



The Impact Of Financial Risks On The Profitability Of Islamic Banks Operating In Jordan (2019-2022)

Dr. Ghassan Abumatar*

*Assistant Professor, financial department, Arab Amman University/ Amman / Jordan, ghassan.abumatar@aau.edu.jo

Citation: Dr. Ghassan Abumatar (2024), The Impact Of Financial Risks On The Profitability Of Islamic Banks Operating In Jordan (2019-2022), Educational Administration: Theory And Practice, 30(4), 3888-3897, Doi: 10.53555/kuey.v30i4.2137

ARTICLE INFO ABSTRACT

Islamic banks seek to achieve greater compatibility with international standards and regulations related to financial risk management. This can help enhance the reputation of these banks and expand their operations on the global stage. Studying financial risks helps ensure the sustainability of Islamic banking. By controlling risks, Islamic banks can preserve capital and reduce the chances of significant losses.

The study aimed to examine the impact of financial risks, including credit risk, interest rate risk, and liquidity risk, on the profitability of Islamic banks operating in Jordan. The study employed a descriptive-analytical approach, the study population consisted of financial data for all Islamic banks operating in Jordan, during the period from 2019 to 2022.

Financial risks: credit risks, interest rate risks, and liquidity risks, have a negative impact on the profitability of Islamic banks operating in Jordan during the period from 2019 to 2022.

Keywords: financial risks, profitability, Islamic banks, Jordan.

INTRODUCTION

The banking system plays a significant and fundamental role in the economies of countries due to its major influence on their economic situation. Given the magnitude of this role and the tasks performed by banks, which are primarily associated with money, they are exposed to significant risks, whether these risks stem from internal factors or external factors (Al-Ajnaf, 2018).

According to a report prepared by The Center for the Study of Financial Innovation (CSFI) in collaboration with Price Waterhouse Coopers (PWC) in December 2015, the risks facing banks were divided into 24 categories. Among the most prominent of these risks are credit risks, interest rate risks, and liquidity risks. These risks affect the bank's management of its assets and, consequently, its performance and profitability (Al-Fawwaz, Dawood, & Arabiyat, 2016).

The process of evaluating financial statements and the derived results is one of the important aspects that management and users of financial data should consider, especially during critical periods characterized by inflation and economic instability due to economic, political, and health conditions in the region. These conditions may lead to an increase in these risks. Evaluating financial statements helps identify potential future challenges for the bank, enabling it to anticipate and mitigate risks as well as find solutions to problems that could affect the bank's profitability. This allows the management to be proactive and prepared for any unforeseen circumstances.

The banking sector provides a key indicator of the economic vitality of a country through the diverse banking services it offers, which stimulate economic and commercial activities. As a result, it's important to evaluate the performance of banks and the extent to which financial risks like credit risks and others affect them (Hussein, 2017).

The banking industry is one of the most risk-exposed industries, as these risks are diverse and constantly changing due to the continuous developments in this sector. These risks have significantly increased in the late twentieth century due to rapid technological advancements and the emergence of modern financial instruments. Risks are an integral part of any bank's operations, as banks are exposed to risks to varying degrees, and their impact on the bank differs depending on the approaches adopted to confront them. Therefore, the subject of risk and its management has become a matter of great concern for bank management and regulatory authorities, as the soundness of the banking system reflects on the stability of the overall economic and financial system.

1. Literature review

Financial risks are defined as the probability of a specific event or series of events occurring over a period of time, negatively affecting the achievement of a particular objective, with the possibility of the borrower being unable to meet its obligations within the specified time. This, in turn, affects the bank's revenues and capital (Kipngetich & Muturi, 2015). Financial risks can be defined as a "circumstance or situation in the real world where there is exposure to an adverse outcome. More precisely, it is the state in which there is a possibility of a deviation from the desired, expected, or intended result (Abu Khurais & Tallawa, 2011). Al-Shbeeb (2012) defines financial risks as the "uncertainty of future financial outcomes for a decision made by an economic agent in the present based on the results of studying natural or general phenomena in the past."

The Financial Services Roundtable (1999) (FSR), a committee on banking regulation and risk management in the United States, defines financial risks as the "probability of incurring losses either directly through business results or capital losses or indirectly through constraints that reduce the bank's ability to achieve its goals and objectives. Such constraints weaken the bank's ability to continue its operations and conduct its activities on the one hand and limit its ability to exploit available opportunities in the banking environment on the other" (Hussein, 2017).

In general, Islamic banks face a range of risks arising from the nature of their banking practices, whether Islamic or conventional. Some risks are shared with their conventional counterparts, while others are unique due to the differences in the banking methodology and approach at Islamic banks. Agha (2020) explains that financial risks shared by Islamic banks and commercial banks include credit risks, capital adequacy risks, interest rate risks, and liquidity risks.

Many previous studies have looked at the issue of impact of financial risks on the banks profitability. By moderately adjusting interest rates, Nurfadillah et al. (2023) examined banking business profitability aspects. Capitalization greatly reduced profitability for small and medium banks but greatly increased it for large banks. Liquidity risk hurts big banks' profits. Credit risk hurts small and large banks' profitability. Small banks and mediating banks profit from the interest rate policy, whereas large banks lose.

Puspitasari et al. (2023) examined how financing risk, capital adequacy, ICG, and ICSR affect Islamic banking ROA in Indonesia. The data showed that NPF hurt ROA financial performance. Additionally, CAR and ICG disclosure improved ROA financial performance. However, ICSR disclosure did not affect ROA financial performance. Age control variables and Islamic bank size did not affect ROA.

Shakhom & Haffa (2021) examined how banking risk values affected commercial bank profitability from 2010 to 2018. The study found that while banking risks increased by one unit, return on assets declined by 0.02%, demonstrating that commercial bank profitability is unaffected by risk.

Anh et al.'s (2021) study aimed to identify the impact of credit risks on the financial stability of Vietnamese commercial banks, using the Z-score to express bank stability. The researchers used a descriptive analytical approach and utilized data from 27 Vietnamese commercial banks in BankScope during the period 2010–2019. The study revealed a negative impact of non-performing loans on the financial stability of banks and that bank-specific variables such as the ratio of equity to assets, return on equity, bank size, and a set of macroeconomic variables affect the financial stability of the bank..

Al-jama'i (2020) examined how financial risks affect Yemeni Islamic banks' performance. The study found an association between financial risks and performance. Financial risk type affected this correlation (negative or reverse). Credit risks were negatively connected with financial success evaluated by ROA and ROE, while the remaining risks were favourably correlated. The statistical research showed that financial risks affected financial performance, albeit not significantly.

Djebali & Zaghdoudi's study (2019) aimed to identify the relationships between liquidity risk, credit risk, and bank stability for a dataset of 75 traditional banks from 11 countries in the Middle East and North Africa region observed during the period 1999–2017. The study found that the relationship between credit risks related to bank stability and liquidity stability risks is nonlinear and characterized by critical thresholds of 13.16% for credit risks and 19.03% for liquidity risks. Contrary to their positive effects below these optimal thresholds, credit and liquidity risks become harmful to bank stability in the high-risk system.

The study by Al-Fawaz et al. (2016) compared Jordanian conventional and Islamic banks' credit risk management. The study found Islamic banks more responsive to credit risk management. Islamic and conventional banks differed in their understanding, perception, evaluation, analysis, and credit risk management techniques to mitigate credit risks. The report advised conventional banks to create a risk-management environment. It stressed the significance of clear credit approval criteria and proper credit portfolio management through measurement, monitoring, and risk control to ensure the soundness of the credit-providing process.

1.1 Credit Risks:

Credit risks are among the most significant risks faced by banks in their general relationship with customers. These risks relate to the likelihood of the customer's inability to repay their obligations on time and under the agreed-upon conditions in the credit contract. Banks almost face credit risks in all their operations because the relationship between them and their customers is a creditor-debtor relationship, regardless of the various labels for contracts and transactions (Widajatun & Wahju, 2019). Credit risks are defined as: "risks arising

from the inability of customers and other parties to meet their obligations to the lending parties in a timely manner. These risks are related to loans, advances, credit facilities, guarantees, and market values of financial derivatives" (Agha, 2020). Credit risks are defined as: "the change in the net value of assets due to the expected debtor's ability to fulfill their contractual obligations to the lender in a timely manner" (Bahat & Darzi, 2019).

1.2 Interest Rate Risks:

Changes in interest rates affect the bank's profits due to changes in net interest income, the sensitivity of other income to interest rates, and operating costs. Changes in interest rates affect the value of assets, liabilities, and off-balance-sheet instruments. The present value of future cash flows changes with fluctuations in interest rates. Therefore, effectively managing risks is crucial to maintaining hedging levels to ensure safety (Basel 2 World, 2009). Interest rate risks are defined as "risks resulting from changes in interest rates or fluctuations in implied rates" (Ghandour, 2018). Islamic banks do not face the market risks arising from interest rate changes as long as they do not deal with interest rates. However, in reality, changes in interest rates pose some risks to the revenues of Islamic financial institutions. For example, in a Murabaha contract, the profit margin is determined in addition to the risk margin relative to the reference rate. It is known that the nature of fixed-income assets requires determining the profit margin once throughout the contract period. Therefore, it will not be possible to change the profit margin in these fixed-income contracts if the reference rate changes. Thus, Islamic banks face risks arising from interest rate movements in the banking market (Al-jama'i, 2020).

Interest rate risks are general market risks because they affect all investments since they are susceptible to changes in interest rates. An increase in interest rates corresponds to an increase in commodity prices due to a decrease in investment ratios. If the opposite happens, the prices of these commodities will decrease, increasing investments in them. As Islamic bank transactions are usually direct investments or financing and supply contracts tied to the future, they are exposed to this type of market risk. When studying the feasibility of a project or investment to be funded on a participatory basis or carried out independently by an Islamic bank, the study is based on market prices, especially for the raw materials needed for the project. As this purchase is made in installments according to the project's stages, if the bank buys these materials in one installment at the current market price, it may expose itself to risks of damage, loss, or theft of these materials. Also, storage leads to increased costs. Therefore, the bank purchases materials according to the project's needs, which exposes it to the risks of changing prices of these goods due to fluctuations in interest rates in the market, resulting in a decrease in project revenues or a loss (Al-Fawaz et al., 2016).

1.3 Liquidity Risks:

Liquidity risks manifest themselves in the condition that arises within a bank, either by a shortage of liquidity, meaning that the cash assets in the bank are insufficient to meet the bank's requirements and obligations. This poses a real problem for the bank. Alternatively, there could be an excess of liquidity, where the bank retains higher levels of cash liquidity than required to meet any emergency obligations or operational commitments it may face. This reflects on the volume of deposits invested by the bank and, consequently, on the amount of returns generated from investing these surplus funds beyond its liquidity needs (Al-Ghafood & Amzeka, 2016).

Liquidity risks are defined as "the unavailability of sufficient liquidity to meet the operational requirements and fulfill the bank's obligations at the appropriate time. It can result from poor liquidity management within the bank and the difficulty of obtaining liquidity at a reasonable cost, which is known as liquidity funding risk. It can also arise from the inability to sell assets, known as asset sales risk" (Lih'ssan & Kaddour, 2017).

1.4 Bank Profitability

Islamic banks are among the key players in managing economic operations in any country, considering the various services they provide and the roles they play in this regard. These services contribute to improving the growth rate, and consequently, the measure of success of the local economy largely depends on the soundness of the banking sector, including Islamic banks. Profitability is defined as the relationship between the profits generated by banks and the investments that contributed to those profits. It serves as an indicator of their efficiency and effectiveness in utilizing their resources. Profitability represents the net results of numerous policies and decisions made within these banks, thus serving as evidence of performance (Chen et al., 2019). The importance of profitability for banks in general is highlighted by the wide usage of the concept of profit in various practical situations. Profit is used in financial reports as a measure of the institution's success and as a fundamental criterion for estimating profit distributions and determining annual taxes for banks. Furthermore, the significance of profitability for banks is reflected in their primary objective, which is to maximize the wealth of shareholders and maximize the bank's profitability. It also reflects the image perceived by shareholders, as it represents the return on their invested capital. Depositors are also concerned about profitability because a strong bank's profitability provides them with reassurance and ensures the safekeeping and growth of their funds. Profitability reflects a stable and robust financial position for the bank. Borrowers are interested in profitability as it expands the bank's lending capacity, thereby increasing their opportunities for borrowing and supporting their projects and development. Profitability drives the wheel of

the economy, stabilizes the banking sector, and enables banks to provide services and excel to the best of their abilities.

1.5 Profitability Ratios

Profitability ratios are used to indicate the efficiency of operating activities and evaluate the ability to generate and maximize profits. Thus, these ratios also illustrate the management's efficiency in utilizing the commercial bank's assets and its invested financial resources in various operational and financial processes. There are several financial ratios used to measure profitability. The study relied on the return on assets (ROA) and the return on equity (ROE) ratios to measure profitability in Islamic banks operating in Jordan. Return on Assets (ROA) is one of the profitability measures and indicates the management's efficiency in utilizing its assets. It is calculated by dividing net profit by total assets (Al-Ajnaf, 2018). The ROA ratio can be calculated using the following equation:

$$\text{Return on Assets (ROA)} = \frac{\text{Net Profit after Tax}}{\text{Total Assets}}$$

Return on Equity (ROE) is one of the profitability indicators that reflects the management's efficiency in handling depositors' funds. It is measured by the ratio of net profit to total equity (Al-Muayta, 2018). The ROE can be calculated using the following equation:

$$\text{Return on Assets (ROA)} = \frac{\text{Net Profit after Tax}}{\text{Total Shareholders' Equity}}$$

After reviewing the previous literature, the study designs the following hypotheses:

H01: There is no statistically significant impact, at a significance level ($\alpha \leq 0.05$), of credit risks on the profitability of Islamic banks operating in Jordan.

H02: There is no statistically significant impact, at a significance level ($\alpha \leq 0.05$), of interest rate risks on the profitability of Islamic banks operating in Jordan.

H03: There is no statistically significant impact, at a significance level ($\alpha \leq 0.05$), of liquidity risks on the profitability of Islamic banks operating in Jordan.

2. Methodology

This study employs a descriptive-analytical methodology, which aims to derive insights about society through data analysis to achieve prediction or inference of the meaning and statistical significance of the numbers, as well as their interpretation and comprehensive description. This approach goes beyond the descriptive method in providing utility for understanding societal phenomena (Al-Bina, 2017). It also focuses on various tests of significance to test hypotheses and determine the validity of conclusions or findings. Moreover, the task of interpretation primarily relies on inferential analysis (i.e., the task of inference and deduction of conclusions) (Salkind, 2019).

2.1 Study Population and Sample

The study population comprises of Jordanian Islamic banks, including Safwa Islamic Bank, Jordan Islamic Bank, Arab Islamic Bank, and Al Rajhi Bank. To ensure the availability of the essential data for assessing the variables of the current study from 2019 to 2022, the study sample was selected using a comprehensive survey approach that included all Islamic banks operating in Jordan. Table 1 depicts the Islamic banks in Jordan that were included in the study.

Table 1: Islamic Banks Operating in Jordan

No.	Bank	Est. date
1	Safwa Islamic Bank	2010
2	Jordan Islamic Bank	1978
3	Arab International Islamic Bank	1998
4	Al Rajhi Bank	2011

Source: Association of Banks in Jordan

2.2 Study tool

The study tool was used to collect data on the independent variable of financial risks in Jordanian Islamic banks, which were measured by credit risks, interest rate risks, and liquidity risks, and the dependent variable of profitability, which was measured by return on assets and return on equity. As shown in Table 2, the financial statements issued on the Amman Stock Exchange's official website were used as the major means of data gathering from 2019 to 2022, in addition to financial reports.

Table 2: Study Variables and Measurement Method

	Variable	Type	Measurement Method	Source
Financial risks	Credit Risks	Ind.	Non-performing loan ratio to total loans	Marzouq (2020) Saeed & Zahid (2016)
	Interest Rate Risks		Risk-weighted asset ratio to total deposits	(Ghandour, 2018)
	Liquidity Risks		Cash and financial asset ratio for investment to total deposits	(Al-Sarhan, 2019) (L'hassan and Qadour, 2017)
Profitability	Return on Asset	Dep.	Net profit ratio to total assets	(Al Shabib, 2017)
	Return on Equity		Net profit ratio to total equity	(Ben Shina, 2017)

Source: Prepared by the researcher based on theoretical literature.

2.3 Study Variables Model

The researcher utilized a regression equation model to measure the impact of financial risks, namely (credit risks, interest rate risks, liquidity risks), on the profitability of Islamic banks operating in Jordan, represented by (return on assets, return on equity). The following model represents the relationship between these variables:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where:

- Y = Profitability (return on assets, return on equity)
- α = Equation constant
- X₁ = Credit risks
- X₂ = Interest rate risks
- X₃ = Liquidity risks
- $\beta_1 - \beta_3$ = Regression coefficients for the independent variables
- e = Error term

3. Results

It is necessary to ensure that there are no high correlations among any two or more independent variables, as this affects the estimation of study parameters. The ideal scenario in multiple regression analysis is to have high correlations between the independent variables and the dependent variable on the one hand and low correlations between the independent variables themselves on the other. This is because high correlations between independent variables lead to collinearity issues, making it difficult to extract variance from the dependent variable (Amer, 2018).

Multicollinearity refers to the presence of a strong and significant relationship between two or more independent variables. It is considered one of the major negative effects resulting from multicollinearity between independent variables. This leads to the non-independence of regression coefficients as well as their lack of reliability. This condition can be verified using the following methods:

Examining the correlation matrix between independent variables ensures that there is no linear multicollinearity if the correlation coefficients do not exceed a value of 0.80 (Gujarati et al., 2017).

Table 3: Pearson correlation matrix between independent variables.

Variables	Credit Risk	Interest Rate	Liquidity Risk.
Credit risks	1	0.621	0.433
Interest rate risks	0.621	1	0.588
Liquidity risks	0.433	0.588	1

The results in Table 3 indicate that the highest correlation coefficient between the independent variables was 0.621, which corresponds to the relationship between credit risk and interest rate risk. This suggests that it is suitable for conducting statistical analysis, as it does not exceed 0.80.

By relying on the Variance Inflation Factor (VIF), each independent variable can be assessed for multicollinearity. If the VIF value is less than 5, it can be concluded that there is no linear duplication. Dividing 1 by the inflation factor (VIF) reveals the result of permissible variance (Tolerance). If the tolerance value does not exceed 1 and is greater than 0.2, it also indicates no linear duplication (Hair et al., 2018).

Table 4: Results of Multicollinearity Test

Variables	Credit Risk	Interest Rate Risk	Liquidity Risk
VIF	1.221	1.033	1.562
1/VIF	0.819	0.968	0.640

The results in Table 4 indicate that the Variance Inflation Factor (VIF) values are less than 5, and the tolerance values are greater than 0.2 and do not exceed 1 for all independent variables. This suggests that there is no issue with linear duplication.

3.1 Descriptive Statistics Results:

The mean, standard deviation, maximum value, and minimum value were computed to describe the variables of the study during the extended study period from 2019 to 2022. The results were as follows:

Table 5: Descriptive Statistics of Financial Risks for the Period (2019-2022) at the Islamic Banks in Jordan.

Years	Minimum	Maximum	Mean	S.D.	N
Credit Risk					
2019	0.0592	0.0620	0.0607	0.130	4
2020	0.0601	0.0741	0.0647	0.646	4
2021	0.0721	0.0972	0.0799	1.164	4
2022	0.0689	0.1197	0.0866	2.304	4
Overall indicator	0.0651	0.0883	0.0730	1.069	16
Interest Rate Risk					
2019	0.1018	0.1490	0.1283	2.017	4
2020	0.1313	0.1514	0.1395	0.857	4
2021	0.1385	0.1445	0.1420	0.278	4
2022	0.1313	0.2055	0.1595	3.226	4
Overall indicator	0.1257	0.1626	0.1423	1.594	16
Liquidity Risk					
2019	.18000	.37000	.25000	.08370	4
2020	.21000	.37000	.26750	.07140	4
2021	.22000	.36000	.27500	.06030	4
2022	.16000	.32000	.24750	.06700	4
Overall indicator	.19250	.35500	.26000	.07060	16

Upon analyzing Table 5, it is evident that the average credit risks, as shown by the ratio of non-performing loans to total loans, for the duration spanning from 2018 to 2021, was seen to be 0.0730, with a standard deviation of 1.06. The year 2022 saw the highest recorded value of 0.1197, however the lowest observed value of 0.0592 was documented in 2019.

Furthermore, it has been discovered that the average level of interest rate risks, as determined by the ratio of risk-weighted assets to total assets, for the time span of 2019 to 2022, was found to be 0.1423, accompanied with a standard deviation of 1.594. The year 2022 witnessed the highest recorded value of 0.2055, however the lowest observed value of 0.1018 was documented in the year 2019.

The table data indicates that the mean of liquidity risks, measured as the ratio of total cash and financial investment assets to total deposits, during the period (2019-2022) amounted to 0.2600 with a standard deviation of 0.0706. The highest value of 0.3700 was recorded in the years 2019 and 2020, while the lowest value of 0.1600 was observed in the year 2022.

Table 6: Descriptive Statistics of Profitability in Islamic Banks in Jordan for the Period (2019-2022).

Years	Minimum	Maximum	Mean	S.D.	N
Profitability (Return on Assets)					
2018	.00600	.01200	.00960	.26460	4
2019	.00560	.01200	.00940	.27840	4
2020	.00640	.01490	.01110	.35510	4
2021	.00600	.01480	.01080	.36770	4
Overall indicator	.00600	.01340	.01020	.31650	16
Profitability (Return on Equity)					
2018	0.0864	0.1265	0.1087	1.7056	4
2019	0.0658	0.1244	0.0992	2.4972	4
2020	0.0693	0.1605	0.1186	3.7862	4
2021	0.0413	0.1645	0.1099	5.1554	4
Overall indicator	0.0657	0.1440	0.1091	3.2861	16

Based on the data provided in Table 6, the average level of profitability during the period from 2019 to 2022, as assessed by the return on assets metric, was found to be 0.0102, with a corresponding standard deviation of 0.3165. It is worth noting that the highest value, 0.0149, was observed in the year 2020, while the lowest value, 0.0056, occurred during the same period. Moreover, the table indicates that the mean profitability, as measured by return on equity, for the aforementioned time frame was 0.1091. Furthermore, the standard

deviation for this measure amounted to 3.261. Notably, the maximum value of 0.1645 was recorded in 2022, whereas the minimum value of 0.0413 was also observed in the same year.

3.2 Testing hypotheses

H01: There is no statistically significant impact, at a significance level ($\alpha \leq 0.05$), of credit risk on the profitability of Islamic banks operating in Jordan.

This hypothesis was tested using the Simple Linear Regression test, the results of this test are presented in Table 7.

Table 7: Results of Credit Risk Testing on the Profitability of Islamic Banks Operating in Jordan.

D.V.	Statement	Unstandardized Coefficients		Standardized Coefficients	T	T. Sig
		B	S.E.	β		
Profitability	Constant	0.183	0.008		23.321	0.00
	Credit Risk	-0.273	0.102	-0.321	-2.688	*0.009
R	R ²	Adj R ²		F	F. Sig	
0.321	0.103	0.089		7.224	*0.009	

The results of the statistical test done on the hypothesis model, which comprises a single independent variable (credit risk) and a single dependent variable (profitability), are presented in Table 7. The table presents empirical evidence demonstrating a moderate correlation coefficient (R) of 32.1% between credit risk and profitability in Islamic banks operating within the Jordanian context. Additionally, the table presents empirical evidence of a strong relationship between credit risk and profitability. This is supported by the T. Sig value of 0.009, which is below the conventional threshold of 0.05. Furthermore, the computed T value of 2.688 surpasses the critical value of 1.998, providing additional evidence to support the relevance of this model, which has one degree of freedom. The R² value, which represents the coefficient of determination, is determined to be 0.103. This value suggests that credit risk accounts for approximately 10.3% of the observed variability in profitability among Islamic banks operating within the Jordanian context. Therefore, a rise in credit risk by one unit will lead to a drop in profitability of 0.321 degrees for Islamic banks that are functioning in Jordan.

Based on these findings, the null hypothesis (H01) is rejected, and the alternative hypothesis is accepted, stating that there is a statistically significant impact, at a significance level of $\alpha \leq 0.05$, of credit risks on the profitability of Islamic banks operating in Jordan.

H02: There is no statistically significant impact, at a significance level of $\alpha \leq 0.05$, of interest rate risks on the profitability of Islamic banks operating in Jordan.

This hypothesis was tested using the Simple Linear Regression test, the results of this test are presented in Table 8.

Table 8: Results of the impact test of interest rate risks on the profitability of Islamic banks operating in Jordan.

D.V.	Statement	Unstandardized Coefficients		Standardized Coefficients	T	T. Sig
		C.C. B	S.E.	β		
Profitability	Constant	0.177	0.009		19.66	0.00
	Interest rate risks	-0.256	0.062	-0.291	-4.129	*0.009
R	R ²	Adj R ²		F	F. Sig	
0.302	0.912	0.085		6.135	*0.007	

Table 8 presents the findings of a statistical test conducted on a hypothesis model comprising a single independent variable (interest rate risk) and one dependent variable (profitability). The table reveals that the correlation coefficient (R) is 30.2%, indicating a moderate association between interest rate risk and profitability in Islamic banks operating in Jordan. Moreover, the table demonstrates a statistically significant influence of interest rate risk on profitability, as evidenced by a T. Sig value of 0.007, which is less than 0.05. Additionally, the computed T value (4.129) exceeds the tabulated value (1.998) at one degree of freedom, highlighting the significance of this model. The coefficient of determination (R² = 0.912) suggests that interest rate risk accounts for 9.12% of the observed variation in profitability among Islamic banks in Jordan. Based on these results, a one-unit increase in interest rate risk leads to a decrease in profitability among Islamic banks in Jordan by 0.291 units.

Consequently, we reject the null hypothesis (H02) and accept the alternative hypothesis, which asserts a statistically significant impact of interest rate risk on the profitability of Islamic banks operating in Jordan, at a significance level ($\alpha \leq 0.05$).

H02: There is no statistically significant impact, at a significance level of $\alpha \leq 0.05$, of liquidity risks on the profitability of Islamic banks operating in Jordan.

This hypothesis was tested using the Simple Linear Regression test, the results of this test are presented in Table 9.

Table 9: Results of testing the impact of liquidity risks on the profitability of Islamic banks operating in Jordan.

D.V.	Statement	Unstandardized Coefficients		Standardized Coefficients	T	T. Sig
		C.C. B	S.E.	β		
Profitability	Constant	0.187	0.011		17.577	0.00
	liquidity risks	-0.127	0.054	0.285	-2.355	*0.022
R	R ²	Adj R ²		F	F. Sig	
0.285	0.081	0.066		5.548	*0.022	

Table 9 shows the statistical test findings for the hypothesis model, which includes one independent variable (liquidity hazards) and one dependent variable (bank stability), both of which represent Islamic banks in Jordan. The correlation coefficient $R = (28.5\%)$ in the table above demonstrates a weak association between liquidity risks and profitability among Islamic banks. Furthermore, the table shows that liquidity risks have a statistically significant impact on the dependent variable (profitability) by using T. Sig ($=0.022$), which is less than 0.05, and the calculated T-value ($=2.355$), which exceeds the critical value of 1.998, indicating the model's significance at a degree of freedom of one. The interpretation coefficient ($0.081 = R^2$) implies that liquidity risks explain 8.1% of the variance in profitability across Jordanian Islamic banks. Based on the previous data, an increase in liquidity risks of one unit results in a 0.285 unit drop in profitability for Islamic banks operating in Jordan.

Based on that, we reject the null hypothesis (H03) and accept the alternative hypothesis stating that there is a statistically significant effect, at a significance level ($\alpha \leq 0.05$), of liquidity risks on the profitability of Islamic banks operating in Jordan.

After the hypotheses have been analyzed and tested, the Table 10 shows a summary of the acceptance or rejection of the hypothesis.

Table 7. Means and relative importance of the sample member estimates of the study variables

No.	Hypothesis	Decision
H01:	There is no statistically significant impact, at a significance level ($\alpha \leq 0.05$), of credit risks on the profitability of Islamic banks operating in Jordan.	Rejected
H02:	There is no statistically significant impact, at a significance level ($\alpha \leq 0.05$), of interest rate risks on the profitability of Islamic banks operating in Jordan.	Rejected
H03:	There is no statistically significant impact, at a significance level ($\alpha \leq 0.05$), of liquidity risks on the profitability of Islamic banks operating in Jordan.	Rejected

4. Discussion

The descriptive results of the study variables indicate that credit risks in Islamic banks have increased during the study years. The average credit risk in the year 2018 was 0.0607, which increased to 0.0866 in the year 2012. Additionally, the average interest rate risk rose from 0.1283 in 2018 to its highest level in 2021 at 0.1595. As for liquidity risks, they increased from 0.250 in 2018 to their highest level in 2020 at 0.275, then decreased to 0.2475 in 2021.

Obaidat, et, al. (2020) pointed out in his study that banks, in general, are exposed to various risks that affect their diverse activities, such as lending and investment. This is due to continuous changes in the economic environment. Among these risks are credit risks, interest rate risks, and liquidity risks.

These results indicate that Islamic banks operating in Jordan have been exposed to numerous financial risks during 2018. The most significant of these risks are credit risks, interest rate risks, and liquidity risks. The researcher attributes this to the spread of the COVID-19 pandemic, which negatively affected the banking sector, whether commercial or Islamic. The pandemic exerted significant pressure on the demand for cash from banks, resulting in substantial pressure on credit providers in an economy that was largely paralyzed. Consequently, governments of various countries adopted financial policies through their central banks, including reducing interest rates and instructing banks to defer credit facility installments granted to economically affected sectors due to the impact of the coronavirus crisis, both for companies and individuals, without delay, penalties, or additional fees. These measures, among others, collectively led to an increase in financial risks for banks in general. These results are consistent with the results of Al-Fawaz et al.'s study (2016), which revealed that Islamic banks are more sensitive to credit risk management. There is also a significant difference between Islamic and conventional banks in understanding and perceiving credit risks, as well as in credit risk management practices to reduce credit risks.

In general, banks, including Islamic banks, faced a liquidity shortage during the spread of the COVID-19 pandemic due to the lack of sufficient liquidity from counterparties dealing with the bank or even individual customers. On the other hand, the COVID-19 pandemic led to the suspension of most economic activities, resulting in the bank's inability to effectively deploy the available funds. This finding aligns with the results of the study by Shakhom and Haffa (2021), which demonstrated that as the value of banking risks increased, the return rate on assets decreased. It is also consistent with the results of the study by Al-Jama'i (2020), which indicated a correlation between financial risks and financial performance, with the nature of this relationship (positive or negative) varying according to the type of financial risk. Specifically, there was a negative correlation between credit risks and financial performance measured by ROA and ROE.

5. Conclusion

The results of the statistical test for the hypothetical model, which includes the independent variables representing financial risks (credit risks, interest rate risks, and liquidity risks) and one dependent variable representing profitability in Islamic banks operating in Jordan, indicated a statistically significant impact at a level of $\alpha \leq 0.05$ for credit risks, interest rate risks, and liquidity risks on profitability. It was found that an increase in financial risks would lead to a decrease in profitability, measured by return on assets and return on equity. The results have shown that credit risks, interest rate risks, and finally liquidity risks are the three main financial risks affecting the profitability of Islamic banks operating in Jordan. The researcher explains this outcome by highlighting that credit risks are among the most crucial risks faced by banks in general. These risks are related to the probability of customers being unable to repay their obligations within the agreed-upon timeframe and terms stated in the credit contract. Additionally, banks encounter credit risks in almost all of their operations because their relationship with customers is essentially a debtor-creditor relationship, regardless of the various labels assigned to contracts and transactions. Consequently, this leads to financial losses that impact the bank's capital revenues, resulting in a general decline in profitability ratios. One of the external factors that influence credit risks and contribute to their existence is a change in economic conditions, such as a shift towards recession or the occurrence of an unexpected collapse in financial markets. This is what happened to markets during the COVID-19 pandemic, when most economic activities came to a halt.

Regarding interest rates and their risks, it can be said that Islamic banks do not face the risks associated with emerging markets due to changes in interest rates. This is due to the fact that they avoid dealing with interest rates directly in accordance with their commitments and the law, which forbids lending or borrowing at usurious interest rates. However, in reality, changes in interest rates pose certain risks to the revenues of Islamic banks. For example, in contracts such as murabaha or istisna'a, the profit margin is determined in addition to the risk margin in relation to the reference rate. It is also known that the nature of fixed-income assets requires the profit margin to be determined once for the duration of the contract. Therefore, changing the reference rate would not allow for a change in the profit margin in these fixed-income contracts. As a result, Islamic banks face risks arising from interest rate movements in the banking market.

As for liquidity risks, they arise from two aspects. One aspect is the existence of a liquidity shortage, meaning that the cash assets in the bank are insufficient to respond to the bank's requirements and obligations. The other aspect is the presence of a liquidity surplus, where the bank chooses to hold a higher cash liquidity ratio than the required ratio to address any unexpected obligations it may face. This reflects a decrease in the yield obtained from investing these excess funds beyond their liquidity needs.

REFERENCES

1. Abu Khurais, M., & Tallawa, M. (2011). The impact of risk management on the level of security in the banking system: An analytical study on Libyan commercial banks. *Journal of Financial and Banking Research*, (1), 322-340.
2. Agha, M. K. (2020). The impact of financial and operational risks on the profitability of Jordanian Islamic banks. Unpublished master's thesis, Faculty of Economics and Administrative Sciences, Al al-Bayt University, Al-Mafraq, Jordan.
3. Al-Ajnaf, A. M. F. (2018). *The impact of market risks on the profitability of Islamic banks*. Amman: Dar Al-Nafa'is for Publishing and Distribution.
4. Al-Bina', M. (2017). *Statistical skills for educational researchers with practical examples in SPSS (1st ed.)*. Amman: Wael Publishing and Distribution.
5. Al-Fawaz, T., Dawood, H., & Arabiyat, Y. (2016). Credit risk management in Islamic and conventional banks in Jordan. *Jordanian Journal of Business Administration*, 12(2), 289-305.
6. Al-Ghafood, M. A., & Amzeka, F. A. (2016). Determinants of liquidity risks in commercial banks: A field study on the Republic Bank branch in Zliten. *Journal of Economic and Political Sciences*, (7), 24-57.
7. Al-jama'i, A. A. (2020). The impact of financial risks on financial performance: An empirical study on Yemeni Islamic banks. *Journal of Al-Jazeera University*, 3(5), 345-352.
8. Al-Muayyatah, W. (2018). The impact of the stability of customer deposits on the banking performance of Jordanian commercial banks. *Journal of Al-Hussein Bin Talal University for Research*, 4(1), 1-21.

9. Al-Shbeeb, D. (2017). *Introduction to contemporary management (4th ed.)*. Amman: Dar Al-Maseera for Publishing.
10. Amer, A. N. S. (2018). *Structural equation modeling in psychological and social sciences: Foundations, applications, and issues (Part 2)*. Riyadh: Naif University Press.
11. Anh, N. Q., & Phuong, D. N. T. (2021). The impact of credit risk on the financial stability of commercial banks in Vietnam. *Ho Chi Minh City Open University Journal of Science-Economics and Business Administration*, 11(2), 67-80.
12. Bahat, S; Darzi, M. (2019). Effect of Weather Changes on the Credit Risk in Agricultural Microfinance: An Indian Perspective. *Productivity*, (59)4, 413-423.
13. Basel II World, (2009).
14. Ben Shanna, F. (2017). *Credit risk management and its role in evaluating the profitability of conventional banks: An empirical study of Algerian banks during the period 2005-2014*. Doctoral dissertation, Algeria: Kasdi Merbah University.
15. Chen, Zhiyao; Harford, Jarrad; Kamara, Avraham. (2019). Operating Leverage, Profitability, and Capital Structure, *Journal of Financial & Quantitative Analysis*, 54 (1), 369- 392.
16. Djebali, N., & Zaghdoudi, K. (2020). Threshold effects of liquidity risk and credit risk on bank stability in the MENA region. *Journal of Policy Modeling*, 42(5), 1049-1063.
17. Ghandour, G. (2018). Measuring interest rate risks in private banks in Syria under international Basel standards: A case study on Syria and Al-Muhajer Bank (BSO). *Journal of Kirkuk University for Administrative and Economic Sciences*, 8(3), 111-130.
18. Gujarati D, Porter, D, and Gunasekar, S. (2017). *Basic Econometrics (5thed)*. USA, New York: The Mc Graw- Hill Gunasekar.
19. Hair, J, F, Black, W. C, Babin, B. J, Anderson, R, E, and Tatham, R, L. (2018). *Multivariate Data Analysis (8thed)*: Cengage Learning EMEA.
20. Hussein, I. (2017). Means of managing bank loan risks. *Local Investigator Journal of Legal and Political Sciences*, 2(6), 165-176.
21. Kipnetich S. and Muturi, W (2015). Effect of Credit Risk Management on Financial Performance of Savings and Credit Cooperative Society in Kenya Strategic, *Journal of Business and Change Management*, Vol. 2 (4).
22. Lih'ssan, F., & Kaddour, B. N. (2017). The role of accounting information in bank risk management under international accounting standards. *Journal of North African Economics*, (17), 271-284.
23. Marzouk, A. A. (2020). The impact of liquidity and credit risks on the financial performance of commercial banks: A comparative study between Egyptian and Saudi stock exchange-listed banks. *Journal of Contemporary Business Studies*, (10), 205-254.
24. Nurfadillah, M., Setiadji, D., Paminto, A., & Azis, M. (2023). Moderation of Interest Rate Policy Towards Banking Profitability. *International Journal of Professional Business Review*, 8(5), e01962. <https://doi.org/10.26668/businessreview/2023.v8i5.1962>
25. Obaidat, H., Azooz, A. & Abdul Kareem, M. (2020). Islamic Financial Sukuk: Between Shariah Principles and Implementation Challenges. *Journal of Contemporary Business and Economic Studies*, 3(1), 149-161.
26. Puspitasari, N., Jururi, S., & Hidayat, S. E. (2023). Effects of Internal Finance, Islamic Governance and Islamic Corporate Responsibility on Profitability: Evidence of Islamic Banking in Indonesia. *International Journal of Professional Business Review*, 8(5), e02102. <https://doi.org/10.26668/businessreview/2023.v8i5.2102>
27. Saeed, M. S., & Zahid, N. (2016). The Impact of Credit Risk on Profitability of the Commercial Banks. *Journal of Business & Financial Affairs*, (5), 192-198.
28. Salkind, Neil J. (2019). *Exploring Research (9thed)*. Upper Saddle River, New Jersey, NJ: Pearson India, Inc.
29. Sarhan, L. A. (2019). The impact of liquidity risks on the financial stability of commercial banks in Jordan. Unpublished master's thesis, Faculty of Economics and Administrative Sciences, Al al-Bayt University, Al-Mafraq, Jordan.
30. Shakhom, R., & Haffa, A. (2021). Banking risks on the profitability of commercial banks: A standard study on a sample of private banks operating in Algeria during the period 2010-2018. *Economic Studies Journal*, 12(2), 221-235.
31. Widajatun, Vi Wahju, I. (2019). The Impact of Credit, Liquidity, Operational and M Risks on Return on Asset, *Global Business & Management Research*, (11)1, 335-340.