Factors Affecting to Performing and Non-performing Borrower’s Loan Repayment Ability

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Abstract: The research examined factors affecting performing and non performing borrower’s repayment ability of Regional Development Bank in North Central Province. This study was done collecting data from both performing and non performing borrowers of Regional Development Bank in Medirigiriya area. The dependent variable of the study was loan repayment ability and the independent variables were information about borrower’s income, loan amount, borrower’s background, accessibility of getting loan and information about guarantee. The collected data analyzed using descriptive statistics, correlation and regression analysis. According to regression result of performing holders, it was found that information about guarantee has significantly impact on borrower’s loan repayment ability. On the other hand, the regression result of non performing holders indicated that there are statically significant impact of background investigation and information about guarantee on loan repayment ability.

Key Words: Performing borrowers, Non-Performing Borrowers, Loan Repayment

Introduction

Most of developing countries people have number of critical questions in which lack of money is a major problem which they face in day to day life. Resulting government and financial institutions have taken significant initiatives to reduce this major issue within the society. Sri Lankan financial institutions also provide lending facilities to poor people to enhance their income and wealth to get rid from the problem. According to Khataee et al. (2009) Bank credit is best mechanism to promote economic growth among poor in the economy. It raised employment, exports and even imports rapidly in the economy. Banks are the key financial providers in an economy to the low income entrepreneurs and farmer. As a formal financial institution, banks often investigate and analysis financial requirement, character and financial position of each borrower. Because banks deems to be adequate to cover any risk of loan default (Papias & Ganesan, 2009). Financial institutions are mainly providing services to customers to deposit money, transfer money and acquire loans through financial institutions. One of the most critical tasks of the financial institution is managing its loan portfolio adequately. The loan portfolio is the largest assets of financial institutions. It generates revenue to the organization though it has a significant credit default risk which often unfavorable to the bank’s operation. Therefore bank should establish proper and effective loan repayment environment to reduce credit default risk of nonperforming loans. Then it leads to minimize risk of loan repayment, otherwise it will create many problems in the society such as underutilization of financial resource, lower saving, higher unemployment and finally economic instability. Because when the allocation method and use the savings are undesirable, it does not provides favorable symbol to economic growth and development and will cause of disaster (Haghighat and Nasiri, 2004). Hence the study examined and compare how performing and non-performing borrower’s behaviour affect to loan repayment with reference loan holders of Regional Development Bank in North Central Province in Sri Lanka.

Literature Review

A bank loan is a form of credit which is extended for a specified period of time, usually on fixed interest terms, with the principal being repaid either on a regular installment basis or in full on the appointed redemption date. Depending upon the nature of the loan and the degree of risk involved, a bank loan may be unsecured or secured, the latter requiring the borrower to deposit with the bank an approved form of collateral security (Pass et al., 2002). People can lend money through formal or informal source mainly small scale organizations fulfill their financial requirement through informal source. Informal financial markets are much closer to their clients and potential clients through gossip and daily contact they are much more aware about their client’s activities than a formal banker due to
this reason probability of default of small scale enterprises credit from informal market rather than the formal market. On the other hand small scale organizations get loan from formal financial markets and has experienced a high rate of default in many developing countries for example Mali, Benin, Liberia, India, Nigeria, Malawi, and Peru (Fry, 1995).

According to Oladeebo (2008) study socio-economic factors influencing loan repayment among small scale farmers in Ogbomoso agricultural zone of Oyo State of Nigeria. He emphasized level of education were the major factor and it positively and significantly influenced loan repayment in the area. Saleem and Jann (2010) examined the impact of farm and farmers' characteristics on repayment of farm credit user for agricultural growth in D.I.Khan district during 2007-2009. According to T-test and ANOVA result support to conclude age, education, marital status, farm type, farm size, farm status and numbers of times credit obtained significantly affect to repayment of farm credit but regression result showed significant influence of marital status, farm type and numbers of times credit attained on repayment of farm credit. Nwachukwu, Alamba, and Oko-Isu (2010) examined determinants of loan repayment performance among farmers in Afikpo North Local Government Area (LGA) of Ebonyi State, Nigeria. The study collected information through structured questionnaire. According to discriminant function analysis result showed that 72% of the beneficiaries were operating performing loans while 28% were non-performing loan beneficiaries. Finally they concluded extensive loan periods and adoption of income support measures as panacea for efficient credit delivery and utilization among farmers. According to the empirical findings of Talibi and Ansari (2014) were analyzed factors affecting loan repayment of bank loans. They identified that the most important issues regarding the loan is non-repayment of borrowers. Sample of that study was the 70 credit holders and 23 questions included in the questionnaire.

Angaine and Waari (2014) were conducted a research about factors influencing on loan repayment in Micro Finance Institution (MFI) using stratified proportionate sampling and simple random sampling. Data was collected by using questionnaires and interview. Study results indicated that education level, number of dependents, and hobbies were main individual characteristics which have significant influence on the loan repayment. Business characteristics influencing loan repayment were length of operation, management and type of business. Lenders characteristics were groups handled, period taken to qualify new members and the criteria used to evaluate credit worthiness. Haile (2015) investigated that factors affecting loan repayment performance in Harari MFI of Ethiopia. Sample of this study is the 120 households through systematic random sampling between defaulters and non-defaulters of the microfinance institutions. Primary and secondary data were collected through pre tested structured interview. The fifteen variables were used to conduct this research. Out of these nine variables were statistically significant to the dependent variable. These significant variables are saving habit of borrowers, loan size, and perception of borrowers on repayment period, source of income, availability of training, business experience, business type, family size and the purpose of savings. Kohansal and others (2009) studied the factors influencing on repayment performance of farmers in Khorasan-Razavi province of Iran during 2008. They applied logit model to explain the probability of loan on time repayment. Study analysis results showed that farmer's experience, income, received loan size and collateral value have positive effect while loan interest rate, and total application costs and number of installment implies a negative effect on repayment performance of recipients. Comparison of the elasticity of significant variables indicated that loan interest rate is the most important factor in our model. Farming experience and total application costs are the next factors respectively. Awunyo-Vitor (2012) investigated the determinants of loan repayment default among farmers in Brong Ahafo region of Ghana. The study used Probit model to investigate factors that influence farmer’s loan repayment default. The results showed that farm size, and engagement in off farm income generating activities reduces the likelihood of loan repayment default significantly. Also, larger loan amount and longer repayment period as well as access to training are more likely to reduce loan repayment default. Thus, any policy that aimed at improving farm sizes, farm income and cultivation of cash crops would significantly reduce loan repayment default. Loan delinquency refers to failure of borrowers to repay their debts on time or to repay them at all. Loan delinquency is a serious problem of rural credit programs because it results in a waste of manpower, high administration costs and slow turnover of resources. The main reasons for loan delinquency are failure of projects, law income of the borrowers and natural disasters (Okorie, 2004). According to above empirical analysis previous studies emphasized different kind of factors affect to repayment ability, based on above researchers definitions Loan default is the inability of borrowers to repay the loans. For that...
affect the low income of the credit holders, natural
disasters, failure of projects. Loans defaults mainly
affect to the nonperforming loan rate of the
financial institutions.

Methodology

The study of Performing and Non-performing
Borrower's Behaviour towards Repayment Ability
was examined in North Central Province based on
Regional Banks. The study is qualitative type
comparative analysis. According to the literature
survey, Borrower's income, Loan amount,
Background, Loan accessibility, and grantees are
the independent variables of the study and loan
repayment ability was treated as dependent
variable. The population of the study was all loan
holders of Regional Banks in Medirigiriya area in
which 75 borrowers were selected as sample based
on stratified sampling method. The sample
included 34 performing credit holders and 41 non
performing credit holders of RDB in Medirigiriya
area. The questionnaire was used to collect
information from the sample. It includes thirty four
closed end questions and categorized those under
seven parts. The questionnaire consists multiple
questions, dichotomous questions and 'Likert
Scale' questions. Likert scale range from one to
five points. One represents strongly dissatisfied and
five represents strongly satisfy. The questionnaires
were analyzed through SPSS software and
employed descriptive, correlations and regression
analysis to derive accurate findings.

Result and Discussion

According to the demographic analysis sample
consisted with 34 performing borrowers' and 41
non-performing borrowers in the study. Under the
performing borrowers' category, sample consisted
with 56% male borrowers and 44% female
borrowers and most of borrowers were more than
35 years old and more borrowers have good
education background. Non-performing group
included 74% male borrowers and 26% female
borrowers all borrowers have moderate level
educational level.

Performing Borrowers Category

Reliability test was performed to identify the
reliability of each construct which was used to
measure the research variables. Cronbach's alpha
was used for reliability analysis. Current study
reliability test reflected all variable Cronbach's
alpha value were greater than the 0.7 hence study
accepted those variables to address research
question. According to the descriptive analysis
mean value of the information about income,
information about loan amount, background
investigation, Accessibility of getting loan,
information about guarantee and loan repayment
are 4.1422, 4.1050, 4.2647, 4.0176, 4.0784 and
4.2255 respectively. These values indicate for all
variables that the respondent's satisfaction level of
4 (satisfy level).

Table 01: Correlation Analysis for Performing Loan Holders' sample

<table>
<thead>
<tr>
<th>Correlations</th>
<th>LR</th>
<th>BI</th>
<th>LA</th>
<th>BH</th>
<th>AL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan Repayment (LR)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borrower's Income (BI)</td>
<td>0.629*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loan Amount (LA)</td>
<td>0.650*</td>
<td>0.569*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Background of Loan Holders (BH)</td>
<td>0.319*</td>
<td>0.244*</td>
<td>0.303*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Access to Loans (AL)</td>
<td>0.296*</td>
<td>0.314*</td>
<td>0.381*</td>
<td>0.152</td>
<td>1</td>
</tr>
<tr>
<td>Loan Guarantors (LG)</td>
<td>0.325*</td>
<td>0.491*</td>
<td>0.525*</td>
<td>0.162</td>
<td>0.442*</td>
</tr>
</tbody>
</table>

*, Correlation is significant at the 0.05 level (2-tailed).

According to correlation analysis, correlation
coefficients of borrower's income, loan amount,
background of loan holders, access to loans, loan
guarantors, were 0.629, 0.650, 0.379, 0.302, 0.650
respectively and all were statistically significant at
5% level. Accordingly all independent variables of
performing loan category have statistically
significant positive associations with loan
repayment ability of performing loan holders of
RDB at Madirigiriya area.

Regression Test
According to the regression result, R square of the test is 38%. Accordingly, 38% variation of loan repayment ability of performing loan holders' is explained by the independent variables of the study.

### Table 02: Coefficient analysis for Performing Loan Holders' sample

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardized Coefficients of B</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.398</td>
<td>0.000</td>
</tr>
<tr>
<td>Borrower’s Income (BI)</td>
<td>0.435</td>
<td>0.000</td>
</tr>
<tr>
<td>Loan Amount (LA)</td>
<td>0.482</td>
<td>0.000</td>
</tr>
<tr>
<td>Background of Loan Holders (BH)</td>
<td>0.061</td>
<td>0.785</td>
</tr>
<tr>
<td>Access to Loans (AL)</td>
<td>0.180</td>
<td>0.072</td>
</tr>
<tr>
<td>Loan Guarantors (LG)</td>
<td>0.357</td>
<td>0.050</td>
</tr>
</tbody>
</table>

Dependent variable of loan repayment ability

According to the model, regression coefficient of borrowers' income was 0.435. It was significant at 0.05 level. Accordingly when changing borrowers' income by 1% it will lead to change repayment ability of performing loan holders by 0.435. As per the regression test regression coefficient of loan amount and loan guarantor's information were 0.482 and 0.357 respectively. Both were statistically significant at 0.05 level. Resulting changes of both variable by 1% will change loan repayment ability by 0.482 and 0.357 respectively. However the impacts of background information and loan access on loan repayment ability were statistically insignificant at 0.05 level.

Data Analysis and Discussion of Non-Performing Loan Holders

### Table 03: Correlation Analysis for Non-Performing Loan Holders' sample

<table>
<thead>
<tr>
<th></th>
<th>LR</th>
<th>BI</th>
<th>LA</th>
<th>BH</th>
<th>AL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan Repayment (LR)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borrower’s Income (BI)</td>
<td>0.211*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loan Amount (LA)</td>
<td>0.314*</td>
<td>0.439*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Background of Loan Holders (BH)</td>
<td>0.410*</td>
<td>0.312*</td>
<td>0.327*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Access to Loans (AL)</td>
<td>0.293*</td>
<td>0.296*</td>
<td>0.218*</td>
<td>0.289*</td>
<td>1</td>
</tr>
<tr>
<td>Loan Guarantors (LG)</td>
<td>0.526*</td>
<td>0.421*</td>
<td>0.398*</td>
<td>0.298*</td>
<td>0.332*</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).

According to correlation analysis, correlation coefficients of borrower’s income, loan amount, background of loan holders, access to loans, loan guarantors, were 0.211, 0.314, 0.410, 0.293, 0.526 respectively and tis all were statistically significant at 5% level. Accordingly all independent variables of non-performing loan category have statistically significant positive associations with loan repayment ability of non-performing loan holders of RDB at Madirigiriya area.

**Regression Test**

According to the regression result, R square of the test is 31%. Accordingly, 31% variation of loan repayment ability of performing loan holders' is explained by the independent variables of the study.

### Table 04: Coefficient analysis for Non-Performing Loan Holders' sample

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients of B</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.482</td>
<td>0.000</td>
</tr>
<tr>
<td>Borrower’s Income (BI)</td>
<td>0.357</td>
<td>0.000</td>
</tr>
<tr>
<td>Loan Amount (LA)</td>
<td>0.357</td>
<td>0.000</td>
</tr>
<tr>
<td>Background of Loan Holders (BH)</td>
<td>0.526*</td>
<td>0.421*</td>
</tr>
</tbody>
</table>

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Variables | Unstandardized Coefficients of B | Sig.
--- | --- | ---
Constant | 3.261 | 0.000
Borrower’s Income (BI) | 0.242 | 0.334
Loan Amount (LA) | 0.117 | 0.384
Background of Loan Holders (BH) | 0.393 | 0.023
Access to Loans (AL) | 0.126 | 0.459
Loan Guarantors (LG) | 0.353 | 0.036

Dependent variable of loan repayment ability

According to the model, regression coefficient of borrowers’ income, loan amount and access to loan were statistically insignificant at 0.05 level. Accordingly changers of above variables do not lead change repayment ability of performing loan holders at Medirigiriya area. As per the regression test regression coefficient of background information and loan guarantor’s information were 0.393 and 0.353 respectively. Both were statistically significant at 0.05 level. Resulting changers of both variable by 1% will change loan repayment ability by 0.393 and 0.353 respectively.

Conclusion

The purpose of this study was to examine factors affecting loan repayment ability of performing and non-performing borrowers of Regional Development Banks in North Central Province. As per the correlation analyses conducted, there were statistically significant positive association between all independent and dependent variables of both performing and non-performing loan holders of Regional Development Banks in North Central Province. According to the regression analysis, borrower income and loan amount have statistically significantly impact on repayment ability of performing loan holders. However, borrower income, loan amount do not make any impact on repayment ability of non-performing loan holders. It indicated that though increasing income and loan amount encourage performing holders to repay the loan, its do not make any influence on non-performing loan holders to pay the due amount on time. Background of loan holders is one of significant factor that lead repayment ability of non-performing loan holders however it was insignificant at performing holder level. Access to the further loans does not encourage both performing and non-performing holders to repay the loans. Loan guarantor’s information has a significant impact on repayment ability of both performing and non-performing holders’ repayment ability. The findings of the study is match with few previous studies such as Okorie, 2004, Kohansal et al., 2009, Haile, 2015, Angaine and Waari, 2014, Nwachukwu, Alamba, and Okoisu, 2010, Pass et al., 2002, Fry, 1995. Based on the findings study recommends that bank should identify the background of the loan holders before releasing money through previous records and experiences. As well as study further recommends financial institutes to release money on trusted guarantors.

References


