

## THE IMPACT OF SHARIAH GOVERNANCE AND CORPORATE GOVERNANCE ON THE RISK MANAGEMENT PRACTICES: EVIDENCE FROM LOCAL AND FOREIGN ISLAMIC BANKS IN MALAYSIA

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### ABSTRACT

The purpose of this study is to examine the impact of Shariah governance and corporate governance (CG) on the risk management practices (RMPs) of local Islamic banks and foreign Islamic banks operating in Malaysia. The Shariah governance comprises the Shariah review (SR) and Shariah audit (SA) variables. The study also evaluates the level of RMPs, CG, SR, and SA between these two type of banks. With the aid of SPSS version 20, the items for RMPs, CG, SR, and SA were subjected to principal component analysis (PCA). From the PCA, one component or factor was extracted each for the CG, SR, and RMPs while another two factors were extracted for the SA. Primary data was collected using a self-administered survey questionnaire. The questionnaire covers four aspects ; CG, SR, SA, and RMPs. The data received from the 300 usable questionnaires were subjected to correlation and regression analyses as well as an independent t-test. The result of correlation analysis shows that all the four variables have large positive correlations with each other indicating a strong and significant relationship between them. From the regression analysis undertaken, CG, SR, and SA together explained 52.3 per cent of the RMPs and CG emerged as the most influential variable that impacts the RMPs. The independent t-test carried out shows that there were significant differences in the CG and SA between the local and foreign Islamic banks. However, there were no significant differences between the two types of the bank in relation to SR and RMPs. The study has contributed to the body of knowledge and is beneficial to academicians, industry players, regulators, and other stakeholders.

**Keywords :** Risk management practices, Shariah governance, corporate governance.

### INTRODUCTION

As risk management (RM) is crucial to the survival and success of Islamic financial institutions (IFIs), the importance of risk management practices (RMPs) is not to be questioned (Romzie & Abdul Rahim, 2015). Risk is one of the most important elements that needs to be managed, how small the risk may be (Nor Fahimah & Shamsiah, 2011). Islamic banks as financial intermediaries not only have to manage the common risks found in conventional banks, but also additional risks unique to Islamic banks.

The failure of risk management in banks will lead to financial losses, and continued losses will eventually cause the bank's failure (Khadijah, 2014) as shown by the Asian and Latin American financial crisis (Rashidah et al., 2013) and the more recent global financial crisis (GFC). Risk

management practices (RMPs) that are efficient is therefore critical to the long-term business growth and sustainability of a bank.

The recent GFC has shown the weaknesses in the corporate governance of financial institutions. Weak governance is one of the reasons that affect the efficiency of RMPs which in turn resulted in a series of corporate failure worldwide that caused the downfall of even the well-known corporations such as Enron, Pharmalat, Worldcom, and Tyco (Maliah et al., 2015). Thus, CG is a critical factor vis-à-vis the RMPs of financial institutions (FIs) and non-financial institutions (NFIs) worldwide.

The weakness in the RMPs of FIs and NFIs including Islamic banks has also been associated with the moral issues among the officers that give rise to agency problems. Due to the agency problems that exist in the Agency theory, the role of auditing and auditors, including Shariah auditors becomes critical. Nawal et al. (2013a) suggest that there is a need to have regular independent Shariah audits in IFIs including Islamic banks. Therefore, Shariah audit (SA) is another critical success factor for effective RMPs.

Apart from SA, Shariah review (SR) is also critical to efficient RMPs, especially in the IFIs. According to Bank Negara Malaysia (BNM), SR refers to the regular assessment on Shariah compliance in the activities and operations of the IFIs, not only by qualified Shariah officers but also by the business units who form the first line of defense (BNM, 2017, July 15). Shariah non-compliance has serious financial and non-financial implications on Islamic banks.

For instance, in Malaysia, Shariah non-compliance contravenes section 28(5) of Islamic Financial Services Act 2013 (IFSA 2013) and such contravention provides imprisonment for a term not exceeding eight years or fine not exceeding RM25 million, or both (Mohd Nazri, 2013a). The author adds that the non-financial implication is even more severe, which is the impediment of Allah SWT's blessing or barakah, that eventually jeopardizes a business reputation.

On the other hand, SA is a periodical assessment conducted from time to time by the auditors who form the third line of defense in providing an independent assessment and objective assurance designed to add value and improve the degree of compliance of the IFI's business operations (BNM, 2017, July 15). Thus, SR and SA are two closely related factors that are significant in ensuring efficient RMPs in Islamic banks.

Previous studies have also shown that risk and risk management (URRM), risk identification (RI), risk assessment and analysis (RAA), risk monitoring (RM), and credit risk analysis (CRA) influence risk management practices (Al-Tamimi & Al-Mazrooei, 2007; Hassan, 2009; Khalid & Amjad, 2012; Khattak et al., 2013; Rashidah et al., 2013; Rashidah et al., 2014). The difference in the RMPs between local and foreign Islamic banks have also been examined in some of these prior studies.

However, there have been no attempts to examine the influence of corporate governance (CG), Shariah review (SR), and Shariah audit (SA) on RMPs of Islamic banks, particularly in Malaysia. There is a lack of study that examines the difference between local and foreign Islamic banks operating in Malaysia in respect of RMPs, CG, SA, and SR. Therefore, this paper has two key objectives. Firstly, the present study examines the influence of CG, SR, and SA on the RMPs of Islamic banks in Malaysia. Secondly, the research objective is to compare the RMPs, CG, SR, and SA among the local and foreign Islamic banks operating in Malaysia.

## **LITERATURE REVIEW**

### **Risk Management Practices**

Managing risk is becoming a fundamental concern and is among the critical success factors for enterprises (Arena et al., 2010) including the financial institutions. Risk management is the cornerstone of prudent banking practice (Al-Tamimi & Al-Mazrooei, 2007) and the recent global

financial crisis (GFC) has jeopardised such prudence. The future of the financial industry will, to a very large extent depend on how risk management practices are being carried out (Khan & Ahmed, 2001).

The GFC reveals some of the flaws such as unregulated legal/regulatory environment, excessive profit motives at the organizational level, failure of risk assessment (Ahmed, 2009), lack of basic risk management (Fauziah et al., 2011) or poor level of risk management practices (Al-Ali & Naysary, 2014). According to Al-Ali & Naysary, findings from prior studies have highlighted the failure of risk management departments to effectively perform their duties.

Following the GFC in 2008, more empirical studies were undertaken particularly on the factors affecting risk management practices (RMPs) of conventional and Islamic banks (Al-Tamimi & Al-Mazrooei, 2007; Abu Hussain & Al-Ajmi, 2012; Khalid & Amjad, 2012; Khattak et al., 2013; Shafique et al., 2013; Al-Ali & Naysary, 2014; Soyemi et al., 2014).

Among the factors that influence RMPs comprise: (i) understand risk and risk management (URRM), (ii) risk identification, (RI), (iii) risk assessment and analysis (RAA), (iv) risk monitoring (RM), (v) credit risk analysis (CRA), and (vi) corporate governance (CG). However, there are no studies that attempt to examine the SR and the SA as possible antecedents of the RMPs in the context of Malaysia. The absence of such studies provide the first gap for the present study.

There are also various comparative studies reported in the literature about the RMPs of Islamic and conventional banks (Abu Hussain & Al-Ajmi, 2012; Shafique et al., 2013; Ali & Naysary, 2014). For instance, researchers in Pakistan made a comparison in the RMPs between three sets of banks: (i) public and private bank, (ii) local and foreign bank, and (iii) Islamic and conventional bank (Nazir et al., 2012).

In Malaysia, studies by Rashidah et al. (2013) and Rashidah et al. (2014) are among the few that have been conducted to compare the RMPs of local Islamic banks (LIBs) and foreign Islamic banks (FIBs) located in their respective countries. However, no research has examined the differences in the levels of RMPs, CG, SR, and SA between LIBs and FIBs operating in Malaysia. The absence of the research provides a second gap for the present study.

### **Corporate Governance**

Corporate governance (CG) is a set of processes, policies, and laws affecting the way an organization is directed, administered and controlled (Maliah et al., 2015). It has been recognized by the bankers as “the first line of defense” (Ard & Berg, 2010), and it plays an important role in the prudent operation of financial institutions and the stability of the financial sector.

The recent global financial crisis reveals the lapse or failure of CG (Kirkpatrick, 2009; Yeoh, 2010; Kumar & Singh, 2013). Weak CG has contributed to the bank failure and more broadly, to the financial crisis. According to Ard & Berg (2010), and Kumar & Singh (2013), prior studies have shown weaknesses in four broad areas; (i) board professionalism, (ii) remuneration and alignment of incentive structures, (iii) risk governance, and (iv) shareholder engagement.

These corporate failures have shaken the confidence and trust of stakeholders. These failures have brought about increased attention to the CG issues. In line with the global focus on CG, various regulating bodies such as Accounting and Auditing Organisations of Islamic Financial Institutions (AAOIFI), the Islamic Financial Services Board (IFSB), and BNM have issued various guidelines and standards for the purpose of addressing the governance issues of Islamic financial institutions (IFIs) including Islamic banks.

In Malaysia, the BNM has issued various guidelines about CG such the “Guidelines on Corporate Governance for Licensed Islamic Banks” (GP1-i) and Shariah Governance Framework (SGF). The enactment of the IFSA 2013 is another important development about the CG. SGF, for instance, is very critical in guiding the IFIs to be Shariah-compliant at all times. Failure to ensure

compliance with the Shariah principles will expose Islamic banks to Shariah non-compliance risk (Zurina et al., 2013). Shariah non-compliant transactions in Malaysia carries severe financial punishment under the IFSA 2013.

Saif Alnasser & Jorih (2012) opined that CG is very important in Islamic banks because it might help to draw the right image of the organisation. As the image is related to reputational risk, it can be concluded from the study that CG has an important influence on risk management practices. Their opinions are shared by Nawal et al. (2013a). According to the latter authors, the SGF will enhance the confidence of the investors and the stability of the Islamic capital market industry. Confidence will be linked to reputational risk. In another word, Shariah governance which is part of corporate governance influences the management of the reputational risk.

### **Shariah Governance**

There are limited comprehensive definitions of Shariah governance as the concept is still new (Nawal et al., 2013b). The literature failed to define the term (Zulkarnain et al., 2015). For instance, the AAOIFI, an international standard-setting organization, does not provide any definition of Shariah governance although the body has issued the standards on Shari'ah governance. Likewise, the SGF issued by the Bank Negara Malaysia does not specify the definition of Shariah governance. The framework merely states the objective of Shariah governance.

According to the SGF, its primary objective is, among others, to enhance the relevant key organs having the responsibility to execute the Shariah compliance aimed at the attainment of a Shariah-based operating environment (BNM, 2017, July 15). Under principle number 7 of the SGF, Islamic banks are required to have a robust Shariah compliance function, comprising review and audit functions, supported by a risk management control process and internal research capacity. According to Nawal et al. (2013b), Shariah review and audit is one of the vital elements of Shariah governance.

IFSB issued "Guiding Principles on Shariah Governance Systems for Institutions offering Islamic Financial Services" in December 2009. This standard also does not define corporate governance, but it states the term "Shariah Governance System." The system refers to the set of institutional and organizational arrangements through which an Islamic financial institution such as an Islamic bank ensures that there is an effective independent oversight of Shariah compliance in the bank. An internal Shariah compliance review and Shariah audit are to be carried out to verify that Shariah compliance has been satisfied.

Due to the importance of Shariah review (SR) and Shariah audit (SA) functions as stated in the various guidelines, it is timely to study their role in the risk management of Islamic banking. SR and SA are proposed as the variables that influence risk management practices (RMPs) of Islamic banks in Malaysia. The influence of these variables on the RMPs of Islamic banks has not been previously studied particularly in the context of Malaysia. The lack of the study provides a gap for the present study, and the results will be beneficial to the academicians, practitioners, regulators, and other stakeholders. The following section provides a discussion on the SR and SA.

### **Shariah Review and Shariah Audit**

According to the SGF, Shariah review (SR) refers to "regular assessment on Shariah compliance in the activities and operations of the Islamic financial institutions (IFIs) by qualified Shariah officers" (BNM, 2017, July 15). The objective of the review is to ensure that the activities and operations carried out by the IFIs do not contravene the Shariah.

On the other hand, Shariah audit (SA) refers to the "periodical assessment conducted from time to time, to provide an independent assessment and objective assurance designed to add value and improve the degree of compliance of the IFI's business operations..." (BNM, 2017, July 15).

The main objective of the audit is to ensure a sound and effective internal control system for Shariah compliance.

Although the function of the SA is mentioned in the SGF, the term 'Shariah audit' itself has no specific definition in any related Acts or regulations at the moment (Nawal et al., 2013a). Yazkhiruni & Nurmazilah (2012) provide a simple definition of SA which is an audit attestation for Shariah compliance. However, as the scope of SA is much larger than the traditional auditing, the conventional concept of attest and authority need to be transformed to reporting on various social and economic aspects of the business organization such as Islamic banks (Nawal et al., 2013a).

SR and SA functions will normally be concerned with ex-ante and ex-post aspects of Shariah compliance respectively as stated in the guiding principle number ten of the IFSB. The ex-ante aspects cover the issuance of relevant Shariah pronouncements and dissemination of the information (IFSB, 2005) while internal Shariah compliance review is under the ex-post aspect (Mohd Nazri, 2013b). The SR will focus more on the ex-ante aspects while the SA with the assistance from the Shariah unit will concentrate on the ex-post aspect.

SR and SA under the SGF are referred to by the AAOIFI as internal Shariah review and Shariah review respectively (Mohd Hairul Azrin et al., 2009). AAOIFI does not distinguish between SR and SA and treats both as Shariah review. Despite the AAOIFI's stand, the researcher chose to treat SR and SA as two separate variables in the present study as guided by the SGF of BNM.

In the present study, SR and SA are proposed as possible antecedents of RMPs for several reasons. Firstly, a recent study by PricewaterhouseCoopers (PwC) shows that there is a potential relationship or association between audit and risk management. The study, conducted by the PwC through a survey of 1,300 chief audit executives, senior management, and board members globally, indicates that internal audit needs to change in tandem with the need of the business unit in today's rapid economic growth (PwC, 2015).

The study reported that internal auditor could be a relevant and valuable contributor to business while fulfilling its charter. In this respect, the chief audit executives have identified risk focus as one of the four areas where internal audit can be a valuable contributor. For instance, internal auditor will be able to offer proactive views on business risks and provide recommendations on how to manage or mitigate the risks.

Therefore, the future trend is towards forging closer ties or collaboration between internal auditor and risk management. Sooner or later, similar trend may be seen in the case of Shariah audit. Thus, the present study intends to examine the relationship between Shariah review (SR) and Shariah audit (SA) and risk management practices (RMPs) of Islamic banks in Malaysia.

Secondly, SR and SA are included as independent variables in the present study due to the evolvement of the role of internal audit in maintaining its relevance in the near future. In relation to this, the 2006 global Common Body of Knowledge (CBOK) study is undertaken in late 2006 by the Institute of Internal Auditor (IIA) to examine how internal auditing is being practiced (Burnaby & Hass, 2009).

CBOK 2006 study invited the entire worldwide IIA's members to participate. The participation of members from 91 countries resulted in 9,366 usable respondents, making CBOK 2006 the most comprehensive study in the IIA's history. In the study, the respondents were asked to indicate what types of audit activities that they performed then. The four highest-rated areas are (i) fraud prevention (69 per cent of respondents), (ii) risk management (66.6 per cent), (iii) regulatory compliance (64 per cent), and (i) corporate governance (52.2 per cent).

The CBOK study also found that 79.5 per cent of the respondents predicted then that the greatest increase in the type of audits performed in the next three years would be for risk management. This study shows increased collaboration and cooperation between internal auditor and risk management in managing risk in financial institutions in the future.

In a study by Zurina et al. (2013), the authors examine the impact of Shariah audit function on the role of the Shariah committee. The authors conclude that Shariah audit has a direct impact on risk management of Islamic bank. The relationship between Shariah audit and risk management practices is also evident in another prior study by Zurina et al. (2010), suggesting that audit programs and Shariah compliance audit framework must be put in place to mitigate the Shariah non-compliance risk in the products and operations of Islamic banks.

The final reason for proposing SR and SA as the drivers of RMPs is because of the legal requirement in the IFSA 2013 which governs Islamic banking business in Malaysia. Under the act, all the Islamic banks have to comply with Islamic law or Shariah at all times. Failure to do so poses Shariah risk to the banks and carries serious financial and non-financial implications.

Given the potential financial loss, Shariah risk (or commonly referred to as Shariah non-compliance risk), therefore, has to be effectively managed probably through the collaboration between Shariah review (SR), Shariah audit (SA) and risk management disciplines. Therefore, the potential relationship between the three disciplines was explored in the present study.

## **METHODOLOGY**

### **Hypotheses**

Based on the two objectives stated in the introduction, three groups of hypotheses (H) were formulated and tested in the present study as presented below.

(a) The first group of hypotheses - four correlation hypotheses

- H<sub>1</sub>*: There are positive and significant relationship between Corporate governance (CG), Shariah review (SR), Shariah audit (SA) and risk management practices (RMPs)
- H<sub>1a</sub>*: There is a positive and significant relationship between CG and RMPs
- H<sub>1b</sub>*: There is a positive and significant relationship between SR and RMPs
- H<sub>1c</sub>*: There is a positive and significant relationship between SA and RMPs

(b) The second group of hypotheses - four regression hypotheses

- H<sub>2</sub>*: CG, SR, and SA have a positive impact on RMPs
- H<sub>2a</sub>*: CG has a positive impact on RMPs
- H<sub>2b</sub>*: SR has a positive impact on RMPs
- H<sub>2c</sub>*: SA has a positive impact on RMPs

(c) The third group of hypotheses - four comparison hypotheses

- H<sub>3</sub>*: There is a significant difference in the level of RMPs between local Islamic banks (LIBs) and foreign Islamic banks (FIBs) operating in Malaysia
- H<sub>4</sub>*: There is a significant difference in the level of CG between LIBs and FIBs operating in Malaysia
- H<sub>5</sub>*: There is a significant difference in the level of SR between LIBs and FIBs operating in Malaysia
- H<sub>6</sub>*: There is a significant difference in the level of SA between LIBs and FIBs operating in Malaysia

### **Instrument**

In testing the hypotheses, a survey questionnaire was developed using the methods as suggested by Churchill & Iacobucci (2002) and De Vellis (1991). The items/questions for RMPs variable were

adopted from past studies by Al-Tamimi & Al-Mazrooei (2007), Hassan (2009), and Rashidah et al. (2014). Where necessary, the items/questions were modified, deleted, or new ones were added following the validation exercises that were carried out by eight academicians from the local institutions of higher learning and five practitioners from the Islamic banking industry in the Klang Valley.

For the CG, SR, and SA variables which were newly introduced into the present study, no suitable items /questions were available from past studies. Therefore, new items/questions were developed based on the SGF for Islamic Financial Institutions, the “Risk Governance,” and the “Guidelines on Corporate Governance for Licensed Islamic Banks,” all of which are issued by the Bank Negara Malaysia. Another international guideline such the “Guiding Principles of Risk Management for Institutions (other than Insurance Institutions) Offering only Islamic Financial Service” was also referred to. The items/questions for the CG, SR, and SA were also subjected to the validation exercise as mentioned in the preceding paragraph.

The questionnaire was then revised taking into considerations the comments and suggestions of the academicians and the industry practitioners. The revised questionnaire is divided into three sections. Section I covers the demographic information of the respondents. Section II relates to the CG, SR, and SA factors and the final section relates to the RMPs variable. There are eight questions in Section I and 31 closed-ended questions in Section II and eleven closed-ended questions in Section III. The instrument was subjected to pilot testing, and the results revealed that the instrument was reliable and valid and could be employed in the final large-scale study.

### **Sampling and Data Collection**

The pilot-tested questionnaires were then distributed to the target population who are the staff from the head offices of 16 Islamic commercial banks comprising ten local Islamic banks (LIBs) and six foreign Islamic banks (FIBs) in Kuala Lumpur, Malaysia. Through purposive sampling method, the questionnaires were physically handed over to the representatives in the head office of each of the 16 Islamic banks in Kuala Lumpur. The representatives were kindly requested to distribute the questionnaires to the staff (respondents) who met the criteria of the present study. The completed questionnaires were later collected by the researcher personally from these representatives.

Out of the 450 questionnaires distributed, 350 were received, and 38 were immediately excluded due to substantial missing data. The remaining 312 questionnaires represent an effective response rate of 70 per cent which is better than the average of most of the previous studies. During data processing, a further 12 questionnaires were excluded due to the presence of multivariate outliers leaving a balance of 300 questionnaires (local bank = 200 questionnaires; foreign bank = 100 questionnaires).

### **Data Processing**

Data processing involves screening or cleaning the data with the aim to meet the multivariate assumptions (Hair et al., 2006). Data cleaning in this study involved checking the accuracy of the data input, dealing with missing values, and detecting and treating the outliers. Data screening or cleaning is a very important step to be performed before further analysis such as regression is carried out (Tabachnick & Fidell, 2001).

In the present study, the data set was checked, and several minor mistakes that were found were rectified. As for missing values, the issue was addressed by checking for errors in the questionnaires at the point of time they were collected. Any unanswered questions were referred back to the respondents. Based on the result of missing values analysis generated by the Statistical Package for the Social Sciences (SPSS) version 20, no missing data was found. Using the SPSS, 12

cases were treated with outlier's issue and were deleted from the dataset leaving behind 300 cases for further analysis.

**Tests on Multivariate Assumptions**

After the data have been processed, tests to meet four assumptions of multivariate analyses were conducted: normality, linearity, homoscedasticity, and multicollinearity (Hair et al., 2006). These tests were carried out before performing the final analysis such as regression. The result of the normality test (see **Table 1**) shows that the skewness and kurtosis values fall within -2.00 and +2.00, indicating that the distribution of data is fairly normal (George & Mallery, 2010). Therefore, the basic assumption of parametric testing is fulfilled. Visual inspection of the histogram also reveals that the data of the present study is normally distributed.

In the case of linearity test, examination of the scatterplots (Hair et al., 2006) indicates that the (second) assumption of linearity is met. Therefore, linearity could be assumed. Other scatterplots also revealed that the (third) assumption of homoscedasticity is not violated. Finally, multicollinearity test revealed that all the four variables have a tolerance value of more than 0.1 and VIF value of less than 10 (see **Table 2**) indicating that there is no issue of multicollinearity. Also, the correlation coefficient ( $r$ ) among variables were less than 0.9, indicating that the variables were free from multicollinearity issue. Thus, the various tests undertaken show that all the four multivariate assumptions were met and the researcher proceeded with the main data analysis.

**Table 1:** Skewness and Kurtosis for CG, SR, SA, and RMPs

	Skewness		Kurtosis	
	<i>Statistic</i>	<i>SE</i>	<i>Statistic</i>	<i>SE</i>
Corporate governance (CG)	-.056	.141	-.307	.281
Shariah review (SR)	-.004	.141	-.410	.281
Shariah audit (SA)	-.162	.141	.085	.281
Risk management practices (RMPs)	-.242	.141	1.158	.281

**Table 2:** Test of multicollinearity

	Tolerance	VIF
Corporate governance (CG)	.350	2.854
Shariah review (SR)	.405	2.471
Shariah audit (SA)	.448	2.234
Risk Management Practices (RMP)	.431	2.321

**Reliability of the Measure**

During the data analysis, the four variables under study were found to have Cronbach's values ranging from .874 to .912 (see **Table 3**) indicating that the reliability of the variables is of a high standard. These values are in line with the benchmark that an instrument with a coefficient of 0.70 and above shows high-reliability standard (Nunnally, 1978). These Cronbach's alpha values are comparable to the ones achieved during the pilot test (see **Table 3**) indicating that the instrument is consistently reliable. In the case of RMPs, the Cronbach's alpha value of 0.874 obtained in the present study is higher than most of those from the previous research (see **Table 4**).



**Table 3:** Cronbach's alpha values of the main and pilot studies

Construct		No. of Items	Cronbach's Alpha (Main study)	Cronbach's Alpha (Pilot study)
Corporate governance	CG	11	.912	.933
Shariah review	SR	8	.911	.859
Shariah audit	SA	12	.903	.913
Risk management practices	RMPs	11	.874	.886

**Table 4:** Comparison of Cronbach's alpha values for RMPs

		Cronbach's alpha
Al-Tamimi & Al-Mazrooei	(2007)	.677
Hassan	(2009)	.678
Khalid & Amjad	(2012)	.822
Hussain & Al-Ajmi	(2012)	.872
Rashidah et al	(2013)	.863
Rashidah et al	(2014)	.887
The present study	(2017)	.874

### **Validity of the Measure**

In addition to reliability, the validity of the survey instrument was also assessed in order to ascertain the content validity of the instrument. Items for the questionnaire were selected after (i) an extensive literature review, (ii) obtaining opinions of the experts, and, (iii) a pilot test conducted among selected respondents. The experts comprising eight academicians from local universities and five practitioners from Islamic banks were appointed to validate the items and endorse the content validity of the instrument. Meanwhile, a pilot test was successfully conducted involving 40 respondents from the Islamic commercial banks in the Klang Valley. Amendments were made to the questionnaire following the validation process and the pilot study.

After establishing the instrument's content validity, construct validity was then assessed using the factor analysis (FA) on 300 usable samples. Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) were employed as suggested by Tabachnick & Fidell (2001) to help assess the factorability of the data. With the aid of the SPSS version 20, factor analysis was carried out using principal component analysis (PCA) as suggested by Stevens (1996). Varimax rotation was employed to rotate the factors (Pallant, 2005). From the PCA, one component or factor was extracted each for the CG, SR, and RMPs while another two factors were extracted for the SA. All the 42 items/questions were also retained after the PCA.

## **RESULTS**

### **Descriptive Statistics and Hypotheses Testing**

Descriptive statistics are used to describe the basic features of the data. They provide a simple summary of the sample and the measures. Descriptive statistics are useful because they provide information, such as the mean and standard deviation of the variables. According to Hair et al. (2010), mean values can be categorised into three levels: low = 1.00 to 2.99; moderate = 3.00 to 4.99

and high = 5.00 to 7.00. The result of the descriptive statistics for each of the four variables is presented and discussed below.

**Risk Management Practices**

The scale for risk management practices (RMPs) is measured by 11 items/questions on a seven-point Likert scale ranging from ‘1’ (strongly disagree) to ‘7’ (strongly agree). A descriptive analysis for the RMPs is presented in **Table 5**.

**Table 5:** The mean and T-test significant level for risk management practices

	Risk Management Practices	Mean of Islamic Bank			T-test Sig-Level
		Local	Foreign	Both	
1	The executive management of your Islamic Bank regularly reviews the bank's performance in managing its business risk	5.90	5.82	5.87	
2	Your Islamic Bank is highly effective in continuous review/ feedback on risk management strategies and performance	5.79	5.74	5.77	
3	Your Islamic Bank's risk management procedures and processes are documented and provide guidance to staff about managing risks	5.94	5.81	5.90	
4	Your Islamic Bank's policy encourages training programmes in the areas of risk management and Islamic ethics	5.90	5.76	5.85	
5	Your Islamic Bank emphasizes the recruitment of qualified people having Shariah knowledge in risk management	5.78	5.68	5.74	
6	One of the objectives of your Islamic Bank is effective risk management	5.95	5.87	5.92	
7	Your Islamic Bank is successfully implementing the Islamic Financial Services Board (IFSB) and BNM guidelines/ principles in regard to risk management	6.00	5.86	5.95	
8	The application of the Basel III Accord will improve the efficiency and risk management practices in Islamic banking in general	5.79	5.55	5.71	0.023
9	I consider the level of risk management practices of my Islamic Bank to be excellent	5.80	5.63	5.74	
10	I consider my Islamic Bank has risk management practices that are Shariah-compliant	5.96	5.85	5.92	
11	Your Islamic bank always manage risks within the tolerance limits as per the bank’s risk appetite guideline	5.88	5.84	5.86	
<b>Total Mean</b>		5.88	5.76	5.84	0.086

The table shows that the mean response of both local and foreign Islamic banks in Malaysia was 5.84 (out of a total score of 7) which is considered high (Hair et al., 2010) indicating that these banks

are efficient in their RMPs. The highest overall mean for RMPs was 5.95 for question seven indicating that the Islamic banks in Malaysia have been successfully implementing the RMPs in line with the guidelines/principles of IFSB and BNM.

Likewise, the local Islamic banks (LIBs) also had the highest mean (6.00) for question seven while the foreign Islamic banks (FIBs) almost had the highest mean (5.86) for the same question. The results imply that both LIBs and FIBs are successfully implementing the IFSB and BNM guidelines/principles regarding risk management.

**Table 5** also indicates that there is no significant difference in the RMPs of LIBs (mean = 5.88) and that of FIBs (mean=5.76) because the significance level was 0.086, which is above the required cut off of 0.05. The result shows that there is no statistically significant difference in the RMPs between the LIBs and FIBs in Malaysia. Thus, hypothesis ( $H_3$ ) which indicates a significant difference in the RMPs between the LIBs and FIBs in Malaysia is rejected. Both types of banks are equally efficient in their RMPs. The result is consistent with the findings in the study by Rashidah et al. (2013), where there is no significant difference in the level of RMPs between the Islamic banks in Malaysia and that of Jordan.

Despite the non-significant overall result for the RMPs, there is a statistically significant result for question eight, “The application of the Basel III Accord will improve the efficiency and risk management practices in Islamic banking in general.” The question shows a statistically significant result as the significant value (0.023) was below the 0.05 benchmark. For question eight, the LIBs had significantly higher mean (5.79) than the FIBs (mean = 5.55) implying that the respondents of LIBs have a significantly better perception than the FIBs towards the application of the Basel III Accord in improving the efficiency and risk management practices in Islamic banking in general.

### Corporate Governance

The scale for corporate governance (CG) is measured by 11 items/questions on a seven-point Likert scale ranging from ‘1’ (strongly disagree) to ‘7’ (strongly agree). A descriptive analysis for the CG is presented in **Table 6**. The table shows that the mean response of both local Islamic banks (LIBs) and foreign Islamic banks (FIBs) in Malaysia was 5.98 (out of a total score of 7) which is considered high (Hair et al., 2010) indicating that these banks have good corporate governance. The highest mean of 6.25 for question 10 indicates that both the LIBs and FIBs put their highest priority on observing the relevant guidelines on a comprehensive disclosure requirement by Bank Negara Malaysia. The highest mean for question 10 is attributed to the fact that both LIBs and FIBs had the highest means of 6.28 and 6.21 respectively.

**Table 6:** The mean and T-test significant level of corporate governance

	Corporate Governance	Mean of Islamic Bank			T-test Sig-Level
		Local	Foreign	Both	
1	The board of directors (board) of Islamic bank establish clear lines of responsibility and accountability, which are communicated throughout the organization.	6.05	5.94	6.01	
2	The board provides active oversight on the overall operations and performance of the Islamic bank	6.01	5.87	5.96	
3	The management of Islamic bank is accountable in running the bank’s business operations	6.16	6.07	6.13	
4	There is a clear division of responsibilities in an Islamic	5.91	5.74	5.85	

	bank and no one individual or group of individuals dominates the decision-making process				
5	Directors and management of Islamic bank are persons of high calibre who ensure the sound operations of the bank	6.14	5.85	6.04	0.003
6	The board of the Islamic bank meets frequently to monitor the financial condition of the bank and to deliberate and discuss important strategic issues	6.01	5.78	5.93	0.015
7	The Islamic bank develop a clear policy and framework on the remuneration of directors, CEO and senior management.	5.92	5.66	5.83	0.016
8	Directors, officers and employees of an Islamic bank observe the minimum standards of conduct expected of directors, officers and employees of Islamic bank	5.86	5.65	5.79	
9	The board maintains an effective communication policy that enables both the board and management to communicate effectively with its stakeholders	5.97	5.78	5.91	0.036
10	Islamic banks observe the relevant guidelines on a comprehensive disclosure requirement by Bank Negara Malaysia	6.28	6.21	6.25	
11	There is adequate and effective operational procedures, internal controls and systems in place for assessing, measuring, controlling, monitoring and reporting of risks.	6.08	5.98	6.04	
<b>Total Mean</b>		6.03	5.87	5.98	0.018

**Table 6** also indicates that there is a statistically significant difference in the CG of the LIBs (mean = 6.03) and that of the FIBs (mean=5.87) because the significance level was 0.018, which is below the 0.05 benchmark. Thus, hypothesis ( $H_1$ ) which indicates a significant difference in the corporate governance (CG) between LIBs and FIBs in Malaysia is supported. The LIBs were perceived by the respondents to have a slightly better CG than the FIBs in Malaysia, contrary to the assumption that foreign banks normally have better risk management than the local banks (Al-Tamimi & Al-Mazrooei, 2007). The table also shows a significant difference for question five, question six, question seven and question nine. For these questions, the LIBs scored significantly better than the FIBs.

### Shariah Review

The scale for Shariah review (SR) is measured by eight items/questions on a seven-point Likert scale ranging from ‘1’ (strongly disagree) to ‘7’ (strongly agree). A descriptive analysis for SR is presented in **Table 7**.

**Table 7:** The mean and T-test significant level for Shariah review

Shariah Review	Mean of Islamic Bank			T-test Sig-Level
	Local	Foreign	Both	
1 The Islamic bank performs regular assessment on its activities and operations including end-to-end product	6.09	5.97	6.05	

	development process				
2	The Islamic bank performs regular assessment to ensure its activities and operations do not contravene with the Shariah	6.16	6.15	6.16	
3	The Islamic bank examines and evaluates the level of compliance to the Shariah	6.20	6.12	6.17	
4	The Islamic bank examines and evaluates the remedial rectification measures to resolve Shariah non-compliances	6.20	6.04	6.04	
5	The Islamic bank records the process involved in the regular assessment of its activities and operations	6.06	6.01	6.18	
6	The Islamic bank communicates findings of the assessment to the Shariah committee and the management	6.24	6.18	6.13	
7	The Islamic bank rectifies any instances of Shariah non-compliance	6.23	6.24	6.23	
8	The Islamic bank prevents Shariah non-compliance incidence from recurring	6.23	6.11	6.19	
	<b>Total Mean</b>	6.17	6.09	6.15	0.205

The table shows that the mean response of both the local Islamic banks (LIBs) and the foreign Islamic banks (FIBs) operating in Malaysia was 6.15 (out of a total score of 7). The mean which is considered high (Hair et al., 2010) indicates that these banks are efficient in their Shariah review. The highest mean of 6.23 for question seven indicates that the Islamic banks in Malaysia put their highest priority in rectifying any instances of Shariah non-compliance (SNC). The rectification takes place after the SNC event is discovered either during the Shariah review exercise, or during the risk control self-assessment (RCSA) exercise, or during the internal or external audit exercises.

As for the LIBs, the highest mean (6.24) was for question six, “The Islamic bank communicates findings of the assessment to the Shariah committee and the management” indicating that the communication is their main focus. In the case of FIBs, the highest mean of 6.24 was for question seven indicating that the banks’ main concern is rectifying any instances of SNC followed by the communication of findings of the assessment to the Shariah committee and the management (question 6; mean = 6.18).

**Table 7** also indicates that there is no significant difference in the SR of LIBs (mean = 6.17) and that of FIBs (mean=6.09) because the significance level was 0.205, which is above the required cut off of 0.05. The values show that there is no statistically significant difference in the SR between the LIBs and FIBs in Malaysia. Thus, hypothesis (H5) which indicates a significant difference in the SR between the LIBs and FIBs in Malaysia is therefore rejected. Both types of banks are equally efficient in their SR.

### **Shariah Audit**

The scale for Shariah audit (SA) is measured by 12 items/questions on a seven-point Likert scale ranging from ‘1’ (strongly disagree) to ‘7’ (strongly agree). A descriptive analysis for SA is presented in **Table 8**.

**Table 8:** The mean and T-test significant level for Shariah audit

Shariah Audit		Mean of Islamic Banks			T-test Sig-Level
		Local	Foreign	Both	
1	Auditors of Islamic bank undertake periodical independent assessment on the business operations	6.06	5.93	6.02	
2	The auditors provide independent and objective assurance during the periodical assessment	6.05	5.95	6.01	
3	The auditors undertake periodical assessment to improve the degree of the bank's compliance to the Shariah	6.04	5.77	5.95	0.006
4	The auditors perform periodical assessment to ensure a sound and effective internal control system for Shariah compliance	6.05	5.80	5.97	0.008
5	The auditors may engage Shariah officers in performing the periodical assessment	5.93	5.83	5.90	
6	The auditors perform the assessment in critical areas at least once a year	5.96	5.74	5.89	0.042
7	The auditors undertake assessment on the bank's financial statements	5.82	5.60	5.75	0.039
8	The auditors communicate results of the assessment to the Board Audit Committee and the Shariah Committee	6.15	5.96	6.08	0.037
9	The auditors perform compliance audit on organisational structure, people, process, and information technology	6.06	5.78	5.97	0.005
10	The auditors review the adequacy of the Shariah governance process	6.08	5.80	5.98	0.004
11	The auditors provide recommendations on rectification measures for Shariah non-compliant incidence	6.01	5.58	5.87	0.000
12	The auditors will follow-up on the implementation of the recommendations	6.03	5.76	5.94	0.011
<b>Total Mean</b>		6.02	5.79	5.94	0.001

The table above shows that the overall mean of both the local Islamic banks (LIBs) and the foreign Islamic banks (FIBs) in Malaysia was 5.94 (out of a total score of 7) which is considered high (Hair et al., 2010) indicating that these banks have efficient Shariah audit. The highest mean was 6.08 for question eight indicating that the auditors of the Islamic banks in Malaysia communicate results of the assessment to the Board Audit Committee and the Shariah Committee.

**Table 8** also indicates that there is a statistically significant difference in the SA of the LIBs (mean = 6.02) and that of the FIBs (mean=5.79) because the significance level was 0.001, which is below the 0.05 benchmark. The majority of the means for LIBs except for items number one, two, and five were significantly better than that of the FIBs. Thus, hypothesis (H6) which indicates a significant difference in the SA between LIBs and FIBs in Malaysia is supported. The LIBs are perceived to be more efficient in the SA than the FIBs.

It is interesting to note that the highest mean for both the LIBs and the FIBs was for question 8 ("The auditors communicate results of the assessment to the Board Audit Committee

and the Shariah Committee”). The same mean obtained by the LIBs and FIBs implies that the communication between the auditors and the committees takes centre stage in both types of banks. In another word, the synergy between the auditors, the Board Audit Committee, and the Shariah Committee is probably pivotal in ensuring an efficient SA in Islamic banks in Malaysia.

The results of the hypotheses testing about the differences in the level of CG, SR, SA, and RMPs between LIBs and FIBs are summarized in **Table 9**. The table shows that hypotheses ( $H_4$ ) and  $H_6$  were supported while hypotheses ( $H_3$ ) and  $H_5$  were rejected. In summary, there were significant differences between LIBs and FIBs in the levels of CG and SA but not in the RMPs and the SR. LIBs are perceived to be significantly better in the CG and SA compared to the FIBs.

**Table 9:** Summary results of hypotheses testing

<b>Hypothesis</b>	<b>Results</b>
$H_3$ <i>There is a significant difference in the level of RMPs between LIBs and FIBs operating in Malaysia</i>	Rejected
$H_4$ <i>There is a significant difference in the level of CG between LIBs and FIBs operating in Malaysia</i>	Supported
$H_5$ <i>There is a significant difference in the level of SR between LIBs and FIBs operating in Malaysia</i>	Rejected
$H_6$ <i>There is a significant difference in the level of SA between LIBs and FIBs operating in Malaysia</i>	Supported

**Correlation Analysis (Pearson Correlation)**

The relationship between corporate governance (CG), Shariah review (SR), Shariah audit (SA), and risk management practices (RMPs) was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed, and the results show that the assumptions of normality, linearity, homoscedasticity, and multicollinearity were not violated. The purpose of the correlation analysis is to determine the strength and direction of the relationship between CG, SR, SA, and RMPs. The results of the correlation analysis are shown in **Table 10**.

**Table 10:** Relationship among variables

	RMPs	CG	SR	SA
Risk Management Practices (RMPs)	1			
Corporate governance (CG)	.666**	1		
Shariah review (SR)	.628**	.677**	1	
Shariah audit (SA)	.611**	.650**	.669**	1

The table above shows that all the Pearson correlation ( $r$ ) values exceeded 0.5, and thus the strength of the correlations is considered large (Cohen, 1988, cited in Pallant, 2005, p.126). A large correlation indicates a strong relationship. Thus, there was a strong positive and significant relationship between CG and RMPs, between SR and RMPs and between SA and RMPs. CG had the strongest positive relationship with RMPs ( $r=0.666$ ,  $p<0.01$ ), followed by SR ( $r=0.628$ ,  $p<0.01$ ), and SA ( $r=0.611$ ,  $p<0.01$ ). Thus, the results reveal that the hypotheses  $H_{1a}$ ,  $H_{1b}$ , and  $H_{1c}$  are supported as shown in **Table 11**.

**Table 11:** Summary results of hypotheses testing (correlation)

Hypothesis	Direction	Results
$H_1$ There are positive and significant relationship between Corporate governance (CG), Shariah review (SR), Shariah audit (SA) and risk management practices (RMPs)	(+)	Supported
$H_{1a}$ There is a positive and significant relationship between CG and RMPs	(+)	Supported
$H_{1b}$ There is a positive and significant relationship between SR and RMPs	(+)	Supported
$H_{1c}$ There is a positive and significant relationship between SA and RMPs	(+)	Supported

**Multiple regression analysis**

Multiple regressions were utilized to test hypotheses  $H_2$ ,  $H_{2a}$ ,  $H_{2b}$ , and  $H_{2c}$ . Multiple regression analysis using Enter Methods were applied using the confidence level of 95 per cent ( $p < 0.05$ ). **Table 12** summarizes the results of multiple regression analysis to examine the effect of CG, SR, and SA on RMPs.

**Table 12:** Effects of CG, SR, and SA on RMPs (Regression)

	Hypothesis	B	t	Sig.
Corporate governance (CG)	$H_{2a}$	.366	6.261	.000
Shariah review (SR)	$H_{2b}$	.236	3.948	.000
Shariah audit (SA)	$H_{2c}$	.215	3.723	.000
$R^2$		0.523		
F		108.383		
Sig.		0.000		

The results (**Table 12**) indicate that the model (which includes CG, SR, and SA) explained 52.3 per cent of the variance in the RMPs ( $R^2 = 0.523$ ,  $F = 108.383$ ,  $p < 0.01$ ) and the ANOVA table shows that the model reached statistical significance. Every individual variable shows significant influenced on RMPs. They were CG ( $B = 0.366$ ,  $t = 6.261$ ,  $p < 0.01$ ), SR ( $B = 0.236$ ,  $t = 3.948$ ,  $p < 0.01$ ) and SA ( $B = 0.215$ ,  $t = 3.723$ ,  $p < 0.01$ ). Among the three variables, CG had the highest impact on the RMPs followed by SR and SA. In another word, CG made the highest unique contribution to the prediction of the RMPs followed by SR, and SA. In summary, the regression analysis reveals that the hypotheses  $H_2$ ,  $H_{2a}$ ,  $H_{2b}$  and  $H_{2c}$  are supported (see **Table 13**).

**Table 13:** Summary results of hypotheses testing (regression)

Hypothesis	Results
$H_2$ Corporate governance (CG), Shariah review (SR), Shariah audit (SA) have a positive impact on risk management practices (RMPs)	Supported
$H_{2a}$ CG has a positive impact on RMPs	Supported
$H_{2b}$ SR has a positive impact on RMPs	Supported
$H_{2c}$ SA has a positive impact on RMPs	Supported

**Research Implications**

The results of the present study have provided several theoretical implications and some practical implications particularly for the industry players and the regulators. The theoretical implication



relates to the CG, SR, and SA variables which are newly introduced into the present study. There have been limited studies to-date that examine their impact on the RMPs of Islamic banks in Malaysia. Likewise, field studies on the difference between the local Islamic banks (LIBs) and foreign Islamic banks (FIBs) in terms of CG, SR, and SA are challenging to find.

Thus, the theoretical contribution of the present study lies in it being the first to support the direct positive impact of CG, SR and SA on RMPs of Islamic banks in Malaysia. The findings also contribute to the literature by demonstrating that there is a significant difference in the CG and SA between the two types of Islamic banks. Both findings expand the body of knowledge in the area of risk management in Islamic banking.

The outcome of the present study also provides the practical implication particularly to the industry players and the regulators. For the industry players, the results revealed that it is crucial for them to focus primarily on the CG, SR, and SA in managing risk in the banks. As much as ensuring Shariah compliance in the financial transactions of Islamic bank is critical, the results show that the industry players should treat corporate governance issues as their top priority in managing risk in their banks at this juncture.

To the regulators such as BNM, the findings are useful in at least two ways. Firstly, based on the results, BNM can consider improving the existing SGF by incorporating corporate governance into the framework thereby emphasizing the crucial role of CG especially in promoting enterprise risk management practices of Islamic banks in Malaysia. Secondly, the findings that there is no significant difference in the RMPs between LIBs and FIBs probably reflect the success of BNM in standardizing the practice of managing risk among these banks through the various policies and guidelines issued by BNM.

## **CONCLUSION**

In the present study, the influence of CG, SR, and SA on the RMPs of Islamic bank in Malaysia was investigated. The differences in CG, SR, SA, and RMPs, were also examined between the LIBs and FIBs operating in Malaysia. The descriptive statistics reveal that the overall means of each of the four variables were above the value of 5.00 (out of 7.00) based on the seven-point Likert scale suggesting that the respondents perceived a high agreement towards all the four variables for both the LIBs and FIBs. The value implies that the Islamic banks in Malaysia are efficient in their CG, SR, SA, and RMPs. Interestingly, the study found that the LIBs have higher overall means for all the four variables compared to the FIBs.

The results of the t-test show that LIBs have significantly better CG and are significantly more efficient in the SA compared to the FIBs. However, there was no significant difference between the LIBs and the FIBs in the case of SR and RMPs indicating that both types of banks are equally efficient in their SR and RMPs. The results of the correlation analysis show that the CG, SR, and SA have positive and significant relationships with the RMPs. Finally, the regression analysis indicates that the model which contain CG, SR, and SA reaches statistical significance and explains more than 50 per cent of the variance in the RMPs. All the variables have a significant influence on the RMPs. Out of the 12 hypotheses formulated, ten of them were supported.

The inclusion of CG, SR and SA variables in the present study has contributed significantly to the theory and the methodology as the new items developed for the variables could be used in future research. The practitioners and the regulators may also benefit from the study especially on the role of CG, SR, and SA in the risk management practices of the Islamic banks in Malaysia. They need to give special attention to CG since it emerged as the most influencing variable in the present study that impacts the RMPs of Islamic banks in Malaysia.

The study has also shown that the Shariah review and risk management practices in both the LIBs and the FIBs are no different probably due to the successful implementation and compliance of the SGF in guiding the risk management practices of these Islamic banks. Thus, the findings of the present study have answered all the research objectives.

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