

# Determinants of Microfinance Repayment Performance: Evidence from Small Medium Enterprises in Malaysia

L. Shu-Teng<sup>1</sup>, M. A. Zariyawati<sup>1</sup>, M. Suraya-Hanim<sup>2</sup> & M. N. Annuar<sup>1</sup>

<sup>1</sup> Faculty of Economics and Management, Universiti Putra Malaysia, Selangor, Malaysia

<sup>2</sup> Faculty of Agriculture and Food Sciences, Universiti Putra Malaysia, Selangor, Malaysia

Correspondence: M. A. Zariyawati, Department of Accounting and Finance, Faculty of Economics and Management, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia. Tel: 603-8946-7710. E-mail: zariyawati@upm.edu.my

Received: July 7, 2015

Accepted: August 4, 2015

Online Published: October 25, 2015

doi:10.5539/ijef.v7n11p110

URL: <http://dx.doi.org/10.5539/ijef.v7n11p110>

## Abstract

Microfinance was introduced in Malaysia to provide financing services to the poor and Small Medium Enterprises (SME) to start up business. The borrower may use the facility to finance business activities such as to purchase assets and additional capital to expand their business. Microfinance helps SME that have limited access to get loan from financial institutions. Financial institutions specifically commercial bank refuse to provide microfinance facilities to SME due to the high default rate among the majority of borrowers who obtain loan without collateral. In addition, the percentage of non-performing loan (NPL) of microfinance in Malaysia has been increasing. Therefore, the objective of this research is to analyze the determinants of SMEs loan repayment performance in Malaysia. Results showed that there are four variables with significant relationship towards loan repayment namely educational level, business experience, amount of loan and loan tenure.

**Keywords:** loan repayment, microfinance, SME

## 1. Introduction

The term “microfinance” became widespread and widely used with the formation of Grameen Bank by Muhammad Yunus in the 1970s (Mokhtar, Nartea, & Gan, 2012). Microfinance is small business loans ranging from RM1, 000 to RM50, 000 and the loan tenure vary from one month to seven years. Microfinance institutions (MFI) consist of a wide range of institutions, from credit unions and cooperative to non-government organizations (NGO), government agencies, private companies and commercial banks. According to Schreiner and Colombet (2001), microfinance acts as the attempt to improve access to small deposits and small loans for poor households abandoned by banks. Therefore, microfinance involves the provision of financial services such as savings, loans and insurance to the poor who are unable to obtain such services from formal financial sector. In Malaysia, SMEs generally face difficulties in obtaining financing because they were unable to meet the minimum qualifications to gain access to normal banking due to the lack of collateral and insufficient documents to support loan application (Nawai & Shariff, 2013). The lack of financial track record is the main constraint faced by SMEs in Malaysia in gaining access to loan (Aris, 2007). SMEs tend to rely more on financial and commercial institutions as sources of financing as they grow in size. 43.9% of medium-size SMEs made use of financial institutions as their major source of financing (Aris, 2007). However, with the presence of a huge number of SMEs in the economy, access to credit in the market has become more competitive. Therefore, microfinance is able to fill the gap of financial services’ sector in giving funds to the lower-income group involved in SMEs activities. This group relatively seeks for a small amount of loan to finance their businesses, to manage emergencies, to acquire assets, or for smooth consumption (Nawai & Shariff, 2012). Based on 423,400 of SMEs in Malaysia, 30% showed that the main purpose of financing is for working capital requirements, followed by the requirements to buy or lease of equipment or machinery (Census of Establishment and Enterprise 2005, Department of Statistics Malaysia). Thus, microfinance has been recognized as a vital socio-economic and financial mechanism to alleviate poverty, to promote development of entrepreneurship and to increase the profile of disadvantaged people in numerous countries throughout the world (Hossain, Rees, & Millar, 2012).

Since most of the SMEs are able to obtain loan without collateral, this led to most of the SMEs unwilling to

repay their loans as this move does not portray any harm to them. This shows that microfinance as a lending institution is a risky business as loan repayment can seldom be fully guaranteed (Arsyad, 2006). Furthermore, MFIs are generally exposed to higher credit risk as they are involved in lending to potential SMEs with difficulties in obtaining loans initially. Apart from that, most of the MFIs are semi-formal or informal institutions that are not profit-oriented. These MFIs generally received funds from the government to operate their activities. Hence, this causes most of the MFIs unable to sustain and being too dependent on subsidies (Nawai & Shariff, 2012). For instance, the non-performing loans (NPLs) for Malaysia Cooperative Commission (CCM) and Perbadanan Nasional Berhad (PNB) are 13.8% and 11% respectively (Utusan Malaysia, 16 December 2008). NPL for TEKUN Nasional is 29% and until year 2012, the NPL for TEKUN Nasional is still considered high at 20% (TEKUN Nasional, 2012) compared to non-governmental agencies such as Public Bank, CIMB Bank and Maybank. The NPL levels of non-governmental agencies are between 0.95% and 3.15%. However, for SME Bank, the NPL is 8% and it increased to 12.3% in year 2013 (The Star, 2014).

The phenomenon of high NPLs is one of the critical problems faced by MFIs in lending to SMEs. Despite the importance of microfinance to SMEs development, examining repayment performance is important to ensure the sustainability of MFIs. Many researchers have highlighted the importance of loan repayment performance such as Stearns (1995) and Hulme and Mosley (1996). A great number of failures among MFIs in many developing countries were due to their inability to ensure good repayment performance among their borrowers (Woolcock, 1999). Hence, the main objective of this study is to identify the critical determinants of loan repayment performance of SMEs in Malaysia. Since MFIs can be divided into government agencies and non-government agencies, the specific objectives of this study are to examine the determinants of SMEs loan repayment performance among government and non-government agencies in Malaysia and to determine the determinants of SMEs loan repayment performance in Malaysia among default and non-default borrowers.

## 2. Literature Review

Okorie (1986) investigates main factors of agricultural smallholder loan repayment in a developing economy which is Nigeria. He claims that poor loan repayment performance in developing countries has become a key problem in credit administration, especially to smallholder farmers who have limited collateral capabilities. Since the loans are not secured by collateral, these MFIs generally exposed to credit risk (Chong, Morni, & Suhaimi, 2010). High rates of loan default are common in institutional credit.

Chong, Morni, and Suhaimi (2010) also find that 55% of the borrowers did not pay on time in their study of the repayment performance of Non-Bank Financial Intermediaries (NBFI) Customers in Kuching. Most of the NBFI such as SME bank, Bank Simpanan Nasional, Bank Rakyat and Agrobank are involved in lending to SMEs and individuals who have potentials but are having problems in obtaining financial services from the conventional lending institutions.

Onyeagocha, Chidebelu, and Chukwuemeka (2012) argue that informal financial institutions are performing better than the formal financial institutions in terms of loan repayment performance. This statement is supported by Njoku and Odii (1991) and Njoku and Obasi (2001). It has shown that formal financial institutions in Nigeria experienced a serious loan repayment problem. Studies in Imo State outlined by Njoku and Odii (1991) presented only 27% repayment rate of the farmers while Njoku and Obasi (2001) recorded 33.72% as repayment rate in their study. On the other hand, Coyle (2000) contends that reasons of default risk are from borrowers' side instead of lenders' side. This means that if loans are not repaid, the blame will be put on the borrowers. However, Stearns (1995) mentions that it is the lender who causes high levels of default in microfinance rather than the borrowers.

Many past researchers have studied the determinants of loan repayment performance around the world. The factors that affect loan repayment performance of MFIs can be categorized into four groups namely borrower's characteristics, business characteristics, loan characteristics and lender factors. Past researchers (i.e. Eze & Ibekwe, 2007; Nawai & Shariff, 2013; Roslan & Karim, 2009) have tested borrowers' characteristics such as gender, age and level of education on loan repayment performance. Studies conducted by Chong, Morni and Suhaimi (2010) and, Nawai and Shariff (2013) showed that either male or female borrower does not have any impact on loan repayment performance. Roslan and Karim (2009) and, Wongnaa and Vitor (2013) have made an implication that female borrowers have higher loan repayment rate compared to male borrowers because lending to females leads to economic empowerment and, able to inhibit hard work and financial discipline culture in them. Eze and Ibekwe (2007) have mentioned that age is positively significant to loan default rate indicating that younger people have better loan repayment performance. This was supported by Oladeebo and Oladeebo (2008) that MFIs are willing to give out loans to young people as they are likely to implement new innovations

compared to their old counterparts. It is believed that borrowers with higher level of education lead to better loan repayment performance (Eze & Ibekwe, 2007; Bhatt & Tang, 2002; Wongnaa & Vitor, 2013) as educated borrowers have better ability in understanding and evaluating information on new techniques and processes which leads to higher income.

In this study, business characteristics include total sales and business experience. Nawai and Shariff (2013) have showed that business with higher sales are said to earn more profit and thus, more creditworthy. This result is consistent with studies done by Okorie (1986). Besides, Wongnaa and Vitor (2013) have also agreed that an increase in business total sales led to higher profit earned and thus better loan repayment rate. In terms of business experience, it is said that by increasing farming experience, it increases the likelihood of farmers in repaying their loans (Wongnaa & Vitor, 2013). Onyeagocha, Chidebelu and Okorji (2012) have shown that business experience is positive and significant suggesting that longer business experience result in higher loan repayment rate.

Amount of loan and loan tenure are some of the loan factors that will be covered in this research. Studies done by Roslan and Karim (2009) and, Zohair (2013) have found that amount of loan has positive relationship with loan repayment performance. It is argued that a small loan amount is not enough to finance the business or projects and consequently insufficient for the business to generate sufficient cash flows to repay the loan. Therefore, larger loan size has better loan repayment rate. This statement is agreed by Onyeagocha, Chidebelu, and Okorji (2012). Roslan and Karim (2009) have identified that loan tenure is negative and significant with loan repayment performance; demonstrating that shorter loan repayment period leads to higher loan repayment rate. Chelagat (2009) has also reported that longer loan repayment period caused lower loan repayment as borrowers were susceptible to default.

Institutional or lender factors (i.e. monitoring and training) will be examined in this study. Okorie (1986) has explained that lenders should pay at least three visits to the borrowers' premises to ensure smooth business operations and this indirectly will enhance full loan repayment. This result is in line with Wongnaa and Vitor (2013), Nawai and Shariff (2012) and, Deininger and Liu (2009) where loan repayment rate is higher when MFIs paid frequent visits to the borrowers premises in a month. Consequently, a frequent monitoring of loan by visits enhances the loan repayment performance. Awunyo-Vitor (2012) has concluded that the training variable is positive and significant towards loan repayment performance. This finding is consistent with the result found by Roslan and Karim (2009) that training lessens loan repayment default among microcredit beneficiaries. Besides, the study of Tundui and Tundui (2013) also showed that borrowers who had undergone training are better in managing their businesses and make efficient use of their loans. Thus, they are believed to have better loan repayment performance compared to their counterparts who have not undergone any training.

### 3. Method

#### 3.1 Data

Primary data collections were collected through survey interviews using a structured questionnaire. The questionnaires were distributed to a total of 125 Small and Medium Enterprises (SMEs) in Malaysia. The survey was carried out in the month of March and April 2015. The respondents were chosen using judgmental method. Judgmental sampling is a non-probability sampling technique and it happens when elements selected for the sample are chosen by the judgment of the researcher (Black, 2010). The researcher chose the SMEs for this study by identifying whether these SMEs borrow loans from MFIs such as MARA, TEKUN, non-government agencies and so on before they are qualified as respondents for this research. The prospective respondents were chose based on the criteria above as they have the ability to evaluate the determinants of loan repayment performance. A statistical software program, SPSS (Statistical Package for Social Sciences) version 21 was used for comprehensive data analyses. Descriptive analysis was used to summarize and describe the sample characteristic of the respondents while disclosing the general pattern of the responses. Multicollinearity test was conducted to examine whether the regression model has correlation among independent variables. Multiple regression analysis was used to examine whether there is a relationship between the independent variables and loan repayment performance. Overall, the loan repayment performance can be influenced by four groups of factors which include borrower characteristics, business characteristics, loan characteristics and lender factors.

#### 3.2 Variables of the Study

The determinants of the loan repayment performance model were analyzed using multiple regressions. The loan repayment model is as follow:

$$Y = \beta_0 + \beta_1(X1) + \beta_2(X2) + \beta_3(X3) + \beta_4(X4) + \beta_5(X5) + \beta_6(X6) + \beta_7(X7) + \beta_8(X8) + \beta_9(X9)$$

Where,

Y = loan repayment performance measured by how much borrowers repay monthly in Ringgit Malaysia.

X1 = gender of borrower (1= male, 0= female);

X2 = age of borrower (1= 18 to 35 years old, 0= over 35 years old);

X3 = educational level of borrower (1 = Tertiary educational level which include STPM, certificate, Diploma and Degree, 0 = Otherwise);

X4 = total sales generated in one month by firm in Ringgit Malaysia;

X5 = business experience in months;

X6 = amount of loan borrowed in Ringgit Malaysia;

X7 = loan tenure: how many months borrower takes to repay the loan;

X8 = monitoring: the number of times MFI staffs visit borrower's business premise in a year;

X9 = training: do MFIs provide training to the borrowers before they run their business (1= yes, 0= otherwise).

The hypotheses development of this study is as follow:

H1: There is a relationship between gender and loan repayment performance.

H2: There is a negative relationship between age and loan repayment performance.

H3: There is a positive relationship between level of education and loan repayment performance.

H4: There is a positive relationship between total sales and loan repayment performance.

H5: There is a positive relationship between business experience and loan repayment performance.

H6: There is a positive relationship between amount of loan and loan repayment performance.

H7: There is a negative relationship between loan tenure and loan repayment performance.

H8: There is a positive relationship between monitoring and loan repayment performance.

H9: There is a positive relationship between training and loan repayment performance.

## 4. Result

### 4.1 Descriptive Analysis

Based on the descriptive analysis, among the 125 respondents, 69 are male respondents (56.1% of the total respondents) while the remaining 54 are female respondents (43.9% of total respondents). Based on the age group analysis, the result indicated that majority of the respondents fall into the age group of above 35 years old (65.9%), while 34.1% is in the 18-35 years old age group. The age groups of 18-35 years old represents respondents considered as young while age group of above 35 years old represents the older respondents. Due to the popularization of the Malaysian education system, the majority of the respondents are from the group of tertiary level which accounts for 68.3%, while 39 respondents (31.7%) are from non-tertiary level, which is either primary or secondary level. Tertiary level consists of respondents with STPM, Certificate, Diploma or Degree holder. On the other hand, non-tertiary level represents respondents who graduated from primary or secondary school. From the table below, there are 57 respondents who attended training before they do their business. However, 66 respondents (53.7%) did not attend any training for business or skills before they start their business. Majority of the respondents borrow loans from non-governmental agencies, for example BSN, Bank Rakyat, SME Bank, Public Bank and Maybank which represent 52% out of the total respondents. In contrast, among the 125 respondents, 59 respondents (48%) borrowed loans from government agencies such as AIM, MARA and TEKUN. It is crucial to determine the number of respondents who default in the repayment. In this research, 66 respondents (53.7%) were identified as non-default borrowers. These 53.7% of respondents always repay their loan on time. This is then followed by 57 respondents (46.3%) who are considered as default borrowers. These borrowers at some time in the past had skipped their monthly repayment.

Table 1. Respondents frequency table

	Profile	Frequency	Cum. Frequency	Percentage	Cum. Percentage
Gender	Male	69	69	56.10 %	56.10%
	Female	54	125	43.90%	100%
Age	18-35 years old	42	42	34.10%	34.10%
	Above 35 years old	81	125	65.90%	100%
Educational Level	Tertiary level	84	84	68.30%	68.30%
	Non-tertiary level	39	125	31.70%	100%
Training	Yes	57	57	46.30%	46.30%
	No	66	125	53.70%	100%
Lending Institution	Government agencies	59	59	48.00%	48.00%
	Non-government agencies	64	125	52.00%	100%
Status	Default	57	57	46.30%	46.30%
	Non-default	66	125	53.70%	100%

#### 4.2 Multicollinearity Test

We have tested multicollinearity problem for this study. According to Hair et al. (2003), the maximum acceptable VIF value would be less than 5.0 and the tolerance value must be larger than 0.10. Thus, if VIF value is higher than 5.0 and tolerance value is lesser than 0.10, this indicates a multicollinearity problem. The values of Variance Inflation Factor (VIF) for all the constructs in this study were less than 5.0 and the range of Tolerance Value was between 0.308 and 0.883. Therefore, the finding indicated that the multicollinearity problem was not significant in this research.

#### 4.3 Regression Analysis

In terms of factors affecting loan repayment performance, Table 2 has shown the result of multiple regression analysis of loan repayment performance for overall samples. From Table 2, four out of nine predicted determinants were statistically significant. Since educational level and business experience significance value are less than 0.05, H3 and H5 are cannot be rejected. Amount of loan and loan tenure are significant at the level of 1% significance. Hence, H6 and H7 are cannot be rejected. The other variables however, have a significance value of more than 0.10. This indicates that these hypotheses are rejected. Thus, this concludes that, (i) gender, (ii) age, (iii) total sales, (iv) monitoring and (v) training is not a predictor of loan repayment performance.

Table 2. Regression analysis for overall samples

Model	Coefficient	P-Value
(Constant)	-1.251	0.002
Gender	0.068	0.318
Age	-0.029	0.346
Educational level	0.190	0.011 **
Total sales	-0.053	0.104
Business experience	0.003	0.035 **
Amount of loan	0.900	0.000 ***
Loan tenure	-0.023	0.000 ***
Monitoring	0.009	0.162
Training	0.011	0.448

Note. \*\*\* significant at 1% confidence interval, \*\* significant at 5% confidence interval, \* significant at 10% confidence interval.

A comparison between government and non-government agencies was made. There are a total of 59 respondents who borrowed loans from government agencies while 64 of them borrowed from non-government agencies. The determinants that affect the loan repayment performance between government agencies and non-government agencies were compared. The result of multiple regression analysis of loan repayment performance for government agencies and non-government agencies are shown in Table 3. For government agencies; five variables, (i) educational level, (ii) business experience, (iii) amount of loan, (iv) loan tenure and (v) monitoring are significant towards loan repayment performance. The other variables however, have a significance value of more than 0.10. Thus, this concludes that, (i) gender, (ii) age, (iii) total sales and (iv) training are not predictors

of loan repayment performance. For non-government agencies; age, educational level, amount of loan and loan tenure have a significant relationship towards loan repayment performance. On the other hand, (i) gender, (ii) total sales, (iii) business experience, (iv) monitoring and (v) training are not factors affecting loan repayment performance.

A comparison between default borrowers and non-default borrowers was done. There are a total of 57 respondents in the default group. Conversely, the remaining 66 respondents are in the non-default group or they never missed to repay the loan on time. Hence, the determinants that affect the loan repayment performance between default and non-default borrowers were compared. Table 4 displayed the result of multiple regression analysis for the default group and non-default group. For the default group, six variables, (i) age, (ii) business experience, (iii) amount of loan, (iv) loan tenure, (v) monitoring and (vi) training are significant towards loan repayment performance. The remaining variables however have a significance value of more than 0.10. Thus, this concludes that, (i) gender, (ii) educational level and (iii) total sales are not predictors of loan repayment performance. In the non-default group, educational level, amount of loan and loan tenure and monitoring have a significant relationship towards loan repayment performance. On the other hand, (i) gender, (ii) age, (iii) total sales, (iv) business experience and (v) training are not determinants of loan repayment performance as the p value is more than 0.10.

Table 3. Regression analysis for government agencies and non-government agencies

Model	Government Agencies		Non-government Agencies	
	Coefficient	P-Value	Coefficient	P-Value
(Constant)	-0.472	0.539	-0.550	0.413
Gender	0.159	0.182	-0.055	0.405
Age	0.117	0.178	-0.099	0.090 *
Educational level	0.200	0.086 *	0.119	0.066 *
Total sales	0.034	0.363	-0.032	0.210
Business experience	0.005	0.074 *	0.002	0.188
Amount of loan	0.708	0.000 ***	0.847	0.000 ***
Loan tenure	-0.024	0.000 ***	-0.025	0.000 ***
Monitoring	0.071	0.006 ***	0.003	0.332
Training	-0.104	0.244	0.015	0.431

Note. \*\*\* significant at 1% confidence interval, \*\* significant at 5% confidence interval, \* significant at 10% confidence interval.

Table 4. Regression analysis for default and non-default borrowers

Model	Default Borrowers		Non-default Borrowers	
	Coefficient	P-Value	Coefficient	P-Value
(Constant)	-1.618	0.000	-0.996	0.144
Gender	0.017	0.690	0.112	0.367
Age	0.109	0.016 **	-0.050	0.355
Educational level	0.062	0.131	0.517	0.000 ***
Total sales	-0.034	0.137	-0.042	0.274
Business experience	0.003	0.002 ***	0.001	0.425
Amount of loan	0.864	0.000 ***	0.871	0.000 ***
Loan tenure	-0.012	0.000 ***	-0.029	0.000 ***
Monitoring	-0.017	0.007 ***	0.023	0.056 *
Training	0.170	0.004 ***	-0.055	0.337

Note. \*\*\* significant at 1% confidence interval, \*\* significant at 5% confidence interval, \* significant at 10% confidence interval.

## 5. Discussion

From Table 2 above, level of education has to be taken into consideration for an effective understanding of the determinant of loan repayment because educational level is significant at  $p < 0.05$ . It is consistent with the hypothesis where higher educational level will lead to better loan repayment performance. The result is similar with most of the researchers such as Bhatt and Tang (2002), Eze and Ibekwe (2007), and Wongnaa and Vitor

(2013). Borrowers with higher education level possess the knowledge of operating a business resulting in higher profit level. Therefore, educational level is one of the significant factors influencing loan repayment performance among SMEs in Malaysia.

Business experience is also identified as one of the significant determinants of loan repayment performance in this research. This is due to the p value of business experience is less than 0.05. Thus, business experience is positively significant at 5% significance level. Borrowers who have longer business experience are expected to be more successful in their business because they have established consistent customers and stable sales compared to those SMEs who have just started their business. Thus experienced SMEs may have higher repayment rates. This result is similar with the finding of Wongnaa and Vitor (2013) and, AL-Sharafat, Qtaishat, and Majdalawi (2013) where longer business experience leads to better loan repayment performance.

Amount of loan has the strongest significant impact on loan repayment performance with the beta of 0.9,  $p < 0.01$ . Thus, amount of loan is the most critical determinant of the loan repayment performance. It is similar with the hypothesis where a positive relationship is predicted. The reason behind this result is due to bank officers paying frequent visits to the borrowers with huge amount of loan compared to those with smaller loan amount in this research. Bank officers tend to monitor borrowers with huge amount of loan compared to a smaller amount of loan. Hence, borrowers with larger amount of loan tend to have better loan repayment performance. This result is parallel with the study carried out by Zohair (2013) and, Onyeagocha, Chidebelu, and Okorji (2012).

Table 2.0 shows that loan tenure is negatively significant at the level of 10% significance with p value less than 0.01. The hypothesis stated that the loan tenure is negatively related with loan repayment performance and this is supported by researcher Roslan and Karim (2009). Longer repayment period can be disadvantageous to borrowers. It is believed that a borrower might be tempted to spend the higher net income in the early months of the loan. This will result in potential difficulty in making loan repayment for the later months.

Surprisingly, the result shows that there is no relationship between total sales and loan repayment performance. The significance value for total sales exceeded the level of 10% significance. This is because the amount of total sales generated are required deducting the cost of goods sold and other expenses in order to obtain the net profit. In this study, borrowers had use the money generated from sales in buying assets for the business and paying the employees' salaries. If the cost of goods sold and expenses are high, the net profit generated is much lower than forecasted. Therefore, a high total sale does not represent a high level income. This causes total sales not being able to predict loan repayment performance of SMEs.

The significance value for gender and age are 0.318 and 0.346 respectively. The values for these variables are more than the p value of 0.10. Therefore, there is no evidence that gender and age will significantly affect loan repayment performance among SMEs in Malaysia as H1 and H2 were rejected. This result is similar with the outcomes of Chong, Morni, and Suhaimi (2010) and Nawai and Shariff (2013) where the result showed either a male or a female borrower does not have any influence on the loan repayment performance. Besides, in this study, age has no significant impact on loan repayment performance which is consistent with the study of Brehanu and Fufa (2008). In this study, a number of the older borrowers had increased their expenses on health and insurance, subsequently leading to higher personal expenses and commitment. Hence, this reduces the ability to repay the loan when there is a shortage of money. Age does not have any impact towards loan repayment performance.

The monitoring and training variables have a significant value of 0.162 and 0.448, hence are being rejected in this study as the p value is larger than 0.05. The reason is that most of the borrowers in this study learnt the technical skills on their own rather than taking business management courses provided by professional consultant firm or MFIs. Though the MFIs in Malaysia provide training courses, SMEs prefer to learn on their own or search information from the internet. Without the knowledge of business management, SMEs would not be able to run their business successfully and this may affect their profit. Hence, training could not determine loan repayment performance.

Referring to Table 3, the amount of loan has a significant positive impact towards loan repayment performance for both government agencies and non-government agencies with  $p < 0.01$ . Besides, loan tenure is the determinant of loan repayment performance for both government agencies and non-government agencies with  $p < 0.01$ . The loan repayment performance is better when loan tenure is shorter. This means that amount of loan and loan tenure affects loan repayment performance for government agencies and non-government agencies. Besides, level of education is significant towards loan repayment performance at the level of 10% significance for both government agencies and non-government agencies. This indicates that borrowers with tertiary level tend to have better loan repayment performance for government agencies and also non-government agencies.

From Table 3, in the non-government agencies column, the result showed that age has a significant negative relationship towards loan repayment performance with  $p < 0.10$ . This means that borrowers with age above 35 years old have better loan repayment performance compared to the younger borrowers below age 35. Since non-government agencies are profit oriented, they tend to provide loans to SMEs who are above 35 years old because these borrowers are more responsible in repaying loan. This can be proved by the 43 older borrowers and 22 young borrowers of non-government agencies in this study. In the government agencies column, the result showed that the significance value for age is 0.178, which is more than 0.10. Thus, age has no significant relationship towards loan repayment performance for government agencies. Since government agencies are not profit oriented, they are more willing to provide loans to any age group which is above 18 years old. Consequently, age is not a factor that affects the loan repayment performance in government agencies.

For government agencies, business experience is shown to have a significant positive effect towards loan repayment performance with  $p < 0.10$ . However, for non-government agencies, the result revealed that business experience has no significant impact towards loan repayment performance. Thus, there is no evidence that business experience will significantly influence loan repayment performance for non-government agencies. SMEs who borrowed from government agencies tend to have better loan repayment when they have longer business experience. Business experience does not affect the loan repayment performance in non-government agencies since non-government agencies do not take business experience into consideration when giving out loans to SMEs.

Monitoring is shown to have a significant positive impact on loan repayment performance for government agencies with  $p < 0.01$ . This shows that the more frequent officers from government agencies visit the SMEs, the better the loan repayment performance are. In contrast, monitoring has no significant impact towards loan repayment performance for non-government agencies as the significance value is more than 0.10. In this research, majority of the respondents from non-government agencies were visited by the officer disregards to their loan amount. Thus, monitoring has become an ordinary thing for the borrowers from non-government agencies and hence, it is not a factor that will affect the repayment of SMEs from non-government agencies. However, this scenario is vice versa for government agencies as officers from government agencies rarely visit their borrowers. The borrowers believed that there must be some problems when the officers visit and monitor them frequently, so the borrowers tend to have better loan repayment performance.

According to Table 4, amount of loan has the strongest significant impact on loan repayment performance for both default and non-default borrowers with  $p < 0.01$ . Thus, amount of loan is the most critical determinant of loan repayment performance. This means that loan repayment performance is better if amount of loan for default and non-default groups increase. In addition, loan tenure is a significant determinant of loan repayment performance for both default and non-default borrowers with  $p < 0.01$ . This means that when loan tenure decreases, loan repayment performance also increase. Therefore, amount of loan and loan tenure are the determinants that will affect loan repayment performance for both default and non-default borrowers.

Besides, for the default group, monitoring is shown to have a significant negative impact on loan repayment performance with  $p < 0.01$ . Besides, the result revealed that monitoring has a significant positive relationship on loan repayment performance for non-default group of borrowers at the level of 10% significance. This means that the loan repayment performance is higher if the number of visits by officers increases. For non-default borrowers, officers tend to visit the premises more frequently to prevent them from being default in the loan repayment. Hence, the borrowers will be motivated to work harder and enhance their loan repayment. This differs with the default group whereby loan repayment performance improves when the number of visits by officers decreases. Since the default borrowers missed their payment at least once before, the frequent visits and monitoring by the officers creates a stressful environment for them in running their business. Therefore, they tend to messed up the business and generate lower income. This will then leads to a lower loan repayment performance.

Age is shown to have a significant positive influence on loan repayment performance with the score of 0.016, which is less than 0.50 for default groups. However, for non-default borrowers, the result revealed that age has no significant impact towards loan repayment performance with significance value of more than 0.10. Thus, age is not a significant determinant of loan repayment performance for non-default borrowers. This is because younger borrowers who missed their payment before are afraid of punishment. Since younger borrowers still have a long way to go in their life, they are afraid that the default in their loan might affect their personal reputation and how public perceive them. This causes younger borrowers to have a better performance in paying their monthly repayment compared to older borrowers. For non-default group, age could not determine the loan repayment performance.

Based on Table 4, it is shown that business experience has a significant positive effect towards loan repayment performance for default borrowers with  $p < 0.01$ . Thus, it is verified that this variable had a significant positive relationship towards loan repayment performance. Conversely, for non-default borrowers, the result revealed that business experience has no significant impact toward loan repayment performance. The analysis result showed that the significance value for business experience of non-default borrowers is 0.425, which is more than 0.10. A person with longer business experience normally has a good reputation; thus, when the borrowers default in the payment before, they tend to repay the loan better in the future as they are afraid that it will affect their business reputation. For non-default group, business experience is not a factor affecting loan repayment performance.

For the default group, training is shown to have a significant positive impact on loan repayment performance with  $p < 0.01$ . This implied that default borrowers who have undergone training tend to have a higher loan repayment performance. On the other hand, for non-default borrowers, the result showed that training has no significant impact towards loan repayment performance. The analysis result showed that the significance value for training of non-default borrowers is 0.337, which is more than 0.10. Business training and skills training enable default borrowers to master some soft skills in doing business, such as goal setting, communication skills and time management. Default borrowers tend to have good business performance resulting in a better loan repayment performance. It is different from the non-default group where training is not a factor that will affect the loan repayment performance.

Educational level for non-default borrowers has a significant positive effect towards loan repayment performance with  $p < 0.01$ . In opposition, the significance value for educational level of default borrowers is more than 0.10. Thus, educational level will not influence loan repayment performance of SMEs in Malaysia. This can be justified by borrowers with tertiary education level (e.g. Diploma and Degree) are likely to have better knowledge and skills in keeping their business records and in operating their businesses which will then lead to higher profit. Hence, these borrowers which represent the non-default group tend to have good attitude and have better loan repayment performance. However, educational level does not affect the loan repayment performance of default borrowers because no matter they are in tertiary or non-tertiary educational level, they had defaulted in repaying their loan. So, educational level in default group could not influence the loan repayment performance.

## 6. Conclusion

Microfinance has been recognized as a vital socio-economic and financial mechanism to alleviate poverty and to promote entrepreneurship. This indicates that higher micro financing leads to lower poverty level in Malaysia. It is held that microfinance given to the entrepreneurs can help them to improve their business and to stimulate the poor to be involved in business activities. Hence, it is crucial to examine the determinants that contribute to loan repayment performance.

This study provides empirical evidences and quantifications of the extent to which some determinants affect loan repayment performance among SMEs in Malaysia. The results showed that borrower's characteristics (educational level), business characteristics (business experience) and loan characteristics (amount of loan and loan tenure) are recognized to have an incredible effect on the loan repayment performance among SMEs in Malaysia, as proven by their high correlation to repayment rate. To sum up, the study found that the amount of loan is the most crucial factor that affects the loan repayment performance among the respondents. Therefore, by providing a suitable amount of loan, it is believed that this will improve loan repayment among the borrowers. The study suggests that MFIs should conduct background checks on borrowers to identify their educational level and business experience before providing loans to them.

During the progress of the research, there are some limitations in this study that need to be highlighted. Firstly, there is a lack of previous researches studying loan repayment performance comparing government agencies and non-government agencies and, default and non-default group in the context of Malaysia. Accordingly, it is tough to find strong and related journals in Malaysia's context to support this study. Additionally, respondents of this research are mainly SMEs who borrow loans in Peninsular Malaysia. Therefore, the sample cannot be described as random and representative sample of SMEs who borrow loans in Malaysia as a whole. Hence, the findings of this research are not generalizable across Malaysia. Besides, the sample size used in this research is the second potential limitation of this research. Since this study is only able to obtain 125 SMEs who borrowed loans, it is then considered as small size of sample was collected. Therefore, the data collected is unlikely to represent the larger population. Future research is recommended to include a larger sample size covering the whole Malaysia which includes Peninsular Malaysia, Sabah and Sarawak in order to generalize the results.

## Acknowledgements

The author is grateful to the Ministry of Science, Technology & Innovation for the financial support granted to

this research project.

## References

- AL-Sharafat, A., Qtaishat, T., & Majdalawi, M. I. (2013). Loan Repayment Performance of Public Agricultural Credit Agencies: Evidence from Jordan. *Journal of Agricultural Science*, 5(6), 221-230. <http://dx.doi.org/10.5539/jas.v5n6p221>
- Aris, N. M. (2007). SMEs : Building Blocks for Economic Growth 1, (September 2006), pp. 4-5.
- Arsyad, L. (2006). Assessing Factors Affecting The Repayment Rate of Microfinance Institutions: A Case Study of Village Credit Institutions of Gianyar. *Bali*, 8(2), 247-273.
- Awunyo-Vitor, D. (2012). *Determinants of loan repayment default among farmers in Ghana*. Department of Agricultural Economics, Agribusiness and Extension, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.
- Bhatt, N., & Tang, S. Y. (2002). Determinants of repayment in microcredit: Evidence from programs in the United States. *International Journal of Urban and Regional Research*, 26(6), 360-376. <http://dx.doi.org/10.1111/1468-2427.00384>
- Black, K. (2010). *Business Statistics: Contemporary Decision Making* (6th ed.). John Wiley & Sons.
- Brehanu, A., & Fufa, B. (2008). Repayment rate of loans from semi-formal financial institutions among small-scale farmers in Ethiopia: Two-limit Tobit analysis. *The Journal of Socio-Economics*, 37(6), 2221-2230. <http://dx.doi.org/10.1016/j.socec.2008.02.003>
- Chelagat, K. N. (2012). Determinants of Loan Defaults by Small and Medium Enterprises among Commercial Banks in Kenya.
- Chong, F., Morni, F., & Suhaimi, R. (2010). Demographic factors and repayment performance of NBFIs customers in Kuching. *2010 International Conference on Science and Social Research (CSSR 2010)*, (Csr), 1340-1345. <http://dx.doi.org/10.1109/CSSR.2010.5773748>
- Coyle, B. (2000). *Framework for Credit Risk Management*. UK: CIB Publishing.
- Deininger, K., & Liu, Y. (2009). *Determinants of repayment performance in Indian micro-credit groups*. Washington D.C: The World Bank. <http://dx.doi.org/10.1596/1813-9450-4885>
- Department of Statistics. (2006). *Census of Establishments and Enterprises 2005*. Preliminary Report–Profile of Small and Medium Enterprises, Putrajaya.
- Eze, C. C., & Ibekwe, U. C. (2007). Determinants of Loan Repayment under Indigenous Financial System in Southeast, Nigeria. *Medwell Journals*, 2(2), 116-120.
- Hair, J. F. Jr., Babin, B., Money, A. H., & Samuel, P. (2003). *Essential of business research methods*. United States of America: John Wiley & Sons.
- Hossain, F., Rees, C., & Millar, T. K. (2012). *Success factors of microcredit: What can we learn for international development?* In *Microcredit and international development: Contexts, achievements and challenges*. New York. USA: Routledge.
- Hulme, D., & Mosley, P. (1996). *Finance Against Poverty 2*. London, UK, Routledge.
- Mokhtar, S. H., Nartea, G., & Gan, C. (2012). Determinants of microcredit loans repayment problem among microfinance borrowers in Malaysia (pp. 33-45).
- Nawai, N., & Shariff, M. N. M. (2012). Factors Affecting Repayment Performance in Microfinance Programs in Malaysia. *Procedia-Social and Behavioral Sciences*, 62, 806-811. <http://dx.doi.org/10.1016/j.sbspro.2012.09.136>
- Nawai, N. B., & Shariff, M. N. M. (2013). Determinants of repayment performance in microfinance programs in Malaysia (Vol. 11, pp. 14-29).
- Njoku, J. E., & Odii, M. R. (1991). Determinants of Loan Repayment under the Special Emergency Loan Scheme (SEALS) in Nigeria: A Case Study of Imo State. *African Review of Money, Finance and Banking*, 1, 39-52.
- Njoku, J. E., & Obasi, P. C. (2001). Loan Repayment and its Determinants under the ACGS in Imo State, Nigeria. *Africa Review of Money Finance and Banking*.
- Okorie, A. (1986). Major determinants of agricultural smallholder loan repayment in a developing economy:

- Empirical evidence from Ondo State Nigeria. *Agric. Administration*, 21(1), 223-234. [http://dx.doi.org/10.1016/0309-586X\(86\)90040-3](http://dx.doi.org/10.1016/0309-586X(86)90040-3)
- Oladeebo J. O., & Oladeebo, O. E. (2008). Determinants of loan repayment among smallholder farmers in Ogbomoso Agricultural Zone of Oyo State, Nigeria. *J. Soc. Sci.*, 17(1), 59-62.
- Onyeagocha, S. U. O., Chidebelu, S. A. N. D., & Okorji, E. C. (2012). Determinants of Loan Repayment of Microfinance Institutions in Southeast States of Nigeria. *International Journal of Social Science and Humanities*, 1(1).
- Roslan, A. H., & Karim, M. Z. A. (2009). Determinants of Microcredit Repayment in Malaysia: The case of Agrobank. *Hum. Soc. Sci. J.*, 4(1), 45-52.
- Schreiner, M., & Colombet, H. H. (2001). From Urban to Rural: Lessons for Microfinance from Argentina. *Dev. Policy Rev.*, 19, 339-354. <http://dx.doi.org/10.1111/1467-7679.00138>
- Stearns, K. (1995). *The hidden beast: delinquency in micro enterprise credit programme*. ACCION Discussion Thesis Document No. 6.
- The Star Online. (2 September 2014). SME Bank aims to cut non-performing loans. Retrieved 1 July 2015 from <http://www.thestar.com.my/Business/Business-News/2014/09/02/SME-Bank-aims-to-cut-NPLs-It-targets-to-bring-the-figure-down-to-about-5-in-three-years/?style=biz>
- Tundui, C. S., & Tundui, H. (2013). Microcredit, Micro Enterprising and Repayment Myth: The Case of Micro and Small Women Business Entrepreneurs in Tanzania. *American Journal of Business and Management*, 2(1), 20-30. <http://dx.doi.org/10.11634/216796061302240>
- Utusan Malaysia. (2008, December 16). *Gagal Bayar Pinjaman TEKUN*. Peminjam Mungkin Disenarai hitam, Malaysia.
- Wongnaa, C. A. (2013). Factors Affecting Loan Repayment Performance Among Yam Farmers in the Sene District, Ghana. *Agris on-line Papers in Economics and Informatics*, V(2), 111-123.
- Woolcock, M. J. V. (1999). Learning from Failures in Microfinance: What unsuccessful cases tell us about how group-based programs work. *The American Journal of Economics and Sociology*, 58(1), 17-22. <http://dx.doi.org/10.1111/j.1536-7150.1999.tb03281.x>
- Zohair, M. (2013). Factors Affecting Repayment of Loans by Micro-borrowers in Tunisia : An Empirical Study.

### Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).