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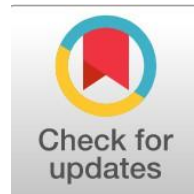
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The Role of Electronic Payment Systems in Supporting the Sustainable Development Path in Iraq

Asst. Prof. Dr. Shaymaa Rasheed Mohaisen, shayma.r@uokerbala.edu.iq (*)
College of Administration and Economics, University of Kerbala, Iraq

(*) Corresponding author

Abstract

General Background: Electronic payment systems are increasingly recognized as critical components of modern financial systems and pathways toward sustainable development. **Specific Background:** In Iraq, financial inclusion remains limited, with only 23% of adults holding formal bank accounts and approximately 90% of transactions conducted in cash, reflecting structural and institutional constraints. **Knowledge Gap:** Despite growing interest in digital finance, there is limited integrated analysis of how electronic payment adoption aligns with sustainable development objectives within Iraq's post-conflict and recovery context. **Aims:** This study examines the adoption of electronic payment systems in Iraq and evaluates their role in advancing selected Sustainable Development Goals by analyzing financial infrastructure, regulatory frameworks, and socio-economic barriers. **Results:** The findings reveal significant barriers including weak infrastructure, low institutional trust, socio-economic inequalities, and cultural preferences for cash, while also identifying pathways through which electronic payments can reduce transaction costs, support poverty reduction, improve gender inclusion, formalize economic activities, and strengthen governance. **Novelty:** The study provides a comprehensive assessment linking electronic payment systems with multiple development dimensions in a fragile economic context. **Implications:** The results suggest that coordinated interventions in infrastructure, regulation, and financial literacy are essential to expand digital financial services and support sustainable development trajectories in Iraq.

Highlights:

- Identifies structural and socio-economic barriers limiting digital financial access
- Demonstrates links between digital transactions and poverty reduction pathways
- Explains role of financial systems in governance transparency and inclusion

Keywords: Electronic Payments, Financial Inclusion, Digital Finance, Sustainable Development, Iraq

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1. Introduction

Iraq is a good example to examine how electronic payment systems and realisation of sustainable development can be achieved in a crossroads that was on the brink of collapse. The country boasts a long history of reconstruction after the war, and is very wealthy, but it is not the richest country in the Middle East and North Africa (MENA) region in terms of electronic payment adoption. The current survey of the World Bank Global Findex databases points out that only 23% of the adults in Iraq have an account with formal financial institutions, which decreases to around 13% amongst women.

The cash transactions which are estimated to be 90 percent of the total transactions in the country are multi-dimensional. Cash supremacy adds to the culture of rampant corruption, builds up the informal sector, and increases transaction costs, weakens tax collection, and restricts access to credit and savings. In addition, it limits the economic participation of women. On the other hand, the growth of electronic payment infrastructure creates good prospects of handling these systemic issues and realizing the sustainable development objectives [1].

Research Objectives

The paper will respond to this by answering three key questions by discussing how strategic electronic payment system programs that aim at adoption can promote sustainable development in Iraq:

1. What are the most prominent current barriers to individual adoption of electronic payments in Iraq?
2. How can electronic payment systems tangibly contribute to achieving selected Sustainable Development Goals in the Iraqi context?

2. Theoretical Framework and Literature Review

2.1. Theoretical Framework:

Financial inclusion and electronic payment system are described as the capability of all the members of the community to access and make good use of formal financial services in a fast and efficient way. Such researchers as Demirgüç-Kunt et al. [1] have underlined that it should not be reduced to owning bank accounts only but also to using them regularly, accessing credit, insurance products, and communicating with digital payment systems. Literature evidence shows that there is a positive correlation between electronic payment system adoption and poverty reduction; Bruhn and Love [2] demonstrated that better access to banking services helped to decrease the income inequality by 7.4%.

2.2. Mechanisms Linking Electronic Payment Systems and Sustainable Development:

- **Savings Accumulation and Capital Formation:** Availability to formal financial services allows the accumulation of savings and capital formation, entrepreneurship and income generation [3].
- **Reduced Transaction Costs:** There is improved efficiency in the economy and a reduction of costs of transactions through the electronic payment systems [4].
- **Expanding Inclusion Scope:** Digital financial services open the access to previously unsupported groups of people including rural communities, women, and low-income families [1].
- **Enhancing Transparency:** Documenting transactions enhances good governance and minimizes chances of corruption.

2.2.1. Electronic Payment Systems in Developing Economies: Electronic payment systems have spread very fast and have radically changed the financial environment in new economies. An example of a successful mobile money platform is M-Pesa in Kenya, where the systems have reached mass and a high influence in areas where banking systems are scarce. Suri and Jack [5] established that mobile payment use raised 194,000 Kenyan households above the poverty line in 2008-2014 with certain effects observed on female headed households.

2.3. Evolution of the Financial Sector in Iraq: Current Status:

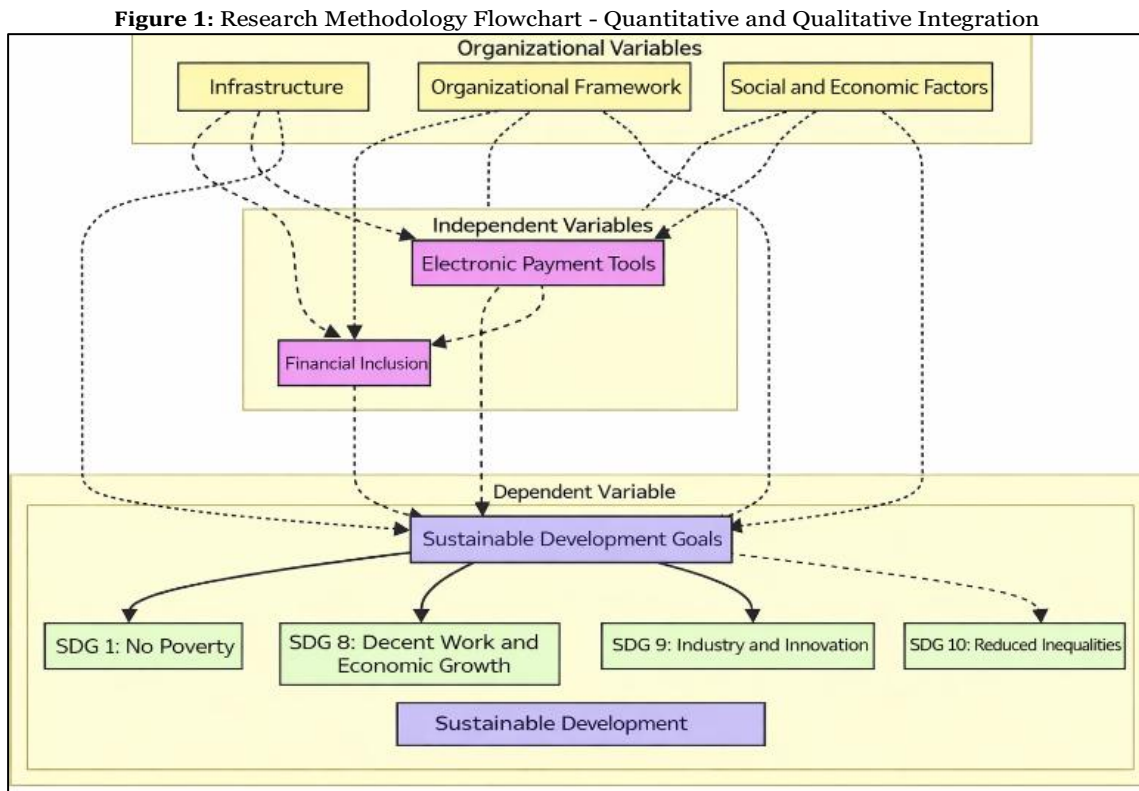
The financial sector of Iraq is not yet as developed as the economic potential and the economy of its neighboring countries. Limited penetration is a feature of the banking industry in the country; there are only about 70 licensed banks according to the Central Bank of Iraq, although the number of branches is small, outside the large urban centers. State banks control the industry, which possesses approximately 85 percent of the banking assets, though, they are often characterized by poor governance, inadequate technologies, and the lack of services.

Studies conducted by World Bank [6] and IMF [7] have revealed certain obstacles to financial inclusion in Iraq. The institutional trust has been destroyed by security issues in the wake of decades of warfare. There is a lack of physical infrastructure particularly in the rural regions, which limits access to banking facilities. Financial behavior is influenced by cultural issues such as preferences of using cash and religious factors towards products based on interests [8]. Female financial inclusion is especially affected by gender-based barriers such as mobility restrictions, women not having financial freedom [9].

The last regulatory changes have shown an increase in the number of people recognizing the significance of financial inclusion. One area of initiative by the Central Bank of Iraq has been financial inclusion, such as authorizing mobile wallet providers and building the infrastructure of a payment system. Nonetheless, implementation has its own problems, such as coordination among regulatory agencies, capacity to enforce, and alignment of incentives among various actors of the public and the private sectors [10][11].

3. Methodology

The study will employ a mixed-methods approach that incorporates both quantitative and qualitative research into the study of available financial inclusion and electronic payment statistics and instrumental and policy framework analysis as depicted in Figure 1.



Source: Prepared by the researcher based on research sources and methodology

4. Electronic Payment Systems in Iraq

4.1. Current Status of Electronic Payment Systems in Iraq

Iraq has continually registering low financial inclusion on various fronts. Formal financial institutions are where people own an account, which is about 23% of adults as per Demircuc-Kunt and; Klapper [12], compared to the MENA region of 53% and the world at 76%. The gap symbolizes a figure of about 15 million unbanked adults in Iraq.

Inequality in demographics is evident. The ownership rate of women (13) is below half of the men (33) and is a 20-percentage point gender gap versus a 6-percentage point global average gap [13]. Long distance differences between rural and urban are also critical and rural are estimated to own less than 15 percent of accounts than 35 percent in urban centres. Financial inclusion among the youths is still particularly low, with only 12% of the age group adults between 15-24 years having formal accounts.

Table 1: Financial Inclusion Indicators in Iraq

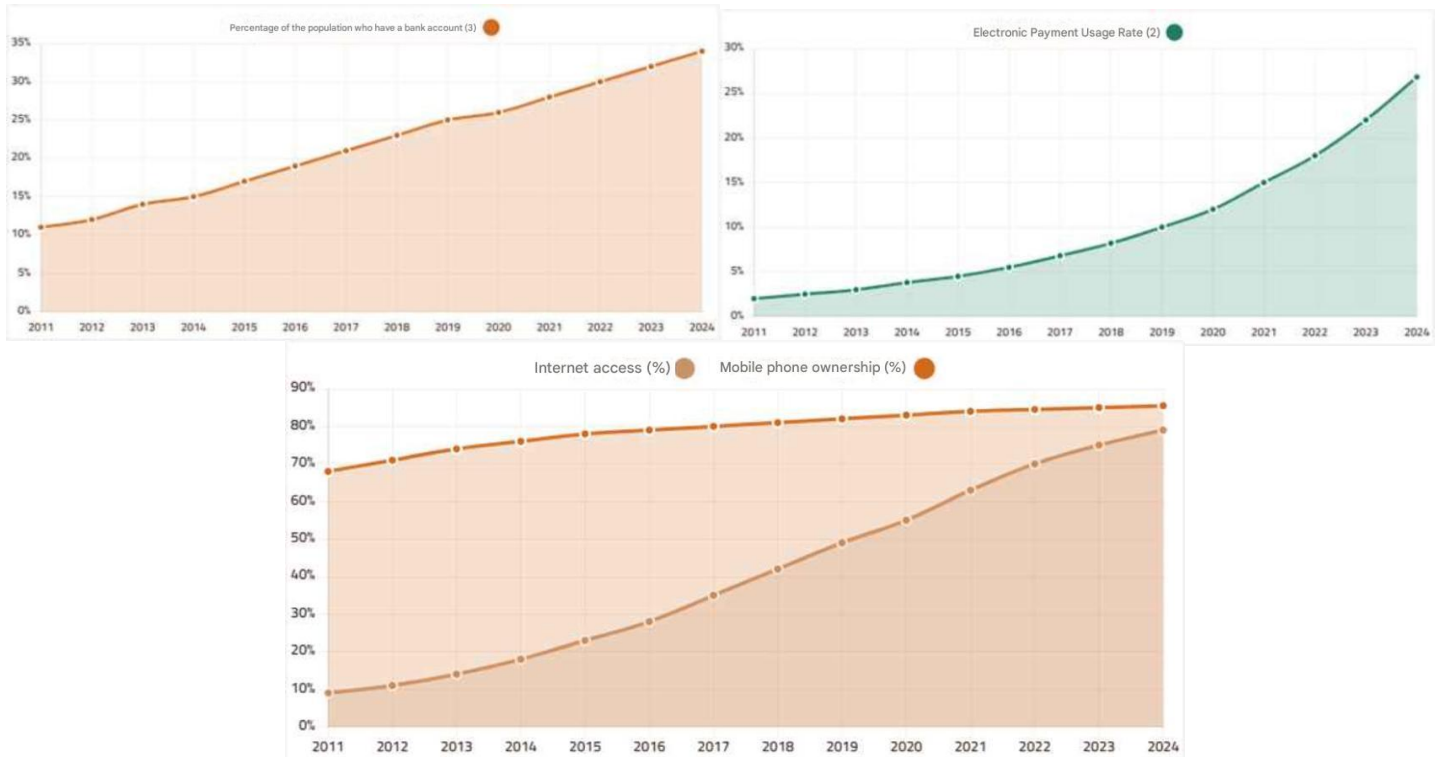
Indicator	Percentage (%)
Bank Account Ownership (Total)	23%
Account Ownership (Male)	33%
Account Ownership (Female)	13%
Debit Card Ownership	8%
Savings at Formal Financial Institutions	6%
Borrowing from Formal Financial Institutions	4%

Source: [6]; [12]; [14].

Charts showing ownership disparities and 2011-2024 trends

Analysis of temporal trends for the period 2011 – 2024

Figure 2: Evolution of financial inclusion in Iraq Loading time trends for the period 2011-2024



4.2. Electronic Payment Infrastructure and Adoption

Iraq Electronic payment infrastructure has been at its infancy. It has around 12,000 Point of Sale (POS) terminals in the country, with Baghdad and other big cities having the majority of them. The coverage has gone to around 1,850 ATMs which translates to 4.5 ATM per 100,000 adults, which is way below the regional average of 25 per 100,000 adults [14].

There is a very low penetration of credit and debit cards. An estimated number of 8% of adults possess a debit card, but those who use it are less than 5%. The ownership of credit cards is low at below 2 percent. The mobile money accounts that revolutionized inclusion in other developing economies had penetrated to approximately 3% based on the most recent measurements. There is still cash domination in practically every type of transaction. Although government salaries and pensions are already being made electronically, they are converted by most of the beneficiaries to cash.

Table 2: Electronic Payment Infrastructure in Iraq

Item	Number	Per 100,000 People
Bank Branches	~1,200	3.0
ATMs	1,850	4.5
POS Terminals	12,000	30

Source: [15].

5. Barriers to Electronic Payment Systems in Iraq

5.1. Infrastructure Deficiencies

Basic limitations are physical and digital infrastructure gaps. There is a consistent lack of reliability in power delivery in the majority of Iraq and there are frequent power outages affecting most regions which cause disruption to the electronic payment systems that require the maintenance of power supply. Even as it expands, the internet connectivity is not available extensively in rural locations and the reliability is compromised in the urban locations. Mobile network coverage is wider but suffers quality variants that impact on mobile payment reliability.

There is also the limited physical access to the financial services due to the few bank branches, particularly in other cities other than the major ones. This geographic concentration is repeated in distribution of ATM and POS terminals and this means that there are large geographical areas that will remain virtually uncovered. The danger to security or destruction of

infrastructure by war or conflict tend to create a hardship or even a risk on travelling to the banking centres, especially to the women who may already have limited mobility.

5.2. Socio-Economic Barriers

All this results in poverty and income instability. A large number of Iraqis give little emphasis to savings and more on the instant consumption demands. Low-income populations may be excluded because of transaction charges as well as minimum balance requirements. The informal workers or the displaced persons are not able to provide documentation requirements such as the IDs and the evidence of address. Small proportions of the population are limited financially and digitally, namely, older people, rural, and women. The Iraqi economy has high informality that lowers the incentives to transact with formal financial services because of the tax exposure issues.

5.3. Institutional and Governance Challenges

The confidence in the financial institutions is weak. There has been a history of banking crises in Iraq, which has left a long term distrust. Corruption and poor governance in state-owned banks also create a lack of trust. Concerns on security whereby data privacy is highly compromised and that the account may be frozen or monitored by the government discourages the potential users. Laxness in legal and regulatory frameworks brings about an element of uncertainty; the enforcement of contracts is slow and they are not reliable [14].

5.4. Cultural and Social Factors

Social practices have a strong cultural orientation towards money. Cash is perceived as physical, direct, and one that does not need any technological intermediation. The perceived necessity to acquire credit is decreased by social norms regarding lending/borrowing via family and community networks. Religiousness issue of interest (Riba) poses a problem to religious Muslims even when they have options of Islamic banking.

Women are greatly impacted by gender barriers in terms of getting included in finance. Women in certain societies are not encouraged to be financially independent by their social norms. There are further challenges in gender disparities in the ID documentation, digital literacy, and mobile phone ownership. The effect of generational differences is also present; although the younger generation is more receptive of digital payment forms, young people usually lack the ability to independently make financial decisions inside the family.

5.5. Security and Conflict-Related Factors

The new history of war in Iraq poses its own obstacles. There are cases where displaced populations are not given any address or ID documents. Damage of physical infrastructure in areas affected by conflict reduces the presence of banking. There is also the psychological influence, as the unpredictability of the future weakens the motivation to save formally, and perceptions of asset destruction in war generate a desire to hold portable money in the form of cash or gold.

6. Electronic Payments and Sustainable Development: Impact Pathways in Iraq

6.1 Goal 1: No Poverty

Different ways of how electronic payment systems may reduce the poverty are possible. First, electronic payments increase the effective value of small transfers, which are essential to the low-income households by lowering transaction costs. Studies indicate that the expense of the cash disbursement may be as high as 3-5% of the transaction value, and the electronic transfer will significantly lower the same.

Second, electronic payment records generate credit-scoring data, which may increase access to formal credit to formerly locked-out entrepreneurs and households. Third, the efficiency of the social protection programs can be enhanced and leakage reduced through the electronic payment infrastructure. Switching to electronic disbursement can help to decrease the number of corruption and make the food subsidies and social welfare transfers timely.

6.2. Goal 5: Gender Equality

Women require financial inclusion in order to empower them. Gender-specific barriers can be handled by electronic payment systems. The privacy and the control offered by mobile money accounts can be sought where women have a limited mobility or financial independence. Studies indicate that the use of mobile money enhances the autonomy and bargaining power of women in the family set-up.

Electronic payments on wages mean that the income is directly received by women as opposed to being passed through male representatives. This enhances economic autonomy. Nonetheless, the gender disparity in mobile phone ownership in Iraq should be narrowed down to allow women to enjoy the growth of electronic payments. Specific actions are needed to improve access of women to mobile phones and digital literacy.

6.3. Goal 8: Decent Work and Economic Growth

Electronic payment infrastructure promotes economic growth through formalization of economic transactions that enhances tax payment and collection by the government. World Bank estimates that informality in Iraq is costing the country more than 3 percent of GDP in terms of tax revenues. In the case of SMEs, the ability to use electronic payments also increases their customer base and e-commerce opportunities.

Electronic payment systems facilitate formalization of the labor markets. Frequent electronic payments of wages leave behind employment records that are useful in assisting workers to obtain loans, rental houses and social services. Moreover, entrepreneurship can be encouraged by providing financial inclusion via the use of electronic payments and thereby access to startup and working capital financing.

6.4. Goal 10: Reduced Inequalities

Electronic payment systems are capable of facilitating the reduction of inequalities by turning the digital financial services more affordable to the low-income groups than the conventional banking. Mobile money platforms and agent banking networks are able to reach rural and peripheral locations to decrease geographic inequality in access to financial services.

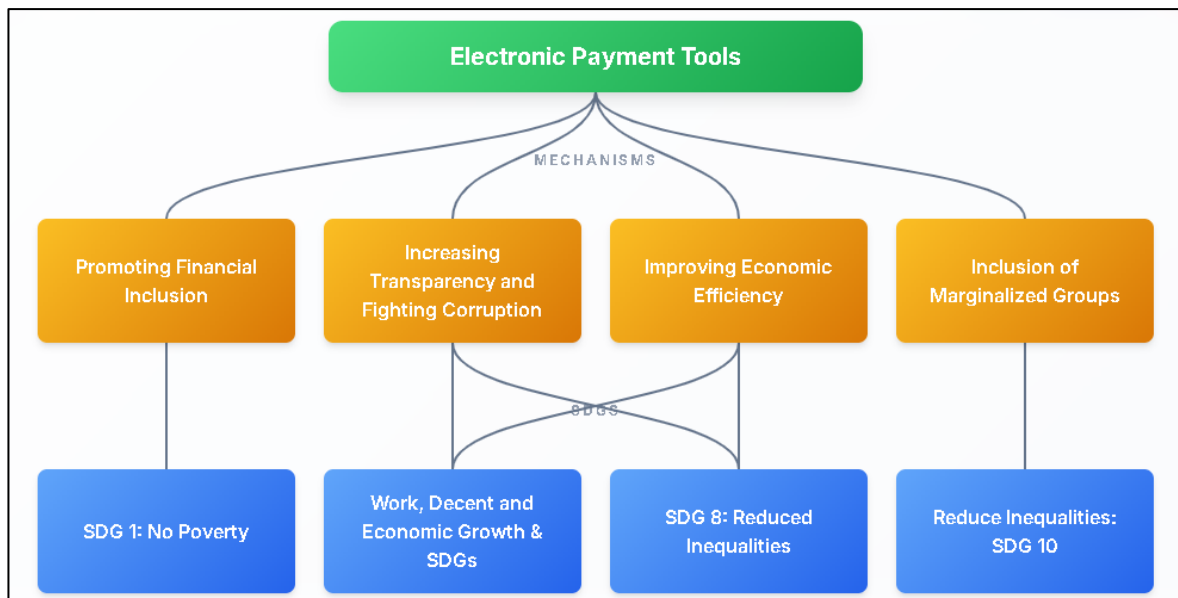
Electronic disbursement has the ability to help eliminate corruption that impacts the poor disproportionately due to less government transparency in government payments. Nevertheless, there is a possibility of establishing digital divides when the growth of electronic payments is mainly in already privileged urban groups. They need to include those with disabilities and to reach out to them specifically in order to provide benefits that are fair.

6.5. Goal 16: Peace, Justice, and Strong Institutions

Electronic payment systems help in enhanced institution building and governance. Transparency is enhanced through formalization of transactions and preserving of records in digital format. Iraq is also low on the corruption indices; transactions which are made in cash enable corruption. The procurement, salaries and social programs are paid electronically and leave trail of audit that facilitates accountability.

Improving tax collection through formalized transactions supports state capacity and institutional legitimacy. Developing the financial sector, including electronic payment infrastructure, contributes to economic diversification away from oil dependency—a critical strategic priority for Iraq's long-term stability.

Figure 3: Key Impact Pathways of Electronic Payments on the 5 Selected SDGs.



[Diagram showing links between E-payments and Poverty, Gender, Growth, Inequality, and Institutions]

7. Conclusion:

1. Financial Inclusion Gap: Iraq suffers from a critical gap where only 23% of adults have bank accounts, with stark gender and regional disparities.

2. Cash Dominance: Cash transactions (90% of total) hinder development by fueling the informal economy and undermining transparency.

3. **Structural Barriers:** Inclusion faces challenges including weak digital infrastructure, institutional constraints, and conflict legacy.
4. **Digital Potential:** High mobile penetration and youth digital literacy offer a historic opportunity for a digital leap.
5. **SDG Impact:** Electronic payments can tangibly reduce poverty, empower women, and stimulate growth.
6. **Integrated Approach:** Success requires simultaneous action on infrastructure, regulation, trust, and financial culture.

8. Recommendations:

1. Build cyber infrastructure through improved telecom infrastructure and energy security.
2. Alter regulatory systems to incorporate elastic laws that favour innovation and consumerism.
3. Massive electronic payments in the government and social transfer to generate critical mass.
4. Increase strategic financial inclusion by providing women, youth, and rural programs.
5. Establish private-state collaborations with a view to coming up with new financial strategies.
6. Create awareness, both financial and digital, via educational campaigns.

References

1. A. Demirgüç-Kunt et al., *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*. Washington, DC, USA: World Bank, 2018.
2. M. Bruhn and I. Love, "The real impact of improved access to finance: Evidence from Mexico," *The Journal of Finance*, vol. 69, no. 3, pp. 1347–1376, 2014.
3. Chibba, Michael. "Financial Inclusion, Poverty Reduction and the Millennium Development Goals." *European Journal of Development Research*, vol. 21, no. 2, 2009, pp. 213–230.
4. Aker, Joshua C., and Isaac M. Mbiti. "Mobile Phones and Economic Development in Africa." *Journal of Economic Perspectives*, vol. 24, no. 3, 2010, pp. 207–232. DOI: 10.1257/jep.24.3.207.
5. Suri, Tavneet, and William Jack. "The Long-Run Poverty and Gender Impacts of Mobile Money." *Science*, vol. 354, no. 6317, 2016, pp. 1288–1292. DOI: 10.1126/science.aah5309.
6. World Bank, *Iraq Economic Monitor: Reforms amid conflict*. Washington, DC, USA: World Bank, 2022.
7. International Monetary Fund, *Iraq: 2023 Article IV Consultation—Staff Report*. Washington, DC, USA: IMF, 2023.
8. R. Rocha et al., *Financial Access and Stability: A Road Map for the Middle East and North Africa*. Washington, DC, USA: World Bank, 2011.
9. A. Demirgüç-Kunt and L. Klapper, *The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19*. Washington, DC, USA: World Bank, 2021.
10. Allen, Franklin, Asli Demirgüç-Kunt, Leora Klapper, and Maria Soledad Martinez Peria. *The Foundations of Financial Inclusion: Understanding Ownership and Use of Formal Accounts*. World Bank Policy Research Working Paper 6290, 2012.
11. R. Aterido et al., "Access to finance in Sub-Saharan Africa: Is there a gender gap?" *World Development*, vol. 47, pp. 102–120, 2013.
12. O. Morawczynski and M. Pickens, "Poor people using mobile financial services: Observations on customer usage and impact from M-PESA," *CGAP Brief*, Washington, DC, USA, 2009.
13. C. Park and R. Mercado, "Financial inclusion, poverty, and income inequality in developing Asia," *Asian Development Bank*, Manila, Philippines, 2015.
14. Central Bank of Iraq, *Annual Statistical Bulletin*. Baghdad, Iraq, 2023.
15. World Bank, *MENA Economic Update*. Washington, DC, USA: World Bank, 2023.