# RISK MANAGEMENT PRACTICES AND PERFORMANCE OF MICROFINANCING BANKS IN MALAYSIA

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#### **Abstract**

The purpose of this study is to investigate the state of risk management practices (RMPs) implemented among the microfinance providers in Malaysia and its relationship with the financial performance. By taking seven banking institutions and three developments financial institutions which participate in the micro financing initiative name as *pembiayaan micro*, the risk management practices were investigated. This study employed the measures available in the existing literature to measure the variables and is modified to match with the respondents. A total number of 1355 survey questionnaires were distributed to the branch managers through mail and 190 usable responses were received from the respondents The result reveals that only three dimensions of RMPs have significant relationship with the performance of financial institutions namely risk identification, risk monitoring and credit risk analysis. While, there is no relationship between risk management understanding and risk assessment and analysis and performance of financial institutions. The results also provide support that the supervision of risk management and internal control systems of Malaysian banks conform to internationally accepted standards that stipulated under Basel II.

**Keywords:** Risk management practices. Financial performance. Microfinance. Understanding risk and risk management, Risk identification, Risk assessment and analysis, Risk monitoring, Credit risk analysis

## 1.0 INTRODUCTION

The involvement of the banking institutions in microfinance industry has created a debate in the financial industry as the industry is known as the high risk in lending activity and the perception of the banking institutions that banking for the poor is not a profitable activity. Even if a bank enters the microfinance market for socially responsible reasons, the long-term viability of the microfinance program is eventually defined by its contribution to the bank's profitability. According to Bassem(2012) it is quite challenging to consecutively accomplish financial performance and microfinance social objectives because the goals may be conflicting each other.

Any sustainable financial institution therefore needs to have an effective risk management to ensure viability of the institution in the future. A good risk management framework helps the institution to protect from unfavourable consequences (downside risks and permit the institution to take the benefit of any possible opportunities (up-side risks). Moreover, as the nature of the financial institutions business are accepting and managing credit risk, they act as shock absorbers. They soak up errors in risk management made elsewhere in the system. Their capacity to act as buffers against errors in risk management depends on their ability to measure and mitigate their own exposures, as well as the sufficiency of their equity capital (Kimball, 2000).

Haneef et al. (2012) stated that the inefficiency of the financial institution in managing risks not only hindering the profitability but also increasing interest rate and retard the economic growth which eventually rendered them unsuccessful in realizing their business objectives. Their study on Pakistan banking sector discovered that lack of risk management may lead to an increase in non-performing loans which threatens the profitability of banks

A study done by Ayayi and Sene (2010)proved that the good risk management would determine quality of credit portfolio control thus the financial sustainability of MFIs and performance of the institution are improved. Previous study, Ariffin and Kassim(2011) found evidence that the performance of the financial institutions correlated with the risk management practices. While, Haneef et al. (2012) found that lack of risk management in financial institutions leads to an increase in non-performing loans which threatens the profitability of banks. According to Kozarevic, Nuhanovic, and Nurikic (2013) the financial performance of most banking institutions in Bosnia and Herzegovina that actively practiced risk management were improved as compared to the period during they implemented only some extent during the outbreak of financial crisis in 2008.

The aim of the study is to investigate and provide empirical evidence in the area of risk management adopted by the financial institutions specifically by addressing the nature, extent of risk and approaches adopted by the institutions. Does risk management practice really matter to the performance of the financial institutions which offering the micro financing to small medium enterprises? Hence, this study is to seek evidence on the relationship between risk management practices implemented and the financial performance of the financial institutions which offer micro financing in Malaysia

#### 2.0 LITERATURE REVIEW

Risk is inherent in every business and every organization has to manage it according to its size and nature of operation because without it no organization can survive in long run. In the finance and statistics perspective, risk can be defined as the possible variation in cash flow about an expected cash or anything that hinders from meeting certain objectives flow (Kallman, 2005; Petty, Keown, Scott Jr., & Martin, 2004). Whilst, risk management can be defined as the procedures where the managers satisfy their risk taking needs by recognizing key risk, acquiring consistent, comprehensible, operational risk measures, deciding which risks to reduce and increase and by what means, and creating procedures to monitor the outcome risk position in order to achieve the institutional goals of the firm(Ozturk & Aktan, 2007). Risk management practices consist of five constructs; understanding risk and risk management, risk identification, risk assessment and analysis, risk monitoring and credit risk analysis (Hassan, 2009; Peng, 2009; Rosman, 2009; Shafiq & Nasr, 2010).

# 2.1 Understanding Risk and Risk Management

The first step in risk management is to understand the aspect of risk in the microfinance operations and in the surrounding of the institution. Many studies revealed that understanding risk and risk management is an important factor in risk management practices (Al-Tamimi & Al-Mazrooei, 2007; Hassan, 2009).

## 2.2 Risk identification

Risk identification refers to the process of identifying and classifying risks that could affect the project and documenting such risks. According to Tchankova (2002) an efficient risk identification comprise of four components namely sources of risk, hazard factors, perils and exposure to risk.

# 2.3 Risk assessment and analysis

Risk assessment and analysis is also crucial financial industry as it ensures the balance between risks taken and the returns received by financial institutions. Revealed that assessing the risk related to bank failures is the paramount concern of bank regulations. Believed that a suitable, precise and adaptable credit risk assessment and valuation model or system is needed for developing a viable credit risk management environment in banking industry.

### 2.4 Risk monitoring

According to Hassan (2009), risk monitoring is important in financial institution as it is used to ensure that risk management practices of institutions are in line with the institution's objectives and help the financial institution's management to discover mistake at early stage. Therefore, Rahman (2011) emphasized that credit monitoring consists of periodic reviews, ratings and audits to warn an early sign of the financial health of a borrower. The effects of bank monitoring on performance have been researched previously by Allen, Carletti and Marquez (2008), Besanko and Kanata (1993), and Dewatripont and Tirole (1994). Their findings have proved that bank monitoring improves the expected return on firms' projects and thus enhances bank performance.

## 2.5 Credit risk analysis

Credit risk can be defined as the possibility of losing the outstanding loan partially or totally, due to default risk or credit events (Supervision, 2001). Financial institutions have invested so much capital in credit risk management as because it helped the financial institutions to maximize bank risk, adjust risk rate of return by maintaining credit risk exposure with view to shield the bank from the adverse effects of credit risk (Musyoki & Kadubo, 2012). Therefore, Frank, Simon, and Josephine (2014) believed that based on the previous studies, microfinance institutions are strongly suggested to have strong and effective credit risk management policies for ensuring consistent recoveries from clients. While, Alshatti (2015) suggested that all banks need to ascertain appropriate credit risk environment; running a comprehensive credit granting process, preserving an applicable credit administration which include monitoring, administering as well as adequate controls over credit risk in order to establish an effective credit risk management system.

Based on the literature discussed above, five hypotheses have been developed in relation to the relationship between risk management practices and performance of financial institutions:

- H1: There is significant relationship between risk understanding and performance of financial institutions in Malaysia
- H2: There is significant relationship between risk assessment and analysis and performance of financial institutions in Malaysia
- H3: There is significant relationship between risk identification and performance of financial institutions in Malaysia
- H4: There is significant relationship between risk monitoring and performance of financial institutions in Malaysia
- H5: There is significant relationship between credit risk analysis and performance of financial institutions in Malaysia

#### 3.0 RESEARCH METHOD

# 3.1 Sample and Data Collections

The population of the study is a group of branch managers which represents the key informants from the participating financial institutions providing government micro financing skim pembiayaan mikro` to the micro enterprises are consistent with previous literature that believed the branch managers are the individuals considered more knowledgeable about their bank's risk management practices and firm performance (Hornsby, Kuratko, & Zahra, 2002; Snow & Hrebiniak, 1980; Zahra, 1991).

A total number of 1355 survey questionnaires were distributed to the branch managers through mail, and 190 usable responses were received from the respondents, giving a response rate of 14.02 percent. The participating financial institutions consisted of three development financial institutions namely AgroBank, Bank Kerjasama Rakyat and Bank Simpanan Nasional and seven banking institutions namely Alliance Bank, Ambank, CIMB Bank, Bank Muamalat, Maybank, Public Bank and United Oversea Berhad.

# 3.2 Variables and Measures

This study employed the measures available in the existing literature to measure the variables of the study. The instrument used to measure the independent variable, risk management practices (RMPs) which is adapted from past researches and are modified to match with the respondents. There are five dimensions for RMPs studied; Understanding Risk Management (URM), Risk Assessment and Analysis (RAA), Risk Identification (RI), Risk Monitoring (RM), Credit Risk and Analysis (CRA). While for the performance of financial institutions (dependent variable) is adapted from is based on the subjective measurement of Return on Equity, Return on Investment, Financial self-sufficiency and sales growth for the last three years.

## 4.0 RESULT AND DISCUSSION

## 4.1 Reliability Analysis

A reliability test was conducted to determine the internal consistency of the measures used. The findings as depicted under Table 1, revealed that the reliability of RMPs dimensions and performance of financial institutions are proven to be reliable as the reliability tests as shown by Cronbach's alpha ( $\alpha$ ) which exceeded 0.6 lower limit of acceptability (Hair, Black, Babbin, & Anderson, 2007)

No.	Variables	No. of Items	Alpha Value		
1.	Risk Management Understanding	4	0.801		
2.	Risk Assessment Analysis	4	0.807		
3.	Risk Identification	4	0.756		
4.	Risk Monitoring	4	0.873		
5.	Credit Risk Analysis	4	0.666		
6.	Performance of financial institutions	4	0.900		

Table 1 Reliability scores for constructs

## 4.2 Factor Analysis

Besides reliability, the constructs were also validated through factor analysis. The factor analysis was used to determine the inter-correlations among a set of variables. The fitness of the data was measured through two tests; Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, and Bartlett's Test of

Sphericity prior examined the factor analysis. According to Pallant (2010) and Hair et al. (2007), the KMO has to be more than 0.50 and Bartlett's Test of Sphericity has to be significant. For factor analysis, principle component analysis and direct oblige rotation were performed. As suggested by Costello and Osborne (2005) oblige rotation allows factors to correlate. Only items that had factor loadings above 0.55 will be accepted and to be included in the factor (Comrey & Lee, 1992).

For the performance of financial institution, both the KMO value is 0.757 and Bartlett's Test of Sphericity at p<0.001 indicated as the data is factorable, and thus factor analysis was performed. The direct oblige rotated has resulted in a single factor loading that explained 75.12 per cent of the variance and all the items loading were all above 0.55. Thus, all the four items were loaded on a single factor. While, for RMPs dimensions, the KMO value is 0.817 and Bartlett's test of Sphericity at p<0.001 indicated as the data is factorable. Five items were dropped after the fourth round of factor analysis due to cross loading and loading factor less than 0.55. The fifteen items remaining loading well on five dimensions with loading scores above 0.55.

## **4.3 Hypotheses Testing**

The purpose of this study is to examine the relationship between RMPs dimensions and the performances of the financial institutions offering government micro financing. Five hypotheses have been developed and multiple regression analysis was employed to test the relationship between RMPs dimensions and the performance of financial institution. The adequacy of the model was confirmed by checking the regression assumptions such as linearity, normality, homoscedasticity, and error independence.

Table 2 shows the result of that risk management dimensions (risks management understanding, risk assessment and analysis, risk identification, risk monitoring and credit risk analysis) contribute significantly to the performance of financial institutions (F=22.151, p=0.000). The risk management practices dimensions predict 38.4% (R2=0.384) of the variation in the performance of financial institutions.

Table 2 Multiple Regression Result for Hypothesis 1-5

Summary		Anova		Dimensions			Collinearity statistics		
R	R Square	F	Sig		β	t- value	p- Value	Tolerance	VIF
0. 619 <sup>a</sup>	0.384	22.151	$.000^{a}$	(constant)		5.245	.000		
				Risk Management Understanding	143	-1.936	.055	.632	1.582
				Risk Assessment and Analysis	.147	1.913	.057	.585	1.710
				Risk Identification	.382	5.062	.000	.607	1.648
				Risk Monitoring	.164	1.995	.002	.514	1.944
				Credit Risk Analysis	.194	2.970	.003	.808	1.237

The result shows that there risks identification ( $\beta$  = 0.382, p < 0.05), risk monitoring ( $\beta$  = 0.164, p < 0.05) and credit risk analysis ( $\beta$  = 0.194, p < 0.05) with the performance of financial institutions. However, there is no relationship between risk management understanding (t= -1.936,  $\rho$ >0.05) and risk assessment and analysis (t= 1.913,  $\rho$  >0.05) to the performance of financial institutions, thus H1 and H2 are rejected. Amongst the three dimensions that provide significant contribution to the performance of financial institutions; risk identification, risk monitoring and credit risk analysis, risk identification seems to be the biggest predictor to the performance of financial institutions. This is shown by beta result where risk identification is the largest beta coefficient ( $\beta$  = 0.382) followed by credit risk analysis ( $\beta$  = 0.194) and risk monitoring ( $\beta$  = 0.164). Beta coefficient suggests that these variables make the unique and strongest contribution to the explanation of the dependent variable performance of financial institutions.

#### 5.0 RESULT

The main results of this study are:

- (1) Out of five dimensions of RMPs, three dimensions have significant relationship with the performance of financial institutions namely risk identification, risk monitoring and credit risk analysis. It is found that there is no relationship between risk management understanding and risk assessment and analysis with the performance of the financial institutions.
- (2) The results of this study revealed that supervision of risk management and internal control systems of Malaysian banks conform to internationally accepted standards stated under Basel II (Parrenas, 2005).

#### 6.0 CONCLUSION

These findings have significant contribution to the literature by critically analysing the current state of risk management practices among microfinance providers in Malaysia. It also provides insight information to the institutions that can be used for the improvement of the financial performance of the institutions. The policy makers and regulators such as Bank Negara Malaysia (BNM) may use the information to emphasize on the possible areas to be strengthened for a more effective and efficient management of risk to ensure that the institution is efficiently using the scarce public fund in meeting the objectives of microfinance program.

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