Abstract ID: ICBMIS-2019- 071

Effectiveness of Risk Management Practices in an Islamic Bank of Brunei Darussalam

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Abstract

Understanding and managing risks allows one to control, and often prevent, the outcomes associated with risks. Risk Management in Islamic Banking can be defined as a forecast of viewed from the view point of awareness of various applicable aspects of different phases of risk management framework i.e. establishing the context, identifying, assessing, prioritizing and controlling threats through the use of mitigation measures. which are the financial risks and applying Besides, it is also aims to look into the applications of necessary control measures procedures in order to minimize the occurrences of the risk events. This study analyses the impact of risk management in an Islamic Bank of Brunei Darussalam and to see if they are these risks are being managed with the application of various risk management practices efficiently throughout the bank. The goal is to identify and study the level of risk management practices in the bank. To answer this question, a survey questionnaire has been distributed to the staffs of the bank. A quantitative study has been conducted on primary data. The findings of the study indicated that the bank is managing its risk management practices well and the results are concluded as positive.

Keywords: Risk Management Practices, Islamic Banking, Shariah Banking Risk Management, Brunei Darussalam

1 Introduction

The academic interest in the study of Islamic banking risk management research may begin with scholars such as Khan (1997), Vogel and Hayes (1998), Obaidullah and Wilson (1999), Khan and Ahmad (2001) and Hassan (2009). They believe that Islamic banks not only face the types of risks faced by traditional banks, but they also discover new and unique risks due to the unique nature of the asset classes and liability structures of Islamic banks. Risk Management in Islamic Banking is not significantly different from conventional banking. There are additional risks that are unique to Islamic Banking. A bank's business, whether Islamic or conventional, is to take calculated risks. Therefore, risk management is not the minimization of losses but the optimization of the risk. Risk management is the process where the banking organization identifies, assesses and control the threats to an organization's capital and earnings.

This research is conducted in order to achieve the aims of identifying the level of importance of risk management practices being used in, studying the level of risk management practices, investigating the management practices of risks as well as looking into if the risks are being dealt with efficiently in one of the largest Islamic Banks of Brunei Darussalam. The paper has been divided into five sections. The second section, preceding this section on introduction, reviews the literature and section three is about data description and methodology. Section four and five are on 'description of results and analysis' and 'concluding remarks' respectively.

2 Literature review

Risk is defined as the uncertain outcome and it can be measured by the standard deviation of historic outcomes, and risk can be divided into two types which are systematic risk and unsystematic risk. Unsystematic risk is a risk that is unique to a firm or an industry. It is associated with random causes that can be eliminated through diversification and controlled through good governance. Systematic risk is defined as the risk of change in asset value associated with systemic factor which can be hedged but cannot be diversified away completely. Systematic risk is also called as market risks which include interest rates, commodity prices, foreign exchanges, stock market prices and concentration risk Oldfield and Santomero (1997).

Sundararajan and Errico (2002) have found that Islamic banks have greater operational risks and lower profits than traditional banks. This is due to the special nature of Islamic banks' investment deposits, whose capital value and rate of return are not guaranteed. In addition, Islamic banks may, at their discretion, manage asymmetric information generated by unrestricted Mudarabah contract of depositor funds that may lead to the moral hazard problems. Issues in Shari'ah compliant tools or instruments and facilities have also led to the increased risk and reduced profitability of Islamic banks. The role of risk management in the operation of Islamic banks is to minimize the risk and maximize value of bank's assets as it is for conventional banks (Hasan and Antoniou, 2004; Greuning and Iqbal, 2008). Therefore, as long as Islamic bank does not go against the Shari'ah jurisprudence, risk taking is part of Islamic Banks' business as well.

Islamic banks are required to manage the risk according to Shari'ah principles, in which no element of interest rate should exist in their transactions, Islamic banks should, therefore, be concerned with the rate of return risk which may originate because of benchmarking of Islamic Banks' markup rates to some form of interest rate. Khan and Ahmad (2001) have argued that this new type of risk is a direct result of their compliance with the Shari'ah law, and is also called the moral law requirement. The nature of risks in Islamic banks is different from the risks faced by conventional banks.

Regarding the risk management practices at various banks, the banking institutions can only disclose minimal details of their risk management programs and activities, and, as a result, most empirical analysis has to rely on surveys. Thus, a survey questionnaire has been developed by following the methodology of Al-Tamimi and Al-Mazrooei (2007), Hassan (2009), and Rahman et al. (2014), Rahman et al. (2014) has collected and used data comprising 136 and 70 responses for Malaysia and for Jordan respectively, which gives a total sample of 206 where seven Islamic banks in Malaysia and four Islamic banks in Jordan have participated in the survey. The analysis has shown that factors such as the level of understanding risk management, risk assessment and analysis, risk control, and monitoring are featured more extensively in Malaysian Islamic banks than in the Jordanian Islamic banks (Rahman et al.; 2014).

Another study on Islamic banks of Pakistan has found that the banks are somewhat reasonably efficient in managing risk where understanding risk management, risk monitoring and credit risk management are the most influencing variables in the risk management practices. The methodology used in this study is the distribution of survey questionnaire which covers six aspects of the variables which are the understanding risk and risk management, risk assessment and analysis, risk identification, risk monitoring, credit risk analysis and risk management practices. The sample in this study consists of six Islamic banks which are operating in Pakistan and the branches of banks selected for sample are located in the cities of Abbottabad, Islamabad, Manshera and Rawalpindi. The target population for each of the banks in each city includes all of the senior staff members of the head offices of the six Islamic banks as well as the senior staff of the branches of the six of the selected Islamic banks. It has concluded that there is a general understanding of risk management practices throughout the Islamic banking system in Pakistan, and all the aspects of risk management have positive relationship with risk management practices. The Spearman's correlation has also been calculated between independent variables and dependent variable and results have shown that there is a positive relationship between independent variables.

3 Data Description and Methodology

This study has conducted a survey by using a questionnaire which is having various parts similar to the questions in Rahman et al. (2014) and where only minor parts have been customized to suit our context. The survey has been distributed to the staffs of all the departments of the Islamic Bank of Brunei and thus data has been collected using online Google Survey Forms because of the ease of the questionnaire design and compilation of data in various formats besides, providing the summary statistics in colourful charts. The main objective of this survey is to determine the impact of risk management practices in the Islamic Bank. There are five sections in the questionnaire named as risk management practices, understanding risk management, risk identification, risk assessment and analysis, risk control and monitoring sections.

The questions in the survey are of close ended nature which has been measured on six point Likert-scale choice of responses. The total of 95 responses of all the distributed questionnaires have been received where 10.5% of the respondents are from operations department, 11.6% from the finance department, 9.5% from the corporate banking department, 8.4% from the treasury and global market department, 9.5% from the retail banking department, 8.4% from the Shari'ah department, 6.3% from compliance department, 4.2% from the human resource department, 7.4% from the risk department, 8.4% from information's department, 6.3% from internal audit department and 9.5% from the digital banking department.

The hypothesis states that there is a positive relationship between the risk management practices and the understanding of risk management, risk identification, risk assessment and analysis, and risk control and monitoring and it has been tested in this research study. The analysis component in this study have relied on Cronbach's alpha, correlation and regression analysis. While most of the respondents belong to the average age group of 36-50 (78.9%), 21.1% belong from the age group of 26-35. The gender composition of the respondents of the survey is such that there are 64.2% male respondents and 35.8% female respondents.

4 Results and Analysis

Cronbach's Alpha has been used as one of the analysis methods in order to measure the reliability of the overall structure of the questionnaire and its various sections. As a rule of thumb, a coefficient of greater than or equal to 0.7 is considered acceptable and a good indication of the reliability. In our survey, most of the variables have shown that the alpha is above the 0.5 range. The overall Cronbach Alpha's value if 0.839 which confirms reliability. For all the questions in the survey. The first section for the reliability test is that of related to risk management practices. From the results shown above, with 11 instruments analyzed, the alpha shows a value of 0.317 which indicates that the reliability in this questionnaire section is quite poor. The partial reason may be argued based on the large number of instruments in the section which caused a lower alpha value.

Table 1: Correlation across various sections of the questionnaire

	URM	RI	RAA	RCM
RMP	0.491	0.466	0.431	0.377
URM	1	0.421	0.276	0.491
RI		1	0.625	0.632
RAA			1	0.411
RCM				1

The second section for the reliability test is that of about the understanding of risk management in the bank. The results have shown that, with seven instruments, the alpha value is 0.645 which indicates that this section lacks reliability at a very narrow margin. The third section for the reliability test is that of risk identification. With five instruments, the alpha score for this section is 0.776 which indicates that it is acceptable in terms of its association with reliability. The fourth section is risk assessment and analysis. With eight instruments, the alpha score is 0.657 which indicates that it is questionable at narrow margin as well. The fifth section is risk control and monitoring which has six instruments and the alpha value is 0.545 which indicates that it is poor in terms of its association with reliability. The correlation among the different sections have been shown in Table 1 where the results of the correlations among the variables such as Risk Management Practice (RMP) between Understanding Risk Management (URM), Risk Identification (RI), Risk Assessment and Analysis (RAA), and Risk Control and Monitoring (RCM) have been presented in Table 1.

The model summary table states that it has R-square value of 0.353, Adjusted R-square value of 0.324 and standard error of the estimate of 1.14072 for a model having a constant term as well as using RCM, RAA, URM and RI as predictors or independent variables. The analysis of variance (ANOVA) table shows that it is a test of whether the R square in the previous model summary table is significantly greater than zero. The ANOVA table has been provided below which shows that the regression analysis is statistically significant. Besides, the first independent variable (URM) has a t value of 3.6 and a P value of 0.001 respectively. This means that the variable is significant on its own, and it accounts for a significant amount of unique variance in the dependent variable. The second independent variable (RI) has a t value of 1.4 and a P value of 0.168 respectively. This means that the variable is not significant on its own, and does not account for a significant amount of unique variance in the dependent variable. The third independent variable (RAA) has a t value of 2.0 and P value of 0.044 respectively. This indicates that the variable is significant and accounts for a significant amount of unique variance in the dependent variable. The fourth independent variable (RCM) is not significant.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	63.835	4	15.959	12.264	.000[b]
	Residual	117.112	90	1.301		
	Total	180.947	94			

a. Dependent Variable: RMP

b. Predictors: (Constant), RCM, RAA, URM, RI

5 Concluding Remarks

This study is concerned with the impact of risk management in one of the largest Islamic banks in Brunei Darussalam. The objectives in this study include the identification of the level of importance of risk management practices being used in Brunei's Islamic Bank, the study of the level of risk management practices in the Islamic Bank, to identify if the Islamic Bank is managing its risk management properly, and to identify if the Islamic Bank deals with the risks efficiently. Hypotheses have been developed and tested. The results have revealed that there is a positive level of risk management practices throughout the Islamic Bank. In the Reliability analysis, results have revealed that the variables used are good in terms of its association with reliability, except for the variables of risk management practices and risk control and monitoring. There may be many instruments in the first section causing a lower alpha value.

In the Pearson's correlation analysis, the results revealed that there is a positive correlation, which is less than 0.5 in most of the cases, among the different variables such as risk management practice, understanding risk management, risk identification, risk assessment and analysis, and risk control and monitoring. In the Regression analysis, the outcome revealed that the predictors or independent variables account for 34% of the variance in the dependent variable, which is risk management practice (RMP). It also showed that the independent variables are able to account for a significant amount of variance in the dependent variable. Thus, the regression analysis is statistically significant. By looking at the independent variables individually, only the variable of understanding risk management (URM) and risk assessment and analysis (RAA) are significant in their own unique way in the variation of the dependent variable. Therefore, it can be concluded that there is a strong impact of risk management in the Islamic Bank, under study, of Brunei Darussalam as they are doing well in managing their risks and also prepared in prioritizing the high value risks when faced with a problem. The staffs of the bank are also able to understand the risk involve while controlling and monitoring risks which gives way to an efficient working management with risk events in the future course of action.

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