

## The Impact of Electronic Financial Services (EFS) in Private Iraqi Banks on Financial Performance

Karrar Mohammed AL-Shafeay<sup>1</sup>

<sup>1</sup> University of Kufa, Faculty of Administration and Economics Najaf, Iraq

### Abstract:

Electronic financial services (EFS) continue to grow and replace traditional banking services through innovative technologies in order to meet expanding demands and stay up with advanced technological breakthroughs in the financial sector. These numerous items assist banks improve their financial performance and market competitiveness. It also helps to increase market share. To raise profits and strengthen its financial situation.

The main aim of this research is to study the impact of electronic financial services on the financial performance of private Iraqi banks. The research found that there is a positive association between online financial services, i.e., electronic payment services, and financial performance as measured by return on assets (ROA) and return on equity (ROE).

**Keywords:** Electronic financial services (EFS), financial performance, Cash payment, electronic finance.

### 1. Introduction

Information and communication, which is considered one of the most important features of the modern era and which has been reflected in all aspects of life and its various sectors, and the banking sector is one of the sectors most affected by these changes, as the global banking arena has witnessed, as a result of the liberalization of banking services, many developments, represented by intensified use of the latest information and communication technologies. And developing computers with great efficiency with the aim of creating modern electronic financial services (EFS) in the banking sector and developing ways of providing them to allow accuracy and easy flow of electronic services in banks to customers in accordance with the current period. On the one hand, the demands of various consumer segments are growing, while the bank's operations and revenues are expanding.

Given the connection between electronic banking services and financial concepts or costs and profits, in this context, we cannot fail to point out the role of financial performance in Private banks, because the primary goal of Private banks is to achieve the greatest possible return, and this is done by evaluating their performance, as this process is one of the basic means of The analysis that the bank uses to identify strengths and weaknesses and attempt to correct deviations in order to improve the level of its financial performance, in addition to knowing the extent of its impact iveness in achieving its established objectives as a result of its good management and exploitation of its available resources. To carry out the evaluation process, it must take into account the logic of choosing the appropriate tool for this, as the ratios are Finance is the most widely used tool due to its ease of application, reading and analysis of its results.

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In this regard, Iraqi banks worked to develop financial services electronically in order to keep pace with the technological developments taking place to reach the finest banking systems. They adopted electronic banking services such as electronic payment as well as financial transactions such as financial transfer and lending via electronic platforms as well as bank settlements to confront strong competition and improve their financial performance. Hence, this research comes to shed light on this type of services and find out the extent to which Private banks respond to them.

Hence the research problem arises, which revolves around the following question:

- What is the impact of electronic financial services on the financial performance of Iraqi Private banks ?

In order to answer this question, we will use some of following subquestions:

What is the impact of electronic payment services and financial transactions on return on assets?

- What is the impact of electronic payment services and financial transactions on return on equity?

As a starting point for the study and an attempt to answer the sub-questions, we decided to include the following hypotheses:

**H0:** There is no statistically significant impact of electronic financial services on financial performance, resulting in the following hypotheses:

**H0A:** There is no statistically significant impact of electronic payment services and financial transactions on return on assets.

**H0B:** There is no statistically significant impact of electronic payment services and financial transactions on return on equity.

**H1:** There is statistically significant impact of electronic financial services on financial performance, and the following hypotheses emerged from it:

**H1A:** There is statistically significant impact of electronic payment services and financial transactions on return on assets.

**H1B:** There is statistically significant impact of electronic payment services and financial transactions on return on equity.

## 2. The Importance Of Studying:

The significance of the research arises from the importance of the banking industry in the economy, as the banking sector is one of the most important economic pillars due to its function in mobilizing savings and redirecting them to various economic activities. With the tremendous progress in technology, financial institutions have begun to adopt a developmental trend for their banking services in pursuit of achieving the basic goal. Representing achieving the highest return and thus improving financial performance, as the process of diversifying electronic financial services in the banking sector and providing them at high levels is one of the reasons for achieving this goal.

## 3. Objectives Of The Study:

Based on the importance of the study, the goals we aim to achieve can be limited to the following:

Identify the concept of electronic financial services and their types in Iraqi Private banks.

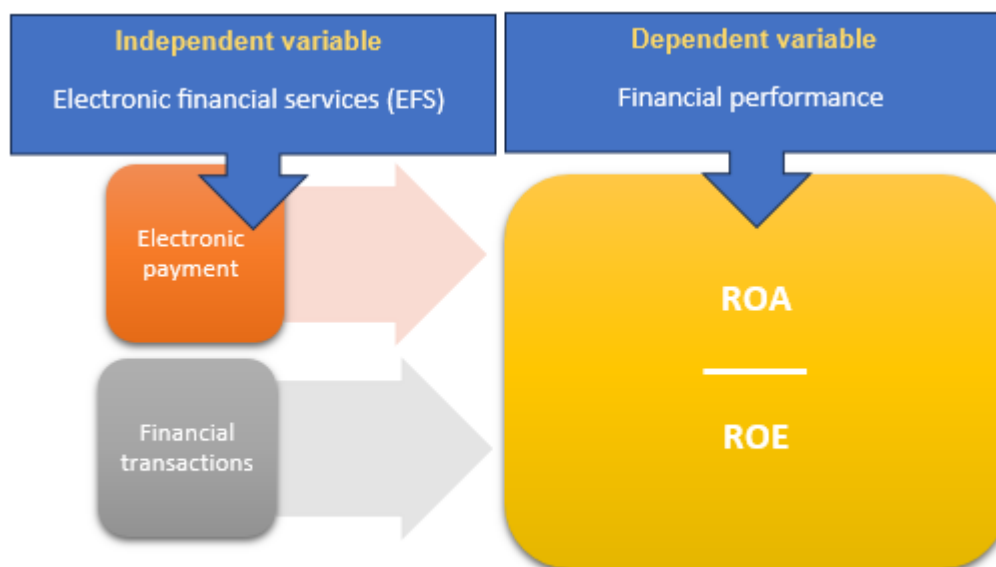
Explaining the concept and general importance of evaluating the bank's financial performance

Identify the most important indicators to evaluate the bank's financial performance.

#### 4. Study Methodology:

In order to address the topic and reach the desired results, we relied on the Descriptive analytical approach to identify the various basic aspects of (EFS) and the financial performance of Private banks in the Iraqi banking sector, such as addressing the basic concepts of this topic while the applied aspect was limited to calculating financial performance such as return on assets and return on equity for the purpose of knowing the extent of its development. During the six years under study for a sampling of Iraqi private banks which number 6 banks, as well as an analysis of the impact of electronic financial services (EFS) on the financial performance of the banks in the study sample.

##### 4.1 Search Model:



**Figure (1): Research variables**

##### 4.1. Data Type And Source:

This study used secondary data from 2016 to 2021. Data for this study will be gathered from the six Iraqi private banks selected for the study.

**Table (1) Summary of Measurement of Dependent and Independent Variables**

Independent Variable	Measurement
Electronic payment	Total electronic payment / total bank payments
Electronic transactions	Total electronic transactions / total bank transactions
Dependent Variable	Measurement
Return on Asset (ROA)	Net income before tax / Total Assets
Return on equity (ROE)	Net income before tax / Total equity

#### 5. Electronic Financial Services: (EFS)

EFS refers to a broad category of financial services, such as insurance, remittances, credit, savings, payments, and financial information, that are available and delivered electronically.

Electronic financial services (EFS), with their innovative methods and technologies like electronic payment methods, electronic money models, and mobile phone-enabled solutions, have great potential to expand the general public's access to basic financial services in an inexpensive, convenient, and secure environment. (Abbasi and Weigand, 2017:3)

Electronic financial services (EFS) also include the systems that allow bank clients to send letters, faxes, original signatures, and phone confirmations without hindrance or disruption, as well as use the bank's website to access their accounts and general information about the products and services offered by the bank. (Mateka et al, 2016:54)

### 5.1 Electronic Payment:

In today's worldwide businesses, electronic payment is an impact ive part of the transaction process. This is as a result of its appropriateness, timeliness, and impact iveness. Additionally, the electronic payment system consists of a number of ways that financial institutions can provide their clients with a range of electronic payment options and services, including credit cards, debit cards, mobile banking, and online banking. (Alzoubi et al, 2022:1370)

The phrase "electronic payment" refers to a very wide range of electronic payment instruments that utilize cutting edge technology to facilitate the transaction, including electronic money transfers, electronic instruments, credit card payments, and electronic money transfers. Payment systems also express a group of institutions and organizations. The rules and tools through which the payment process takes place between economic units in order to settle their obligations in financial transactions and Private exchanges. (Mohammed and Kareem, 2023:57)

Electronic banking services provide banks with a number of advantages, including lower transaction costs and around-the-clock service, which enhances the efficiency of your banking operations. Mobile banking is also one of the newest electronic distribution channels for banks and has become a more important technology for them, as it provides customers and banks More comfort and value. (Usman, 2018:2-3)

Point of sale (POS), automated teller machine (ATM), online payment (WEB), and mobile money transfer (MMT) technologies are examples of commonly used electronic payment systems. (Alshurideh et al, 2020:602)

### 5.2 Electronic finance:

The transition of financial infrastructure from traditional to electronic platforms indicates the direction of money growth. The relative importance of data circulation when used as data adds value to the data itself. (Westermeier, 2020:2060)

Financial services offered through mobile devices, desktop computers, the Internet, mobile banking, e-wallets, mobile wallets, credit cards, and debit cards are collectively referred to as e-finance. (Risman et al, 2021:1980)

Low-income individuals in developing nations can save and borrow more easily with electronic financial services than with traditional banking, which is more convenient than storing cash at home when travelling. However, a wide range of stakeholders are involved in the provision of e-finance, including banks and other financial institutions, mobile network providers, regulators, agents, retail chains, and consumers.( Durai and Stella,2019:3)

## 6. The Impact Of (EFS) On Financial Performance

According to a study (Mateka et al.), the ease of use that the Internet provides for both individual and corporate clients has led to the influence of online banking on revenue because it makes transactions quick, simple, and comfortable. Consequently, the primary force behind bank cost management is internet banking. (Mateka et al,2016:54)

The research team (Abusaleem and Hersh) further found that a strong, statistically significant correlation exists between electronic banking services and financial performance indicators in Saudi private banks. (Abusaleem and Hersh, 2016:119)

In the same context, the results of the study (Yasin) showed that the random impact regression analysis of electronic banking services was positively associated with the financial performance of Ethiopian banks. (Yasin, 2018:1)

According to a study (Augustin and Prosper), electronic banking services enable banks to switch from conventional channels linked to humanitarian aid to self-service digital channels, which lowers operating costs and boosts productivity and financial performance. (Augustin and Prosper, 2023:71)

In the same context, the study (Maseko and Kalama) investigated how the profitability of private banks is affected by electronic banking services as a measure of their financial performance. It was concluded that electronic transfer significantly affects the profitability of private banks. (Maseko and Kalama, 2022:1)

## 7. Analysis And Findings:

The research used multiple regression analysis of panel data to demonstrate the impact of electronic financial services on the financial performance of selected private Iraqi banks, taking into account the study's dependent and independent factors.

### 7.1 Independent Variables:

**1. Ratio of electronic payment to total bank payments:** Electronic payment means all bank payments made via electronic devices and cards or via Internet applications, such as paying salaries via electronic cards and electronic wallets via mobile phone applications.

The values of table (2) represent the percentage of electronic payments that were extracted for the banks in the research sample, which amounted to (6) banks and for the years of the research sample, which amounted to (6) years, i.e. (36) observation. All data were taken from the records of the research sample banks.

**Table (2) Ratio of electronic payments to total payments**

**Source: Annual reports of banks**

<b>Ratio of electronic payment to total payments</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
National Bank of Iraq	0.307	0.319	0.316	0.307	0.359	0.418
Commercial Bank of Iraq	0.358	0.399	0.388	0.407	0.487	0.567
Investment Bank of Iraq	0.448	0.483	0.526	0.519	0.538	0.54
Gulf Commercial Bank	0.248	0.274	0.302	0.333	0.387	0.428
Sumer Commercial Bank	0.397	0.401	0.456	0.476	0.519	0.551
Iraqi Middle East Investment Bank	0.469	0.458	0.501	0.497	0.529	0.566

**Source: Annual reports of banks (2016:2021)**

**2. Percentage of electronic transactions to the bank's total transactions** Electronic transactions: refer to transactions conducted by the bank via electronic means, including money transfers, personal financing, group financing between individuals, peer-to-peer lending services via electronic platforms, and bank settlements.

The values of Table (3) represent the percentage of electronic payments that were extracted for the banks in the research sample, which amounted to (6) banks and for the years of the research sample, which amounted to (6) years, meaning (36) observations. All data were taken from the records of the banks in the research sample.

**Table (3) Percentage of electronic transactions to total financial transactions**

The ratio of electronic transactions to total financial transactions	2016	2017	2018	2019	2020	2021
National Bank of Iraq	0.36	0.422	0.637	0.657	0.722	0.731
Commercial Bank of Iraq	0.401	0.533	0.554	0.675	0.746	0.802
Investment Bank of Iraq	0.576	0.609	0.637	0.716	0.79	0.817
Gulf Commercial Bank	0.426	0.447	0.499	0.587	0.627	0.737
Sumer Commercial Bank	0.548	0.668	0.706	0.778	0.807	0.851
Iraqi Middle East Investment Bank	0.558	0.578	0.697	0.728	0.789	0.829

Source: Annual reports of banks (2016:2021)

**7.2 Dependent Variables:**

Below are (ROA) and (ROE) for the Private banks under study in Table (4) and (5), respectively.

**Table (4) return on assets**

The ratio of electronic transactions to total financial transactions	2016	2017	2018	2019	2020	2021
National Bank of Iraq	0.01034	0.65776	0.6785	1.2803	2.04692	1.42707
Commercial Bank of Iraq	1.259	1.536	1.592	0.98	4.677	1.49
Investment Bank of Iraq	1.4136	0.5536	0.0428	0.0021	0.6607	0.1198
Gulf Commercial Bank	0.579	0.457	0.102	0.461	0.013	0.646
Sumer Commercial Bank	0.82742	0.08327	0.17764	0.21378	0.2469	0.25481
Iraqi Middle East Investment Bank	2.062	0.858	0.3	0.491	0.586	0.716

Source: Annual reports of banks (2016:2021)

**Table (5) return on equity**

The ratio of electronic transactions to total financial transactions	2016	2017	2018	2019	2020	2021
National Bank of Iraq	9.640	2.057	2.178	4.468	8.057	10.248
Commercial Bank of Iraq	2.688	3.444	3.826	2.408	11.521	4.136
Investment Bank of Iraq	4.160	1.687	0.135	0.007	20.833	0.426
Gulf Commercial Bank	2.189	1.571	0.288	1.282	0.035	1.656
Sumer Commercial Bank	1.656	0.176	0.400	0.440	0.477	0.520
Iraqi Middle East Investment Bank	7.184	3.192	1.289	2.077	2.172	2.613

Annual reports of banks (2016:2021)

The first hypothesis centers on the absence of a statistically significant effect of electronic payment services and financial transactions on return on assets.

The alternative hypothesis H1A, which states that electronic payment services and financial transactions have a statistically significant effect on the return on assets for all banks except for the Iraqi Private Bank, was adopted instead of the null hypothesis H0A. There is no effect because the result was unfavorable.

The results of the regression analysis for the first model indicate that the model as a whole can be relied upon due to the possibility that the probability (F-Statistic) is less than (5%) and reaches (2%)

Table (6) shows the results of the multiple regression test

**Table (6) Regression statistics for the first hypothesis**

<b>Banks</b>	<b>Multiple R</b>	<b>R Square</b>	<b>Std. E</b>	<b>Significance F</b>
National Bank of Iraq	0.923	0.852	0.435	0.02
Commercial Bank of Iraq	0.418	0.175	1.965	0.09
Investment Bank of Iraq	0.933	0.870	0.308	0.01
Gulf Commercial Bank	0.897	0.804	0.181	0.02
Sumer Commercial Bank	0.943	0.889	0.140	0.01
Iraqi Middle East Investment Bank	0.848	0.719	0.528	0.03

**Program outputs spss 25**

The results indicate that the value of the coefficient of determination ( $R^2$ ) and the adjusted coefficient of determination amounted to (0.852), (0.923) respectively. These results indicate that the independent variables can, in their entirety, explain about (0.923) of the behavior of the dependent variable. This means that electronic payment services Financial transactions explain (0.923) of the change in (ROA).

As for the second hypothesis  $H0B$ , there is no statistically significant effect of electronic payment services and financial transactions on return on equity.

The alternative hypothesis  $H1B$ , which states that electronic payment services and financial transactions have a statistically significant effect on the return on equity of all banks except the Iraqi Private Bank and the National Bank of Iraq, was accepted, instead of the null hypothesis  $H0B$ . The result was unfavorable, that is, it had no effect.

The results of the regression analysis for the second model indicate that the model as a whole can be relied upon for the possibility that the probability of the (F-Statistic) is less than (5%) and reaches (4%).

Table (7) shows the results of the multiple regression test

**Table (7) Regression Statistics for the second hypothesis**

<b>Banks</b>	<b>Multiple R</b>	<b>R Square</b>	<b>Std. E</b>	<b>Significance F</b>
National Bank of Iraq	0.657	0.432	4.393	0.07
Commercial Bank of Iraq	0.489	0.239	4.718	0.08
Investment Bank of Iraq	0.952	0.906	3.949	0.01
Gulf Commercial Bank	0.926	0.857	0.500	0.02
Sumer Commercial Bank	0.946	0.895	0.269	0.01
Iraqi Middle East Investment Bank	0.844	0.713	1.783	0.04

**Program outputs spss 25**

The results indicate that the value of the coefficient of determination ( $R^2$ ) and the adjusted coefficient of determination amounted to (0.432), (0.657) respectively. These results indicate that the independent variables can, in their entirety, explain about (0.657) of the behavior of the dependent variable. This means that electronic payment services Financial transactions explain (0.657) of the change in (ROE).

**8. Conclusions:**

The fundamental goal of any bank behind innovation and offering advanced services is to improve financial performance, which prompts the bank to expand its customer base, which increases the volume of transactions and then contributes to gaining a larger portion of the market of the services offered to have a positive impact on the bank's profitability, which is reflected in its profits and wealth. Through the above, the impact of electronic financial services on the financial performance of some Iraqi Private banks was studied, and in view of the experience of Iraqi Private banks in adopting electronic payment methods as

well as money transfer, clearing, and electronic settlement, it was found that the development of electronic financial services in the Iraqi banking sector has a positive impact on performance Financial.

### 9. Recommendations:

Investment spending in the field of banking information technology should be increased as it is the most important tool to confront competition and provide advanced banking financial services that will reflect positively on the bank's reputation.

The banks under study should also encourage customers to use electronic banking services by promoting them so that they realize their importance and advantages.

In addition to working to spread the culture of using electronic payment methods because of their benefits to the bank or customers

The diversification and development of electronic financial services contributes to strengthening the competitiveness of Iraqi Private banks in light of the competition from foreign banks.

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