

# Financial Risk and the Financial Performance in listed Commercial and Investment Banks in Bahrain Bourse

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Risk management is on the rise every day in the banking industry due to the rising uncertain economic climate. Despite the growing role of banks in the country's growth, the governing bodies of these institutions face numerous risks. Risk management is perceived to be the secret to the success and failure of any financial institution. The study explores the effect of financial risk on the performance of listed banks in Bahrain and the relative value of the most popular types of risk. The research covers 11 of the 18 banks in Bahrain from 2014 to 2018. Based on the availability of data, data was collected from the Bahrain Stock Exchange Database. Alternatively, the most common metrics, ROA, was used for bank performance and risk measures. Four forms of financial risk have been used, namely capital risk, exchange rate risk, liquidity risk and operating risk. Regression analysis reveals that there is an insignificant relationship between bank performance, exchange rate risk, liquidity risk and operating risk. The findings also indicate an important positive relationship between bank performance and capital risk. In addition, the findings indicate that capital risk is the most significant form of risk. The research advises that attention be paid to operational risk, which is primarily related to uncertainty about the earnings of a financial company due to computer system failures, mistakes, abuse by staff, or risk of loss due to unforeseen operating expenses.

**Key words:** *Financial performance, Commercial or Investment bank, Financial risk.*

## **Introduction**

### ***Background of the Study***

As liberalisation, globalisation and the rapid development of computer technology creates new business opportunities, economic and financial bodies are exposed to risks more complex and diverse than in the past. Identification, measurement and control of risk have never been more important to organisational and strategic management. Financial risks are among the key challenges faced by many companies, especially those listed on the stock exchange, where the value of companies depends on market conditions. Several risks common to all companies include liquidity risk, credit risk, market risk and other forms of non-financial risk (Kassi, Rathnayake, Louembe, & Ding, 2019).

Financial risk is whereby returns vary or fluctuate unexpectedly. There are many types of financial risks. These risks contribute negatively in terms of how an organisation will perform financially (Kioko, Olweny, & Ochieng, 2019; Muriithi, 2016). The term financial risk can be used as a general term for various forms of financing risk, including financial transactions involving corporate default risk loans. Financial risk arises from possible stock market declines attributable to volatility in asset variables. This is usually associated with the debt, with the probability that commitments and responsibilities can not be balanced against current assets (Al-Tamimi & Al-Mazrooei, 2007). Financial performance relates to the ability of a company to execute plans and critical decisions in order to meet its goals, goals and high returns. As part of the financial system, wise economic banks make a significant contribution to the development of a nation. Therefore, the financial performance of banks is crucial as it also boosts the living standards of people at large. There have been many studies done on performance on financial institutions such as banks. The findings of these studies indicate different outcomes on financial performance globally (Doliente, 2003; Kioko et al., 2019).

There has been a significant amount of empirical research in recent years on the impact of financial risk management on financial performance. Subsequently, a multitude of these studies demonstrates the significant role played by the country's financial system as the cornerstone of a stable and productive economy. The banking sector, the main player in the role of financial intermediation in developing countries, is at the heart of the financial system as per (Hawkins & Mihaljek, 2001; Sathyamoorthi, Mapharing, Mphoeng, & Dzimir, 2020). Our emphasis in this study would be on the use of term financial risks to generally cover the capital risk, exchange rate risk, liquidity risk and operating risk. Financial risk can be triggered by changes in interest rates, currency exchange rates, stock price fluctuations, default risk and liquidity differences that affect cash flows and thus their financial performance (FP) and competitive position in commodity markets.

The remaining of the paper is structured as follows. First is the introduction to financial performance and banking in Bahrain, research issue, research objective, and the benefit of the research. The second part deals with the review of the literature of the most recent studies and hypotheses, followed by the study of testing techniques and data collection. The fourth section is devoted to the review of results. Conclusions on the key results are discussed in the final portion of the debate on the empirical findings.

### ***Financial Performance***

The financial performance (FP) of financial institutions can be assessed by explicit or implicit factors. Internal factors may be bank-specific determinants, while external factors may be industry-specific indicators and macro-economic predictors. The bank's basic metrics include growth in bank assets, capital adequacy, operating performance and liquidity. Common considerations for the industry include ownership, size of the bank, and concentration index of the bank. At the other word, main macroeconomic factors include GDP growth, inflation expectations, interest rate and spread. Financial performance is a summary of the management progress in using company resources to achieve optimum profitability (Mansyur, 2017).

FP is described as a general measure of how well a bank generates its capital revenue (Toutou & Xiaodong, 2011). Suka (2010) view financial success as a subjective indicator of how effectively a company uses assets from the primary mode of business to produce revenue. There are a number of metrics that can be used to determine the financial performance of commercial banks. Some of the main FP metrics include ROA, ROE, and Productivity. The ROA is the net income for the year divided by total assets, typically the average value of the year. ROA tests the capacity of bank management to produce revenue by using the assets of the business at their disposal. In other words, it demonstrates how effectively the company's resources are used to produce revenue. Khrawish (2011) It argues that return on assets is showing the efficiency of the management of the business in producing net income from all the resources of the organisation. ROE represents how efficiently shareholders' funds are used by bank management. Therefore, it can be deduced from the above argument that the more effective the management of ROE is in the use of shareholder capital.

### ***Banking Industry in the Kingdom of Bahrain***

As far as the banking sector listed on the Bahrain Stock Exchange is concerned, there has recently been a significant expansion. There are now more than One hundred and fourteen banks in Bahrain, comprising twenty three retail banks, sixty nine wholesale banks, two specialist banks, commercial and investment and thirty six international bank representative offices. The country's financial system is comprised of Islamic banks and conventional banks.

Bahrain is a commercial centre (Hub) for the Middle East (Erdoğan, Gedikli, & Genç, 2018). Bahrain Central Bank (CBB) regulates the sectors in Bahrain, such as insurance and banking. Legal, regulatory, and accounting systems in the Bahraini financial sector are transparent and in line with international standards. All of these factors combined to support the kingdom of Bahrain as a regional banking hub that has succeeded in attracting a number of foreign banking institutions to establish offices in the Kingdom of Bahrain. Growth in the banking sector has recently been boosted by an increase in oil prices, which has led to an increase in liquidity. Thus, banks played a pivotal role in reinvesting surplus oil revenues and benefiting from financing opportunities in other sectors in the national economy (CBB Financial Report, 2018). There are 7 commercial bank listed in Bahrain bourse (Ahli United Bank, Bahrain Islamic Bank, BBK, Ithmaar Holding B.S.C., Khaleeji Commercial Bank B.S.C, National Bank of Bahrain), and the investment sector consists 11 firms, namely Al Baraka Banking Group B.S.C, Arab Banking Corporation, Bahrain Commercial Facilities Company, Bahrain Middle East Bank (Suspended), Esterad Investment Company B.S.C, GFH Financial Group B.S.C, INOVEST B.S.C., Investcorp Holdings B.S.C., Investcorp Holdings B.S.C., United Gulf Holding Company B.S.C., and United Gulf Investment Corporation B.S.C.

### ***Research Problem***

The banking industry is booming globally. Every bank in the world must seek to boost its overall performance profitability, where the performance is measured in terms of a better position in the world's financial institutions. According to Alzorqan, 2014, Ismail, Abd Samad, and Romaiha, 2018, the performance of the bank is different for each bank and is affected by factors such as the basic management of the banks and the markets they have served to assess their risk exposure. Based on the previous report, it indicates that there are various types of risks facing banks, such as credit risk, operating risk, interest rate risk, market risk and foreign exchange risk. For commercial and investment banking, this study may help to recognise factors that have an impact on the profitability of banks. A number of studies have investigated the relationship between financial risks and financial results, but most of these studies reflect the experiences of countries in which the economic, social and legislative environment differs from that in the Kingdom of Bahrain, which makes it difficult to generalise its results to the Kingdom of Bahrain. Previous studies also showed that there is a gap in the study of types of financial risks, for example ,Shamas, Zainol, and Zainol (2018) showed that there is a decrease in the number of studies on financial risks such as liquidity, as well as a decrease in the number of studies prepared in the Arabian Gulf. This study comes to cover the gap by studying several variables of financial risks, which are the risks (capital, exchange rate, liquidity, operation) this may, in effect, impact the financial performance of banks listed on the Bahrain Bourse.

### ***Research Objective***

The main objective of the analysis is to examine the effect of financial risk management on the financial performance of listed commercial and investment banks in the Bahrain Bourse. Clear goals have been set:

1. To assess the effect of capital risk on the financial performance of listed commercial and investment banks in Bahrain Bourse.
2. To assess the effect of Exchange rate risk on the financial performance of listed commercial and investment banks in Bahrain Bourse.
3. To assess the effect of liquidity risk on the financial performance of listed commercial and investment banks in Bahrain Bourse.
4. To assess the effect of operational risk on the financial performance of listed commercial and investment banks in Bahrain bourse

### ***Value of the Study***

The study will provide insight into the most effective approaches that banks use to mitigate financial risk. The results of the research will benefit Bahrain's banks to establish guidelines that boosts financial risk management in the banking sector. The study will also be useful for commercial banks and will be able to understand the risk management activities and lead to the financial performance of commercial banks and ensure that appropriate banking policies and procedures are followed. Academicians will benefit from the research details because the research would add to the current body of knowledge. The study could also provide background knowledge to research institutions and researchers and would recognise gaps in current research for further research.

### **Literature Review**

The key results of selected empiric studies are summarised in this section. There is no empirical proof to the best of the researcher's knowledge research dealing with the same issues discussed in this paper for commercial and investment banks in Bahrain or in other parts of the world. The majority of available empiric studies cover only one form of risk, such as liquidity risk, operating risk, credit risk or capital risk. The following is an effort to illustrate the findings of some empiric research discussing four forms of risk listed in the current study, and this study often uses specific important variables and control variables.

The influence of financial risk on the financial performance of commercial banks was examined by Sathyamoorthi et al. (2020). The analysis used ROA and ROE as a measure of financial success, gross debt to total assets, net equity to total assets and loan-deposit ratios

have been used as measures for financial risk management. The research population was all ten commercial banks in Botswana, and the research data were eight years (2011 - 2018). This concise research provided secondary data from Financial Statistics database. Descriptive statistics, correlation and regression analyses were used to analyse the results. The findings of the regression analysis showed that interest rates had a negative and significant effect on asset returns and equity returns. On the other hand, overall debt to total assets had a negative and negligible impact on the return on assets. Nonetheless, the overall debt on total assets showed a small and negligible impact on the return on equity. The loan deposit ratio had a negative and important effect on the return on assets and on the return on equity.

Kioko et al. (2019) reported how financial risks impact the financial performance of commercial banks listed on the Nairobi Stock Exchange in Kenya. The independent variables in this analysis were credit risk, market risk, liquidity risk and operational risk. Financial output was the dependent variable. The study focused on the population of all 44 commercial banks. The study included a sample population of the 11 commercial banks listed on the Nairobi Stock Exchange. The research was performed over a 5-year period (2014-2018). The architecture of the analysis used during the study was descriptive. Secondary data for 11 commercial banks were collected from the released financial statements and annual reports of the bank. Data analysis was performed using a multiple regression model. The data collected was encoded using the SPSS and fed into an excel data collection tool. The analysed data was provided in the form of tabulations, mean and standard deviations. The findings of the research showed that credit risk, market risk and operating risk had a significant negative impact on financial performance, while liquidity risk had a significant negative impact on financial performance. At the same vein but with different results, liquidity risk and specific determinants in Gulf Cooperation Council were examined by Shamas et al. (2018). Panel data analysis was used on a survey of seven Bahraini IBs representing the Bahraini Islamic banking sector between 2007 and 2011. The econometric results show that the liquidity risk of the Bahraini IBs depends on idiosyncratic factors. We find that liquidity risk relates positively to the return on average assets (ROAA). On the other hand, non-performing loans (NPLs) and capital adequacy ratios (CARs) have a negative and important effect on liquidity risk. Finally, the scale of the bank and the financial crisis display a negative and negligible correlation with liquidity risk.

Gweyi, Olweny, and Oloko (2018) investigated the effect of Liquidity Risk on the financial performance of deposit-taking savings and credit co-operatives (DT Saccos) in Kenya. A descriptive research design was adopted in the report. The target population for this analysis was 164 deposits with Sacco companies approved to conduct Sacco business in Kenya for the financial year ending 31 December 2016. The research carried out a survey and found all of the deposit taking Saccos for research. Secondary data was obtained from 135 deposits taken from Sacco's audited financial statements, which constituted 82.32% of the performance rate.



Data were analysed using both descriptive and inferential statistics. As a consequence, liquidity risk has a negative and important effect on financial performance. Ismail et al. (2018) reported inconsistent results from an analysis of the financial effect on the performance of Islamic banks in Malaysia. This research includes the majority of Islamic banking institutions in Malaysia operating between 2008 and 2014. The data for 15 Islamic banks were taken from the Bank Scope database using the panel data set. Many factors have a major effect on the success of Islamic banks. Financial risk is one of them. The financial risks used in this analysis are credit risk, liquidity risk, operating risk and capital risk. Overall, the analysis establishes a major relationship between capital risk, operating risk and financial performance. Nevertheless, there is no connection between the credit risk and the liquidity risk to the success of Islamic banks in Malaysia.

Mansyur (2017) analysed the effect of financial risk on the financial performance of banks in Indonesia. This analysis uses panel data from the annual report of 23 banks listed on the Indonesian Stock Exchange for the period 2011-2015. Data analysis was conducted using the Smart PLS 3.0 route analysis. Financial success is the endogenous component. Exogenous variables include financial risk, consisting of liquidity risk and credit risk, exchange rate risk and interest rate. The results of the study indicate that credit risk has a negative and significant effect on financial performance. The risk of interest rates has a strong and important effect on financial results. Liquidity risk and exchange rate risk have been insignificant and do not impact the financial performance of banks.

The role of risk management in financial performance in Rwandan institutions has been assessed by Harelimana (2017) for the period 2012-2016. The data were collected by means of a questionnaire designed for 30 staff members of Unguka Bank Ltd, using both quantitative and qualitative techniques. Findings indicate that there is a clear association between risk management and financial performance. The four independent variables have been found to moderately predict the performance of Unguka bank ltd.

The results on the effect of liquidity risk as a significant component of financial risk management strategies on performance have also revealed inconsistent results and contradictions from one country to another. A statistically significant positive effect was found in several studies (Adeusi, Akeke, Adebisi, & Oladunjoye, 2014; Bagh, Khan, & Sadaf, 2017; Chipa & Wamiori, 2017; Harelimana, 2017; Lelgo & Obwogi, 2018; Mudanya & Muturi, 2018). A positive influence of liquidity risk management on financial results suggests that successful liquidity risk management contributes to improved profitability.

Other studies (Gweyi et al., 2018; Mardiana & Dianata, 2018; Perinpanathan & Vijayaratnam, 2015) provided proof of statistically significant negative effects on financial results of liquidity risk management, meanwhile still many studies (Haque & Wani, 2015;

Kioko et al., 2019; Mansyur, 2017; Wamalwa & Mukanzi, 2018) highlighted the insignificant impact on financial performance. Hassan Al-Tamimi, Miniaoui, and Elkelish (2015) review the relationship between the financial risk and performance of the Gulf Cooperation Council Islamic banks and the value of the most common types of risk. The study covers 11 of the 47 Islamic banks in the Gulf States from 2000 – 2012, based on the accessibility of data. Data was collected from Bankscope servers. Alternatively, the two most common metrics, ROA and ROE, have been used in the bank efficiency and risk metrics. Four types of financial risk were used, namely credit risk, liquidity risk, operating risk and capital risk. The regression analysis showed that there is a significant negative correlation between both the performance of the Gulf countries Islamic banks, capital risk and operating risk. The findings also reflect the important negative relationship between the outputs of Islamic banks in the Gulf Cooperation Council. In addition, the findings indicate that capital risk is the most significant form of risk, followed by operational risk. Hussain and Al-Ajmi (2012) Studied the risk management practices of mainstream and Islamic banks in Bahrain. The researcher found that credit, liquidity and operational risks are the most significant threats facing both traditional and Islamic banks. It also found that the risk rates faced by Islamic banks are substantially higher than those faced by conventional banks.

Previous researchers examined the relationship between financial risk variables and the financial performance of companies in different countries. Empirical evidence and findings from previous studies indicate a mixed pattern in the relationship between of financial risk components and profitability with statistically significant negative or positive influence, low and, in some cases, negligible or no influence of financial risk and financial performance. The literature also reveals that researchers have used a wide variety of approaches to financial risk elements, including non-performing loan ratios, loans to total deposit ratios, interest rates, capital adequacy ratios, interest income growth and loan loss assumptions on total loans, total equity debt, non-performing loans to gross loans ratios, inflation, total debt to total loans. Return on assets and return on equity have been commonly used to calculate financial performance.

## **Research Methodology**

### ***Research Design***

The research used a descriptive nature of the analysis. Descriptive survey research provides an objective profile of individuals, events or characteristics, e.g. attitudes, views, skills, beliefs and awareness of a specific individual, circumstance or community. The concise survey approach was chosen because it would provide a thorough explanation of the situation (in an in-depth analysis of financial risk management) and provide that there was minimal bias in data collection.



### ***Population & Sample Design***

In this study, 18 listed commercial and investment banks in Bahrain bourse were considered. Out of these, 18 of them are commercial and investment. Both licensed commercial and investment banks in the country are the target population for this analysis. During the period (2014-2018) as for the study sample, it was limited to 11 banks from the population of this study and based on the financial period. Taib Bank B.S.C. (Suspended), Bahrain Middle East Bank (Suspended) from trading on the stock exchange, and United Gulf Holding Company, 7 firms were excluded from the study due to lack of data needed or suspended from Bahrain Bourse.

### ***Data Collection***

These data were obtained from the annual financial reports of the listed commercial and investment banks in Bahrain bourse for the period 2014-2018 five years, which are available on the website of the exchange and the official websites of the banks themselves. The ratio of ROA to the dependent variable (financial performance) was averaged. The data was then analysed using SPSS tools.

### ***Model Specification***

The research used regression analysis with the formula equation. The model offered a statistical technique to estimate the relationship between financial risk management and financial performance of banks in Bahrain.

1- The first Model (ROA) financial performance measured by the rate of return on assets:  
 $PERFit (ROA) = \beta_0 + \beta_1 CAPR_{it} + \beta_2 ERR_{it} + \beta_3 LIQR_{it} + \beta_4 OPR_{it} + \beta_5 SIZE_{it} + \epsilon_{it}$

2- The second model (ROE) financial performance measured by the rate of return on equity:  
 $PERFit (ROE) = \beta_0 + \beta_1 CAPR_{it} + \beta_2 ERR_{it} + \beta_3 LIQR_{it} + \beta_4 OPR_{it} + \beta_5 SIZE_{it} + \epsilon_{it}$

Where:

$\alpha$  = constant/the interception point of the regression line.

Y=Financial performance Measured by the ROA (2014-2018) five years.

PERFit(ROA) = The financial performance of the bank as measured by the rate of return on assets

PERFit(ROE) = The financial performance of the bank as measured by the rate of return on equity.

X1= CAPR is capital risk = Equity capital/total assets;

X2= Exchange rate risk

X3= LIQR is liquidity risk = Total loans/total deposits;

X4= OPR is operational risk = Cost/income.  $\epsilon$  = disturbance term or error term.

### ***Operationalisation of the Study Variables***

In order to quantify financial risk, four main components of the Basel Committee on Banking Supervision (1999 and 2001) were used to formulate the report. The four components included capital risk, exchange rate risk, liquidity risk and operating risk.

Capital risk, exchange rate risk, liquidity risk and operating risk components were then related to the five-year average of ROA (2014-2018). The variables have been calculated as follows:

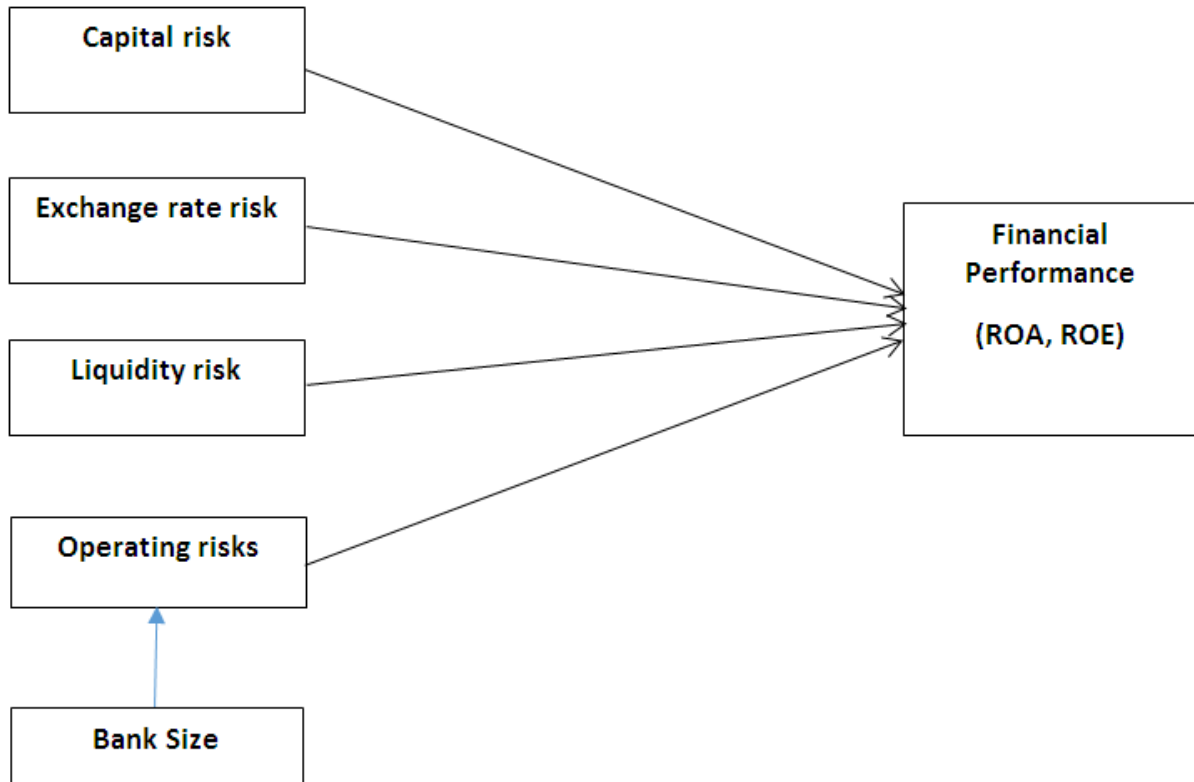
**Table 1:** Operationalisation of the Study Variables

<b>Variable</b>	<b>Measurement</b>
ROA	Return on Asset was measured as the ratio of net income to. Average total assets for the respective bank. A simple average.
ROE	Net Income after Taxes divided by Total Equity Capital
capital risk	Capital risk (CAPR) measured by equity capital/total assets.
Exchange rate risk	Assets - liabilities / total assets
Liquidity risk	Liquidity risk measured by total loans/total deposits.
operational risk	Operational risk (OPR) measured by the proxy measure cost/income
Bank size	Measured by total assets and deposits of the bank at the end of the year

Based on the most recent empiric studies described above, the model used in this analysis contains several variables previously used in the literature. For example, when assessing the overall performance of the bank, two measures are widely used: return on equity (ROE) and return on assets (ROA). In this analysis, ROA is used variously with four different variables.

### *Conceptualisation of the Research Framework and Hypotheses Formulation*

**Figure 1.** Conceptual Research Model



Therefore, the relevant hypotheses are proposed as follows:

**H<sub>1</sub>:** There is an insignificant relationship between Capital risk and banks' performance in Bahrain.

**H<sub>2</sub>:** There is an insignificant relationship between Exchange rate risk and banks' performance in Bahrain.

**H<sub>3</sub>:** There is an insignificant relationship between Liquidity risk and banks' performance in Bahrain.

**H<sub>4</sub>:** There is an insignificant relationship between operational risks and banks' performance in Bahrain.

**H<sub>5</sub>:** There is an insignificant relationship between bank size and banks' performance in Bahrain.

### **Data Analysis**

Initially, the researcher evaluated the study data descriptive analysis of all variables in order to derive some descriptive statistical measures such as standard deviation, the mean, the

highest and lowest value to ensure the extent of the study data approach to the normal distribution. The study hypotheses were tested through the use of the multiple regression model, in order to determine the extent of the impact of the independent variables on the dependent variable, and data validity methods were used for statistical analysis, which is the natural distribution test and linear interference test in addition to the Pearson matrix test, through the use of SPSS social science statistical packages to achieve this goal.

### *Descriptive Statistics*

Table 2 presents the descriptive statistics of the different factors that decide the financial performance of banks in Bahrain. As shown in Table 4-3, that the average capital risk has reached 0.15 and this ratio is good since the banks are subject during the study period to Basel 2 committee standards, which set the minimum ratio Capital adequacy 8%. It is also noted that the average exchange rate risk in the study sample was 0.368, while the standard deviation was 0.242, while the lowest value of the exchange rate risk was 0.099, and the highest value was 0.746, due to the stability of the rate Currency exchange rates in the Kingdom of Bahrain and the procedures followed by Bahraini banks to reduce the impact of exchange rate risk. The average liquidity risk in the study sample was 0.763, and the standard deviation was 0.815. The lowest value of operating risks was (2.699, while the highest value was 5.954)

This can be explained by the development of banks in the Kingdom of Bahrain for their banking operations according to rules and standards that contribute to controlling their operations in addition to their application to the rules of financial governance. As for the average size of the bank, it reached in the study sample (6.322).

**Table 2:** Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
ROA	55	-.010	.066	.01108	.011460	2.024
ROE	55	-.238	.239	.06726	.084102	-1.571
CR	55	.053	.366	.15701	.078639	1.458
ERR	55	.099	.746	.36884	.242629	.441
LR	55	.001	2.253	.76359	.815180	.835
OP	55	-2.699	5.954	2.91287	2.479898	-.568
BankSize	55	4.81	7.13	6.3229	.63517	-.882
Valid N (listwise)	55					

### Correlations

Usage of more than one component to analyse the contribution of independent variables to the regression model can result in a multicollinearity problem between these variables. Before analysing the contribution of independent variables to the regression model, we discuss the potential for multicollinearity. A multicollinearity test was carried out to determine the degree of correlation between variables. Table 2 displays the differences between the independent variables. The "dome law" test proposed by Anderson et al. (1990) implies that any over-correlation coefficient of 0.7 indicates a potential problem. The results in Table 2 imply that the correlations between variables are not statistically strong enough to indicate that there is a significant multicollinearity problem.

**Table 3: Correlations**

	ROA	ROE	CR	ERR	LR	OP	BankSize
ROA	1						
ROE	.747**	1					
CR	.516**	.210	1				
ERR	-.100	-.074	.083	1			
LR	.362**	.296*	.219	-.448**	1		
OP	.288*	.340**	.379**	-.162	.322**	1	
BankSize	-.286*	.010	-.475**	-.209	-.081	.157	1*

### Discussion and Finding

During this study, hypotheses will be tested through multiple linear regression testing by least squares where two models ROA and ROE were used.

Table 4 and 5 shows that the value of the Adjusted R Square amounted to 0.339 and 0.164 which indicates that the financial risks as an independent variable explain approximately 33% and 16% of the changes that occur in the financial performance measured by the return on assets and return on equity sequentially.

**Table 4: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	
					R Square Change	F Change
1	.582 <sup>a</sup>	.339	.271	.009783	.339	5.020

a. Dependent Variable: ROA

b. All requested variables entered.

**Table 5: Model Summary**

Model Summary <sup>b</sup>						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	
					R Square Change	F Change
1	.405 <sup>a</sup>	.164	.078	.080737	.164	1.919

a. Dependent Variable: ROE

b. All requested variables entered.

**First Hypothesis Test: H<sub>1</sub>:** There is an insignificant relationship between Capital Risk and Banks' Performance in Bahrain

Table 6 and 7 presents the results of the regression test for capital risks and its effect on return on assets as a dependent variable in the study. The value of Sig which reached 0.015 indicates a statistically significant effect between capital risk (CR) and return on assets (ROA), and the probability value (T) of 2.527 indicates a positive impact of capital risks on the return on assets in banks listed on the Bahrain Stock Exchange.

This can be explained by the fact that banks seek to raise the level of return on assets, as they are one of the most influential returns on the work of commercial banks, so banks are keen to maintain acceptable proportions of return on assets, and this is linked to banks' commitment to monetary policy that the CBB applies to banks listed on the stock exchange. Bahrain, which aims to maintain sufficient levels of capital in order to maintain investor confidence and balance between achieving high returns for the bank and protecting the capital. Therefore, the lower the capital risks, the more investor confidence and consequently, the impact on return on assets. This result is consistent with prior studies (Hassan Al-Tamimi et al., 2015; Ismail et al., 2018; Wahdan, 2017). In contrast, no statistically significant effect has been found between the capital risk r and the return on equity.



**Second Hypothesis Test: H<sub>2</sub>:** There is an insignificant relationship between Exchange Rate Risk and Banks' Performance in Bahrain

From Table 6 and 7 below, we find that the regression test results for exchange rate risks and indicate their effect on the return on assets as a dependent variable in the study, and the value of Sig which reached 0.761 indicates that there is no statistically significant effect between the exchange rate risks (ERR) and return on assets (ROA), as the Probability Value (T) of -0.305 indicates a negative impact of exchange rate risk on the return on assets in banks listed on the Bahrain Stock Exchange, This finding was consistent with previous studies (Maniagi, 2018; Mansyur, 2017). In addition, no statistically significant effect has been found between the exchange rate risk and the return on equity.

**Third Hypothesis Test: H<sub>3</sub>:** There is an insignificant relationship between Liquidity Risk and Banks' Performance in Bahrain

Table 6 and 7 below presents the regression test results of liquidity risk and its effect on return on assets as a dependent variable in the study, and the value of Sig which amounted to 0.116 indicates that there is no statistically significant effect between liquidity risk (LR) and return on assets (ROA), and the Probability Value (T) of 1.598 indicates a positive effect of liquidity risk on the return on assets in banks listed on the Bahrain Stock Exchange. This result was consistent with prior findings (Ismail et al., 2018; Kioko et al., 2019; Mansyur, 2017; Patarai & Mohamad Fauzi, 2016), due to the ability of banks to manage declines or unexpected changes in funding sources, and to face changes that may occur to market conditions that may affect the ability to liquidate assets quickly and with minimal loss in value, as liquidity risk does not affect financial performance as they are subject to the controls and laws of the Basel Committee binding by the central bank. The study result is inconsistency with Gweyi et al. (2018). However, also no statistically significant effect between the LR and the return on equity.

**Fourth Hypothesis Test: H<sub>4</sub>:** There is an insignificant relationship between operational risks and banks' performance in Bahrain

Table 6 and 7 below presents the results of the regression test for operating risks and its effect on return on assets as a dependent variable in the study. The value of Sig which reached 0.598 indicates that there is no statistically significant effect between the operational risks (OP) and the return on assets (ROA), and the probability value (T) of 0.531 indicates a positive impact of operational risks on the return on assets in banks listed on the Bahrain Stock Exchange. This can be explained by the ability of banks in the Kingdom of Bahrain to use their available resources and investments to achieve profits and reduce risk ratios, in addition to careful control and financial scrutiny of all their investments and financing and

lending operations carried out by those banks, which is reflected in the reduction of operating risk ratios, and this is reflected in banking operations. It creates a good reputation for banks, and thus increases the volume of deposits and customer confidence in them, which increases the return on assets. The results of this study were different from the results of previous studies (Ismail, et al. 2018; Al-tamimi, et al. 2015; Kioko, 2019). However, also no statistically significant effect had been found between the operations and the return on equity.

**Fifth Hypothesis Test: H<sub>5</sub>:** There is an insignificant relationship between bank size and banks' performance in Bahrain

Table 6 and 7 below presents the results of the regression test for the size of the bank and its effect on return on assets as a dependent variable in the study, and the value of Sig which reached 0.498 indicates that there is no statistically significant effect between the bank size and the return on assets (ROA), as the probability value (T) of -0.682 indicates a negative impact of the size of the bank on the return on assets in banks listed on the Bahrain Stock Exchange, and therefore the fifth sub-hypothesis can be accepted, meaning that there is no statistically significant effect between the size of the bank and the return on assets, as this result is consistent with several studies (Maniagi, 2018; Shamas et al., 2018). However, also no statistically significant effect has been found between the size of the bank and the return on equity.

**Table 6: Coefficients**

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.011	.019		.569	.572
CR	.057	.023	.393	2.527	.015
ERR	-.002	.006	-.041	-.305	.761
LR	.003	.002	.224	1.598	.116
OP	.000	.001	.076	.531	.598
BankSize	-.002	.003	-.101	-.682	.498

b. Predictors: (Constant), BankSize, LR, OP, ERR, CR

**Table 7:** Coefficients

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.039	.158		-.249	.804
	CR	.091	.187	.085	.487	.628
	ERR	.026	.053	.075	.490	.626
	LR	.025	.016	.239	1.517	.136
	OP	.008	.005	.235	1.457	.152
	BankSize	.006	.022	.049	.292	.772

a. Dependent Variable: ROE

b. Predictors: (Constant), BankSize, LR, OP, ERR, CR

### Conclusion and Recommendations

The main objective of this study is to analyse the effect of financial risks on Bahrain's commercial or investment performance and the relative significance of different types of risk. The research covers 11 of the 18 investment or commercial banks in the Bahrain Region for the period from 2014 to 2018. Financial risks include capital risk, exchange rate risk, liquidity risk and operating risk. The interpretation of the results consists of ROA-dependent variables. The results of this study must respond to the analysis objective.

Four forms of risk were examined: capital risk, exchange rate risk, liquidity risk and operating risk. The choice of these banks and the types of risks were determined by the amount of the data. Two output tests were used using two regression models. The expected results indicate an insignificant relationship between bank performance and three types of risk, namely exchange rate risk, liquidity risk and operating risk. The positive and important relationship between capital risk and the performance of the banks has been reported. In addition, the findings suggest that capital risk is the most significant form of risks. There are insignificant relationships between control variables, size of bank and output of banks.

As a recommendation, it appears that there are opportunities for other researchers to further study the relationship between financial risk and commercial or investment bank performance. On the basis of the results, we found that there are several suggestions for future research in order to obtain more detailed results. The first suggestion is to conduct a study related to a comparison of commercial or investment results. The future research will use financial risks as an independent variable to analyse the effect of financial risks on the results of both banks. Through this analysis, the researcher was able to establish similarities and differences between these banks. In addition, it proposed that other variables, such as corporate governance as moderator variable or gross domestic product, non-profit loans,



should be added in order to produce better results in the future analysis. Through incorporating new variables, the researcher may recognise certain variables that have a significant relationship with commercial or investment results. Pay attention to capital risk, since this type of risk is the key determinant of results calculated by either the equity or the components of the assets. In addition, attention should be paid to operational risk, which is primarily related to confusion regarding the earnings of a financial company due to computer system glitches, mistakes, wrongdoing by staff, or risk of loss due to unforeseen operating expenses.

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