

The Role of Electronic Banking Services in Enhancing Bank Profitability: An Analytical Study of a Sample of Private Iraqi Commercial Banks

Ahmed Sabah Ali Mahmood

Department of Financial and Banking Sciences, College of Administration and Economics, Al-Mustansiriya University, Baghdad, Iraq

Asst. Prof. Dr. Sadiq Taama Khalaf Al-Bahadli

Department of Financial and Banking Sciences, College of Administration and Economics, Al-Mustansiriya University, Baghdad, Iraq

Received: 22 May 2025; **Accepted:** 18 June 2025; **Published:** 20 July 2025

Abstract: The study aims to demonstrate the extent to which the level of electronic banking services reflects the banking profitability indicators of a sample of private banks (Baghdad, Al-Ahli, and the Middle East) listed on the Iraq Stock Exchange. The study identified a problem: To what extent do electronic banking services affect profitability indicators in the selected sample banks? Are the bank's electronic banking services compatible with the banking industry's economic reality and technological developments? The study reached several conclusions, including that electronic banking services, especially ATMs, points of sale, and electronic card services, have positively impacted profitability indicators in some banks, including the National Bank of Iraq and the National Bank of Baghdad. Their importance has diminished or had no positive impact on the National Bank of the Middle East. Expanding the National Bank's digital infrastructure has reduced costs and increased operational efficiency, improving profitability.

Regarding compatibility with economic and technological realities, these services are fully aligned with global trends in the banking sector. This transformation has become inevitable in the current era, as financial institutions strive to provide convenient, fast, and secure services to customers, enhancing their competitiveness in the market. Furthermore, leveraging digital infrastructure helps banks keep pace with global economic transformations that are driving a reduction in reliance on cash and stimulating digital transactions.

Keywords: Electronic banking services, commercial profitability, Bank of Baghdad, National Bank, Middle East Bank.

Introduction: The world is experiencing a wave of changes and scientific discoveries in the field of information technology. The invention of computers and the Internet accelerated the transformation of traditional administrative methods and structures, creating a society based on digital technology. This has been reflected in all political, economic, and social spheres, including the emergence of electronic banking services in the banking sector.

With this digital development, most Iraqi banks and the banks of Baghdad, Al-Ahli, and the Middle East compete to gain customer loyalty through the

electronic banking services they provide quickly, with high quality, and at the lowest cost. These services offer great convenience to customers, whether through the Internet or other electronic delivery methods, which provides ease of transaction and low price. Electronic financing has become one of the most important technological variables in the financial industry for banks. The forms of electronic banking services are diverse for these banks, which provide a range of services in a bid to gain customer loyalty, including the multi-functionality of ATMs, the spread of point-of-sale (POS) devices and mobile points of sale (POCs), and the issuance of electronic cards. This has facilitated

customers' transactions quickly and easily.

First: Study Methodology

1. Research Importance:

1. In the banking field: This research helps private commercial banks understand how to leverage modern technology to provide their services to enhance their competitiveness and profitability.

2. For customers: Understanding the benefits of the electronic services provided by these banks contributes to enhancing the customer experience.

3. For those responsible for banking policies: This research provides insights into improving the banking business environment by implementing modern electronic services.

2. Research Problem:

The research problem lies in posing the following two questions:

1. To what extent do electronic banking services affect profitability indicators in the selected sample banks?

2. Are the electronic banking services provided by the bank compatible with the reality of economic life and the technological development of the banking industry?

3. Research Hypothesis

Electronic banking services play a role in enhancing the profitability indicators of the banks in the study sample.

4. Research Objective:

The study aims to:

1. Identify the level of electronic banking services represented by the level of electronic banking services provided.

2. Identify the level of profitability achieved by commercial banks, represented by (return on assets, return on equity, return on available funds, and profit margin).

3. Explain the positive effects of enhancing the efficiency of electronic banking services on profitability.

4. Analyze the profitability indicators of the commercial banks in the sample.

5. Research Methodology:

The researcher relied on descriptive (theoretical) and analytical (applied) approaches to achieve the research objectives and prove its hypothesis. This approach was based on the annual reports of the sample banks for the period 2015-2023. The researcher also relied on personal interviews conducted with stakeholders in these banks and published and unpublished data from the Central Bank of Iraq's bulletins and the sample banks to integrate the relationship between electronic

banking services and profitability indicators of the commercial banks within the sample. Second: The Concept of Electronic Banking

The concept of electronic banking is one of the newest economic concepts that has received significant attention from researchers over the past few years, especially as we live today in an era brimming with information technology and electronic services, which have yielded a vast array of applications and programs spanning all economic sectors. Under this modern concept, bank customers can now conduct exchange transactions (buying and selling) over the Internet, using the electronic payment methods available from banks. Banks' electronic services work to achieve the highest quality of services produced at a lower cost and in a shorter time (Abdali, Hala, 2017, p. 384). The Bank for International Settlements defines electronic banking as "the state in which banks provide banking services remotely or via electronic channels, whether to residents or non-residents inside or outside the country" (Al-Damour, Hamed Hani, 2005, p. 21). It has also been defined as "conducting banking operations electronically through the use of new information and communication technology, whether related to traditional or modern banking. This eliminates the need for customers to travel to the bank." So that he can obtain the service from his bank at any time and any place (Al-Haddad, Waseem Muhammad and others, p. 55).

Third: Dimensions of electronic banking services.

1- Providing integrated, high-quality banking services: These services include both modern and traditional electronic banking services. However, the former is distinguished by its modern performance and keeping pace with the developments of modern technology, through (Al-Sarn, Raad Hassan, 2007, p. 315):

A- Issuing electronic newsletters advertising the bank's banking services.

B- Providing customers with a method for knowing and verifying their balances with the bank.

C- Providing customers with a method for paying bills drawn on them electronically.

D- Highlighting how to manage customers' investment portfolios (stocks and bonds).

E - Method of transferring funds between different customer accounts.

2 - Cost of electronic banking services: Banks realize that customer satisfaction is essential to achieving long-term profitability. However, at the same time, they do not aim to improve customer and employee satisfaction at the expense of the costs they incur. Rather, they aim to manage these relationships, as well

as the drivers of profitability, to improve the quality of performance and, consequently, profitability (Hassan, Salah El-Din, 1998, p. 164).

3 - Speed of electronic banking services: The banking arena is witnessing a widespread proliferation of electronic banking services. The speed, quantity, and quality of electronic banking services have become essential factors in the competition between commercial banks to attract customers. However, the use of these services remains below the desired level. Many factors also play a role in motivating individuals to adopt technology to implement these services electronically. One of these factors is the individual's ability to understand the importance and benefits of these services, which must be available internally (Al-Zaghibi, Saddam; Al-Afeef, Muhammad Ali, 2023, pp. 254-255).

4- Ease of Communication: The use of electronic communication methods (telephone, fax, and the internet) allows customers to easily contact the bank, learn about the banking services provided electronically, and submit their inquiries to the bank's automated response staff. This facilitates communication between the two parties (customer and bank), strengthening the relationship between them. This feature allows customers to send information to the bank about their interest in a particular electronic banking service. This allows the bank to benefit from feedback and study market conditions (Nariman, Halili; Muhammad, Bin Bouzian, 2022, p. 104).

Fourth: Types of Electronic Banking Services

1- Automated Teller Machines (ATM): These are automated devices that operate 24 hours a day to serve customers without human intervention, within pre-prepared programs. This is done through an ATM card, which is a plastic card with specific specifications issued by banks and is available to the customer upon notification. This card carries a secret number determined by its owner to ensure confidentiality and security when withdrawing from an ATM (Abdul Allah, Khaled Amin; Al-Tarad, Ibrahim, 2006, p. 221).000000000

2- Electronic cards: These are magnetic cards made of a tamper-evident material, issued by a bank or other financial institution. The cardholder can use them to purchase most of their needs or pay for services without having to carry large sums of money, which could be exposed to the risk of theft, loss, or damage (Ahmed, Jameel; Kahina, Rasham, 2009, p. 109). They are, in turn, divided into four types (Abdul Naeem, Elias Shahid, 2017, p. 2):

A - Payment cards: These are issued by banks or

international finance companies based on the customer's actual balances in the form of current accounts that correspond to the corresponding withdrawals.

B - Credit cards: These are cards issued by banks within specific amounts, enabling the holder to purchase their needs immediately and pay for them later. Interest is charged on the account statement for the amount exceeded by the customer at the end of each month.

C - Monthly debit cards: These cards differ from credit cards in that they are fully repaid to the bank by the customer within the month in which the withdrawal was made (i.e., the credit on these cards does not exceed the duration of the month).

D. ATM card: This card allows the customer to withdraw cash from their account up to a pre-agreed maximum. It also enables the customer to withdraw the funds they need during bank closures. The customer inserts the card into the bank's ATM and enters the four-digit PIN by pressing the keypad on the machine. Bank cards are issued by a group of international organizations and financial and commercial institutions, including (Al-Maghribi, Muhammad Al-Fateh Mahmoud Bashir, 2016, p. 169):

- Visa International: This is one of the largest international credit card issuing companies, dating back to 1958 when the Bank of America issued the Blue, White, and Gold cards. 3- Smart Cards: In keeping with the developments of the technological era, smart cards have emerged. These are plastic cards containing an electronic cell that stores all the holder's data, such as name, address, issuing bank, disbursement method, disbursed amount and date, and the customer's banking history (Brahimi, Abdul Razzaq; Habbal, Abdul Malik, p. 8).

4. Correspondent Banks: These are the banks that the bank that opens the documentary credit relies on to inform it of the letter of credit, revealing the seller's rights and obligations to be fulfilled, for the purpose of delivering the value of the credit. The correspondent bank is not obligated to pay, as it is considered an agent of the bank that opens the credit in the notification process. Alternatively, it is a network of foreign banks and financial institutions whose tasks are limited to providing services, money transfers, documentary credits, and financing foreign trade for the bank's local customers or international activities. Because they deal with the local bank, they are responsible for providing services on its behalf and are located abroad (Central Bank of Iraq, 2021, no page).

3- Electronic Points of Sale (POS): Electronic POS is an electronic cash system in stores that accept electronic payment for purchases. These devices are connected to

communication stations with banks, where the value of purchases is deducted from the cardholder's account and added to the merchant's account by swiping the card over these devices. The electronic POS system works in the same way as an ATM, except that it is located within the institution or store (Qasim, Adeeb, 2011, p. 7). 4- Internet Banking: Through this service, customers of banking institutions can conduct financial transactions by using the electronic page owned by the banking institution via the Internet. This secure and convenient service allows customers who own debit cards to access their bank accounts anywhere and anytime, whether from home or work. The customer opens the bank's website and enters the designated banking service website to enter the card number and PIN. Some banks require additional information for the purpose of confidentiality and protection against theft and other purposes (Bint Jeddou, Umnia; Diqash, Samia, 2020, p. 92).

5- Mobile banking: The phone provides electronic banking services directly to the customer through an automated communication system that provides information, conducts transfers, and receives loan applications. This service is considered advanced and attractive to people who are constantly on the move. It also connects to mobile phone companies or through contracted public or private networks (Masoudi, Abdul Hadi, 2016, pp. 24-25).

Fifth: Analysis of electronic banking indicators for the selected sample

1. Electronic banking services of the Baghdad Investment Bank for the period (2015-2023)
2. The current electronic services provided by the

bank reflect the extent of its development and its position among banks through increased competition among them in delivering services that keep pace with global developments. This is achieved through developing its electronic payment channels system by updating the bank's website, adding ATM locations, and using payroll features for companies, which provides it with flexibility, liquidity, and speed of completion (Bank of Baghdad, 2019, p. 15), and gaining a greater number of customers, as well as expressing the movement of economic activity in expanding investments. The bank's vision for 2023 aimed to implement part of its plan according to its main axes, which focus on developing the bank's operations and technology axis, in addition to structuring and developing individual and corporate services through the implementation of several projects aimed at raising the level of the bank's services, especially electronic ones, to keep pace with developments in the banking industry. This vision resulted in several achievements through the implementation of a series of projects that had a significant impact in bringing about a qualitative shift in the services provided and developing service management programs by adding the operational risk management program (Nucleus). On the customer and market side, redeployment was carried out in some branches in the governorates, in addition to the bank's re-evaluation with major international companies (CI), the results of which are expected to be completed before the end of the first half of 2023, and the commencement of the information governance project (COBIT) (Bank of Baghdad, 2023, p. 83). The following table shows the electronic banking services of the Baghdad Investment Bank for the period (2015-2023):

Table (1) Electronic Banking Services of the Bank Baghdad Al-Ahly for the period (2015-2023)

Number of electronic cards	POC	POS	Number of ATMs	years
72,650	50	15	10	2015
85,010	50	35	10	2016
97,370	75	35	30	2017
109,730	75	35	50	2018
122,090	75	50	60	2019
134,450	100	50	70	2020
148,810	108	58	81	2021
152,346	117	67	90	2022
157,412	126	72	95	2023

Source: Central Bank of Iraq, Payments Department, Operations Division, unpublished data.

Table (1) shows the significant increase in the number of automated teller machines (ATMs) from (10) in 2015 to (95) in 2023, as well as in point-of-sale (POS) services, which increased from (15) to (72) POS, and in mobile electronic payment (POC) services, which grew from (50) to (126), reflecting a significant development in the digital transformation strategy of the National Bank of Baghdad. This substantial growth is due to several scientific and technical factors, most notably the development of financial technology and the increased reliance on digital solutions to improve the customer experience and facilitate access to banking services. The growth in point-of-sale (POS) services also reflects increased digital payment transactions due to the shift towards a digital economy and the encouragement of cashless transactions, which have

become safer and easier to use. In addition, the enhancement of the electronic payment system (POC) can play a role in facilitating prepaid money transfers and increasing the use of electronic payment cards, which have grown in this bank from 72,650 cards in 2015 to 157,412 cards in 2023. This positive increase in electronic services reflects the bank's keenness to keep pace with the latest technological developments in electronic applications and alternative channels for digital transformation by enhancing its electronic services and electronic distribution channels and expanding the spread of ATMs across all governorates to achieve operational efficiency, maximize profit margins, and maintain cash liquidity on an ongoing basis (Bank of Baghdad, 2023, p. 83). 2. Electronic Banking Services of the National Bank of Iraq for the Period (2015-2023)

Table (2) Electronic Banking Services of the National Bank of Iraq for the Period (2015-2023)

Number of Electronic Cards	Number of Mobile Pocs	Number of Pos Points	Number of Atms	Years
11,400	2000	0	10	2015
12,530	2500	50	30	2016
14,930	2500	50	65	2017
18,720	5000	85	80	2018
23,010	6000	100	100	2019
30,080	6000	100	150	2020
39,270	6800	112	169	2021
46,578	7400	123	178	2022
54,210	8500	136	187	2023

Source: Central Bank of Iraq, Payments Department, Operations Division, unpublished data.

By analyzing the data in Table (2) related to the electronic banking services of the National Bank of Iraq between 2015 and 2023, significant growth can be observed in various aspects of the bank's electronic services. The number of ATMs increased significantly from (10) machines in 2015 to (187) machines in 2023, reflecting an improvement in the ability to provide cash withdrawal and deposit services to customers as a form of the bank's electronic services. This growth is due to investment in expanding the ATM network, thus facilitating access to funds and reducing pressure on traditional branches.

Points of Sale (POS) also witnessed similar growth, rising from (10) to (136) during the same period. This facilitates electronic payment transactions for a greater number of merchants and consumers and reflects the expansion in the use of bank card payments as an alternative to cash payments.

Mobile points of sale (POS) increased significantly from 2,000 to 8,500, indicating the bank's drive to increase

the use of mobile devices that facilitate payment transactions in areas without fixed infrastructure. This contributes to the further expansion of e-commerce and commercial services.

Finally, electronic cards increased from 11,400 in 2015 to 54,210 in 2023, indicating the bank's success in spreading the electronic payment culture and expanding its customer base who rely on electronic means to conduct banking transactions. This reflects a significant development in the bank's strategy to adopt digital services and facilitate access. 2. Electronic Banking Services of the Middle East Iraqi Investment Bank (2015-2023)

The bank was established in 1993 and ranked first among Iraqi private banks according to the global CAMEL system for four consecutive years (2007, 2008, 2009, 2010). The bank aims to improve the performance of international banks by adopting advanced methods, including technology, which has become a fundamental pillar of modern banking. The bank will continue to offer the latest banking methods

in the banking industry. It will remain an advanced and distinguished bank in serving its customers and protecting the funds and rights of shareholders (Majid, Zainab Abdul Khaliq, 2020, p. 54).

The bank offers various services, including the electronic banking system (e-banking), which allows customers to conduct banking transactions online easily and securely. In addition, the bank provides

automated teller machines (ATMs) spread across various regions to meet customer needs. It also includes point-of-sale (POS) services facilitating electronic payment transactions in stores and commercial facilities. It also offers an ATM service for quick cash withdrawals, balance inquiries, and the issuance of MasterCard cards to all its customers, in addition to many other electronic services (Majid, Zainab Abdel Khaleq, 2020, p. 54).

Table (3) Electronic Banking Services of the Middle East National Investment Bank (2015-2023)

Number of electronic cards	POC	POS	Number of ATMs	Years
7,625	50	25	20	2015
8,113	75	30	20	2016
8,727	100	30	20	2017
9,847	100	40	25	2018
12,982	100	50	30	2019
13,419	150	50	30	2020
14,078	168	52	36	2021
14,536	174	56	42	2022
23,174	182	61	50	2023

Source: Central Bank of Iraq, Payments Department, Operations Division, unpublished data.

The data in Table (3) reflect a gradual development in the Middle East Bank's capabilities to provide digital services, focusing on improving the availability of ATMs, POS, and mobile POS and increasing the number of electronic bank cards. The number of ATMs began at only (20) in 2015 and gradually increased to (50) in 2023. Despite the increase, the number remains relatively low compared to other banks or the aspirations of the local market, indicating that the bank needs to accelerate investment in ATM infrastructure to meet the growing demand for withdrawal and deposit services.

As for point-of-sale (POS) devices, they increased from (25) in 2015 to (61) in 2023, reflecting a gradual improvement in the spread of these devices. However, this number remains limited compared to other markets, and there is a growing need for electronic payment in commercial sectors. This indicates the need to enhance the point-of-sale (POS) infrastructure to encourage more merchants to rely on card payments.

On the other hand, mobile POS devices increased significantly from 50 devices in 2015 to 182 devices in 2023. This is a positive development, as these devices

give the bank greater capacity to provide electronic payment services in areas without fixed infrastructure. This increase in mobile POS devices is a strong point in the bank's strategy to expand the use of electronic payment across various locations.

Electronic bank cards witnessed significant growth from 7,625 cards in 2015 to 23,173 cards in 2023, demonstrating the bank's success in attracting new customers and encouraging them to use electronic services in their daily financial transactions. However, the number of cards remains below expectations compared to population growth rates and the demands of the digital financial market, highlighting the need for further awareness campaigns and increased offerings to attract the largest number of customers.

Sixth: Analysis of profitability indicators in the selected sample banks

1. Analysis of profitability indicators at the National Bank of Baghdad

Table (4) Profitability indicators for the National Bank of Baghdad for the period (2015-2023)

Profit margin%	Return on available funds%	Return on Equity%	Return on Assets%	Years
8.11	0.55	2.4	0.42	2015

27.49	1.82	7.16	1.69	2016
11.3	0.62	2.21	0.56	2017
11.35	0.39	1.56	0.37	2018
18.29	0.28	0.27	0.64	2019
3.34	0.65	0.07	0.14	2020
3.61	7.05	0.96	1.94	2021
49.9	3.20	15.20	2.03	2022
66.64	9.39	32.88	5.66	2023

The researcher prepared data from Appendix Table No. (1).

It is noted from Table (4) that profitability rates were positive throughout the study period for this bank and reached their highest rates in the years (2022-2023). The last year recorded the highest return on assets, reaching approximately (5.66%), and the return on equity rose to (32.88%), while the profit margin recorded a significant increase this year (66.64%). These indicators reflect the rise in the financial performance of this bank during this period, which was characterized by stability. The return on available funds was the highest rate in 2023 due to the expansionary investment activity witnessed by the bank after the end of the coronavirus pandemic, in addition to the rise in oil prices in recent years.

The positive ratios of the above indicators reflect the bank's ability to improve the quality of its assets and maintain its competitive position within the banking sector in Iraq, despite the challenges created by the coronavirus pandemic, which cast a shadow over the markets which the Bank of Baghdad operates.

However, the adoption of bank's management adopts a precautionary policy that balances profitability and risks, improves asset quality, and transforms challenges into opportunities for success. This has positively impacted the bank's performance growth regarding profitability, maximizing revenues, and reducing expenses, which has positively impacted profitability indicators (Bank of Baghdad, 2023, p. 84). To analyze the effect of banking services (referred to in the previous section) on these indicators at the National Bank of Baghdad, it is noted that the significant improvement in the number and quality of electronic banking services has impacted operational efficiency and increased production. Automated teller machines (ATMs) and mobile points of sale (POS) have played a prominent role in improving financial returns and enhancing the bank's overall profitability. The number of ATMs reached approximately (95) in 2023, while the number of mobile points of sale (POS) reached approximately (126), resulting in a profit margin of approximately (66.44)% in the same year. 2. Analysis of the profitability indicators of the National Bank of Iraq for the period (2015-2023)

Table (5) Profitability indicators of the National Bank of Iraq for the period (2015-2023)

Profit Margin%	Return on available funds%	Return on Equity%	Return on Assets%	Years
11.21	1.41	1.59	0.78	2015
52.58	5.39	0.82	0.4	2016
7.96	6.3	1.04	0.49	2017
-5.6	-1.7	-3	-1.5	2018
26.53	1.79	3.57	1.47	2019
3.68	2.74	0.65	0.22	2020
3.14	6.06	0.82	1.43	2021
17.78	8.22	8.26	1.39	2022
45.64	23.51	37.61	4.77	2023

The researcher prepared the table based on data from Appendix Table No. (2).

These indicators in Table (5) show a significant development in financial performance over recent years, with fluctuations in some years. In 2015, the return on assets, return on equity, and return on available funds were relatively low, with the return on assets recording 0.78% and the return on equity at 1.59%, reflecting moderate banking performance.

Over the years, the indicators have shown significant improvement, with return on assets reaching 1.74% in 2019 and then jumping to 4.77% in 2023, indicating a substantial improvement in the efficiency of using assets to generate returns. Despite this improvement, 2020 witnessed a considerable decline in some indicators due to the repercussions of the COVID-19 pandemic. Return on assets and equity declined significantly, with return on equity declining to 0.56%. However, in 2023, the bank recorded a significant return improvement, with the return on equity reaching approximately 37.61% and the return on available funds reaching approximately 23.51%,

reflecting an improvement in the quality of investments and increased profits.

The notable increase in 2019 (26.53%) and the significant increase in 2023 (45.64%) in the profit margin index demonstrate the bank's ability to improve profit margins effectively despite the significant fluctuations experienced in some years.

To analyze the impact of banking services (referred to in the previous section) on these indicators at the National Bank of Iraq, the effect is noted: the increased reliance on digital technologies, such as automated teller machines (ATMs), point-of-sale (POS) services, and mobile sales (POC), has significantly contributed to enhancing the bank's efficiency and raising profitability indicators. This increase in banking services has also been reflected in an improvement in the digital payments system, which has contributed to the rise in the volume of financial transactions and, consequently, in banking revenues.

3. Analysis of the profitability indicators of the Middle East National Bank for the period (2015-2023)

Table (6) Profitability indicators of the Iraqi Middle East Bank for the period (2015-2023)

Profit Margin%	Return on available funds%	Return on Equity%	Return on Assets%	Years
15.27	1.09	2.39	0.98	2015
27.1	2.18	4.23	1.79	2016
-2.16	-0.1	-0.2	-0.08	2017
-1.4	-0.3	-0.8	-0.29	2018
-4.8	-0.48	-0.3	-0.1	2019
-0.9	-0.4	-0.08	-0.03	2020
-0.69	-2.2	-0.03	-0.03	2021
7.16	0.98	1.30	0.42	2022
-21.76	-2.09	-2.66	-0.98	2023

The Tablercher prepared the table based on data in Appendix (3).

It is clear from the data in Table (Tableat) that this bank is among the banks in the sample with the most declining profitability indicators. Since 2017, profitability rates have been negative, as shown in

Table. This is due to two factors. The first is a general reason, as this period is one of security and political instability, global economic recession, and the COVID-19 pandemic crisis ravaging all aspects of human life (Middle East Iraqi Investment Bank, 2020, p. 1310). The second factor is the result of the decline in the volume of investments in the bank and the decrease in the

volume of cash credit during the years (2016-2023), compared to the increase in the volume of expenses and the decline in the volume of revenues in recent years, especially in 2023, as the bank incurred net profit losses of (-6,702,000%) in this year (see: Middle East Iraqi Investment Bank, 2023, p. 1310). Miscellaneous). This negatively impacted the return on assets (-0.98%), return on equity (-2.66%), return on available funds (-2.09%), and profit margin (-21.76%).

To analyze the impact of banking services (mentioned in the previous section) on these indicators at Middle East Bank, it is noted that the number of ATMs, POS and mobile POCs, and the number of electronic cards had no positive impact, as evidenced by the negative results of the profitability indicators in the table especially in recent years. This is despite the gradual increase in these services, which has been modest compared to the services provided by other banks. Furthermore, the increase has not met the requirements of the local market. Based on the above, electronic banking services, especially ATMs, points of sale, and electronic card services, have positively impacted profitability indicators in some banks, including the National Bank of Iraq and the National Bank of Baghdad. Their importance has diminished or had no positive impact on the National Bank of the Middle East. Expanding the National Bank's digital infrastructure has reduced costs and increased operational efficiency, improving profitability.

Regarding compatibility with economic and technological realities, these services are fully aligned with global trends in the banking sector. Transformation has become inevitable in the current era as financial institutions strive to provide convenient, fast, and secure services to customers, enhancing their competitiveness in the market. Furthermore, leveraging digital infrastructure helps banks keep pace with global economic transformations that are driving a reduction in reliance on cash and stimulating digital transactions.

CONCLUSIONS

1. The study sample's banks provide electronic banking services differently in terms of their use of modern technology, as demonstrated by the relationship between electronic banking services and banking profitability indicators.
2. The banks in the study sample rely on modern technology in the electronic banking services industry, and banking profitability indicators increase positively with increased use of all three types of electronic banking services.
3. The results of the description and analysis of the ATM index showed that the National Bank of Iraq recorded

the highest arithmetic mean and was the best in terms of service provision, with an arithmetic mean of approximately (107.7) machines, followed by the Bank of Baghdad and the Middle East Bank with (55.1, 30.3) as an arithmetic mean for ATMs, respectively, during the study period.

4. The results of the description and analysis of the POS index showed that the National Bank of Iraq was the best in terms of service provision, with an arithmetic mean of approximately (84) points of sale during the study period. It was followed by the Bank of Baghdad with (46.3) points of sale and the Middle East Bank with (43.7) points of sale.

5. The results of the description and analysis of the POC cash payment devices index showed that the National Bank of Iraq performed best in terms of service provision, with an arithmetic mean of approximately 5,188.9 POS points loaded for cash payments. The Middle East Bank followed with 122.11 points, and then the Bank of Baghdad with 86.2 POS points.

6. The results of the description and analysis of the number of electronic cards index showed that the Bank of Baghdad performed best regarding the number of cards issued, with an arithmetic mean of approximately 119,985.3 cards. During the study period, the arithmetic mean for the National Bank of Iraq and the Middle East Bank was approximately 27,858.7 and 15,500.1 cards. 7. Profitability indicators at the National Bank of Baghdad improved during the study period. This was due to the significant improvement in the number and quality of electronic banking services, which contributed to operational efficiency and increased production. Automated teller machines (ATMs) and mobile points of sale (POS) played a prominent role in improving financial returns, contributing to the bank's overall profitability.

8. The National Bank of Iraq's banking profitability indicators showed moderate progress in financial performance over recent years, with fluctuations in 2018. Increased reliance on digital technologies, such as automated teller machines (ATMs), point-of-sale (POS) services, and mobile point-of-sale (POC), significantly contributed to enhancing the bank's efficiency and profitability indicators. This increase in banking services was reflected in an improvement in the digital payments system, which contributed to the rise in the volume of financial transactions and, consequently, in banking revenues.

9. The profitability indicators of the Middle East Bank showed a significant decline, making it one of the banks in the sample with the highest profitability declines. Since 2017, profitability rates have been negative. This is due to two factors: the first is that this year was

marked by security and political instability, a global economic recession, and the COVID-19 pandemic, which has disrupted all aspects of human life. The second factor is the decline in the volume of investments in the bank and the decline in the volume of cash credit during the years (2016-2023), compared to the increase in expenses and the decrease in revenues in recent years.

10. Regarding compatibility with economic and technological realities, these banking services are fully aligned with global trends in the banking sector. This transformation has become inevitable in the current era, as financial institutions seek to provide convenient, fast, and secure services to customers, enhancing their competitiveness in the market. Furthermore, leveraging digital infrastructure helps banks keep pace with global economic transformations that are driving a reduction in reliance on cash and stimulating digital transactions.

Recommendations

1. Iraqi banks should be informed of the quality of electronic banking services provided by developed countries so that they can benefit from modern technological and financial methods used to provide distinguished services to the public in Iraq.
2. The banking sector, in general, should be encouraged to take measures to enhance electronic payment operations by assigning a special weighting when evaluating banks according to the CAMELS assessment.
3. Encouraging, supporting, and educating the public about the use of electronic payment methods will increase financial inclusion.
4. Iraqi private commercial banks in general, and the banks included in the study sample in particular, should increase the number of ATMs, POS and POC points of sale, and electronic cards to reach all members of society, especially in remote areas, with the aim of expanding the geographical area they serve.
5. The banks in the selected sample should work to introduce modern and advanced methods to improve electronic banking services, enabling them to compete with other commercial banks and thus attract and retain a larger number of customers, therefore achieving high financial returns for the banks.
6. Reducing risks in providing electronic banking services to employees by providing them with training courses on how to deal with technical problems.
7. Reducing the cost of banking services and reducing traditional banking red tape helps commercial banks in general, and the sample banks attract the largest number of customers, positively impacting their competitiveness and profitability.

REFERENCES

- Hala Abdeli, Electronic Banking: Mechanisms for Ensuring the Quality of Banking Services, Al-Asil Journal of Economic and Administrative Research, Issue 1, Volume 1, Algeria, 2017.
- Hamed Hani Al-Damour, Marketing Banking Services, Wael Publishing House, Second Edition, Amman, 2005.
- Waseem Mohammed Al-Haddad and others, Electronic Banking Services, Al-Masirah Publishing and Distribution House, Amman, Jordan.
- Raad Hassan Al-Sarna, Globalization of Banking Services Quality, Al-Warraaq Publishing and Distribution Foundation, 1st ed., Amman, 2007.
- Salah El-Din Hassan, Accounts and Modern Banking Services, Dar Al-Wissam for Printing and Publishing, Beirut, 1998.
- Saddam Al-Zaghbi, Muhammad Ali Al-Afif, The Impact of Electronic Banking Services on the Profitability of Commercial Banks: An Applied Study of Jordanian Commercial Banks, Arab Journal of Management, Volume 43, Issue 3, 2023.
- Halayli Nariman, Ben Bouzian Muhammad, The Role of Electronic Banking Services Characteristics in Enhancing Customer Relationships, Journal of Economic Sciences, Volume 17, Issue 1, 2022.
- Samer Fakhri Al-Obaidi, Khaled Abdullah, (2012), Determinants of the Profitability of Jordanian Commercial Banks: An Applied Study, Irbid Journal of Research and Studies, 16(1).
- Jamil Ahmad, Rasham Kahina, Credit Cards as a Means of Payment in Algeria, New Economics Journal, Issue 00, 2009.
- Muhammad Al-Fateh Mahmoud Bashir Al-Maghribi, E-Commerce, First Edition, Dar Al-Janan for Publishing and Distribution, Jordan. 2016.
- Abdel Razzaq Brahimi, Abdelmalek Habal, The Importance of Using Electronic Banking Media in Developing Banking Services, A Case Study of the Agricultural and Rural Development Bank and the National Bank of Algeria in Setif Province, Journal of Economic Studies, Volume 7, Issue 1.
- Central Bank of Iraq, Monetary and Financial Stability Department, Financial Stability Report, 2020, Arabic Edition, Baghdad, Issue 11, 2021.
- Adeeb Qasim, Electronic Banking: Patterns and Acceptance and Rejection Options, Journal of the Baghdad College of Economic Sciences, University, Issue 27, 2011.
- Amnia Bint Jeddou, Samia Diqash, Electronic Banking Service Practices in Algerian Banks, A Case Study of the

National Bank of Algeria, Journal of Administrative and Financial Sciences, Volume 40, Issue 2, 2020.

Abdel Hadi Masoudi, Electronic Banking, Al-Yazouri Scientific House for Publishing and Distribution, Amman, 2016.

Annual Economic Report of the National Bank of Baghdad For the years (2015-2024).

Zainab Abdul Khaliq Majeed, The Impact of Electronic Banking Services on Bank Profitability - A Study of a Sample of Banks Listed on the Iraq Stock Exchange, Unpublished Master's Thesis, College of Administration and Economics, University of Basra, 2020.