

An Analytical Study of the Financial Inclusion Indicators in the Iraqi Banking Sector Between 2011-2021

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Abstract

Financial inclusion has been recently gaining the attention of researches due to its important role in achieving sustainable development, reducing poverty and unemployment rates, and enhancing the efficiency and effectiveness of the financial performance in banking sector. The aim of this study is to analyze the indicators of financial inclusion for the banking sector in Iraq during the period from 2011 till 2021 using the descriptive approach. Results showed that financial inclusion indicators (FII) (access, use and quality of services) in Iraq are still below the international standards, but they have witnessed a relative improvement in recent years, which is attributed to the growing attention to raising the level of financial inclusion in Iraq and the efforts made by the Central Bank of Iraq. Central Bank of Iraq is recommended to adapt more developed initiations to elevate the level of financial inclusion and cooperate with the local authorities and international partners in order to formulate an integrated and implementable national strategy that could help in achieving this goal.

Key Words: Financial Inclusion, access to financial services, usage of financial services, quality of the products and services, Iraqi banking sector.

Introduction

Financial inclusion has emerged since the beginning of the 21st century as one of the most important contemporary financial and economic issues. Its concerns have occupied a large space of interest of international organizations, led by the United Nations as an essential part of its 2030 strategy and the World Bank, within the framework of international policies and efforts to eradicate poverty (Yousef, 2020). Today, banking sectors in various countries around the world seek to

improve their performance by applying financial inclusion indicators, within a broad direction aimed at supporting sustainable development operations. This requires the presence of a banking sector capable of providing all banking services to various social groups, through the use of modern technologies and encouraging poor and marginalized social groups to benefit from the credit services provided by banks in financing medium and small projects that contribute to sustainable development (Abdulridha et al., 2021). In light of the weakness of financial inclusion in the Iraqi banking sector, there is a need for the current study as a means of contributing to reducing this research gap. Furthermore, due to the importance of this topic in raising public awareness about analyzing financial inclusion indicators in the Iraqi banking sector.

The annual report of the Central Bank of Iraq on financial stability for the year 2021 indicates an increase in the overall financial inclusion index in Iraq to 33.5%. However, the level of financial inclusion is still among the lowest percentages and below the required level (Financial Stability Report, 2021). Many studies confirm the existence of many difficulties that hinder the process of applying financial inclusion in the Iraqi banking sector and uplifting it to the international level (Al-Hasnawi & Mahdi, 2020; Ghanawi & Saleh, 2019; Muhammad, 2021). Based on that, the problem of the study lies in attempting to analyze financial inclusion indicators in the Iraqi banking sector. Therefore, the main question that can express the problem of the study is:

- What are the applicability level of financial inclusion indicators (access, use and quality of services) in the Iraqi banking sector?

Research significance

The importance of the study lies in keeping up with the changes and developments in the systems, standards, and frameworks of financial operations and activities in banks and financial institutions, as well as enhancing the orientations of Iraqi banks and financial institutions to apply financial inclusion standards and use their frameworks to enhance their role in improving the quality of life for individuals and society, while improving the financial performance of the Iraqi banking sector. This, in turn, enhances its ability to maintain its continuity, competitiveness, and effectiveness at all financial, economic, social, and environmental levels.

Research objectives

The current study aims to achieve a set of objectives, including:

1. Presenting the theoretical framework of financial inclusion and its key indicators;
2. Measuring the level of application of financial inclusion indicators (access, use and quality of services) in the Iraqi banking sector.

Research hypothesis

- The financial inclusion data with its main dimensions for the period (2011-2021) are not stable

Literature review

Financial inclusion

Financial inclusion has been variously and multiply defined depending on the different stakeholders and perspectives. The World Bank Group (2013) defined it as the proportion of the population that uses financial services out of the total population. In another definition, it is the extent to which individuals from all segments of society, including excluded groups, use formal financial services (Cámara & Tuesta, 2017). Based on the above, financial inclusion can be defined in a procedural form for the purposes of the current study as enabling all individuals from various categories and segments of society, especially the poor and marginalized, to access the financial services provided by banks, while committing to quality services and appropriate costs in a sustainable manner.

Financial inclusion dimensions (FID)

The Los Cabos Summit of G20 leaders in June 2012 endorsed the main dimensions of financial inclusion and presented by the Alliance for Financial Inclusion (AFI) (Al-Sun, 2019; Men, 2021). The three dimensions of financial inclusion are:

1. Accessing dimension, which refers to the ability of beneficiaries to use financial services (Ajour, 2017), and the responsibility of financial institutions that provide these services (Kelly, 2016). This dimension can be measured using indicators such as bank density, bank spread, number of access points, and number of ATMs.
2. The usage dimension of financial inclusion is related to the behavior of beneficiaries towards financial services and their interaction with financial service providers in terms of requesting and using these services on a regular basis. It is also linked to whether the beneficiary has a bank account and how frequently they use it for deposit and withdrawal transactions (Camera & Tuesday, 2014; Chinaka, 2016). This dimension can be measured using indicators such as the number of bank accounts, number of bank cards, percentage of deposits, and percentage of loan accounts.
3. Quality dimension of financial inclusion aims to provide high-quality financial products to meet the needs of users. This includes ease of use, affordability, and efficiency of service delivery methods (Chakravarty & Pal, 2010). This dimension can be measured using two indicators: private

sector credit to gross domestic product (GDP) and private sector deposits to GDP.

Financial inclusion in Iraq

International reports on financial inclusion indicate that the level of financial inclusion in Iraq is still low due to the strong preference for cash transactions among individuals, partly due to the general lack of trust in the banking sector after decades of instability (International Labor Organization, 2020). According to a study by the Central Bank of Iraq, the low level of financial inclusion in Iraq can be attributed to three reasons (Abdul Nabi, 2018; Al-Rafi'i, 2020):

1. Low bank density is due to a weak level of adoption of modern technologies and lack of adequate banking plans to expand the banking network and spread its services in a wider geographic area, where the global standard ratio is one branch per ten thousand people.
2. High unemployment rates and lack of sufficient job opportunities for young people of both genders, due to the destruction of agricultural, industrial, and commercial sectors since 2003, causing a significant decrease in transactions with banks.
3. High poverty rates in Iraq, amidst wars that led to the deterioration of political, security, and economic conditions, as well as the destruction of infrastructure in various sectors of work and production.

Indeed, the banking sector in Iraq is still relatively small and about 90% of all assets and deposits are controlled by government-owned banks (International Labor Organization, 2020).

The relationship between financial inclusion and performance

In the banking sector, the relationship between financial inclusion and performance plays a crucial aspect of the success of banking institutions in the contemporary business environment. Several studies have confirmed the positive relationship between financial inclusion indicators and performance in banks (Bin Dhib, 2019). Banks that expand financial inclusion with high levels of financial literacy and awareness among individuals can enable them to access and use financial services, attracting a larger number of customers with different savings categories to conduct their financial transactions with the banking sector. This reflects an increase in liquidity and enhances financial performance (Awad, 2021). Other studies confirmed that the relationship between financial inclusion and performance in banks is strengthened by investing in modern technology and keeping up with its rapid developments that serve the banking business (Yousef, 2020; Yas, 2022).

Methodology

The study population includes the entire 74 Iraqi banking sector with all its institutional components, represented by all banks and financial institutions operating in Iraq. As for the study sample, it consists of all financial indicators related to financial inclusion at the level of the Iraqi banking sector as a whole. All these indicators were purposively selected within the time frame (2011-2021). Thus, the study aims to analyze financial inclusion through quantitative indicators that describe its levels in the Iraqi banking sector.

Results and discussion

The researchers below presents the quantitative data related to FII. They were collected from the financial stability reports and annual statistical bulletins issued by the Central Bank of Iraq during the period (2011-2021). They consist of three indicators:

Accessing to financial services indicators

Table 1 Access to financial services indicators in Iraq (2011-2021)

Years	Banking density	banking spread	ATM per 1000 km ²	Points of sale (pos) per 1000 km ²	Branches per 1000 km ²
2011	35.9	2.78	1.07	2.06	2.14
2012	34.6	2.89	1.07	2.28	2.28
2013	33.7	2.96	1.48	2.33	2.39
2014	29.9	3.34	0.77	2.37	2.77
2015	43.24	2.31	1.33	1.31	2.79
2016	43.74	2.29	1.52	1.63	2.45
2017	44.05	2.27	1.5	2.1	1.94
2018	44.16	2.26	2.00	5.0	1.99
2019	44.25	2.25	2.3	5.1	2.04
2020	45.06	2.21	2.7	8.9	2.05
2021	45.51	2.2	3.6	19.00	2.08
Average	40.37	2.52	1.76	4.73	2.27

Bank density indicator(BDI)

BDI refers to the total number of people in Iraq who receive their banking service from one bank. The lower its value, the better the level of financial inclusion. During the period (2011-2021), the average bank density in Iraq was 40.37, which means that each branch provides its services to forty thousand citizens. This value is very low compared to the standard ratio of ten thousand citizens per branch. It is noticed that this indicator started to rise since 2015 and stabilized in 2021 at 45.51, which means a decline in the levels of financial inclusion in Iraq. Therefore, it is necessary to increase the number of bank branches to reach ten thousand citizens per branch.

Bank spread indicator (BSI)

BSI represents the inverse of bank density and is calculated by the ratio (number of bank branches/number of people). During the period (2011-2021), the analysis results showed a clear decrease in the bank spread indicator, where the average of this indicator was (2.52) branches per 1000 km². This is a low level of access to financial services in Iraq. The standard level is (10) branches per 1000 km², and this is a negative indicator of achieving financial inclusion in Iraq.

ATM indicator

The number of ATMs is one of the important electronic payment tools that the Central Bank seeks to increase in order to introduce as many people as possible to the financial system and to promote operations within the financial system, using electronic payment tools to gradually reduce cash transactions. It is measured by (total number of ATMs/1000 km²), as shown in Table 1. The percentage remained low since 2011 and reached its lowest point in 2014, where it decreased from (1.07) in 2011 to (0.77) in 2014. Then, it began to gradually increase again since 2015 and witnessed a clear increase in 2020, reaching (2.7). After that, this percentage increased and stabilized at (3.6) in 2021. Although the number of ATMs in Iraq has increased significantly in recent years, these machines are only available in shopping centers, commercial areas, selected government offices, and bank branches; they are not available in public places.

Point of sale indicator (POS)

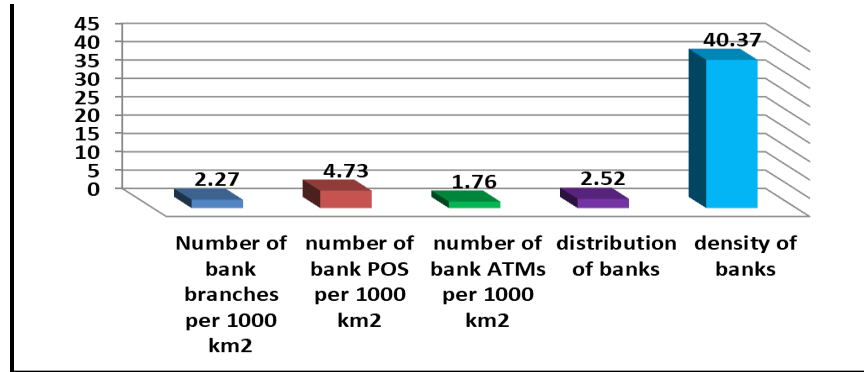
This is an indicator of the number of POS that provides access to banking services quickly and at reasonable prices. The advantages of POS include increasing sales, reducing risks, saving money, and investing in secure and reliable financial transactions, making electronic payment transactions easy for auditing and electronic monitoring. This indicator has witnessed a significant improvement since 2018, where the percentage in 2011 was (2.06), and it remained fluctuating between increase and decrease until it reached (2.1) in 2017, then it increased to (5.0) in 2018, and continued to rise to (8.9) in 2020. Then, it increased significantly to stabilize at (19.00) in 2021. Despite the increasing percentage of POS, the majority of markets and commercial stores, especially in remote and sparsely populated areas, still accept cash payments only due to the lack of adoption of this culture currently, and most business owners are still unsure about how to implement this procedure.

Branches per 1000 km² indicator

The indicator represents the number of bank branches per 1000 km² of the country's area. The percentage of the number of branches witnessed a relative improvement in the years (2011-2015), where it increased

from (2.14) in 2011 to (2.79) in 2015. However, it returned to decrease after that until it stabilized at (2.08) in 2021. This indicator is still below the required level compared to other countries, which means a low level of banking penetration in Iraq.

Figure 1. indicators of access to financial services in Iraq (2011-2021)



Indicators of using financial services

The level of use of financial services in this study is measured by four indicators, as shown in Table 2:

Table 2 Indicators of the use of financial services in Iraq (2011-2021)

Year	Number of bank accounts/ population	Number of bank cards / population	Ratio of deposit accounts/number of adults	Ratio of loan accounts/number of adults
2011	3.1	6.1	2.8	0.8
2012	2.9	5.8	3.01	1.1
2013	3.3	8.9	3.2	1.2
2014	3.6	11.3	11.0	1.3
2015	3.8	12.8	6.5	0.2
2016	3.5	14.4	6.8	1.1
2017	3.6	17.2	5.5	1.7
2018	4.2	23.06	5.4	1.5
2019	7.7	26.7	5.3	1.3
2020	10.9	28.00	6.1	1.4
2021	11.9	35,3	5.8	1.6
Average	5.31	17,23	5.58	1.20

Number of bank accounts

The indicator of the number of bank accounts indicates the number of individuals who actually own a bank account in a certain bank. Likely, the indicator of the number of bank cards, which contribute to enhancing financial inclusion, as the study data indicates that the number of bank accounts opened with banks did not reach the required percentage compared to the Arab countries. During the period (2011-2021), the average value of the index of the number of bank accounts to the number of the population amounted to (5.31), which is a very low percentage compared to the levels achieved in neighboring countries, as this percentage ranges between (3-80%) of the total number of adults. However, this percentage witnessed a significant improvement since 2019, when it rose to (7.7), then reached (10.9) in 2020, to settle at (11.9) in 2021, with a growth rate of (9%) over the past year. This is a result of the campaign to settle the wages of employees in Iraqi banks, which raised the percentage of people in Iraq who have bank accounts.

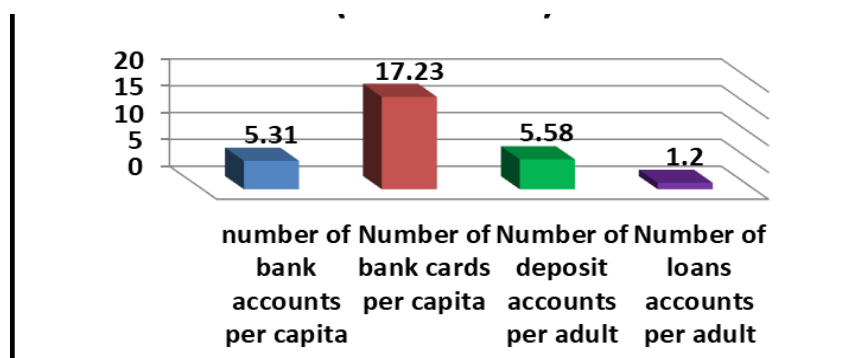
Number of bank cards

The indicator average value of the number of bank cards to the population was (17.23) during the period (2011-2021). Its value is (35.3) in 2021, with a growth rate of 26% over the past year. The continuation of the campaign to settle the wages of employees in Iraqi banks, and the diversification of banking services led to more individuals entering the financial system, which resulted to the expansion of financial inclusion. This is the strategy of the Central Bank of Iraq in order to strengthen and spread it.

Deposit accounts ratio

The indicator, the ratio of the number of deposit accounts to the number of adults, is one of the useful indicators in measuring the level of use of financial services. It is still much lower than the required level, despite the increase the indicator witnessed in recent years 2011 to reach its highest level in 2014, when it reached (11.0). Then, the average decreased after that, and continued to fluctuate between (6.8-5.3) during the period (2015-2021), until it stabilized at (5.8) in 2021. The researchers believe the main reason is the survival of a large part of the adult population in Iraq without benefiting from banking services, in addition to the phenomenon of hoarding. Furthermore, the lack of public confidence in the banking sector, as a result of the unstable conditions in the country, as well as the inability of banks to return the amounts deposited with them at the request of the customer, and the low density Rural banking, low per capita income, lack of banking culture, all of these factors contributed to the decline of this indicator.

Figure 2. The use of financial services in Iraq (2011-2021)



Quality of financial service indicators

The level of quality of financial services is measured using indicators of financial depth, which reflect the levels of ease of access to these services, their low cost, and the expansion of strengthening the operations of providing banking services. Two indicators are used as shown in Table 3 below:

Table 3 Financial depth Indicators (quality of services) in Iraq (2011-2021)

Year	Private credit/GDP sector	Private deposits/GDP sector
2011	5.2	8.4
2012	5.7	8.3
2013	6.2	8.9
2014	6.9	9.5
2015	9.4	12.3
2016	9.2	12.0
2017	8.8	11.8
2018	7.5	10.2
2019	7.6	11.1
2020	11.8	16.3
2021	9.8	14.3
Average	7.63	11.19

Private sector credit/GDP

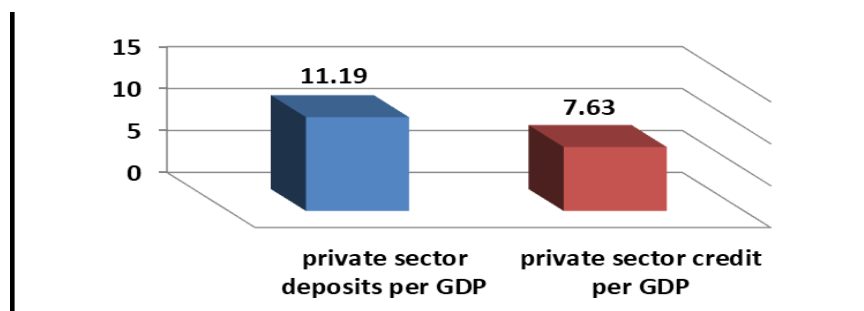
The ratio of private sector credit to GDP increased during the period (2011-2021), from (5.7) in 2011 to (9.2) in 2016, then decreased to (7.6) in 2019, to rise again to (8.11) in 2020, to settle at its highest value in 2021, which amounted to (9.8), and during the period (2011-2021). The

average of this indicator was (7.63). Although this result is still low due to the high growth rate of the GDP, the total rate is higher than the private sector credit growth.

Private sector deposits/GDP

The indicator of private sector deposits/GDP increased from (8.4) in 2011, to reach (12.0) in 2016, but it declined after that. It recorded a significant increase in 2020, when its ratio reached (16.3). Then it decreased in 2021 to (14.3), so that the average of this ratio during the period (2011-2021) stabilized at a value of (11.19), due to the high growth rate of GDP at a rate higher than the growth of private sector deposits. In general, these percentages are low and indicate a clear deficiency in the contribution of the banking sector to the GDP, and a lack of demand for financial services, in terms of credit services or deposits. This leads to poor quality of banking services, which negatively affects the level of financial inclusion.

Figure 3. Financial depth (quality of services) in Iraq (2011-2021)



Conclusions

1. The banking sector with its various components is considered one of the sensitive economic sectors, and an essential element in contemporary economies in general, because of its clear impact on the economy, whether at the micro or macro level.
2. Financial inclusion is considered one of the most effective tools in promoting inclusive and sustainable economic growth, through poverty eradication, promotion of job opportunities, development of employment capabilities, equality of opportunity, mobilization of funds and savings and their fruitful activation, and support for micro and small and medium enterprises.
3. The financial technology infrastructure weakness in the Iraqi banking sector contributed to the low levels of banking penetration, banking density, and banking depth levels related to levels of access, use, and quality of banking services.

4. The low level of education and awareness of financial services provided by Iraqi banks reduced the demand for these services, which in turn contributed to reducing the level of access and use of them by individuals.

5. The indicators of financial inclusion (access, use, and quality of services) in Iraq during the period (2011-2021) are still low from international standard levels, but they have witnessed a kind of relative improvement in recent years, which is due to the growing interest By raising the level of financial inclusion in Iraq, and the efforts made by the Central Bank of Iraq.

Recommendations

1. Enhancing technological support in the banking sector, and benefiting from modern banking technologies in enhancing the level of financial inclusion, by promoting the use of smart applications via the phone, bank cards and other effective technical tools in the banking sector.

2. Raising the level of banking awareness of the principles of financial inclusion, through guidance, education, training and targeted development of banking cadres and the community as well.

3. Providing new financial products and services that are suitable for different social groups, age groups, and small and medium production sectors, and working to direct financial services and financial products towards productive financing on a basis that is based on participation and expanding the scope of employment and investment opportunities.

4. Increasing the number of ATMs in the main cities and increasing the number of branches and POS in the regions and districts that have the largest percentage of the population and which lack banking services and face severe difficulties in accessing them.

5. Developing the initiatives of the Central Bank of Iraq related to financial inclusion and cooperating with all local authorities and international partners in formulating and configuring an integrated and implementable national strategy to achieve this goal.

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