

Assessing the Risk Management Practices of Islamic Banks: Empirical Evidence from Malaysia and Pakistan

Professor Dr Rashidah Abdul Rahman¹

Siti Balqis²

Faisal Dean³

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Abstract

The focus of this study is to examine the effectiveness of the risk management process (understanding risk management, risk identification, risk assessment and analysis, and risk monitoring) on risk management practices among Islamic banks in Malaysia and Pakistan. The study also compares the risk management process and practices between the banks in both countries. The study found that Islamic banks in Malaysia and Pakistan are somewhat efficient in managing risk and that there is a significant difference between the banks in Malaysia and Pakistan in the practice of understanding risk management and risk identification. The results also indicate that risk identification and risk assessment and analysis are the most influencing factors in risk management practices in both countries.

Keywords: Risk management, risk analysis, Islamic banks, Pakistan, Malaysia.

Introduction

Risk management has been at the forefront of news headlines worldwide due to the incompetent practices, which led to today's banking crisis. The inability to fully appreciate the extent of risk exposure and the implications to business strategies has

¹ Professor in Corporate Governance and Islamic Finance, Accounting Research Institute Universiti Teknologi MARA, Malaysia Tel: +603-55444745

Email: shidah@salam.uitm.edu.my

² Postgraduate Student, Accounting Research Institute, Universiti Teknologi MARA, Malaysia, Email: sitibalqis.smn@gmail.com

³ Postgraduate Student, Aston Business School, Birmingham, Email: deanfaisal@hotmail.com

placed many banking institutions in disarray. Arising from the experiences during the 1997 Asian and Latin American financial crisis and the more recent US sub-prime crisis, greater emphasis has been placed on enhancing the risk skills and creating a more robust risk culture. In fact, banks in many emerging market countries are also increasing their focus on risk management in an effort to build more robust and sound financial systems, to remedy the weaknesses that were exposed by the recent regional problems and to position themselves to participate more fully in the global economy. Thus, effective risk management is critical to sustain the business growth and continued profitability of the banks. Given today's challenging financial and economic environment, adopting a balanced risk-return profile is important in striving for the continued enhancement of shareholders' value. With the growing globalization of the financial markets, the risks associated with Islamic banking in any one country are likely to affect the markets in other countries.

Thus, the main focus of this paper is to assess the level of risk management practices among Islamic banks in Malaysia and Pakistan. The secondary objective is to compare risk management practices among Islamic banks in both countries. Due to the lack of research in this field (Hassan, 2009), this study will be among the few to examine the level of risk management practices in Islamic Banks and the first to focus solely on Malaysia and Pakistan. Furthermore, although these two countries have Islamic banking systems, no comparative study between Pakistan and Malaysia has been done before.

Since the establishment of Bank Islam Malaysia Berhad and Takaful Malaysia in 1984 and 1985, respectively, Malaysia has embraced the practice of Islamic banking and finance and has been growing strongly over the last 27 years. In Pakistan, private sector banks dominated the market during the 1950s and 1960s. However, they were nationalized in 1974, only to perform worse than their private counterparts. This resulted in re-privatising the banking sector in 1992. The state bank of Pakistan began to introduce Islamic banking practices around 2000 and the Meezan Islamic bank was the first fully-fledged Islamic bank in 2002 (Ahmad, Ur-Rahman and Saif, 2010).

Today, both Malaysia and Pakistan have succeeded in implementing a dual banking system and have a full-fledged Islamic system operating side-by-side with the conventional banking system. In fact, Islamic banking is growing in terms of size and structure in both countries. Thus, Islamic banks have a number of opportunities in both Malaysia and Pakistan, each having a population of more than 96% Muslims. However, some critics (Haniffa and Hudaib, 2007; Chazi and Syed, 2010) cite that Islamic banks are perceived as being too complacent, thinking they will attract a wide Muslim market

on the basis of religious grounds alone. Other authors (e.g., Hassan and Dicle, 2006) suggest that Islamic banks are lacking professionally managed risk identification processes, which lead to the banks being heavily involved in short-term financing as opposed to a more desirable long-term equity based financing structure. Thus, this study may help the practitioners, bank managers, academicians and policy makers to determine the level of risk management practices in Malaysia and Pakistan. Furthermore, this research is an effort to fill the acute shortage of literature regarding risk management practices within the Islamic banking systems in Malaysia and Pakistan.

The remainder of the paper is organised as follows. The next section discusses the relevant literature on issues pertaining to risk management practices. The third section explains the research method followed by a discussion of the results in section four. The paper ends with the conclusion of the research.

Review of Literature

Apart from the common risks, such as credit, interest rate and liquidity risks, Islamic banks are also exposed to risks that are unique to the Islamic banks, because of the various modes of financing available to the Islamic banks (Ariffin, Archer & Karim, 2009; Zainol and Kassim, 2010). Some of these risks are benchmark risk (rate of return risk), withdrawal risk, fiduciary risk, reputation risk, displaced commercial risk, Shariah compliance risk and asset price risk. (Karim & Verhoeven, 2005) discover that in Malaysia, commercial banks with Islamic financing have "significantly lower credit and liquidity risks but significantly higher interest-rate risk than banks without Islamic financing". As Islamic banks are also facing foreign exchange and equity risks, (Aj-Janabi, 2006) recommends guidelines and procedures for the measurement and managing of these risks. In evaluating risk in Zimbabwe's banks, the study by (Njanike, 2009) concludes that, to a great extent, poor credit risk management contributed to the failure of Zimbabwe's banks. Thus, risk management does not aim at risk elimination rather it is aimed to enable banks to bring their risks to "manageable proportions while not severely affecting their income" (Sharma, Mishra & Sharma, 2010).

In line with the Basel Committee on Banking Supervision (BCBS) (2001), a study by (Lucas, 2011) identifies five general steps of the risk management process; "risk identification, risk analysis and prioritization, risk control and loss prevention, risk financing and risk implementation/administration". A survey carried out by KPMG and the economist intelligence unit in 2008, as quoted by (Hashagen, Harman, Conover & Sharma, 2009), found that banks have been employing a wide variety of approaches to

manage and mitigate their risks. (Dedu&Nechif, 2010) present risk management in light of Basel II, stating how the new accord brings “changes in activity of banks and financial institutions, imposing mandatory capital requirements for banks exposures”. Furthermore, (Grody& Hughes, 2008) go on to say that “the greatest hope for preventing such crisis in the future” lies in the Basel II operational risk framework. (Martin, 2009) highlights the importance of operational risk management to a company and states that the industry needs to learn from its previous mistakes and take operational risk management more seriously. This view is further compounded by (Huebner, 2010) and supported by (Suresh, Kumar &Gowda, 2009), who state that it is imperative to adopt the advanced Basel II methodology for credit risk.

According to (Golub& Crum, 2010), the credit crisis has shown the vulnerabilities in the assumptions underlying the basis for credit risk management techniques, asserting that market participants should not be fooled into believing that the problems associated with the current financial crisis are a one-time event. (Kloman, 2008) and (Stulz, 2009) also highlight potential discrepancies in current risk management practices. (Lang &Jagtiani, 2010) uphold that modern financial risk management systems were designed to avoid the events that led to the financial crisis. (Agbonkpolor, 2010) recommends a reappraisal of the existing framework for bank regulation. In an article by (Trends-Magazine, 2009), it is forecast that the financial crisis will motivate both companies and academics to develop and adopt realistic risk management tools.

(Stulz, 2008) is of the opinion that extremely large losses do not necessarily imply that risk management has failed. The paper goes on to show that some corporate risk-taking decisions resulting in losses were fundamentally reasonable at the time they were made. (Jorion, 2009) is also of this opinion, highlighting serious deficiencies in risk models as an underlying cause, and concluding that risk management systems need to be improved “and place a greater emphasis on stress tests and scenario analysis”. In addition, (Koenig, 2008) states that the credit management system is dominated by “human decisions, interactions and perceptions”, and (Flouris&Yilmaz, 2010) highlight that the human factor is still relevant in most functions of a business however intense or moderate the technologies are being used. (Roszkowski& Davey, 2010) distinguish between ‘risk perception’ and ‘risk tolerance’ and find that although the risk tolerance of the public is still relatively similar, the public’s ‘risk perception’ has changed dramatically since the economic crisis of 2008 with regards to investing. (Pojasek, 2008) adds that risk management needs to be an on-going review to ensure that the current risk management plan remains relevant. The success of such systems depends on a positive risk culture embedded within the organisation.

(Hassan, 2009) explains that a major challenge for Islamic banking and financial institutions is to “analyze risk characteristics of Islamic banking products and to understand how to treat the products under ‘Basel II’ accord”. (Shafii & Salleh, 2010) argue the need for a clear external audit, which will improve the accountability and transparency for decision makers to manage risk. Islamic banks are slowly but surely handling risk in a much better way as they move towards adopting Basel II.

Methodology

A survey questionnaire was developed following the methodology of (Al-Tamimi and Al-Mazrooei, 2007), and (Abul Hassan, 2009) to suit the objective of the study. To access the scales content validity related to the questionnaire survey, six experts (five practitioners from five Islamic banks in Malaysia and one academician) were involved in the pilot testing, as suggested by (Devellis, 1991). The data was then analysed using SPSS. Descriptive analytics were used to determine the view of the degree of risk management practices. Accordingly, changes were made to the first draft in terms of eliminating, adding to or rewording some of the questions included in that draft. The revised questionnaire was distributed during the months of July-September 2011. Questionnaires were distributed and returned by post, through email or by walk-in collection. The method of distribution varied, based on the banks’ preference.

The 7-point Likert-scale questionnaire that was developed can be segregated into four main parts. The first part of the questionnaire covers the respondent’s profile while the second part covers the company’s profile. The third section of the questionnaire focuses on the risk management process and risk management practices; namely, risk management practices, understanding risk management, risk identification, risk assessment and analysis, and risk monitoring, with a total of 34 closed-ended questions. The 7-point Likert-scale includes “strongly disagree”, “disagree”, “disagree somewhat”, “undecided”, “agree somewhat”, “agree” and “strongly agree”.

The sample in our study consists of Islamic banks listed under Bank Negara Malaysia, and Islamic banks under the State Bank of Pakistan. The target population of this survey includes departments that deal with risk management in Islamic banks. As of 30 June 2011, there were 17 Islamic banks in Malaysia, while in Pakistan there were 18. Fifteen questionnaires were distributed to each of the banks totalling 525; 255 for Malaysia and 270 for Pakistan. The usable data for Malaysia is 119 questionnaires and for Pakistan 165, which gives a total sample of 284.

Based on the stated objectives of the study, the following hypotheses are formulated:

- H1. There is a significant difference between Islamic banks in Malaysia and Pakistan in risk management practices
- H2. There is a significant difference between Islamic banks in Malaysia and Pakistan in understanding risk management
- H3. There is a significant difference between Islamic banks in Malaysia and Pakistan in risk identification
- H4. There is a significant difference between Islamic banks in Malaysia and Pakistan in risk assessment and analysis
- H5. There is a significant difference between Islamic banks in Malaysia and Pakistan in risk monitoring
- H6. There is a significant positive relationship between risk management practices and understanding risk management, risk identification, risk assessment and analysis, and risk monitoring

Reliability of the measure

Table 1: Risk Management Aspects and their Internal Consistency

No.	Risk management aspect	Cronbach's α		
		Malaysia (M)	Pakistan (P)	Overall (Both)
1	Risk Management Practices (RMP)	0.872	0.866	0.863
2	Understanding Risk Management (URM)	0.763	0.782	0.736
3	Risk Identification (RI)	0.789	0.837	0.726
4	Risk Assessment and Analysis (RAA)	0.840	0.868	0.848
5	Risk Monitoring (RM)	0.820	0.711	0.781

The reliability of the measures used in the questionnaires was assessed by using Cronbach's α , which allows us to measure the reliability of different variables. In the estimation, a coefficient greater than or equal to 0.7 is considered acceptable and a

good indication of reliability. As shown in Table 1, Cronbach's α for individual aspects - risk management practices (RMP), understanding risk management (URM), risk identification (RI), risk assessment and analysis (RAA) and risk monitoring (RM) - for both countries are greater than 0.7, indicating that all five risk management aspects are reliable.

Empirical Findings

The current section discusses each aspect of risk management practices. An independent-sample t-test was conducted to compare the level of the risk management process and practice for Malaysia and Pakistan.

Risk Management Practice

For risk management practice, Table 2 indicates that there is no significant difference in the risk management (RM) level of Malaysia (mean = 5.83, SD = 0.65) and Pakistan (mean=5.77, SD = 0.58) because the significance level is 0.5, which is above the required cut off of 0.05. This means that there is no statistically significant difference in the degree of risk management practices between banks in Malaysia and Pakistan. Thus, hypothesis 1, which indicates a significant difference between Islamic banks in Malaysia and Pakistan in risk management practices, is rejected. Islamic banks in both countries are equally efficient in their risk management practices.

The survey questionnaire includes ten questions about risk management practices of Islamic banks. As shown in Table 2, the mean response for Islamic Banks in Malaysia is 5.83 (out of a total score of 7), which indicates that these banks are efficient in their risk management practices. Question number one, "Executive management of your IB regularly reviews the bank's performance in managing its business risk", received the highest response with a mean of 6.02, which supports the notion of good efficiency of Islamic banks in Malaysia. With a mean of 5.53, question five, "Your bank emphasizes the recruitment of highly qualified people having Islamic knowledge in risk management", indicates that the banks require staff to be knowledgeable in risk management. Question number six, which states, "One of the objectives of your IB is effective risk management", received an average response of 6.00, further acknowledging Islamic banks efficiency in risk management practices in Malaysia.

Table 2 Level of Risk Management Practices

Risk management practices	Malaysi Mean	Pakistan Mean	Mean of Both	T-Test Sig-Level
1) The executive management of your IB regularly reviews the bank's performance in managing its business risk.	6.02	6.05	6.04	
2) Your IB is highly effective in continuous review/feedback on risk management strategies and performance.	5.77	5.63	5.69	
3) Your bank's risk management procedures and processes are documented and provide guidance to staff about managing risks	5.97	6.02	6.0	
4) Your bank's policy encourages training programmes in the risk management and Islamic ethics areas.	5.84	5.84	5.84	
5) Your bank emphasizes the recruitment of highly qualified people having Islamic knowledge in risk management.	5.53	5.56	5.55	
6) One of the objectives of your IB is effective risk management.	6.00	5.24	5.56	
7) Your IB finds it too risky to invest funds in one specific sector of the economy.	5.63	5.39	5.49	
8) The bank is successfully implementing the IFSB and Central Bank guidelines/principles in regard to risk management	5.76	6.19	6.01	
9) The application of the Basel II Accord will improve the efficiency and RMPs in the Islamic banking, in general, and, particularly, in your bank.	5.98	6.16	6.09	
10) "I consider the level of RMPs of my IB to be excellent."	5.76	5.61	5.67	
Total Mean	5.83	5.77	5.80	0.5

Similar to the Malaysian response, the Islamic banks in Pakistan scored 5.77, also indicating relative efficiency in risk management practice. Question eight, "The bank is successfully implementing the IFSB and Central Bank guidelines/principles in regard to risk management", was scored at 6.19, which not only asserts efficiency in risk management practice, but also a move to align the banks' procedures to the 'best practice'. However, unlike their Malaysian counterparts, question six provided the lowest mean of 5.24. However, question nine, which states, "Application of Basel II Accord will improve the efficiency and RMPs in the Islamic banking, in general, and, particularly, in your bank", received a good response of 6.16, further promoting efficiency in Pakistani banks and supporting the evidence for moves to industry best

practice.

Understanding risk management

In response to the seven questions, Table 3 highlights that Malaysian banks provided a positive response with an average of 6.09, indicating that Islamic banks in Malaysia understand risk management. Bank staff gave the highest response to question four, "Application of the most sophisticated techniques in risk management is vital", with a mean of 6.36, and a least positive response to question six, "It is significant for your Islamic bank to emphasize continuous review and evaluation of the techniques used in risk management", with a mean of 5.92. Thus, it is safe to say that Malaysian Islamic Banks have a good overall understanding of risk management.

In Pakistan, the Islamic bank staff responded with an overall average of 5.88. The highest response, 6.41, was for question three, which states, "Risk Management is important for the success and performance of the bank", showing that staff in Pakistan consider risk management as core to the success of the banks performance. Question two, "Risk management responsibility is clearly set out and understood throughout the bank", provided a response of 5.42, which indicates that the staff consider risk

Table 3: Level of Understanding Risk Management

Understanding risk management	Malaysia Mean	Pakistan Mean	Mean of Both	T-Test Sig-Level
1) There is a common understanding of risk management across Islamic bank.	6.09	5.55	5.78	
2) Risk management responsibility is clearly set out and understood throughout the bank.	6.08	5.42	5.72	
3) Risk Management is important for the success and performance of the bank.	6.08	6.41	6.27	
4) Application of the most sophisticated techniques in risk management is vital.	6.36	5.84	6.06	
5) The objective of Islamic banks is to expand the applications of the advanced risk management technique.	5.91	5.78	5.83	
6) It is significant for your Islamic bank to emphasize continuous review and evaluation of the techniques used in risk management	5.92	6.13	6.03	
7) Applications of risk management techniques reduce the costs or expected losses.	6.18	6.05	6.13	
Total Mean	6.09	5.88	5.97	0.00

management as imperative and it is seen as each individual's job.

The mean of the overall sample of banks is 5.97, demonstrating a good understanding of risk management in both countries, which gives an indication about the ability of the Islamic banks to effectively and efficiently manage risks in the future. The t-test result shows that there is a statistically significant difference between Islamic banks in Pakistan and Islamic banks in Malaysia with regards to how well bank staff understand risks, thus, accepting hypothesis 2. The result indicates that bank staff in Malaysia perceive that they have a better understanding of risk management relative to bank staff in Pakistan.

Risk Identification

Risk identification is one of the crucial steps in risk management practice. Without identifying a risk, the bank is unable to mitigate against it. (Al-Tamimi& Al Mazrooei, 2007) state that the more bank staff understand risk, the more easily they will be able to identify it. The survey contained five questions relating to the identification of risk.

As shown in Table 4, the average response from Malaysia was 5.64. Question 1, "The Islamic bank (IB) carries out a comprehensive and systematic identification of its risk relating to each of its declared aims and objectives", provided the highest response with 6.13. Question 2, the Islamic Bank finds it is (not) difficult to prioritize its main risk, provided the only response below 5, with a mean of 4.97, which shows that the banks face relative difficulty in prioritizing their risk. Overall, the findings show that Islamic banks in Malaysia are aware of the risks the banks are exposed to, however, consistent with (Al-Tamimi& Al-Mazrooei, 2007), banks need to know how to prioritise their main risks efficiently.

Pakistani banks provided a significantly lower response with a mean of 5.43 for the five questions, indicating a good awareness of risk identification in Pakistani Islamic banks. The score 5.73 was the highest response for the question, "Your IB is aware of the strengths and weaknesses of the risk management systems of the other banks". With question five providing a response of 4.57, it is clear that banks in Pakistan have to improve their procedures for identifying investment opportunities.

Table 4: Level of Risk Identification

Risk Identification	Malaysia Mean	Pakistan Mean	Mean of Both	T- Test Sig-Level
1) The Islamic bank (IB) carries out a comprehensive and systematic identification of its risk relating to each of its declared aims and objectives.	6.13	5.72	5.89	
2) The IB finds it difficult to prioritize its main risk.	4.97	5.47	5.26	
3) Changes in risk are recognized and identified with the IB's rules and responsibilities	5.87	5.67	5.75	
4) Your IB is aware of the strengths and weaknesses of the risk management systems of the other banks.	5.47	5.73	5.62	
5) Your IB has developed and applied procedures for the systematic identification of investment opportunities	5.76	4.57	5.07	
Total Mean	5.64	5.43	5.52	0.01

The mean of both countries responses is 5.52, with a highest mean of 5.89 and a lowest mean of 5.07. A lower response to the mean in one country does not provide the same pattern in the other country. This shows the need to develop a best practice in risk management for Islamic banks. The t-test shows that there is a statistically significant difference between bank staff in Malaysia and Pakistan in respect of their abilities in risk identification, thus hypothesis 3 is accepted.

Risk assessment and Analysis

Table 5: Level of Risk Assessment and Analysis

Risk assessment and analysis	Malaysia Mean	Pakistan Mean	Mean of Both	T-Test Sig-Level
1) Your Islamic bank (IB) assesses the likelihood of occurring risk.	6.12	6.17	6.15	
2) Your bank assesses risks by using quantitative analysis methods and/or qualitative analysis methods (e.g., high, moderate, and low).	5.89	5.85	5.87	
3) Your bank analyses and evaluates the opportunities that it has to achieve objectives.	5.89	5.85	5.89	
4) Your bank's response to analysis risk includes assessment of the costs and benefits of addressing risk.	5.91	5.79	5.84	
5) Your bank's response to analyse risk includes prioritizing of risk and selecting those that need active management.	5.87	5.79	5.83	
6) Your bank's response to analyse risk includes prioritizing risk treatments where there are resource constraints on risk treatment implementation.	5.96	5.72	5.82	
7) Your Islamic Bank has applied a shariah compliance risk assessment and analysis	5.87	5.81	5.84	
Total Mean	5.93	5.85	5.89	0.27

The questionnaire included seven questions relating to risk assessment and analysis. As depicted in Table 5, Malaysian Islamic banks scored a mean of 5.93, with the highest response of 6.12 and the lowest response of 5.87. Similarly, Pakistani Islamic banks scored a mean of 5.85, with the highest response of 6.17 and the lowest response of 5.72. These results indicate that the banks are efficiently assessing and analysing risk. In addition, given the close proximity of all the responses, it is fair to say that the Islamic banks in Malaysia do equivalently well in respect to the questions of risk

assessment and analysis. This is supported by the results from the t-test showing no significant difference between the two countries. Thus, hypothesis 4, which indicates a significant difference between Islamic banks in Malaysia and Pakistan in risk assessment and analysis, is rejected.

Risk Monitoring

Risk monitoring in itself is a component of a successful risk management process. Effective risk monitoring can help banks to discover mistakes early and deal with them. This is supported by (Abu Hassan, 2009), who further states that risk monitoring can be used to make sure that risk management practices are in line with the desired practices.

There are five questions relating to risk monitoring. In Malaysia, Table 6 shows that the mean response was 6.02, with the highest response of 6.17 and the lowest response of 5.92. These positive scores indicate that Islamic banks in Malaysia are efficient in their risk monitoring procedures. Furthermore, given that the mean responses to all five questions delivered no big difference, the banks are consistent in the monitoring aspects related to the questions.

Table 6: Level of Risk Monitoring

Risk Monitoring	Malaysia Mean	Pakistan Mean	Mean of Both	T-Test Sig-Level
1)Monitoring the effectiveness of risk management is an integral part of routine management reporting.	6.17	6.41	6.31	
2)The level of control by the Islamic Bank is appropriate for the risk that it faces.	5.92	5.84	5.87	
3)In your bank, reporting and communication processes support the effective management of risks.	5.92	5.08	5.43	
4) The Islamic Bank's response to risk includes an evaluation of the effectiveness of the existing controls and risk management responses.	5.98	6.01	6.02	
5) The Islamic Bank's response to risk includes action plans in implementing decisions about identified risk.	6.09	6.32	6.23	
Total Mean	6.02	5.93	5.97	0.15

In Pakistan, the mean response was 5.93, also indicating that they are efficient in risk monitoring. Particularly, for question 1, “Monitoring the effectiveness of risk management is an integral part of routine management reporting”, had an average response of 6.41, showing that staff in Pakistani Islamic banks view risk monitoring as a core component of risk reporting. However, question three, “In your bank, reporting and communication processes support the effective management of risks”, provided a lower response of 5.08, which is something the Islamic banks in Pakistan should attempt to improve. Further, the results from the t-test suggest that there is no significant difference between the abilities of bank staff in Pakistan and bank staff in Malaysia in risk monitoring, thus rejecting hypothesis 5.

Regression Results

Table 7 highlights that the correlation coefficients of the independent variables are less than 0.8. The variance inflation factor (VIF) statistics for the independent and control variables are calculated to further gauge the multicollinearity concern and the VIF for the independent variables. These results suggest that multicollinearity does not appear to be an issue (Hsu, 2007).

Table 7 Spearman Correlation Matrix between Independent Variables

	RMP	URM	RI	RAA	RM
RMP	1.000				
URM	0.154	1.000			
RI	0.316**	0.365**	1.000		
RAA	0.561**	0.314**	0.512**	1.000	
RM	0.758*	0.652*	0.678	2.145	1.000

Notes: ** Correlation is significant at the 0.01 level (2-tailed); * correlation is significant at the 0.05 level (2-tailed)

Table 8 Regression Analysis Results

VARIABLES	MALAYSIA		PAKISTAN		OVERALL	
	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
CONSTANT	3.33	0.050*	3.29	0.034**	3.65	0.011**
URM	0.713	0.113	0.708	0.122	0.670	0.150
RI	0.317	0.002**	0.247	0.010**	0.342	0.031**
RAA	0.421	0.031**	0.352	0.051*	0.671	0.045**
RM	0.446	0.201	0.448	0.315	0.446	0.543
Adjusted R²	0.357		0.356		0.357	
F-statistic	3.163**		3.139**		3.165**	
Prob. (F-statistic)	0.000		0.000		0.000	
N	119		165		284	

Asterisks (**) denote statistically significant at the 1% level. The coefficient values are consistently White heteroscedascity. Adjusted R² is the adjusted regression coefficient determinant. F-statistics indicate how much variation is explained by the regression equation. The regression equations are below:

Model 1:

$$\text{Risk Management Practices}_{it} = \beta_0 (\text{Constant}) + \beta_1 \text{URM}_{it} + \beta_2 \text{RI}_{it} + \beta_3 \text{RAA}_{it} + \beta_4 \text{RM}_{it} + \varepsilon_{it}$$

As shown in Table 8, the estimated coefficient of two independent variables, risk identification (RI) and risk assessment and analysis (RAA) are positively significant with risk management practices, in the case of Malaysia, Pakistan and overall results, thus confirming hypothesis H6. However, the estimated coefficients of understanding risk management (URM) and risk monitoring (RM) have an insignificant effect on risk management practices (RMP) for both countries and overall result. Similar to the findings of (Hassan, 2009), who found a significant relationship between RI and RAA with RMP among Islamic banks in Brunei Darussalam, the current study also indicates that the Islamic banks in Malaysia and Pakistan need to give more attention to RI and RAA.

Conclusion

Risk management is a cornerstone of prudent banking practice as risks may threaten a bank's survival and success. In summary the results found that Islamic banks in Malaysia and Pakistan are reasonably efficient in risk management practices, understanding risk management, risk identification, risk assessing and analysing, and risk monitoring. Similarly, (Hassan, 2009) found that Islamic banks in Brunei Darussalam are reasonably efficient in risk assessing and analysis, risk management and risk identification. Further analysis indicates that there is a significant difference between the Islamic banks in Malaysia and Pakistan in their understanding of risk management and risk identification, whereas there is no significant difference between the two countries in the aspects of risk management practices, risk assessing and analysing and risk monitoring. In addition, Islamic banks in Malaysia and Pakistan need to give more attention to risk identification and risk assessment and analysis, as they are the most influencing variables in risk management practices (RMP).

However, this paper did not address in detail other aspects of risk management. For example credit or liquidity risk management can be addressed in future studies as credit risk represents the most challenging type of risk while liquidity position affects the continuity of commercial banks and a weak liquidity position might lead to the liquidation of commercial bank (Ismal, 2010) s. Finally, the study could usefully be conducted in another country, using the same methodology. Different and interesting results might be expected, because risk management practices are mainly affected by specific factors, such as economic conditions, competition and regulations.

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