
THE ROLE OF FINANCIAL DIGITIZATION IN IMPROVING BANKING PERFORMANCE FOR THE PERIOD 2020-2023: AN ANALYTICAL STUDY OF ASHUR INTERNATIONAL INVESTMENT BANK

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Abstract

The research aims to examine the role of financial digitization in improving banking performance at Ashur International Investment Bank. The research relied on modern technology, including financial digitization, to transform traditional financial services into digital forms. This digital development encompasses a wide range of services that rely on technology to reduce costs, improve efficiency, provide better user experiences, and increase financial inclusion.

The research results showed that financial digitization has a significant negative impact on banking performance at Ashur International Investment Bank through an inverse relationship between the number of ATMs, total equity to total assets, and the rate of return on deposits. There is also an inverse relationship between the number of correspondent banking networks and the rate of return on deposits and a direct relationship between the number of correspondent banking networks and total equity to total assets. In light of this, the results are recommended. It is necessary to enhance banking services via the Internet to reduce costs and increase returns without resorting to expanding traditional banking structures.

Keywords: Financial digitization, banking performance, deposits, property rights, assets.

Introduction

In recent years, financial digitization has become a necessity for the use of modern digital methods. This is indicative of the digital revolution that has swept the world. These developments have not only affected the banking sector but have also brought about changes to the economic sector in general. Financial digitization has had a significant impact in facilitating many transactions in government departments, not just banks. For example, it has increased productivity, reduced risks, and improved job performance. These transactions have transformed from the use of paper in traditional management to transactions in digital systems, including digital and electronic management.

Research Problem

In light of the significant and rapid developments in technology and the significant and growing interest in financial digitization, banks are increasingly using it to improve their

banking performance. However, banks face numerous problems and obstacles in implementing financial digitization, including continuous investment and development of machinery and equipment to keep pace with modern developments and training users of this equipment.

The improvement in banking performance is evidence of banks' efficiency in investing and managing the risks associated with implementing financial digitization.

The research problem revolves around the following question: "Does financial digitization contribute to improving banking performance at Ashur International Investment Bank?"

Research Importance

The importance of financial digitization is highlighted in raising community awareness of the application of banking services and improving banking performance. This is due to its ease of use, reduced costs, and reduced risks. This reflects the bank's excellence in its work and its rise to a prestigious level, thanks to its reliance on modern technological systems.

Research Hypothesis

The research is based on the hypothesis that there is a clear relationship between the application of financial digitization methods and improved banking performance at Ashur International Investment Bank.

Research Objectives

The research aims to identify the role of financial digitization in improving banking performance, as well as the obstacles that arise from financial digitization, and how to apply financial digitization techniques at Ashur International Investment Bank.

Research Limits and Sample:

1- Spatial Limits: (Ashur International Investment Bank).

2- Temporal Limits: (2020-2023)

Research Structure:

To achieve the objectives that the research seeks to achieve, the research is divided into two axes, as follows:

Axis One: The conceptual framework of financial digitization and banking performance.

Axis Two: Measuring and analyzing financial digitization at Ashur International Investment Bank in improving banking performance for the period (2020-2023)

Conclusion: Conclusions and Recommendations.

First axis: The conceptual framework for financial digitization and banking performance.

First: The concept, means, and characteristics of financial digitization:

1- The concept of financial digitization:

It is the process of using financial digitization technologies to improve bank performance. (Shabo, Zarfawi, 2024: 268)

It is also defined by Daniotti et al. (2020) as the process of integrating technology into all levels of business, resulting in radical changes in how banks are managed and provide the best banking services.

It is also defined by Verina and Titko (2019: 721) as the application of technology to build modern business models, programs, processes, and systems that lead to greater profitability, increased revenues, higher efficiency, and a significant competitive advantage.

The concept of financial digitization is the delivery of banking services to customers at high speed and the lowest cost using innovative digital technological tools, such as money transfer via mobile phone technologies, providing insurance services, cloud computing, and artificial intelligence (Al-Naimi, Al-Hawri, 2023: 571).

2- Financial Digitization Methods:

Financial digitization methods are the most important pillars of advanced banking systems. It is important to identify the most important of these methods, including:

- Automated Teller Machines (ATMs): A device through which customers can access their accounts and conduct various financial transactions, including withdrawals and deposits, change their PIN, and inquire about their balance without requiring assistance. Furthermore, this device facilitates customer access to their bank account, either through a plastic card containing a personal identification number (PIN) or through a special computer code connected to the bank's records. This device operates to provide services 24/7. (Kazem, 2024: 38)
- Correspondent Banking or Electronic Money Transfer: This is an electronic money transfer process conducted via mobile phones or computers, granting the bank the authority to conduct financial transfers from one bank account to another. This process involves transferring funds from one account to another, and this process takes place between two different banks or two accounts of the same bank. (Al-Juwaijati, Ahmed, 2024: 155)

3- Advantages of financial digitization

Financial digitization has many advantages that encourage individuals and institutions to use it instead of traditional methods. These advantages include:

- It provides many advantages, including speed of completion, flexibility, and ease of use for users, as well as saving effort and time. (Alsaegh, Alhussiani, 2024: 6)
- The digitization system works to reduce theft and financial and administrative corruption.
- It brings society in line with the age of technology by spreading awareness and technological culture. (Ali, 2023: 532)
- Financial digitization has the potential to provide low-cost, secure, and profitable banking services and to provide access to financial services at reasonable prices throughout the world. (Ozili, 2018: 330)
- It increases the level of governance and transparency within financial institutions by reducing errors to a minimum (European Commission, 2019).
- Electronic payment is an accepted method worldwide and is therefore used to settle accounts in transactions between users in all countries. (Al-Juwaijati, Ahmed, 2024: 154)

Second: The Concept and Measurement of Banking Performance:

1- The Concept of Banking Performance

Banking performance is considered the result of banks' operations and their evaluation. Numerous financial indicators are used to measure banking performance, and most banking performance measures relate to profitability, liquidity, growth, leverage, and efficiency.

Performance is also defined as the ability of a banking institution to utilize its human and material resources in a manner that maximizes its objectives (Ibrahim, Al-Jubouri, 2024: 293).

Another view suggests that banking performance is used to measure results and then compare them with objectives. This is done to identify and correctly diagnose obstacles so that appropriate decisions can be made to address them. (Al-Janabi, 2024: 140).

Banking performance is also defined as a bank's ability to generate revenues from its assets and invest these assets to maintain and sustain competitiveness through its banking operations (Al-Eitan & Khalid, 2019: 6).

2- Methods for Measuring Banking Performance:

There are several indicators by which banking performance is measured. The bank must set its desired objectives before evaluating its performance so that bank performance can be compared to those objectives. Measuring bank performance is considered an indicator of the bank's success. The most important of these indicators are:

1- Total Equity to Total Assets Ratio: This ratio represents the extent to which the bank relies on capital to create assets. The bank always maintains this ratio at a constant rate, following the decision of the Central Bank, which in turn supports increasing this ratio to protect depositors' funds from risks. (Ibrahim, Al-Jubouri, 2024: 295)

$$\text{Total Equity to Total Assets} = (\text{Total Equity} / \text{Total Assets}) * 100$$

2- Rate of Return on Deposits: This ratio is used to measure the bank's management's ability to generate profits from the deposits it has received. This ratio is calculated as follows (Islam, 2019, pp. 27-28)

$$\text{Rate of Return on Deposits} = \text{Net Profit} / \text{Total Deposits} * 100$$

Second Axis: Analyzing the Relationship Between Financial Digitization and Banking Performance at Ashur International Investment Bank for the Period 2020-2023

First: An Overview of Ashur International Investment Bank

Established in 2005, the bank obtained a license from the Central Bank of Iraq on September 22, 2005, and commenced operations on January 18, 2006, with a capital of approximately 25 billion dinars. The bank's efforts have enhanced its reputation and positioned it as one of the most advanced banks in Iraq. The bank has continued to strengthen its role in the banking sector, committed to achieving its qualitative and quantitative objectives through its strategy. The bank sought to provide a variety of facilities that meet the needs of all individuals while taking into account market changes. From the outset, the bank worked to strengthen its customer base in this category by developing specialized programs, offering personal loans to corporate employees, in addition to issuing credit cards and car financing products. The bank designed a special product targeting widows and displaced persons to help them overcome the difficult circumstances they face.

As for companies, the bank continued to provide its services by providing the necessary financing for all sectors and activities, in addition to supporting projects through capital financing and providing services that enhance the success of merchants.

Second: Empirical Analysis of the Research

The main hypothesis of the research: The research is based on the hypothesis that there is a clear relationship between the application of financial digitalization methods and the improvement of the banking performance of Ashur International Investment Bank.

Table (1) Results of the arithmetic mean, standard deviation, and median

	Arithmetic Mean	Standard Deviation	Median
Number of ATMs	69.75	23.64142	66.875
Number of Correspondent Banking Networks	15.25	1.5	14.625
Equity to Total Assets	46	0.088081	0.43375
Rate of Return on Deposits	9	0.040825	0.075

The mean for the number of ATMs was 69.75, the standard deviation was 23.64142, and the median was 66.875. The mean for the number of correspondent banking networks was 15.25, the standard deviation was 1.5, and the median was 14.625.

The mean for the total equity to total assets was 46, the standard deviation was 0.088081, and the median was 0.43375. Meanwhile, the mean for the rate of return on deposits was (9), the standard deviation was (0.040825), and the median was (0.075).

This means that the results were positive for the mean and standard deviation for each of the variables.

Table (2) Results of the correlation coefficient (R)

Correlation (R)	Total Equity to Total Assets	Return on Deposits
Number of ATMs	-0.82158	-0.04489
Number of Correspondent Banking Networks	0.925363	-0.04487

The most important findings are represented by a correlation and regression analysis of these research variables and testing of the main hypotheses. This was achieved by using a set of statistical methods, such as Pearson's correlation, to measure the relationship between financial digitization and banking performance. The researcher used R², which indicates the extent to which the independent variable explains changes in the dependent variable. The negative relationship between financial digitization and improved banking performance means that the greater the financial digitization, the lower the banking performance. This can be explained by several factors:

On the other hand, high implementation costs mean that digital transformation requires significant investments in technological infrastructure, cybersecurity, and employee training, which can lead to increased costs in the short term and, consequently, reduced profits.

Security Risks and Cyber Fraud: With increased digitization, the risk of cyberattacks and financial fraud increases, potentially leading to financial losses and damage to the bank's reputation, thus impacting banking performance.

Reducing human interaction and its impact on customer satisfaction: Some customers prefer to deal directly with bank employees, and when digital transformation occurs, they may feel dissatisfied due to the lack of human support, leading to customer loss. Increased competition from non-banking institutions. Digitalization opens the door for financial technology (FinTech) companies to enter the market, increasing competition and impacting traditional banks' market share.

The complexity of banking transactions and the challenges of adapting are the biggest obstacles to a bank's success compared to other banks. Some banks may face difficulties adapting to modern technologies, leading to operational problems and delays in service delivery, negatively impacting overall performance. Consequently, there is an inverse relationship between the number of ATMs and the total equity to total assets ratio, which reached (-0.82158). This means that the greater the number of ATMs, the lower the rate of return on deposits at the bank. There is an inverse relationship between the number of ATMs and the rate of return on deposits, which reached (-0.04489). This means that the greater the number of ATMs, the lower the rate of return on deposits at the bank.

The increase in banking and capital has positive implications. The greater the number of banking networks (branches, ATMs, and digital services), the greater the bank's ability to attract more customers, which increases deposits and investments, thus leading to growth in total equity. Furthermore, profitability and risk reduction are also improved through the geographical spread of banks, which helps diversify sources of income and reduce risks, supporting shareholders' equity and increasing total equity.

Confidence in a bank with a wide branch network is considered more stable and attractive to investors, leading to increased capital and improved equity value. In addition, costs versus returns mean that expansion increases equity, but operating costs may be a decisive factor in determining the actual benefits of this expansion. If these costs are not effectively managed, the negative impact may be stronger than the expected benefits. Therefore, there is a direct relationship between the number of correspondent banking networks and total equity to total assets, which reached 0.925363.

There is an inverse relationship between the number of correspondent banking networks and the rate of return on deposits, which amounts to -0.04487, meaning that the greater the number of networks, the lower the return on deposits at the bank.

Thus, the direct relationship between the number of ATMs and the total equity to total assets depends on factors such as management efficiency and service quality.

Table (3) Results of the regression coefficient R^2

Regression Rate (R^2)	Total Equity to Total Assets	Return on Deposits	F	Tabulated F
Number of ATMs	0.674	0.0019	5.974	1.828
Number of Correspondent Banking Networks	0.856	0.0019		

The results of the statistical analysis revealed that the estimated regression equation explains 0.6% of the relationship between the number of exchanges and the total equity to total assets ratio, which is a very weak ratio. The relationship between the number of networks and the total equity to total assets ratio is 0.8%, which is a weak ratio. The relationship between the number of ATMs and the rate of return on deposits is 0.0019, meaning there is no significant relationship, as is the case with the relationship between the number of networks and the rate of return on deposits.

Conclusions and Recommendations

Conclusions:

1. The research results reveal an inverse relationship between the number of ATMs and the total equity to total assets, amounting to (-0.82158), indicating that the greater the number of ATMs, the lower the equity to total assets.
2. There is a negative inverse relationship between the number of ATMs and the rate of return on deposits, amounting to (-0.04489). This indicates that banks with large equity rely heavily on equity capital, which significantly reduces relative returns.
3. There is a direct relationship between the number of correspondent banking networks and the total equity to total assets, amounting to (0.925363). In other words, the greater the number of correspondent banking networks, the greater the confidence of customers and investors in the bank, which enhances equity through increased investments and deposits.
- 4- There is a negative inverse relationship between the number of correspondent banking networks and the rate of return on deposits, which is -0.04487, meaning that the more correspondent banking networks there are, the lower the efficiency and profitability, which leads to a decline in returns compared to costs.

Recommendations:

- 1- It is necessary to work on strengthening and increasing the number of ATMs and correspondent banks to ensure an appropriate return on investment.
- 2- Banks must achieve a strong balance between self-financing (equity) and debt to ensure appropriate returns without increasing risks.
- 3- It is necessary to enhance digital financial services to reduce operating costs and increase financial efficiency, which contributes to increasing equity.
- 4- It is necessary to enhance banking services via the Internet to reduce costs and increase returns without resorting to expanding traditional banking structures.

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