges. *Dhaka: Institutional Reform and the Informal Sector (IRIS)*.
- Mishra, R. (2015). Financial Assistance to SMEs: An Analysis of Decision-Making Criteria of Commercial Banks in India. *International Journal of Innovative Research and Development* // ISSN 2278-0211, 4(8).
- North, D., Baldock, R., & Ekanem, I. (2010). Is there a debt finance gap relating to Scottish SMEs? A demand-side perspective. *Venture Capital*, 12(3), 173-192.
- Tucker, J. & Lean, J. (2001). Information asymmetry, small firm finance and the role of government. *Journal of Finance and Management in Public Services*, 1(1), 43-60.