

# Digital Payment Systems in Iraq: Current Status and Development Challenges

Ahmed Abdullah Al-Waili<sup>1</sup>, Mustafa Kamil Rasheed<sup>2</sup> and Amer Sami Muneer<sup>3</sup>

<sup>1</sup>Economic Department, Faculty of Administration and Economics, Wasit University, 52001 Al Kut, Wasit, Iraq

<sup>2</sup>Economic Department, Faculty of Administration and Economics, Mustansiriyah University, 10011 Baghdad, Iraq

<sup>3</sup>Economic Department, Faculty of Administration and Economics, Tikrit University, 34001 Tikrit, Salah Al-Din, Iraq  
asalman@uowasit.edu.iq, dr\_mustafa\_kamel@uomustansiriyah.edu.iq, amer56@tu.edu.iq

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**Abstract:** The global landscape is evolving towards a more sophisticated digital framework that fosters artificial intelligence and delivers superior services to customers both domestically and internationally, promoting competition and accelerating the enhancement of digital infrastructure around the world. This research aims to assess the development of electronic payment services in Iraq and investigate whether they have made significant progress that aligns with the Central Bank of Iraq's strategy for financial inclusion and stability, which is a crucial step towards encouraging banks and other financial institutions to cooperate and collaborate in enhancing financial access and investing capital in local production sectors. The study posits that the advancement of electronic payment services is adequate to improve the efficiency of Iraqi banks in utilizing funds to bolster the local economy. The findings indicated that electronic payment services in Iraq were limited during the research timeframe. The research recommended that the Central Bank of Iraq regularly assess digital banking performance, focusing on the implementation of digital cybersecurity measures and protection standards, the ongoing enhancement of digital functionalities and services, and their incorporation into the annual evaluations of these banks. It also urged other economic institutions to embrace advanced digital transformation across all commercial, production, and other operations.

## 1 INTRODUCTION

The shift towards electronic payment methods is a reflection of advancements in banking and the growing dependence on banking services for executing commercial transactions and various business operations. Iraq faces a considerable delay in the acceptance of electronic payment systems by both merchants and consumers. This situation has created a significant hurdle for the Central Bank of Iraq in establishing an electronic payment framework and integrating it into ongoing transactions. Payments primarily conducted in cash dominate the financial settlements involving credit and debit cards for sales and purchases. This dominance has put considerable strain on banks, which have localized the salaries of public sector employees to maximize the availability of ATMs, allowing for immediate cash withdrawals.

**Problem Statement.** The adoption of advanced banking practices for electronic payments encounters a psychological obstacle among consumers when

carrying out financial transactions. Additionally, numerous retailers are hesitant to utilize bank cards for settling debts, which has restricted the proliferation of electronic payment solutions throughout the Iraqi economy.

**Importance of the Research.** Digital payment solutions enable the easy, efficient, and secure execution of financial exchanges between parties involved in a transaction. This removes the necessity of handling significant sums of cash and alleviates issues related to varying denominations due to heightened usage (rapid circulation of money). Each of these transactions takes place within encrypted and secure bank accounts in the financial system, enhancing the efficiency of banking operations and boosting its functions throughout the economy.

**Research Hypothesis.** The research assumes that the development of electronic payment services will enhance the efficiency of Iraqi banks in deploying funds to serve the local economy.

**Research Objective.** The research aims to monitor the development of electronic payment services in Iraq and determine whether they have achieved tangible progress that supports the Central Bank of Iraq's approach to financial inclusion and stability. This strategy represents an important step toward mobilizing banks and other financial institutions to collaborate and cooperate with each other to increase financial access and capital investment in local production sectors.

**Research Methodology.** Official data issued by the Central Bank of Iraq through its annual publications was used for the period (2017-2023), and the indicators of electronic payment services were analyzed based on the data and trends of the values of the indicators.

## 2 LITERATURE REVIEW

The electronic payments sector is undergoing a radical shift towards instant payments and central bank digital currencies (CBDCs). The Global Findex 2025 report highlights That Digital savings growth is expected to reach 40% by 2024, marking the fastest increase in a decade, in developing economies. Smart coverage: 84% of adults in low- and middle-income countries own mobile phones, including 3 billion smartphones, which has boosted access to integrated payments. Transformed financial behavior: 79% of adults globally now have accounts, with mobile money playing a pivotal role in changing traditional financial behavior [1].

The IMF's Financial Access Survey (FAS 2025) revealed the following: A transaction boom: Digital transactions (via mobile and internet) in emerging economies increased from 55 transactions per adult in 2017 to 251 transactions in 2024. International remittances: The share of digital remittance flows increased from 13% in 2019 to 46% by 2024, significantly reducing costs. Central bank digital currencies (CBDCs): The IMF's 2025 report indicates that 19 countries in the Middle East and Central Asia are currently exploring the issuance of digital currencies to enhance payment efficiency and financial inclusion [2].

Regarding Fast Payments and Inclusion (FASTT) initiatives, the State of Instant Payments Systems 2025 report highlighted the FASTT project: the World Bank supports countries in establishing fast payment systems to boost trade and create jobs. Instant payments: In Africa alone, instant payments reached \$2 trillion, driving growth and digital inclusion. Artificial intelligence integration: By 2025,

80% of fintech companies would have begun implementing AI to improve customer experience (83%) and reduce costs (75%). [3].

Accordingly, the advancement of electronic payment methods creates an attractive financial environment for the rapid development of the advanced financial instruments industry for settling electronic financial transactions worldwide. In this regard, the most important steps taken by the world can be summarized as follows [4]:

- 1) Shift from "Disruption" to "Cooperation": The fintech industry has moved from disrupting traditional systems to "collaborative transformation" and integration with existing financial infrastructure.
- 2) Centralization of "Instant Payments". 24/7 payment systems are becoming the new standard for boosting productivity and financial inclusion, particularly in Latin America and Africa.
- 3) Challenging Technical Standards. The World Development Report 2025 asserts that "international standards" are the underlying infrastructure of modern economies, and that aligning domestic markets with these standards is essential for export growth and technology flow.
- 4) Macroeconomic Impact. Central bank digital currencies (CBDCs) can strengthen monetary policy transmission channels and reduce "dollarization" or "crypto-ization" if properly designed.
5. The digital divide: Despite progress, a third of the world's population will still be offline in 2024, with the cost of broadband remaining a major obstacle in low-income countries (consuming 29% of monthly income).

## 3 THEORETICAL FRAMEWORKS FOR ELECTRONIC PAYMENT METHODS

### 3.1 Concept of Electronic Payment Methods

The concept of electronic payment refers to a form of electronic money transaction that involves settling debts, conducting purchases, or other forms of payment. It includes all payment methods that leverage modern technology to meet financial obligations, such as electronic funds transfers, e-

checks, electronic bills of exchange, card payments, and digital cash transactions [5].

It is also described as a collection of banking instruments and procedures that encompass the electronic trading and transfer of funds, serving as a mediator between the payer and the recipient [6]. Furthermore, it is explained as (a collection of banking practices, guidelines, instruments, and procedures that enable the trading of funds and offer payment services to individuals and businesses through participating banks and financial institutions in accordance with electronic systems) [7]. Additionally, it is characterized as (a cohesive set of tools and methods that streamline financial transactions among institutions, as they aim to enhance the economy's welfare by lowering capital costs, reducing financial risks, and strengthening financial intermediation) [8].

The most important factors that led to the introduction of electronic payment methods are the following:

- 1) The gradual decline in the effectiveness of traditional payment methods over time.
- 2) The widespread use of the internet in banking activities.
- 3) The global trend towards e-commerce.
- 4) The digital trend due to the COVID-19 pandemic.

### 3.2 Characteristics of Electronic Payment Methods

The most important characteristics of electronic payment methods are the following [9], [10].

Ease of use of electronic payment methods without complications and without routine and administrative procedures.

- 1) Access to financial services: Electronic payment methods can provide access to financial services for groups that do not have bank accounts or do not have sufficient access to traditional financial services.
- 2) They are characterized by security, reliability, ease, and fluidity.
- 3) Organized management by the entity providing the electronic payment service.
- 4) Speed in completing transactions, transparency in financial transfers, and savings in many fees charged for financial transactions.
- 5) They have an international character, meaning they confer an international character on payment methods and are globally accepted.

### 3.3 The Importance of Electronic Payment Methods

The importance of electronic payment methods is evident in the following: [11], [12]:

- 1) Their importance to the financial sector, as they aim to reduce financial risks and increase credibility, speed, and security. Secure and efficient payment systems also represent an important mechanism that supports the functions of financial markets and the financial system. Electronic payment systems enable financial transactions between banks to be completed easily and quickly, reducing the percentage of cash in circulation and ensuring the availability of complete information on cash management. [13].
- 2) The Importance of Electronic Payment Methods in Fiscal Policy: Electronic payment methods can enhance fiscal policy through the government's use of electronic payment methods, which leads to increased public revenues through the easy and rapid collection of taxes and fees electronically, and reduces tax evasion through the availability of accurate records of financial transactions. The government can also support social support programs by providing secure and fast payment methods for beneficiaries. Increasing government revenues reduces government debt, especially in developing countries [14].
- 3) The importance of electronic payment methods for individuals, as they provide them with speed and security in completing their cash transactions without difficulty, and facilitate the completion and settlement of financial accounts for all companies and their local and international branches with ease and accuracy.
- 4) The importance of electronic payment methods in recording accounts related to exports and imports within the scope of electronic systems, especially in rentier economies with increasing oil revenues and consumer imports [15].

## 4 THE DEVELOPMENT OF ELECTRONIC PAYMENT METHODS IN IRAQ

### 4.1 Number of POC Devices

The proliferation of point-of-sale (POS) devices has been a recurring phenomenon. Looking at the

timeline of this proliferation, we find fluctuations between decline and rapid growth, reaching record levels. However, a gap still exists between the current number of devices and market expectations.

As part of the Central Bank of Iraq's efforts to promote financial inclusion and modernize the banking system, the state has adopted an ambitious strategy to move towards electronic payments. These policies have been directly reflected in the payments infrastructure, as statistical data have shown rapid growth in the spread of digital payment tools and the expansion of their use in commercial activities.

The number of POS devices in 2017 was 13.8 devices per 100,000 people (Fig. 1). It increased to 17.3 devices per 100,000 people in 2018, and then gradually increased until it reached 62.5 devices per 100,000 people in 2020. In 2022, it reached its highest level, at 75.7 devices per 100,000 people.

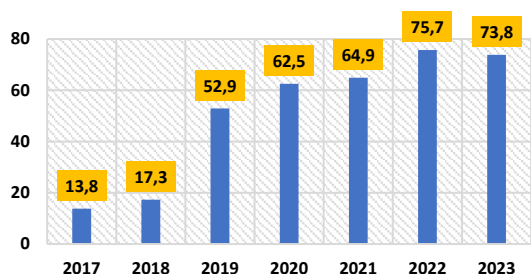


Figure 1: Number of POS devices in Iraq for (2017-2023) (per 100,000 people). Source: CBI, Financial Stability Report, various years.

A parallel analysis of POS deployment shows that in 2017, the number stood at 2.5 devices per 100,000 people (Fig. 2). This number continued to increase until it reached 10.1 devices per 100,000 people in 2019. Thereafter, the culture of electronic payment became more widespread in the Iraqi economy, reaching 35.8 devices per 100,000 people in 2021. In 2023, it reached its highest level, at 71 devices per 100,000 people.

Despite the development in the use of POS devices, their use remains modest and insufficient, not commensurate with the volume of transactions being processed through these devices on an ongoing basis. It appears that electronic payment habits, despite a slow start, have subsequently accelerated following the Central Bank of Iraq's clear adoption of an electronic payment strategy, which obligates banks to use and disseminate them within the community. The spread of these devices is closely linked to markets, shops, and malls that have begun to accept

cashless settlements using credit cards, Visa cards, and other methods.

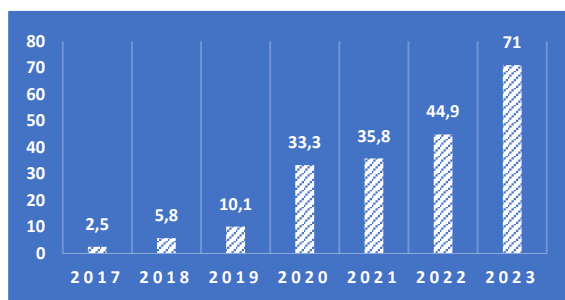


Figure 2: Number of POS devices in Iraq for (2017-2023) (per 100,000 people). Source: CBI, Financial Stability Report, various years.

It is worth noting that the Central Bank of Iraq established the National Company for Electronic Payment Systems in Iraq in 2023 [16]. The Central Bank explained that the company represents a qualitative development in the country's financial infrastructure. The new company will be responsible for developing, operating, and managing the national electronic payment and clearing systems with high efficiency, and will add new elements to serve the electronic payment environment.

## 4.2 Number of ATMs

Automated teller machines (ATMs) are the cornerstone of access to banking services and a vital indicator of the level of financial inclusion in society. Despite the upward trend in their deployment in recent years, the gap between numerical growth and geographical expansion continues to influence individuals' attitudes towards digital transformation, as the following data demonstrates.

The number of ATMs in 2017 was 1.8 machines per 100,000 people (Fig. 3). This trend continued to increase over the research period, reaching 5.9 machines per 100,000 people in 2020, and then 12.4 machines per 100,000 people in 2023. Despite the increasing trend of ATMs, their prevalence remains limited across public facilities, government institutions, and private institutions. Perhaps the limited prevalence of ATMs is driving a decline in the use of electronic payment cards among the population, as there is still a widespread tendency among society to use cash to settle financial obligations.

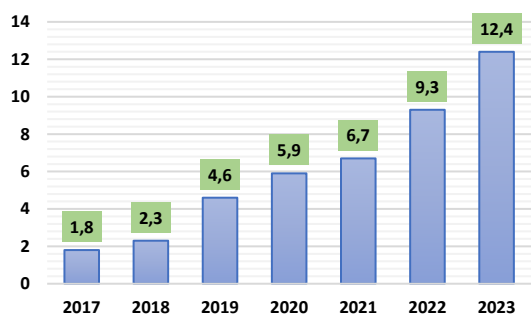


Figure 3: Number of ATM devices in Iraq for (2017-2023) (per 100,000 people). Source: CBI, Financial Stability Report, various years.

### 4.3 Cash Transfer from Mobile

The mobile payment market in Iraq has witnessed fierce competition among licensed companies, with varying levels of market share and performance depending on public trust and the services offered. Statistical indicators for money transfer rates reveal that three main companies lead the scene (Zain Cash, Asia Hawala, and Nass Wallet), with significant shifts in their market shares observed, as illustrated in the following table.

Asia Hawala, Zain Cash, and Nas Wallet were the companies with the highest mobile cash transfer rates (Table 1). Zain Cash topped the list, with transfer rates ranging from a maximum of 98.8% in 2023 to a minimum of 26.1% in 2017. Asia Hawala followed, with transfer rates ranging from a maximum of 73.9% in 2017 to a minimum of 0.3% in 2023. Nas Wallet followed, with only a minimum of 0.3% for the period 2021-2023.

Table 1: Cash transfer from mobile payment companies in Iraq for (2017-2023) (%) [16].

Years	Asia Hawala	Zain Cash	Nas Wallet
2017	73.9	26.1	0
2018	53.6	46.4	0
2019	48.8	51.2	0
2020	32.6	67.4	0
2021	18	78.7	3.2
2022	8.3	84.5	7.3
2023	0.3	98.8	0.8

It is worth noting that the Central Bank of Iraq has imposed a ban on dealing with a number of electronic payment companies and financial platforms, such as PayPal, Perfect Money, Web Money, and Binance. Due to the Central Bank of Iraq's failure to comply with applicable financial regulations and laws, local alternatives such as Zain Cash, Asia Pay, Switch, Q-

Card, Amwal, Fast Pay, Nas Wallet, and others have been provided. However, cash transfers in Iraq remain weak, and their role was very limited during the research period.

### 4.4 Bank Accounts, Electronic Cards, And Electronic Wallets

Bank accounts and electronic cards play a significant role in enhancing electronic payment methods by providing easy and secure financial means for managing money. Electronic cards enable easy and secure cash withdrawals and payments. Bank accounts also enable the opening of deposit accounts, making financial transfers, and receiving wages, salaries, bonuses, and other benefits securely and efficiently.

The annual growth rate of bank accounts in 2018 was 86.4% (Fig. 4). It rose to 101.6% in 2020, after which it began to decline due to the repercussions of the health crisis and quarantine measures. The annual growth rate of bank accounts in 2023 reached 51.1%, following the recovery of financial transactions in general. The annual growth rate of electronic cards in 2018 reached 19.3%, and declined significantly in 2020, reaching 11.8%, and in 2022 it reached its lowest level at 8.7%, which is evidence of the weak use of electronic cards in daily settlements of consumer and financial transactions.

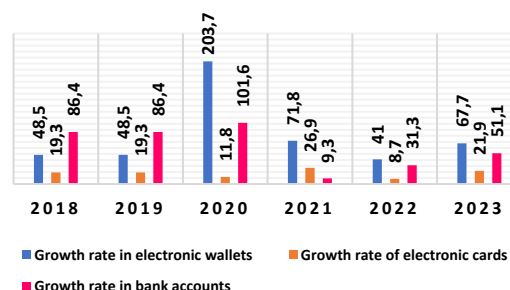


Figure 4: Growth rates of bank accounts, electronic cards, and electronic wallets in Iraq for (2018-2023) (%). Source: CBI, Financial Stability Report, various years.

The annual growth rate of electronic wallets in 2018 reached 48.5%, and reached its highest level in 2020, reaching 203.7%. This indicates the emergence of a desire among users to build their electronic cash wallets to benefit from them in cash transfer operations and completing their daily financial transactions, until it reached 67.7% in 2023. This indicates the importance of creating electronic cash wallets during the research period among users in

order to complete their commercial and daily transactions, which means that individuals prefer electronic wallets over other electronic payment methods in the Iraqi economy.

It is evident from the previous discussion that all electronic payment methods are infrequently utilized by individuals in their everyday transactions. The acceptance of electronic payments encounters several obstacles, primarily the population's hesitance to adopt them due to their relatively recent introduction. In addition, many people find the costs associated with electronic transactions to be prohibitive, which deters usage. Furthermore, the lack of strong financial infrastructure and the limited effort from banks in promoting and fostering the culture of electronic payments have contributed to a decrease in the adoption of these methods, coupled with a general unfamiliarity with how they function. Additionally, users are hesitant to embrace these methods due to concerns over fraud, scams, and the possibility of their electronic accounts being hacked, which could result in financial losses without adequate legal recourse or oversight for such cybercrimes. This situation has prompted the government to implement cutting-edge cybersecurity measures to combat these threats. The creation of the National Company for Electronic Payment Systems also significantly contributes to resolving these issues.

## 5 CONCLUSIONS

The small number of POC devices during the research period indicates a limited spread of their use across the Iraqi economy. Although some growth was observed after 2020, the number of point-of-sale devices remains insufficient and does not correspond to the population increase, which has exceeded 40 million people. Similarly, the number of ATMs is still low, and their availability across public and private sectors remains modest and below expectations. This limited infrastructure constrains the effectiveness of banking operations and does not adequately support the expansion of financial inclusion across all Iraqi governorates.

Cash transfers through local companies also require greater diversification, as the market has been largely dominated by a few providers, particularly Zain Cash and Asia Hawala, throughout the research period. In addition, the role of major international money transfer companies remains weak, limiting competition and innovation in the sector.

Furthermore, the ranking of electronic banking activities based on annual growth shows that electronic wallets occupy the leading position, followed by bank accounts, while electronic cards rank last. This pattern suggests that electronic payment practices in Iraq continue to face structural challenges, particularly those related to financial infrastructure and customer trust, which affect the widespread adoption of these technologies in everyday financial transactions.

## 6 RECOMMENDATIONS

To enhance the effectiveness of electronic payment systems in Iraq, several policy and operational measures should be considered. First, it is essential to expand the deployment of POS devices across all commercial sectors by encouraging their adoption among institutions, companies, retailers, and service providers. This should be complemented by increasing the number of ATMs in public facilities, government institutions, commercial areas, as well as cultural and tourist locations, in order to improve access to banking services and support financial inclusion.

Second, efforts should be made to strengthen the competitiveness of the money transfer sector by supporting the development of local service providers while simultaneously allowing reputable international companies to operate within the regulatory framework established by the Central Bank of Iraq. Establishing partnerships and joint operational agreements between local and international providers could further enhance service quality, technological capabilities, and market efficiency.

Finally, promoting financial literacy and increasing public awareness of electronic payment systems are critical for their widespread adoption. This can be achieved through targeted advertising, educational programs, and promotional campaigns aimed at building trust in digital financial services and encouraging individuals to transition from cash-based transactions to secure and efficient electronic payment methods.

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