

# RISK GOVERNANCE: EXPERIENCE OF ISLAMIC BANKS

*Siti Rohaya Mat Rahim\**, *Fauziah Mahat\*\**

## Abstract

Risk governance has evolved tremendously in the banking industry. Risk governance recommends the imperative roles of Chief Risk Officer (CRO) to oversee risk. This study explores risk governance influence over the Islamic banks performances. Multivariate analysis techniques measure simultaneously via Structural Equation Modelling (SEM). This study employed cross-sectional sample of 200 Islamic banks across 21 countries for the year 2014. To examine risk governance and Islamic banks performance, the study captures seventeen variables developed from risk management and corporate governance (ROA, ROE, Profit Margin, CRO, Shariah committee member, CEO, board size, remuneration meeting, credit rating, external audit, accounting standard, loan loss provision, capital adequacy ratio, total deposit ratio, GDP, central bank lending rate and inflation). The simulation result reveals, risk governance act as mediating variables towards Islamic banks performance. This study has practical and significance contribution for Islamic banks to understand risk governance, aligning with the fundamental risk management and corporate governance.

**Keywords:** Risk Governance, Risk Management, Corporate Governance, Islamic banks, Structural Equation Model

\* Lecturer, Department of Economics, Faculty of Business and Finance, Universiti Tunjku Abdul Rahman, Jalan Universiti, Bandar Barat, 31900 Kampar, Perak, Malaysia., PhD candidate, Faculty of Economics and Management, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia

\*\* Associate Professor, Department of Accounting and Finance, Faculty of Economics and Management, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia

## 1. Introduction

The nature of bank is business of taking risks. Portfolios of banks are extremely complex to determine their liquidity position, short-term funding as well as it debt. Emerging of Islamic banks has specific governance and management issues. As by December 2014, Saudi Arabia now represent \$ 106 billion of total asset followed by Malaysia \$ 207 billion and UAE \$ 75 billion (Young's, 2013). Recently, Hassane Cisse (2013) reported that Middle East and North Africa Islamic banking are projected to be double as \$ 416 billion for the year 2010 to estimation of \$ 900 billion in year 2015. Much concern has been particularly expressed about why Islamic banks in these particular countries counter-cyclical and prudent to absorb the financial shocks throughout the crisis (Rudnyckij, 2014; Claessens & Horen, 2013). Fundamentally, Basel III, IFSB Capital, IFSB liquidity requirement, uniqueness of Islamic banking framework and Shariah rulling were identified as major factors of banking financial crisis resilience.

Good risk governance cannot be denied, several examples for the collapses of Islamic financial institutions such as Ihlas Finance House of Turkey, the Islamic Bank of Africa, Dubai Islamic Bank and Investment Companies of Egypt (Ali, 2007). The

failure of financial market like Fannie Mae, Freddie Mac, Lehman Brothers in mid-September 2009 and other OECD countries demonstrate Islamic banks are different from conventional banks (Flannery, 2009). Another issues rose by Ahmed (2009), the crisis reveals risk-related issues resulted from mismanagement of risk at organizational level including various stakeholders. There is vast reason of explaining the failure of financial market, financial innovations, speculative, housing bubbles; derivatives instruments create complex and high risk exposure (Ariff, 2014; Khan & Bhatti, 2014; Robe, 2014).

Economic growth in Malaysia, Middle East, Pakistan, Sudan, Senegal, Bangladesh, United States, United Kingdom, Bahamas, Philippines, Luxembourg and Switzerland has shown a remarkable in market conditions especially monetary growth (Fu, Lin & Molyneux, 2014; Bashir, 1984; Kuran, 1983). Solid economic growth aligned with prolonging government project maintained Malaysia, Middle East, Pakistan, Sudan, Bangladesh, Indonesia, United Kingdom, United States, Bahamas, Philippines, Senegal, Luxembourg and Switzerland financial sector.

Although Islamic bank in Middle East countries is quite remarkable in terms of its growth, however, after global financial crisis and European debt crisis, Islamic banks signalling alarming condition of its

profits since these countries badly affect by regional crisis (Martin & Ventura, 2014; Kettell, 2010; Ebrahim M. S., 2008). It is evident that the role of corporate governance, risk management and risk governance is hardly to justify. Hence, there is a gap in knowledge on risk governance and bank performance.

Previous studies did not determine the correlation of risk governance on bank performance. Prior studies examine corporate governance and bank performance (Daly & Zhang, 2014; Mamatzakis & Bermpel, 2014; Jiang, Yao & Feng, 2013). In contrast, the study that was mention earlier Eckles, Hoyt and Miller, 2014; Bessis, 2011; Hassan et al., 2009; shows that risk management affect banks performance.

In this paper, we try to investigate mediating effects of risk governance, risk management and corporate governance relationship towards Islamic banks performance. To the best of our knowledge, our study provides the first empirical analysis of differences in risk governance and Islamic banks performance. The remainder of the paper is structure as follow. In section 2.0, we discussed earlier research of risk governance. We present data collection in section 3.0 follow by hypotheses statement in section 4.0. Research methodology is thereby established in section 5.0. Main results related to these researches are reported in Section 6.0. Finally, findings and conclusion are discussed in section 7.0 and 8.0.

## **2. Literature Review**

Risk governance can be defined as the ways directors responsible to optimize and monitoring risk in the organization. Most of the environment demanded corporate governance to apply the proper strategy in order to mitigate the risk of the banks. It is done by boards responds in timely manner besides required efficient reporting systems. Moreover, Kirkpatrick (2009) concludes that major failures in financial services companies occur when some of the cases did not reach the board of directors. Main role of risk governance is to improve the potential for survival and growth of Islamic banks, fewer sudden shocks, focus internally and externally activities across the world high-profile collapses of major financial institutions (Rudnycky, 2014; Claessens & Horen, 2013). As documented by Aebi et al., (2012) define risk governance as characteristics of performance of the bank during the financial crisis. Apart from that bank and any financial institution has to meet regulatory requirements for risk measurement and capital. Theoretically, risk governance as the board and management establish and monitoring firm's strategy, risk appetite and risk limits (IFSB, 2013).

Allen, Vayanos and Vives (2014) consider the recent banking crisis occurs once banks unable to meet their commitments, massive withdrawals by

depositors and asymmetric information. The more recent work Smith (2001) discussed about Diamond-Rajan analysis of financial crises. The main results of his paper concern about understanding modern banking crisis in Asian were caused by the rapid outflow of foreign capital, foreign exchange exposure, inadequate supervisory and regulatory framework, less transparency, lending booms, and excessive investment in risky. In explaining banking crisis, real GDP, M2, inflation rate, interest rate identified as the most significant factors.

The study links the two strands of literature by investigating the influences risk governance and modern financial institutions were highlights in Scandizzo (2013). The key findings above mention, all stakeholders consist of shareholder, depositor, government, bondholder that will bear the risk, only shareholders earn profits. Therefore, the scholars believe it is important to determine the linkages of risk management and corporate governance interrelated. In fact, failure of financial institution severe real economy for consequence generation.

At first sight, one might expect that the risk governance influence bank performance. Unlike Tao and Hutchinson (2013) who study the role of risk management and compensation committees' Australian financial firm over 2006-2008. These results suggest that composition of risk and compensation committees directly connected to risk which affects the firm performance. They used linear regression and generalized least square regression model as the method of the study. Indeed, some commentators argue that chief financial officer influences audit planning of 52 Swedish listed companies during the year 2003-2004, Hellman (2011) discovered that CFOs seek to influence the audit planning, especially with regard to internal controls and the selection and scope of entities subject to audit. The method used was an interview question to analyze the variable is chief financial officer's influence.

Given the increased importance of risk governance Xue Wang's (2010) took the initiative for comprehensive research, increased disclosure requirements and corporate governance decisions with the evidence from chief financial officers (CFO) in the pre (1998-2001) and post (2002-2005) Sarbanes-Oxley Periods. These results show that CFOs of firms with strong internal controls receive higher compensation and do not experience significant changes in forced turnover rates.

## **3. Data Collection**

This study employed cross-sectional studies or one-shot time horizon studies over the period of 2013. Sample size for current study will be 200 banks. In order to ensure that all the banks have its representative a sample of population were selected. We choose 200 banks to draw conclusions about the

entire population of 393 Islamic banks provided from Bankscope databases updated as at 19 February 2014. We classifies listed Islamic banks into (i) Islamic

banks (ii) Investment banks (iii) Wholesales banks and (iv) Islamic Development bank (Table 3.1).

**Table 3.1.** Islamic banks category

Islamic Banks Category	Number of banks
Islamic banks	108
Investment banks	86
Wholesales banks	3
Islamic Development banks	3
Total	200

**Table 3.2.** Number of Islamic banks selected

Islamic Banks Category	Population	
	Number of banks	Percentage
Islamic banks	108	54%
Investment banks	86	43%
Wholesales banks	3	1.5%
Islamic Development banks	3	1.5%
Total	200	100%

To execute the sampling process, the first step is to divide or classify the entire target population ( $N_h$ ) into different subgroup and strata (Table 3.1). This is done by classifying the population into four category of Islamic banks ( $N_1$  = Islamic banks,  $N_2$ = Investment banks,  $N_3$ =Wholesales banks and  $N_4$ = Islamic Development Banks. Thus,  $N_1+N_2+N_3+N_4 = N_h$ . The next step is to get the fraction. This was done by dividing the sample size ( $n_h$ ) of 200 to target population ( $N_h$ ) of 393 ;  $n_h / N_h$  ( $200/393$ ) = 50.89 %. This fraction will be applied to the number of banks in each category in order to get the number of banks to be selected from each category. Since the number of companies to be selected has been identifies such as 200 of Islamic banks. Next step is to randomly select 200 Islamic banks from the sectors. In this study, Microsoft Excel 2010 will be used to select the banks randomly (Table 3.2).

**4. Hypotheses Statement**

Seven testable hypotheses were summarizing as proposed in. The following hypotheses were generated for this study:

*H1. Risk Management is significant affect Islamic banks performance.*

*H1a. Internal risk management is significantly affects Islamic banks performance.*

*H1b. External risk management is significantly affecting Islamic banks performance.*

*H2. Corporate Governance is significantly affect Islamic banks performance.*

*H2a. Internal corporate governance is significantly affect Islamic banks performance.*

*H2b. External corporate governance is significantly affect Islamic banks performance.*

*H3. There is mediating effect of Risk Governance towards Islamic banks performance.*

The conceptual framework proposed for this study is shown in Figure 4.1. It is develop from the agency theory, stakeholder-based governance theory, and delegated monitoring theory. The stakeholder based governance present the ideas whereby banks need to provide multiple benefits relationship include customer, supplier, distributors and employees (Hassn, 2014).

**5. Research Methodology**

This research employed quantitative work with theories concerning the inter-relationship among multivariate analysis simultaneously expressed in the Structural Equation Modeling (SEM). SEM begins with theory whereby the researchers want to test the theoretical relationship among variables modeled into a theoretical framework. Software used to analyze SEM is employed by Analysis of Moments Structure (AMOS) version 22.0 as included in an optional part of IBM SPSS version 22.0. The advantages of AMOS compared to other software, it can construct graphic representation of the model. Special features of AMOS include the capability to test for hypothesized relationship among variables. Other options, AMOS also allow the user to modify the path diagram to improve the fitness of the model or remove it completely from the hypothesized model.



**Table 6.1.** Assessment of normality

Variable	Min	Max	Skew	c.r.	Kurtosis
RCM	2.000	6.700	-0.577	-2.333	0.116
REM	3.000	7.000	-0.483	-2.788	-0.489
CBLR	1.000	6.000	1.222	0.811	0.135
CEO	3.000	7.000	-0.311	-1.794	-0.492
RR	2.000	7.000	-0.502	-2.899	-0.405
AS	2.000	7.000	-0.240	-1.384	-0.655
PM	1.000	5.000	0.140	0.806	-0.738
ROA	1.000	5.000	0.376	2.172	-0.774
INF	2.000	5.400	-1.206	-0.964	1.648
EA	2.000	7.000	-0.579	-2.341	0.096
CRO	1.000	3.000	0.676	2.900	-1.544
TDR	70.000	72.000	-0.257	-1.485	-0.652
CAR	10.000	13.000	-0.200	-1.154	-0.739
LLP	1.000	5.000	-0.438	-2.527	-0.970
Multivariate					6.082

Table 6.1 shows the result of the assessment normality test. The range of skewness is between -0.200 and 1.222 while the kurtosis is between -1.154 and 2.900. Thus, it is assumed that data is normally distributed. Since these variables did not deviate from the normality, it was not necessary to make any adjustments such as transformation of the data. A more detailed evaluation of multivariate kurtosis normality test also represent in Table 6.1. The value of multivariate kurtosis reflects the multivariate normality distribution of data set. The value of multivariate kurtosis for the model with three constructs should be lower than 50.0; otherwise the assumption of multivariate normality is not satisfied. In this case, data was normally distributed since it supports the multivariate kurtosis assumption which is  $6.082 < 50.00$ .

### 6.3 Reliability Test

Reliability test is to test whether the scores on any one indicator tend to be related to their score on the other indicators. Cronbach's alpha is one way of testing internal reliability (Khalid & Amjad, 2012; Cronbach, 1971). Cronbach's alpha has grown as a result of its incorporation into computer software for quantitative data analysis (Cronbach, 2004). It essentially calculates the average of all possible split-half reliability coefficients. A computed alpha coefficient will vary between 1 (denoting perfect internal reliability) and 0 (denoting no internal reliability). The figure 0.700 is typically employed as a rule of thumb to denote an acceptable level of internal reliability (Berthoud, 2000). Case processing summary of 200 Islamic banks present in Table 6.2. To assess the internal reliability of the measures, Cronbach's Alpha result in Table 6.3 shows that, value of 0.704 indicate the required level is achieved.

**Table 6.2.** Case processing summary

		N	%
Cases	Valid	200	100.00
	Excluded	0	0
	Total	200	100.00

**Table 6.3.** Reliability Statistics

Cronbach's Alpha	N of Items
0.704	200

### 6.4 Structural Model

The second stages involved the structural model. Structural model was developed to ensure that all instruments are fit for the model, to test hypotheses for casual effect or mediating effect and to obtain the coefficient of R2. The paths of causal relationship between the underlying exogenous and endogenous constructs were specified in the structural model. The

direct effect is the effect that goes directly from exogenous construct to endogenous construct, while the indirect effect is the effect from exogenous construct to endogenous construct that goes indirectly through the mediator in the model. Endogenous constructs include bank performance, whereas exogenous construct included risk management and corporate governance. In the meanwhile, risk governance constructs act as a mediating effect.

Analysis and results related to these two stages are further discussed next. The measurement model evaluate the observe variables combine to develop the

underlying construct. In this study the measurement model refers to the following table below (Table 6.4).

**Table 6.4.** Variables in the Proposed Model

Variables Types	Variables
Exogenous observed	Risk Management (LLP, CAR, TDP, GDP, CBLR, INF) Corporate Governance (CEO, BS, REM, EA, AS, RR)
Exogenous variables	Risk Management & Corporate Governance
Endogenous variables	Bank Performance ( ROA, ROE & PM)
Mediating variables	Risk Governance (CRO, RCM, SC)

The hypothesised structural model to be tested was specified by including the constructs after validation in the measurement model. The hypothesized model (original structural model) was tested in the second stage, including eight paths representing the hypotheses (H1, H1a, H1b, H2, H2a, H2b and H3). To test the hypotheses, we follow recommend three fitness indexes for measurement.

The absolute fit indices, incremental fit indices and parsimonious fit indices. Values of absolute fit indices require Chisq more than 0.05 and RMSEA less than 0.08. Incremental fit indices aforementioned TLI more than 0.80 or else CFI more than 0.80. Furthermore, Parsimonious fit recommended retain Chisq/df less than 5.00.

**Table 6.5.** Summary of Fitness Indexes for the Measurement

Name of Category	Index	Level of Acceptance	Index value	Comments
1. Absolute Fit	Chisq	$P > 0.05$	393.103	The required level is achieved
	RMSEA	$RMSEA < 0.08$	0.100	The required level is not achieved
2. Incremental Fit	TLI	$TLI > 0.80$	0.807	The required level is achieved
	CFI	$CFI > 0.80$	0.834	The required level is achieved
3.Parsimonious Fit	Chisq/df	$Chisq/df < 5.0$	2.978	The required level is achieved

The results of Figure 6.1 maximum likelihood estimation presented in Table 6.5. Maximum likelihood assumes normality of dataset, large sample size, continuous data and assumption of multivariate normality. The fit statistics show that our structural model in Figure 6.1 exhibit an acceptable fit (i.e Chisq = 393.103; TLI = 0.807; Chisq/df = 2.978). Nevertheless, TLI is not achieve require level; RMSEA = 0.100; RMSEA > 0.08. These review of fit statistics indices are important to test whether any misspecifications or any violation of the assumption. Fixed parameters are fixed to specific value either zero or one. Fixed parameters are the parameter strongly supported by the literature review. In this study, we employed fixed parameter equivalent to one, while free parameter are unknown parameter and need to be estimated.

The results proved to be reasonable and statistically significant. In other words, the research hypothesis is supported (Table 6.6). The regression

weight for risk governance in the prediction of bank performance is significantly different from zero at the 0.001 level (two-tailed) supported research hypotheses three (H3) with strong statistical significance. The probability of getting a critical ratio as large as 2.213 in absolute value is less than 0.001. The regression path shows the two relationship exhibit significant relationship for is risk management and bank performance; in this study 0.109 in absolute value is less than 0.001, supported hypotheses one (H1).On the other hand, corporate governance and risk governance is not significantly different from zero at 0.001 levels, rejected hypotheses two (H2). All pathways are significant, as twelve hypotheses are supported. Remaining a few pathways is not significant, as five hypotheses are rejected. Thus, it can be stated that this model have provided strong test of hypothesized relationships between the construct of interest.

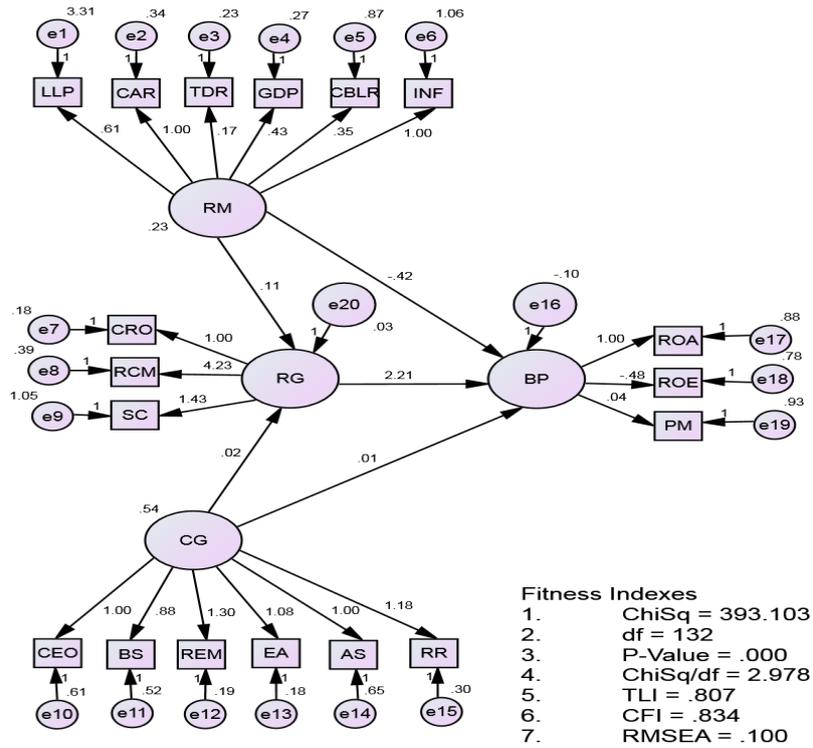


Figure 6.1. Full Model (\*testing H1, H2 and H3)

Table 6.6. Hypothesis testing (\*testing H1, H2 and H3)

			Estimate	S.E.	C.R.	P	Hypothesis	Significant / Not Significant
BP	<---	RM	-0.417	0.111	-3.771	***	H1	Significant
TDR	<---	RM	0.165	0.070	2.379	0.017	H1a	Not Significant
LLP	<---	RM	0.608	0.177	3.427	***	H1a	Significant
CAR	<---	RM	1.000	Reference Point			H1a	Reference Point
INF	<---	RM	1.000	Reference Point			H1b	Reference Point
CBLR	<---	RM	0.348	0.094	3.717	***	H1b	Significant
GDP	<---	RM	0.429	0.056	7.607	***	H1b	Significant
BP	<---	CG	0.006	0.052	0.110	0.913	H2	Not Significant
BS	<---	CG	0.885	0.056	15.924	***	H2a	Significant
REM	<---	CG	1.297	0.050	25.830	***	H2a	Significant
CEO	<---	CG	1.000	Reference Point			H2a	Reference Point
AS	<---	CG	1.000	Reference Point			H2b	Reference Point
RR	<---	CG	1.177	0.058	20.164	***	H2b	Significant
EA	<---	CG	1.079	0.048	22.291	***	H2b	Significant
RG	<---	CG	0.019	0.011	1.732	0.083	H3	Not Significant
RG	<---	RM	0.109	0.026	4.147	***	H3	Significant
BP	<---	RG	2.213	0.337	6.571	***	H3	Significant
RCM	<---	RG	4.231	0.993	4.263	***	H3	Significant
PM	<---	BP	0.044	0.132	0.334	0.738	H3	Not Significant
SC	<---	RG	1.435	0.347	4.135	***	H3	Significant
ROE	<---	BP	-0.480	0.152	-3.152	0.002	H3	Not Significant
CRO	<---	RG	1.000	Reference Point			H3	Reference Point
PM	<---	BP	0.044	0.132	0.334	0.738	H3	Not Significant
ROA	<---	BP	1.000	Reference Point			H3	Reference Point

\*\*\* indicate a highly significant at < 0.001

Figure 6.7 present the factor loadings and R2 for items in the measurement for model risk governance and bank performance. There are three items namely; TDR (0.17), GDP (0.43) and ROE (-0.48) which are below factor loading requirement of 0.50, and need to be deleted. Items with R2 correlations less than 0.40

were considered for deletion. Low R2 were being identified in three item which are TDR = 0.23 and GDP = 0.27. Based on this information, the respective item has to be deleted. Result after deletion these three variables presented in Table 7.1.

**Figure 6.7.** The Confirmatory Factor Analysis (CFA) Report

Construct	Item	Factor Loading (above 0.50)	R2 (above 0.40)	Cronbach Alpha (above 0.7)	CR (above 0.6)	AVE (above 0.5)			
RM	LLP	7.73	0.97	0.857	1.831	7.008			
	CAR	1.00	0.34				Reference Point		
	TDR	0.17	0.23						
	GDP	0.43	0.27						
	CBLR	0.35	0.87						
CG	INF	1.00	1.06	0.831	4.912	3.272			
	BS	0.88	0.52				Reference Point		
	CEO	1.00	0.61						
	REM	1.30	0.19						
	EA	1.08	0.18						
RG	AS	1.00	0.65	0.920	1.242	1.845			
	RR	1.18	0.30				Reference Point		
	RCM	4.23	0.39						
	SC	1.43	1.05						
	CRO	1.00	0.18						
BP	ROE	-0.48	0.78	0.869	1.511	4.577			
	PM	0.04	0.93						
	ROA	1.00	0.88				Reference Point		

The summary of the confirmatory factor analysis (CFA) for the measurement risk governance and bank performance was passing the test of validity and reliability measurement model (Figure 6.7). The required level as the construct reliability (CR): RM = 1.831, CG = 0.831, RG = 0.920 and BP = 0.869 is above than 0.50. Three variables out of the eighteen variables were found to not be statistically significant. These hypotheses were TDR, GDP and ROE. Therefore, re-specification for the original model was needed to provide the most parsimonious model. These procedures were conducted based not only on statistical results, but also on theoretical justifications.

**7. Discussion of findings**

Model modification was necessary, as the structural equation model fit indices were less than satisfactory. As managerial implication for Islamic bank, it suggests the role of chief risk officer (CRO), Risk Committee Member (RCM) and Shariah Committee (SC) perceived important roles to enhance people-to-people information within Islamic banks. These imply that approaches roles of risk governance leads to better performances in terms of risk management, except in the case of corporate governance.

**Table 7.1.** Results of Hypotheses

	Hypotheses	Outcome	
		Before deleting low factor loading	After deleting low factor loading
<b>H1</b>	Risk Management is significant affect Islamic banks performance	Supported	Not Supported
<b>H1a</b>	Internal risk management is significantly affects Islamic banks performance.	Supported	Not Supported
<b>H1b</b>	External risk management is significantly affect Islamic banks performance.	Supported	Partly supported
<b>H2</b>	Corporate Governance is significantly affect Islamic banks performance.	Not Supported	Not Supported
<b>H2a</b>	Internal corporate governance is significantly affect Islamic banks performance.	Supported	Partly supported
<b>H2b</b>	Corporate governance is significantly affect Islamic banks performance.	Supported	Partly supported
<b>H3</b>	There is mediating effect of Risk Governance towards Islamic banks performance.	Supported	Supported

## 8. Conclusion and future work

This study has revealed that risk governance significantly affect Islamic banks performance. We introduced mediating effect of risk governance in the Islamic banks and established the highest loading in primary variables. We also found that, risk management significantly affect bank performances, but not in the case of corporate governance. This study has acknowledged limitations that may drive in future research. We included a sample comprising single study one Islamic banks across various countries. Richer insights may emerge by taking into account additional occurrences in the conventional banks to enhancing the variance. For theory and practice there are some contributions amidst the need for better understanding the true impact of risk governance beyond the financial perspectives arguably process in the short-run and long-run. Results of this study will be useful for the policy makers that are responsible for the development of risk governance in the Islamic banking sector.

## References:

1. Aebi, V. S. (2012). Risk Management, Corporate Governance and Bank Performance in the Financial Crisis. *Journal of Banking and Finance*, 3213-3226.
2. Ahmed, H. (2009). Financial Crisis: Risks and Lessons for Islamic Finance. *ISRA International Journal of Islamic Finance*, 1, (1), 7-32.
3. Allen, F., Vayanos, D., & Vives, X. (2014). Introduction to Financial Economics. *Journal of Economic Theory*, 149, 1-14.
4. Ali, S. S. (2007). Financial Distress and Bank Failure: Lessons from Closure of Ihlas Finans in Turkey. *Seminar Proceedings No. 47* (pp. 99-120). Jeddah: Islamic Research and Training Institution.
5. Ariff, M. (2014). Whither Islamic Banking? *The World Economy*, 733-746.
6. Bashir, B. A. (1984). Successful Development of Islamic banks. *Journal of Research in Islamic Economics*, 1(2), 39-54.
7. Berthoud, R. (2000). Introduction: The Dynamics of Social Change in R. Berthoud and J. Gershuny (eds), *Seven Years in the Lives of British Families: Evidence on the Dynamics of Social Change from the British Household Panel Survey*. Bristol: Policy Press.
8. Claessens, S., & Horen, N. V. (2013). The Impact of the Global Financial Crisis on Banking Globalization. *International Monetary Fund, Washington: IMF Working Paper, WP/14/197*.
9. Cronbach, L. J. (2004). My Current Thoughts on Coefficient Alpha and Successor Procedures. *Educational and Psychological Measurement*, 64, 391-418.
10. Cronbach, L. J. (1971). Test Validation. In R. L. Thorndike (Ed.), *Educational Measurement* (2nd Ed.). Washington, D. C: American Council on Education.
11. Daly, K., & Zhang, X. (2014). Comparative Analysis of the Performance of Chinese Owned Banks' in Hong Kong 2004-2010. *Journal of Multinational Financial Management*, 1-10.
12. Eckles, D. L., Hoyt, R. E., & Miller, S. M. (2014). The Impact of Enterprise Risk Management on the Marginal Cost of Reducing Risk: Evidence from the Insurance Industry. *Journal of Banking & Finance*, 43, 247-261.
13. Ebrahim, M. S. (2008). The Financial Crisis: Comments from Islamic Perspectives. *IJUM Journal of Economics and Management*, 16(2), 111-138.
14. Flannery, M. J. (2009). Iceland's Failed Banks: A Post-Mortem. *Iceland: Special Investigation Commission*.
15. Fu, X., Lin, Y., & Molyneux, P. (2014). Bank Competition and Financial Stability in Asia Pacific. *Journal of Banking & Finance*, 38, 64-77.
16. Gu, Z., & Wu, J.S. (2003). Earnings Skewness and Analyst Forecast Bias. *Journal of Accounting & Economics*, 35(1), 5-29.
17. Hasan, Z. (2014). Basel Accords and Islamic banking: A critical evaluation. *Munich: MPRA Paper No. 56446*.
18. Hassane Cisse, N. R. (2013). The World Bank Legal Review, Volume 5: Fostering Development through Opportunity, Inclusion, and Equity. In N. R. Hassane Cisse, *the World Bank Legal Review, Volume 5: Fostering Development through Opportunity, Inclusion, and Equity* (pp. 130-131). Washington D.C.: The World Bank.
19. Hassan, A. (2009). Risk Management Practices of Islamic banks of Brunei Darussalam. *The Journal of Risk Finance*, 10(1), 23-37.
20. Hellman, N. (2011). Chief Financial Officer Influence on Audit Planning. *International Journal of Auditing*, 15, 247-274
21. IFSB. (2013). Towards Strengthening Corporate and Sharī'ah Governance in Islamic Banks. *Malaysia: Islamic Financial Services Board*.
22. Jiang, C., Yao, S., & Feng, G. (2013). Bank Ownership, Privatization, and Performance: Evidence from a Transition Country. *Journal of Banking & Finance*, 37, 3364-3372.
23. Kettell, B. (2010). *Islamic Finance in a Nutshell: A Guide for Non-Specialists*. United Kingdom: John Wiley & Sons Ltd.
24. Khalid, S., & Amjad, S. (2012). Risk Management Practices in Islamic banks of Pakistan. *The Journal of Risk Finance*, 13(2), 148-159.
25. Khan, M. M., & Bhatti, M. I. (2014). Development in Islamic Banking: A Financial Risk-Allocation Approach. *Journal of Risk Finance*, 9(1), 40-51.
26. Kirkpatrick, G. (2009). The Corporate Governance Lessons from the Financial Crisis. *Financial Market Trends*, 1-30.
27. Kuran, T. (1983). Behavioral Norms in the Islamic Doctrine of Economics: A Critique. *Journal of Economic Behaviour and Organization*, 4, 353-379.
28. Mamatzakis, E., & Bermpei, T. (2014). What Drives Investment Bank Performance? The Role of Risk, Liquidity and Fees Prior to and During the Crisis. *International Review of Financial Analysis*, <http://dx.doi.org/10.1016/j.irfa.2014.07.012>.
29. Martin, A., & Ventura, J. (2014). Managing Credit Bubbles. *International Monetary Fund, Washington : IMF Working Paper, WP/14/95*.
30. Min, S. and Mentzer, J.T. (2004), "Developing and Measuring Supply Chain Management Concepts", *Journal of Business Logistics*, Vol. 25 No. 1, pp. 63-99.
31. Robe, I. O. (2014). Global Risks and Collective Action Failures: What Can the International Community Do?.

- International Monetary Fund, Washington : IMF Working Paper, WP/14/195.
33. Rudnycky, D. (2014). Economy in Practice: Islamic Finance and the Problem of Market Reason. *American Ethnologist*, 41(1), 110-127.
34. Scandizzo, S. (2013). Risk and Governance: A Framework for Banking Organization. London: Incisive Media Investment Ltd.
35. Smith, B. D. (2001). Banks, Short Term Debt and Financial Crises: Theory, Policy Implications and Applications A Comment. Carnegie Rochester Conference Series on Public Policy, 54(1), (pp. 73-83). North Holland.
36. Tao, N. B., & Hutchinson, M. (2013). Corporate Governance and Risk Management: The Role of Risk Management and Compensation Committees. *Journal of Contemporary Accounting & Economics*, 9, 83-99.
37. Wright, D.B., & Herrington, J.A (2011). Problematic Standard Errors and Confidence Intervals for Skewness and Kurtosis. *Behavior Research Methods*, 43(1), 8-17.
38. Young's, E. (2013). World Islamic Banking Competitiveness Report 2013. Mena: Ernst & Young's.