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The Effect of financial inclusion on enhancing banking sector profits for the period (2010-2021)

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Abstract: analyze and measure impact of financial inclusion in enhancing the profits in Iraq for the duration (2010-2021) by demonstrating the contribution of financial inclusion to enhancing the profits of the banking banking , increasing bank deposits. Financial inclusion helps achieve financial stability for the banking sector by increasing the banking sector's ability to expand its investments, by following different methods to attract customers, which lead to an more in deposits , thus an increase in bank profits. The profits achieved by banks reflect the, extent of the bank's, ability to invest its funds in various investments to generate profits. used the descriptive , analytical approach, and used modern standard models (ARDL), and this was done (quarterly) data , for the period (2010-2021), using , statistical program (Eveiws 13). The research reached a set of conclusions, the more important of which, was that there is a direct relationship with a significant impact between financial inclusion and the profits of . The study also recommended the necessity of the banking sector to increase the number of bank branches and points of sale. And ATMs and ensuring their spread in various areas, especially remote ones, to attract more customers and thus increase the profits of the banking sector.

Keywords: Financial inclusion, banking profitability.

Introduction: The banking sector, as its work extends to all branches of economic activity. It relies on profits and seeks to increase these profits through the banking services it provides to customers. It seeks to ensure that all segments of society have access to services through financial inclusion, which enhances financial and banking stability on the one hand, and seeks to focus on increasing the number of customers and banking operations and providing high-quality banking services on the other hand. In addition, it provides credit to low-income individuals ,with minimal time, effort, and cost. the economy, as it directs savings and its funds to various categories in the form of bank credit, it seeks through its work to achieve the maximum possible profit. Banks are intermediary financial institutions based on accepting deposits from various customers as their primary function and then granting credit to employ these funds and achieve profits. Profits are one of the financial indicators used to evaluate the performance of banks and a fundamental goal for their continuity and survival. It increases their ability to face the risks and obligations to which they are exposed. Profits also express the ability of banks to invest their funds in various investments. It contributes to increased profits, the number , customers dealing with bank, an improvement in the quality of services provided, and an increase in financial transactions, such as deposits, loans, and transfers.

Research objective: demonstrate the impact of financial inclusion on enhancing the profits (2010-2021), through:

1. Analyzing financial inclusion indicators in Iraq for the period (2010-2021).
2. Analyzing the profits (2010-2021).
3. Measuring inclusion on the profits (2010-2021).

Research problem: The main problem: Does financial inclusion have a significant impact on enhancing the profits ,(2010-2021)? This research is divided into:

1. Does the number of bank branches, a significant impact on enhancing the profits of the banking sector in Iraq for the period (2010-2021)?
2. Do automated teller machines (ATMs) have a significant impact on enhancing the profits , (2010-2021)?
3- Do points of sale (POS) , a significant , enhancing the profits (2010-2021)?

Hypothesis: This hypothesis is divided into:

1- There is no significant, impact of the number, of bank branches on enhancing the profits of the banking sector in Iraq for the period (2010-2021).
2- There is no significant impact of , (ATMs) on enhancing the profits (2010-2021).

3- There is no significant impact of the number of points of sale (POS) on enhancing the profits of the banking sector in Iraq for the period (2010-2021).

Importance : lies in the extent to which financial inclusion contributes to enhancing the profits of the banking sector by providing access to all banking, services to various segments of society . It also contributes to , expanding its investment base through the proliferation of bank branches, ATMs, and points of sale. This leads to attracting more customers, thus increasing deposits and, consequently, increasing banks' ability to grant credit of all kinds, leading to increased banking profits.

Research Limits:

1. Spatial Limits : The Iraqi banking sector.
2. Temporal Limits : (2010-2021) .

Population and Sample: The Iraqi banking sector.

Section One: Financial Inclusion and Banking Sector Profits

First Requirement: Financial Inclusion

First: The Concept of Financial Inclusion: Financial inclusion can be defined as the process that enables various segments of society, including institutions and individuals, to access and use all financial services through formal channels, including bank accounts, savings, payment services, financing, and credit, as well as the creation of more appropriate financial services at acceptable, competitive prices.

It is also defined as "the state in which all people have access to a full range of high-quality financial and banking services provided at reasonable prices and in an appropriate manner."

Second: The Importance

1. Increasing rate, economic growth through services and products it provides to society in all its segments, leading to increased income flows and sources and the provision of liquidity, which positively impacts the improvement of individual financial inclusion.
2. Enhancing financial and banking stability by enhancing the ability to deal with various types of risks facing companies and institutions by increasing services and providing quick and easy access to them. This impacts the financial and credit structure, which directly impacts the nature of financial activities and improves competitive opportunities in financial markets. This is because the development of banking activities is a fundamental element in achieving financial inclusion.
3. Financial inclusion impacts social life by focusing on low-income individuals and owners ,various financial and banking services in an accessible and affordable manner.
4. Financial access will attract investors from the global market to our country, leading to increased job opportunities and employment.

Third: Objectives of Financial Inclusion

1. Working to improve access to financial institutions and financing methods to improve the living conditions of all segments of society.
2. Driving development and reducing poverty levels.
3. the access of all banking services to various segments of society, and informing customers of the importance of banking services, how to access them, their advantages, and costs. This is achieved by developing programs that highlight the importance of banking services and their role in keeping pace with societal development and improving its economic and social conditions.
4- Financial inclusion helps in the financial stability , increasing the banking sector’s investments , ATMs, the spread , bank branches and points of sale, in addition to providing financial services that suit the desires and needs of customers number of customers , banking sector, which leads to a more in deposits.

Fourth: Indicators for Measuring Financial Inclusion

Financial inclusion has three dimensions:

1. Access to Financial Services: This dimension refers to the ability to use financial services from formal institutions. By addressing problem. Financial services can be accessed through the information and data provided by financial institutions.
2. Use of Financial Services : The extent to which individuals obtain banking services provided by banks, through the extent of benefiting from financial services over a period of time.
3. Quality of Financial Services: The extent to which financial services or products meet consumer needs. It includes the quality of services provided to individuals, the user's idea about them and his attitude towards those available products.

Within these dimensions are several indicators by which financial inclusion can be measured, as follows:

1. Number of Bank Branches: This depends on the number of bank branches spread throughout the country to ensure that all segments of society are covered by banking services.

2- Number of Automated Teller Machines (ATMs): ATMs are an important electronic payment tool. They are electronic devices that enable customers of financial institutions to conduct financial transactions in public places.
3- Number of Points of Sale (POS): An important means of accessing banking services faster and at a lower cost. These devices detect the sufficiency of the cardholder's balance to meet his obligations.

Second Requirement: Banking Sector Profits

First: The Concept of Profitability

The bank's profitability is defined as the bank's achievement of profits by investing the funds deposited with it in a way that achieves the greatest possible return within a specific period. The return achieved by the bank can be expressed as a percentage that represents the return on the investment of funds.

Second: Indicators for Measuring Profitability

1. Return on Assets (ROA) : One of the best methods used to measure the ability of banks to invest their financial resources, and thus reflects the banking sector's ability to achieve financial returns by using its assets to grant loans and investments, and is expressed as net profit after interest and taxes to the bank's total assets.
2. Return on Equity (ROE): This indicator measures the basic trade-off between return and risk. Return on equity, also known as the profitability of private capital (shareholders' funds), is the ratio of net income to total equity. It is a performance indicator that reflects the bank's return on shareholders' investments or the effectiveness of bank management in utilizing shareholders' capital.

This ratio demonstrates The bank's ability to generate profits ,from each unit of shareholders' equity (resulting from subtracting total assets from total liabilities). The higher this ratio, the more it reflects management's efficiency in utilizing shareholders' funds to ensure a satisfactory return. The opposite occurs when this ratio decreases. This ratio is also one of the most important financial ratios traded on the stock market because it reflects earnings per share. A high earnings per share will undoubtedly have an impact on maximizing the stock's market value. The above ratios can be measured according to the following equations:

Return on Assets = Net Profit After Tax / Total Assets * 100
Return on Equity = Net Profit After Tax / Equity * 100

Third Requirement: The Relationship Between Financial Inclusion and Bank Profits

The banking sector is important for the stability of financial systems. Banks play a key role in generating and investing funds for economic growth, financing businesses and individuals, and conducting payment activities. They provide a variety of services that are important to any economy, such as financial intermediation, credit risk management, deposit mobilization, lending, and money transfer. Therefore, banks are credit institutions operating in the money market and granting credit for specific terms (short, medium, or long-term) by accepting deposits from individuals and institutions, in return for which they promise to repay on demand or after a certain period. Banking activities extend to all branches of economic activity, and banks strive, based on their work, to achieve the maximum possible profit. However, the amount of profit depends on the amount of funds the banks own and those provided by individuals, institutions, and projects, as well as the liquidity they retain.

Therefore, financial inclusion and banking profitability are linked to each other in several ways.

Financial inclusion affects banking profitability as follows:

1. Increased number of customers: Financial inclusion can lead to a height of in the number of customers dealing for banks, therefore, increased bank revenues.
2. Increased revenues: Financial inclusion can lead to increased revenues by increasing the number of financial transactions, such as deposits, loans, and transfers.
3. Improving operational efficiency: Financial inclusion can lead to improved financial operation efficiency, which leads to reduced costs and improved profitability.

Bank profitability also impacts financial inclusion as follows:

1. Providing financing: Bank profitability can lead to providing the necessary financing to support financial inclusion, such as financing for establishing bank branches or developing new financial services.
2. Improving service quality: Bank profitability can improve the quality of banking services provided by banks, leading to increased customer satisfaction and improved financial inclusion.
3. Increasing investment: Bank profitability can lead to increased investment in the banking sector, which leads to improved financial inclusion.

Challenges in the relationship between financial inclusion and banking profitability

1. Regulatory challenges
2. Technological challenges
3. Economic challenges

Possible solutions to improve the relationship between financial inclusion and banking profitability

1. Improving operational efficiency: The efficiency of banking operations can be improved to improve profitability and its impact on financial inclusion.
2- Developing new financial services: New financial services can be developed to improve profitability and impact financial inclusion.
3- Improving service quality: can be improved to improve customer satisfaction and impact financial inclusion.

Section Two: Analysis of Financial Inclusion Indicators and Bank Profits

Section One: Analysis of Financial Inclusion Indicators in Iraq for the Period (2010-2021)

Table No. (1) Analysis of Financial Inclusion Indicators in Iraq for the Period (2010-2021)

Year	Number of bank branches		Total bank branches	Growth rate %	Numbe of ATMs	Growth rate %	Number ((POS	Growth rate %
	Government sector	Private sector						
2010	382	478	860	-	385	-	30000	-
2011	397	491	888	3.2	467	21.2	50000	66
2012	471	511	982	10.5	467	0	50000	0
2013	476	526	1002	2.04	647	38.5	30000	(40)
2014	416	522	938	(6.3)	337	(47.9)	30000	0
2015	397	424	821	(12.4)	580	72.1	30000	0
2016	406	452	858	4.5	660	13.7	30000	0
2017	423	411	834	(2.7)	668	1.2	45000	50
2018	420	437	857	2.7	878	31.4	50000	11
2019	423	458	881	2.8	1021	16.2	55000	10
2020	425	459	884	0.3	1278	25.1	68000	23
2021	409	492	901	1.9	1565	22.4	83000	22

Table No. (1) shows the data on financial inclusion (2010-2021). We note that , total number of, bank, branches fluctuated between rising and falling, as it achieved an increase in the years (2010-2013) until it reached (1002) branches in 2013. As for the growth rate over the years, it achieved its highest rate in 2012, which is the highest growth rate achieved during the study period, while the years (2014-2015) achieved a decrease in the number of bank branches to record (938, 821) respectively, with growth of (-6.3%) and (-12.4%). decrease , security situation that the country witnessed in a number of governorates, which resulted in the closure of a number of bank branches in those areas. It rose again in 2016 to reach (858) branches with a growth rate of (4.5%), and the number of branches headed towards a decline in 2017, while the years (2018-2021) achieved a noticeable increase in the number of bank branches until (901) branches , 2021 with a rate of (1.9%), and increase , improvement of the conditions and circumstances witnessed by the country. We also note that the number of ATMs fluctuated between high and low. The years (2010-2013) achieved an increase. In 2013, ATMs reached (647) ATMs for a growth rate of (38.5%). After that, the number of ATMs declined to (337) in 2014 with a growth rate of (-47.9%). While the number of ATMs during the years (2015-2021) gradually increased. The number of ATMs in 2015 was (580) ATMs and increased to reach (1565) ATMs in 2021 with a growth rate of (22.4%). (POS) increased between 2010 and 2012, reaching 30,000, 50,000, and 50,000 points, respectively. The year 2011 also achieved a growth rate of 66%, the highest growth rate during the study period. Between 2013 and 2016, the number of POS remained stable at 30,000 points, after which it rose again. The increase began in 2017, reaching 45,000 points, and continued through 2021, reaching 83,000 points, with varying growth rates.

Second Requirement: Analysis of Bank Profits in Iraq for the Period 2010-2021

Bank profits are expressed using the concept of banking profitability.

Table (2): Bank Profitability Data for Banks

Years	Banking profitability	%growth rate
2010	53,809,831	-
2011	58,697,956	9
2012	70,501,210	20.1
2013	82,804,919	17.4
2014	71,528,076	(13.6)
2015	63,048,516	(27)
2016	68,717,292	8.9
2017	65,690,505	4.4
2018	67,160,979	2 .2
2019	78,253,336	16.5
2020	88,861,792	13.5
2021	110,137,166	23.9

Table (2) profitability data of Iraqi banks for the period (2010-2021)., banks' profitability fluctuated between increases , decreases. The years (2010-2013) achieved an increase in their profits, with profits amounting to (53,809,831) billion dinars in 2010. This increase continued until it reached (82,804,919) in 2013, for rate of (17.4%). because increase is attributed to the height in the number of bank branches, the increase in banking investments, and the introduction of new services, deposits , consequently, an volume of bank credit, thus increasing bank profits.

In the year (2014-2015) the profitability of banks decreased to record respectively (71528076) and (63048516) billion dinars with growth rates of (-13.6%) and (-27%). The reason for this decrease is due to the circumstances and conditions that Iraq witnessed due to its war with terrorism, which resulted in the closure of a number of banks as well as a number of bank branches and individuals withdrawing their deposits due to the war. Then it rose again to record in the year 2016 (68717292) billion dinars with a growth rate of (8.9%), while in the year 2017 it decreased slightly to reach (65690505) growth r of (4.4%). During the years 2018-2021, banking profits witnessed a significant increase, reaching(67,160,979) in 2018, with a growth of 2.2%. This increase continued until it reached(110,137,166) in 2021, for a rate of 23.9%. This is the highest growth rate achieved during the study period. The reason for the increase in banking sector profits is due to enhancing financial , the widespread availability of financial, services and providing access to basic services provided by the formal financial system to all segments of society. This is in addition to developing financial inclusion indicators that measure the level of financial inclusion.

The third section: Measuring the impact of indicators

First section: Building the model

For the purpose of building the model, the data is analyzed on a quarterly basis. In order to arrive at the hypothesis, we use statistical methods to determine the extent to which the theoretical aspect matches the results to identify the impact of financial inclusion on the sector's profitability.

The goal of conducting a time series stationarity test is to ensure that the studied time series are free of the unit root problem, which, when present, results in misleading and unrealistic standard results. To detect the absence of a unit root in these series, the augmented Dickey-Fuller (ADF) test is used. Table (3) shows the stationarity test for the studied variables.

Table (3) Time Series Stationarity Test

UNIT ROOT TEST TABLE (ADF)

		At Level			
		ATM	BANK_P...	NUMBER...	POS
With Con...	t-Statistic	0.3869	-0.1840	-1.6972	-0.2183
	Prob.	***0.9803***	***0.9332***	***0.4261***	***0.9287***
		n0	n0	n0	n0
With Con...	t-Statistic	-1.5779	-1.0873	-1.8508	-1.1342
	Prob.	***0.7867***	***0.9204***	***0.6638***	***0.9120***
		n0	n0	n0	n0
Without ...	t-Statistic	1.8698	1.5578	0.1288	1.2408
	Prob.	***0.9840***	***0.9690***	***0.7185***	***0.9432***
		n0	n0	n0	n0

		At First Difference			
		d(ATM)	d(BANK_...	d(NUMB...	d(POS)
With Con...	t-Statistic	-7.1793	-7.0343	-6.6410	-6.9275
	Prob.	***0.0000***	***0.0000***	***0.0000***	***0.0000***
		***	***	***	***
With Con...	t-Statistic	-7.3875	-7.0761	-6.5739	-6.9999
	Prob.	***0.0000***	***0.0000***	***0.0000***	***0.0000***
		***	***	***	***
Without ...	t-Statistic	-6.7082	-6.7082	-6.7082	-6.7082
	Prob.	***0.0000***	***0.0000***	***0.0000***	***0.0000***
		***	***	***	***

Notes: (*)Significant at the 10%; (**)Significant at the 5%; (***) Significant at the 1%. and (no) Not Significant
*MacKinnon (1996) one-sided p-values.

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Table (3) the Dickey-Fuller test that all study data stabilized at the first difference. The dependent variable, represented by bank profits, stabilized at the first difference level of 1% only,. estimated value (-7.1793) was less than the table value and at a significance level of (0.0000), meaning it was of rank (1). The independent variables, represented by (ATM,POS, number of banks), also stabilized at the first difference of 1%, with only a fixed limit and time trend and a probability of 1%.

Second requirement : Estimating the first model according to the ARDL methodology.

First: Thre role to financial inclusion in enhancing banking sector profits

Table (4): Measuring the role of financial inclusion in enhancing banking sector profits.

Source: Prepared b

Dependent Variable: BANK_PROFITABILITY
Method: ARDL
Date: 04/08/25 Time: 10:02
Sample (adjusted): 2011Q1 2021Q4
Included observations: 44 after adjustments
Maximum dependent lags: 4 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (4 lags, automatic): ATM NUMBER_OF_BANK POS
Fixed regressors: C
Number of models evalulated: 500
Selected Model: ARDL(4, 1, 1, 0)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
BANK_PROFITABILITY(...	0.571385	0.115479	4.947938	0.0000
BANK_PROFITABILITY(...	-4.98E-14	0.080656	-6.17E-13	1.0000
BANK_PROFITABILITY(...	7.78E-14	0.080656	9.65E-13	1.0000
BANK_PROFITABILITY(...	0.240038	0.075173	3.193147	0.0030
ATM	30597.14	3548.642	8.622212	0.0000
ATM(-1)	-18231.43	4909.554	-3.713459	0.0007
NUMBER_OF_BANK	120742.8	12574.14	9.602472	0.0000
NUMBER_OF_BANK(-1)	-70917.38	17567.83	-4.036775	0.0003
POS	-0.829443	37.29547	-0.022240	0.9824
C	-38634990	8239935.	-4.688749	0.0000

R-squared	0.983810	Mean dependent var	75036522
Adjusted R-squared	0.979525	S.D. dependent var	14065406
S.E. of regression	2012641.	Akaike info criterion	32.06451
Sum squared resid	1.38E+14	Schwarz criterion	32.47001
Log likelihood	-695.4192	Hannan-Quinn criter.	32.21489
F-statistic	229.5668	Durbin-Watson stat	1.604712
Prob(F-statistic)	0.000000		

*Note: p-values and any subsequent tests do not account for model selection.

Table (4) ,The results of the variables are significant for the explanatory power of the model, meaning that the value of the coefficient of determination (R^2) reached (0.98), and this increase indicates that the change in banking profitability depends on (0.98), which is a very high value, indicating that the change in banking profitability according to this model is explained by (98%) of the independent variable, financial inclusion, represented by (POS, ATM, and the number of bank branches). Either the ratio of 2% is due to other factors that are not apparent in the model, as inclusion leads to higher profits. As we note, DW reached (1.604), meaning there is no problem of correlation between the variables. We find that the calculated F value reached (229.5668) with a probability of (0.00000), which is greater than the tabular F value at a significant level of 1%, and this indicates the quality of the model in expressing the relationship between the variables

Second: Bounds test for cointegration:

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	5.433084	10%	2.37	3.2
k	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66
Actual Sample Size	44		Finite Sample: n=45	
		10%	2.56	3.428
		5%	3.078	4.022
		1%	4.27	5.412
			Finite Sample: n=40	
		10%	2.592	3.454
		5%	3.1	4.088
		1%	4.31	5.544

Table (5) shows that the value of the Fisher's F-Stat reached (5.433084), which is greater than the minimum value of (4.27) at a significance level of 1%. This means rejecting the null hypothesis, which indicates the absence of a cointegrating relationship .

Third: Estimating the Short-Term Relationship Model Using the Error Correction Model (ECM).

This model is used to verify whether there is a short-term cointegrating relationship between the variables and to estimate the short-term equilibrium relationship using the Error Correction Model (ECM). This model measures the speed of adjustment of the independent variables to correct imbalances that occur from the short to the long term. If the error correction parameter is negative and significant, this confirms the existence of a short-term equilibrium relationship between the variables, as shown in

Table (6). ECM Model for Estimating

ARDL Error Correction Regression
Dependent Variable: D(BANK_PROFITABILITY)
Selected Model: ARDL(4, 1, 1, 0)
Case 2: Restricted Constant and No Trend
Date: 04/08/25 Time: 10:10
Sample: 2010Q1 2021Q4
Included observations: 44

ECM Regression
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(BANK_PROFITABILI...	-0.240038	0.069340	-3.461743	0.0015
D(BANK_PROFITABILI...	-0.240038	0.069340	-3.461743	0.0015
D(BANK_PROFITABILI...	-0.240038	0.069340	-3.461743	0.0015
D(ATM)	30597.14	3007.290	10.17433	0.0000
D(NUMBER_OF_BANK)	120742.8	10871.00	11.10688	0.0000
CointEq(-1)*	-0.188577	0.034224	-5.510113	0.0000

R-squared	0.882611	Mean dependent var	1280167.
Adjusted R-squared	0.867165	S.D. dependent var	5223457.
S.E. of regression	1903768.	Akaike info criterion	31.88269
Sum squared resid	1.38E+14	Schwarz criterion	32.12599
Log likelihood	-695.4192	Hannan-Quinn criter.	31.97292
Durbin-Watson stat	1.604712		

* p-value incompatible with t-Bounds distribution.

Table (6) shows that the error correction coefficient was negative and significant, reaching (-0.188577) at a significance level of 1%. This indicates a co-integration relationship between the independent variable, (as a dependent variable). The results also reveal that the negative and significant value of the error correction coefficient CointEq (-1) reveals the speed of bank profits' return to their equilibrium value in the long term over a given period. The error correction ratio (-0.188) means that (5.5%) of the short-term imbalance from the previous period (t-1) can be corrected in the current period toward long-term equilibrium. This means that financial inclusion can address (5.5%) of the imbalances that occur in banking sector profits.

Third Requirement: Standard Diagnostic

1- Breusch–Godfrey Correlation LM Test

shows us that there is no problem of autocorrelation, as the value of Prob. Chi-Square reached (0.0946), which is greater than the significance level of (10%). Therefore, we accept the alternative hypothesis, which states that the residuals are not autocorrelated.

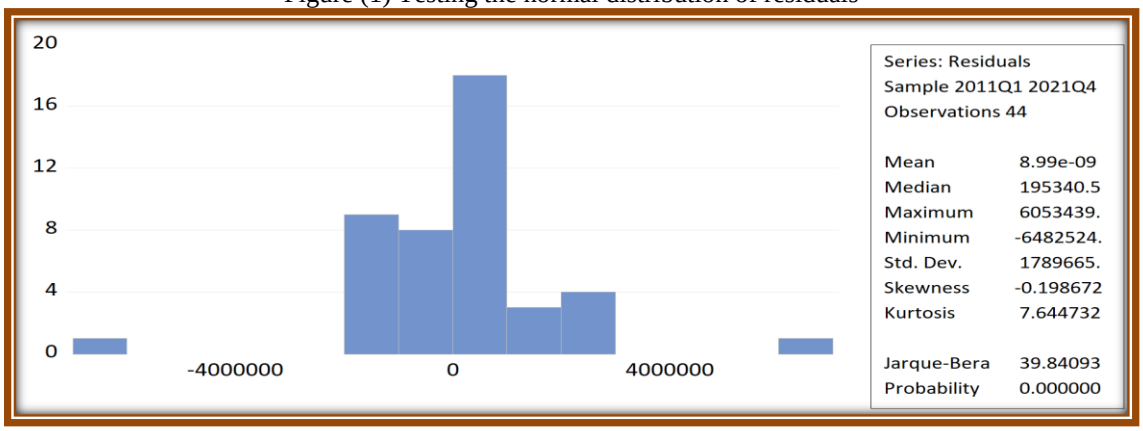
Breusch-Godfrey Serial Correlation LM Test:
Null hypothesis: No serial correlation at up to 2 lags

F-statistic	1.921235	Prob. F(2,32)	0.1629
Obs*R-squared	4.716993	Prob. Chi-Square(2)	0.0946

2- (TEST Histogram-Normality)

It is clear from Figure (1) that the probability value of the (Jarque-Bera) test reached (39.84093) at a significance level of (0.0000), meaning that the residuals are normally distributed, and therefore we accept the null hypothesis and reject the alternative hypothesis.

Figure (1) Testing the normal distribution of residuals



Conclusions and Recommendations

First: Conclusions:

1. Financial inclusion indicators in Iraq have been characterized by both increases and decreases, but they have increased in recent years during the study period.
2. Financial inclusion indicators attract customers through banks' use of banking technology , the creation to new service that increase of customers. The widespread presence of bank branches in various regions also facilitates individuals' access to banks and deposit their funds.
3. The banking sector's profits have increased in recent years during the study period. This is due to the banking sector's role in attracting customers, as well as its investment of deposits in various investments to generate profitable returns.
4. Based on the results of the econometric analysis, it was found that there is a direct and significant relationship between financial inclusion (number of bank branches, points of sale, and automated teller machines) and banking sector profits. Increasing the number of branches, points of sale, and automated teller machines leads to increased banking sector profits, which in turn leads to the inclusion of all segments of society in banking services, thus increasing bank deposits and, consequently, increasing the banking sector's ability to grant credit and provide more services in line with customer needs.

5. Based on the results of the econometric analysis, a long-term co-integration relationship between financial inclusion and banking profits is evident. The longer the period, the greater the positive impact of financial inclusion on banking profits.

Second: Recommendations:

1. The banking sector must employ modern methods and approaches in providing banking services, and hold introductory courses for various segments of society to familiarize them with the banking sector's work, encourage them to engage with banks, and increase their confidence in the banking sector. This should also include the establishment of a deposit insurance company.
2. Increasing the number of bank branches, especially in remote areas far from cities, is essential. Banks should also simplify procedures for opening bank accounts and grant exemptions to low-income individuals, ensuring they are fully covered by the services they provide.
3. Banks should employ various investment strategies to invest their deposits in various sectors to balance returns and risks. They should also provide credit to all segments of society, leading to increased productivity and, consequently, increased incomes, which in turn increases bank deposits, resulting in increased bank profits.
4. The banking sector should develop the concept of financial inclusion and its tools in various regions, especially remote areas, to ensure the inclusion of all members of society in banking services. This will result in an increase in the number of customers dealing with banks and an increase in banking operations. This will lead to increased banking profitability, enabling the banking sector to use a portion of its profits to establish new bank branches in different regions, develop existing banking services, and innovate new ones, leading to greater banking profits.

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