

Financial Risk and Islamic Banks' Performance in the Gulf Cooperation Council (GCC)

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Objective

- ▶ The purpose of this study is to examine the relationship between financial risk and performance of the GCC Islamic banks and the relative importance of the most common types of risk.

Literature Review

- ▶ Wasiuzzaman and Gunasegavan(2013) in their study entitled “Comparative study of the performance of Islamic and conventional banks:The case of Malaysia”, concluded that liquidity and operational risks were found to be highly significant in affecting profitability(performance).
- ▶ Febianto (2012) attempted in his study entitled “Adapting Risk Management for Profit and Loss Sharing Financing of Islamic Banks” to answer the question: Why are Islamic banks reluctant to indulge in mudharabah and musharakah financing? The main conclusion of the study was that risk management can give Islamic banks guidance on how to manage the risk attributed to profit and loss sharing arrangements through Mudharabah and Musharakah contracts. Febianto indicated in this regard that this guidance can motivate Islamic banks to be more participative in profit and loss sharing arrangements, especially on their asset side.

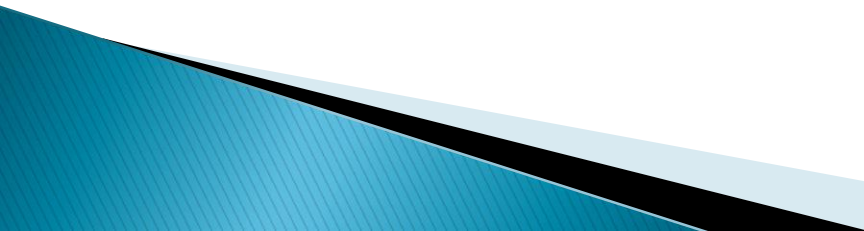
- ▶ Hidayat et al. (2012) investigated the level of effectiveness of liquidity risk management of Islamic banks in Bahrain. They used a questionnaire which was distributed to a sample of 50 depositors who have active relationships with the Islamic banks. The 50 employees chosen were managers and supervisors of Islamic Banks in the Kingdom of Bahrain. The main finding of this study was the positive perception on the status of equity-based financing, which was believed to be an effective part of liquidity risk management. The findings also indicated that there is no significant difference in perception between the employees and depositors on the level of effectiveness of liquidity risk management in terms of deposit portfolio and equity financing.

- ▶ Liquidity risk and banking system performance in Pakistan were examined by Zulfiqar and Anees (2012). The period covered was 2004–2009 and the sample includes 22 banks, which constitute the main part of the Pakistani banking system. They found that liquidity risk significantly affects bank profitability. Kumaran (2012) examined risk management and mitigation techniques in Islamic finance. The study reveals that the Islamic financial institutions face the category of risk they have in common with conventional banks as financial intermediaries, namely credit risk, market risk, liquidity risk, and operational risk. However, due to Sharī'ah compliance the nature of these risks changes. Abu Hussein and Al-Ajmi (2012) examined risk management practices of conventional and Islamic banks in Bahrain and they found that credit, liquidity and operational risk are the most important risks facing both conventional and Islamic banks. They also found that the levels of risks faced

- ▶ Ramadan (2011) indicates in his study on bank-specific determinants of Islamic banks' profitability that well capitalized banks, efficient management, and higher credit risk lead to higher return on assets, which is a measure of bank performance. Another finding of this study is that the credit risk positively and significantly affects the profit margin of Jordanian Islamic banks, which is another measure of bank performance. Bank performance of Islamic banks compared with conventional banks in Indonesia has been investigated by Ika et.al (2011) and they reached the conclusion that Islamic banks are generally more liquid as compared to conventional ones.

- ▶ Boumediene (2011) attempted to answer the question: Is credit risk really higher in Islamic banks? The results indicate that credit risk is indeed higher in Islamic banks compared with conventional banks. Abdullah et al. (2011) investigated operational risk in Islamic banks. The main finding of their study is that risk measurement and risk management practices still need specific adaptations to Islamic banks' operational characteristics. They also highlighted the unique characteristics of Islamic banks and raised serious concerns regarding the applicability of the Basel II methodology for Islamic banks.
- ▶ Rahman (2010) investigated the determinants of the three-factor capital asset pricing model (CAPM) of Malaysian commercial banks. The main findings of this study were: different types of risk exposure have different determinants; the market risk exposure for the Islamic bank is lower than for conventional banks; the merger program is fruitful because it reduces the interest rate risk exposure, total risk exposure, and unsystematic risk exposure; and the banks under study had higher total and unsystematic risk exposures during the 1997 Asian financial crisis.

- ▶ Sensarma and Jayadev (2009) examined the relationship between returns on the banks' stocks and risk management. They found that banks' risk management capabilities have been improving over time and returns on the banks' stocks appear to be sensitive to risk management capability of banks. Rahman (2010) examined the financing structure and insolvency risk exposure of Islamic banks. The main findings of this study were that an increase in real estate financing decreases insolvency risk, but increasing concentration of financing structure increases insolvency risk. Furthermore, increasing the stability of the financing structure reduces risk in the short term. The study recommended the regulatory bodies, policymakers, and market players in the Islamic banking industry should take appropriate action to manage the insolvency risk of Islamic banks.
- ▶ financing produce sustainable returns of bank financing. Marcellina (2011) examined credit scoring and risk assessment, and was able to confirm that financial ratios are good predictor variables of bank's performance and can be used for classifying and evaluating the bank's customers. Consequently, the bank can reduce its non-performing loans and its credit risk exposure.

- ▶ Siddiqui (2008) investigated financial contracts, risk, and performance of Islamic banking. The results indicate a good performance of the Islamic banks covered, measured by returns on their assets and equity; these banks also demonstrated better risk management and maintained adequate liquidity.
 - ▶ Saiful and Mohammad (2008) examined the relationship between risk and return(i.e. a measure of performance) for Islamic banks' investment deposits and shareholders' fund. The findings indicate that deposit yields in conventional banks were lower than return on equity (ROE), as a result of the contractual differences between fixed deposit and bank capital. The findings also indicate that Islamic banks' deposit yield and ROEs do not reflect their risk-taking properties.
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- ▶ Turk and Saredine (2007) highlighted some of the challenges facing Islamic banks in implementing capital adequacy guidelines. For instance, more complications arise when attempting to measure Shari'ah compliance risk; Islamic banks are exposed to a significant liquidity risk, as currently Islamic banks tend to rely on short-term Murabahat which is not enough for liquidity purposes. Therefore, more work is needed in order to better account for liquidity risk exposure and risk-weighted assets that do not include assets funded by profit-sharing investment accounts.

- ▶ How et al. (2005) investigated whether Islamic financing can explain three important bank risks in a country (i.e., Malaysia) with a dual banking system: credit risk, interest–rate risk, and liquidity risk. They found that commercial banks with Islamic financing have significantly lower credit and liquidity risks but significantly higher interest–rate risk than banks without Islamic financing. Bank performance and risk has been investigated by John and Courington (1993). They examined the causes of variation in loan performance among banks located in the energy–producing states of Louisiana, Oklahoma, and Texas. The results indicate that a substantial portion of the variation in troubled assets can be attributed to differences in local economic conditions as well as to the unusually poor performance of particular industries like energy and agriculture. The results also indicate that excessive risk–taking played a critical role in the loan problems experienced by many of the region's banks and was a contributing force to the diversity in loan performance throughout the region.

Research Hypotheses

- ▶ Based on the purpose of the study which is to examine the relationship between risk and performance of the GCC Islamic banks and the relative importance of the most common types of risk , the following hypotheses are formulated:
- ▶
- ▶ H_1 : There is a significant relationship between credit risk, liquidity risk, capital risk and operational risk and Islamic banks' performance in the GCC.
- ▶
- ▶ H_2 : There are significant differences in the magnitude of the impact of each type of financial risk on Islamic banks performance in the GCC.

Data and the Empirical Model

- ▶ The regression model used in this study is as follows:
- ▶ $PERF = f(CRK, LIQR, CAPR, OPR)$
- ▶ Where:
- ▶ PERF – represents two alternative performance measures for the GCC commercial banks. These two measures are ROA and ROE;
- ▶ CRK – is credit risk = Total loans/total assets or loan losses/total loans;
- ▶ LIQR – is liquidity risk = Total loans/total deposits;
- ▶ CAPR – is capital risk = Equity capital/total assets;
- ▶ OPR – is operational risk = Cost/income.

Control variables ▶

- ▶ Three control variables were used; the first one is inflation as there is an inverse relationship between inflation and performance. This relationship has been reported by N'cho-Oguie et al (2011), the second one is Bank size is measured by the natural logarithm of bank's total assets. In this regard Shrieves and Dahl (1992) and Hussain and Hassan(2004) indicated that size may have an impact on the bank's level of portfolio risk. The third control variable is GDP growth rate, which is used as proxy for macroeconomic shocks(see Micco and Panizza ,2004 and Yanez, 2007). The macroeconomic shocks affect risk and return(performance).

Data Analysis and Results

	CRK	LIQR	CAPR	OPR
CRK	1.000			
LIQR	.427	1.000		
CAPR	-.605*	-0.228	1.000	
OPR	-.526	-0.224	0.352	1.000

Table I. The Correlation Coefficients between Independent Variables

* Correlation is significant at the 0.05 level (2-tailed)

▶ Table II. Summary of Regression Results – The First Model

	Beta	T
(Constant)		3.156
CRK	-.009	-.033
OPR	-.399	-1.883*
CAPR	-.703	-3.108**
LIQR	-.231	-1.162*
R		.879
R Square		.773
Adjusted R Square		.644
Std. Error of the Estimates		5.296

Dependent Variable: ROE (net income/equity)

*Statistically significant at the 5 percent level

** Statistically significant at the 10 percent level

ble III. Summary of Regression Results – The Second Model

	Beta	t
(Constant)		2.645
CRK	-.263	-1.164
OPR	-.472	-1.634
CAPR	-.718	-2.945*
LIQR	.035	.117
GDPG	-.131	-.406
R		.883
R Square		.779
Adjusted R Square		.595
Std. Error of the Estimate		5.644

Dependent Variable: ROE (net income/equity)

*Statistically significant at the 1 percent level

Conclusions and Summary of Findings

- ▶ The objective of this study was to examine the relationship between financial risk and performance of the GCC Islamic banks and the relative importance of the most common types of risk. The study covers 11 of the 47 Islamic banks in the GCC region for the period from 2000–2012. For bank performance the two most common measures, ROA and ROE, were alternatively used and for risk, four types of risk were used: credit risk, liquidity risk, operational risk and capital risk. The selection of these banks and these types of risk was determined by availability of data. By using two regression models, two performance measures were used. The results as expected indicate that there is a significant negative relationship between the GCC Islamic banks' performance and two types risk, namely capital risk and operational risk, and also confirm that there is a significant negative relationship between the GCC Islamic banks' performance. However, the positive relationship between risk and performance of the GCC Islamic banks was not confirmed. Furthermore, the results indicate that the most important type of risk is capital risk risk, followed by operational risk.. For policy implementation, it is highly recommended that more attention be paid to capital risk, as this type of risk represents the main determinant of performance, either the equity or assets components. In addition, more attention should be given to operational risk which is mainly related to uncertainty regarding a financial firm's earnings due to failures in computer systems, errors, misconduct by employees, or risk of loss due to unexpected operating expenses. Finally, more attention should also be paid to liquidity risk which represents a determinant of GCC Islamic banks' performance.