THE EFFECT OF CREDIT AND LIQUIDITY RISKS ON THE FINANCIAL PERFORMANCE OF ISLAMIC BANKS

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Abstract

The current study analyzes the impact of credit and liquidity risks on the financial performance of Jordanian Islamic banks during the period (2012-2022). In order to achieve this goal, the study data was collected from the annual financial reports published by Jordanian Islamic banks and the analysis was conducted based on the fixed effects model (Fixed Effect Model). The necessary tests were conducted using the Eviews13 program, and the results showed that there is a direct and significant relationship between the capital adequacy ratio and the return on total assets (ROA), and there is an inverse and significant relationship between the size of non-performing loans and the return on assets (ROA), and there is an inverse and significant relationship between the liquidity ratio and the return on total assets (ROA). The study recommended that the Jordanian Islamic banks should do more efforts to activate the role of risk management due to its impact on the financial performance of Jordanian Islamic banks.

Keywords: Credit Risk. Liquidity Risk. Islamic Banks. Financial Performance

Introduction

The Islamic banking sector in general has witnessed great development in recent years, and the steps taken by Islamic banks in developing infrastructure, human and technological resources in Jordan in particular have increased. The banking sector is considered one of the most important sources that finance the national economy through banking transactions, and it represents one of the most important sources available for financing to be used in developing economic sectors. The bank is also considered one of the important elements that contribute to moving the wheel of economic growth, doubling it and achieving all economic goals capable of driving growth rates. Economic[1]

The great developments witnessed by the financial sector in the world, which were represented by the tremendous technological progress in the banking industry and the development of new financial tools, were accompanied by some financial crises. Most of the crises witnessed by the financial sector had bank problems as a common denominator. Experts attributed this to the increase in banking risks, most notably The risks resulting from credit and liquidity, therefore, it was necessary for each bank to establish specific controls that guarantee the possibility of expanding the granting of credit and the liquidity ratio while maintaining the risk within acceptable limits[2].

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The problem of the study is the impact that credit risks and liquidity risks have on the financial performance of Jordanian Islamic banks, such as capital adequacy and non-performing loans, as Islamic banks face relatively higher risks than those faced by conventional banks, and debts represent the majority of the bank's assets. This is because credit risk management Liquidity in Islamic banks is restricted by jurisprudential controls in their financial transactions. Therefore, this study aims to analyze the impact of credit risks and liquidity risks on the performance of Jordanian Islamic banks. Therefore, this study attempts to answer the following main question: What is the impact of credit and liquidity risks on the financial performance of Islamic banks? The following sub-questions branch out from this question:

1. What is the impact of capital adequacy risks on the return on total assets?

2. What is the impact of non-performing loan risks on the return on total assets?

3. What is the impact of liquidity risk on the return on total assets?

The main objective of this study is to analyze the impact that credit risks and liquidity risks have on the financial performance of Islamic banks in Jordan, and how to reduce these risks with minimal losses by understanding the variables related to the occurrence of credit risks and liquidity risks, managing them, and linking them to the financial performance of Islamic banks in Jordan

Literature review

Gizaw & Sujata (2015) examined the impact of credit risks on the profitability of commercial banks in Ethiopia. The study sample consisted of eight banks, and data was collected during the period 2003-2014, from the banks' annual reports. The study used the descriptive and analytical approach. The study concluded that the credit risk index (percentage Capital adequacy, non-performing loans, provision for loan losses) have a statistical impact on the profitability of Ethiopian commercial banks, and the study recommended the need to develop and improve credit risk management to maximize the profitability of Ethiopian commercial banks.

Saeed & Zahid (2016) analyzed the impact of credit risk on the profitability of commercial banks in Britain. The study sample was taken from five British banks, and data was collected during the period 2007-2015, for the five banks. The study used a method of measuring profitability by adopting indicators (return on equity (ROE) and return on assets). Overall, when measuring credit risk, the non-performing loan ratio (NPLR) and the capital adequacy ratio (CAR) were adopted. A statistical analysis was conducted based on the data of the five banks. The study concluded that credit risk indicators have a positive correlation with banks' profitability as well. The results showed that bank size, leverage and growth are positively interrelated with each other, and the study recommended that commercial bank managers should pay attention to managing and monitoring credit risks in order to improve profitability.

AlShatti (2015) investigated the impact of credit risk management on the financial performance of Jordanian commercial banks during the period 2005-2013. Thirteen commercial banks were chosen to represent the totality of Jordanian commercial banks. The study used two mathematical models to measure this relationship. The study concluded that the impact of credit risk management on financial performance for Jordanian commercial banks, measured by the rate of return on assets and return on shareholders' equity, it was positive, the study showed that the credit risk indicators that were used have a significant impact on the financial performance of Jordanian commercial banks. The study recommended that banks must improve and develop credit risk management to achieve the highest returns, as bank management must take into account the indicators that were studied, which are: total loans. Non-performing loans/total loans, provision for facility losses/net facilities, and financial leverage ratios. The study also recommended that banks need to develop more stringent strategies and systems to reduce credit risks and monitor and treat credit risks.

Ouma (2015) evaluated the impact of liquidity risk on the profitability of commercial banks in Kenya. The sample of the study was forty-three banks during the period between 2010-2014. The descriptive and analytical approach was used. The study concluded that liquidity has a positive impact on the profitability of commercial banks and that there is a statistically significant relationship between... Liquidity and profitability in Kenyan banks. The study concluded that increasing the unity of the current liquidity ratio and the deposit ratio would lead to an improvement in net interest income. The study recommended that liquidity risks be taken into account to improve the return as measured by net interest income, and therefore decision makers must also be aware of the risks. Developing strategic plans and in-depth studies, identifying the causes and addressing weaknesses that affect banks' business operations.

Chang & Xiaoyue (2018) examined the relationship between credit risk and the profitability of commercial banks in the United States of America. The study used the capital adequacy ratio and the non-performing loan ratio to measure credit risk. The study used return on equity and return on assets to measure the profitability of commercial banks in the United States of America. The sample was three. Eighty American commercial banks during the period 2010-2017. The study used the descriptive and analytical approach. The study concluded that there is a relationship between credit risk management and the profitability of American commercial banks. The study concluded that there is a positive relationship between credit risk management and the profitability of commercial banks in the United States, the better and more effective risk management is, the lower the credit risk, and the greater the profitability of commercial banks. The study recommended that commercial bank managers should pay attention to risk management in order to improve profitability, especially controlling non-performing loans, and methods of granting credit should be examined more carefully by banks.

Data and methodology

The process of collecting data from secondary sources was done manually, as the researcher reviewed the annual reports available from Islamic banks in Jordan:

Jordan Islamic Bank (https://www.jordanislamicbank.com/ar).

Islamic International Arab Bank (https://iiabank.com.jo/).

Safwa Islamic Bank (https://www.safwabank.com/ar/).

The researcher also collected the necessary data and information to serve this research through multiple sources, including specialized books and peer-reviewed research in this field, educational and professional websites specialized in the field of credit and liquidity risks, and related articles.

The study used the following standard model to analyze the impact of credit and liquidity risks on the financial performance of Jordanian Islamic banks during the period (2012 - 2022) through the fixed effect model (Hausman, 1978; Gujarati, & Porter, 2009; Im et al., 2003; Kao, 1999; Al-Ababneh et al., 2022; Bataineh et al., 2022; Bekhet & Mugableh, 2016; Jebril et al., 2023; Mugableh & Oudat, 2018; Mugableh et al., 2023):

$$ROAit = \beta 0 + \beta 1IV1it + \beta 2LIV2it + \beta 3IV3it + DU + \varepsilon it \quad (1)$$

Whereas

ROA: Return on total assets (dependent variable and indicator for measuring financial performance), %.

IV1: Capital adequacy ratio (independent variable and indicator for measuring credit risk), %.

IV2: The volume of non-performing loans (an independent variable and indicator for measuring credit risk), in million Jordanian dinars (JD).

IV3: Liquidity ratio (independent variable and indicator for measuring liquidity risk), %.

i = bank

t = year

β0 = Constant term.

β1, β2, β3 = coefficients of the independent variables

L = natural logarithm

ε = random error

DU = COVID – 19 coronavirus pandemic

From the results in Table 1 it noticed the following

There is a direct and significant relationship between the capital adequacy ratio (IV1) and the return on total assets (ROA) at the 1% significance level. This means that the higher the capital adequacy ratio, the higher the return on total assets in the Islamic banks in the study sample.

Table 1. Estimating the parameters of the Fixed Effect Model (ROA: Dependent variable).

Variable	Coefficient	Std. Error	t-statistic	Probability
IV1	4.45632	2.78345	1.60100	0.01
LIV2	-1.16432	0.53478	-2.17719	0.05
IV3	-2.18132	0.83478	-2.61304	0.05
DU	-4.94102	0.71879	-6.87408	0.10
R-squared	0.78			
Adjusted R-squared	0.75			
F-statistics	4.690245			
Probability (F-statistics)	0.028313			

Source: E Views 13 statistical analysis software.

There is an inverse and significant relationship between the size of non-performing loans and the return on total assets (ROA) at the significance level of 5%. This means that the lower the size of non-performing loans, the higher the return on total assets (ROA) in the Islamic banks in the study sample.

There is an inverse and significant relationship between the liquidity ratio and the return on total assets (ROA) at the significance level of 5%. This means that the lower the liquidity ratio, the higher the return on total assets (ROA) in the Islamic banks in the study sample.

With regard to the Corona pandemic (DU), its impact was negative and significant on the return on total assets (ROA) at the significance level of 10%, which is expected since during the first period of the emergence of the epidemic there were closures of multiple economic sectors, including Jordanian banks, which had a negative impact. On the total banking operations during that period, which had a negative impact on the return on total assets (ROA)?

Recommendations

Based on the results obtained, the following recommendations were formulated:

1. The researcher recommends conducting more research on the direct and indirect impact of the capital adequacy ratio on the financial performance in Jordanian Islamic banks.

2. The researcher recommends that bank managements should develop an effective policy in granting loans to achieve a balance between profits and reducing the risks of non-performing loans in light of the current economic conditions.

3. The researcher recommends that senior management in banks should focus on using technological programs that are useful in performing a financial analysis of the data for each of the bank's customers in order to reduce the rate of non-payment by customers when granting them credit.

4. The researcher recommends that credit departments in banks need to study financing requests from customers in accordance with policies related to the feasibility study, which contributes to reducing the credit risks that affect the financial performance of Jordanian Islamic banks.

5. The researcher recommends the necessity of using liquidity optimally and investing in surplus cash through a committee of independent financial experts in the bank to determine and measure the liquidity ratio and employ it.

6. The researcher recommends the necessity of developing the strategies used by banks to manage liquidity risks and activating the role of risk management in Jordanian Islamic banks.

7. The researcher recommends that the managements of Jordanian Islamic banks should adopt a general framework for managing liquidity risks to maintain the provision of liquidity in order to ensure the bank's sustainability in the market.

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