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# REINFORCE BANKS PROFITABILITY BY USING DIGITAL FINANCE TECHNIQUES OF IRAQI BANKS

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Ar	ticle history:	Abstract:
Received: Accepted: Published:	April 6 <sup>th</sup> 2023 May 6 <sup>th</sup> 2023 June 11 <sup>th</sup> 2023	This research aims to clarify the role and importance of digital finance as one of the recent changes that occurred in the banking sector, especially the Iraqi banking sector and an indication of its role in enhancing profitability, as Real-Time Gross Settlements (RTGS) and Automated Clearing House (ACH) were adopted as two dimensions of digital finance for the period (2012-2019), while it was adopted to measure the profitability variable, two dimensions, Return on Equity (ROE), and Return on Assets (ROA) for the period (2000-2021).  As three leading Iraqi banks in this field were adopted, as well as the adoption of the analytical approach in data analysis and spss 21 programming to test hypotheses, as the study found that there is a positive impact of the two dimensions of digital finance on the profit side of the research sample banks, while the study concluded that the experience of digital finance, it is still in the process of being established for the Iraqi banking sector and needs a large infrastructure to make it successful in order to ensure survival in the market and achieve a competitive advantage.

**Keywords:** Digital Finance, Banking profitability, Real-Time Gross Settlements, Automated Clearing House, Return on Equity, and Return on Assets.

#### INTRODUCTION

Banking sector are considered the most influential sectors in the economy in all countries, the banking sector is the artery that finances the economy of countries. Without it, the economy cannot grow and progress. Through banks, financing operations are carried out for all activities and for all classes, whether they are at the level of financing enterprises or at the level of financing individuals (Auta, 2010). Therefore, it is the responsibility of banks to provide their services to all individuals and in various ways to enhance the success of the financial financing project, which aims to deliver banking services to the last point in the country, and this requires banks to keep pace with the modern developments in other countries used in the process of managing and providing banking services, including the introduction of digital technology in the process of providing banking services for all categories and for all regions, and this matter is not easy, as it requires banks to lay the basic foundations for these services represented by providing financial and technical resources as well as human resources (Gomber et al., 2018).

**The Study Problem** 

The Iraqi banking sector has witnessed remarkable technological developments in recent years, represented by the use of E-payment systems and the provision of banking services by means of modern technologies within the infrastructure of the work of banks. For those who want, in addition to reducing non-automated operations in completing transactions, the use of these systems can affect the profitability of Iraqi banks, and the research problem can be formulated with the following main question: What is the extent of the impact of digital transformation of banks in the research sample on profitability? This question stems from two questions:

(1)- RQ1: Does the Real-Time Gross Settlements (RTGS) impact on profitability?

(2)- RQ2: Does the Automated Clearing House (ACH) for electronic cheque clearing impact on profitability?

#### **The Study Objectives**

Result of the massive development that the world is witnessing today in the field of digital technology, Which cast a shadow on all sectors, and banks in particular, As a result of the Iraqi banks' lack of interest in the proper manner to compete with international banks, in order to find a solution to the



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aforementioned problem, a set of objectives has been formulated as follows:

- (1)- To find out the digital financing tools used in Iraq and the most prominent indicators of profitability
- (2)- To find out the desire of the research sample banks to promote digital financing strategies.
- (3)- Analysis of profitability according to the indicators used for the research sample banks.
- (4)- To find out the effect and correlation between the variables of the study.

#### **The Study Hypotheses**

In order to reach and achieve the objectives of our research and also to obtain solutions to the research problem that was mentioned above, a set of hypotheses have been developed as follows:

The main hypothesis is: There is no statistically significant effect or correlation between digital finance on profitability. Two sub-hypotheses branch out from this hypothesis:

H1- There is no correlation and statistically significant effect of (RTGS) on profitability

H2- There is no correlation and statistically significant effect of (ACH) on profitability

#### THEORETICAL BACKGROUND AND LITERATURE **REVIEW**

#### **Concept of digital finance**

Digital finance is a powerful instrument for extending financial services to other sectors, financial services can be provided through technological innovations, such as the mobile phone, which can provide a catalytic element for the provision and use of various other financial services, including credit, insurance, and savings. Those who are now excluded can enjoy expanded money transfer services, microcredit, and insurance (Hasan et al., 2022).

Digital finance also has an important role for small businesses, it not only gives them access to financing but also to electronic payment systems, security of financial products, and the opportunity to build a financial track record, as in below is an explanation of the most essential tools that will be used in our study

#### (1) Automated Clearing House (ACH)

The electronic clearing system is a network for financial settlements that was established by the National Federation of Electronic Clearing in America, where this system initially relied on tapes and magnetic disks, in addition to the actual exchange of paper checks (Lall, 2018), it means that it is the system through which payment orders can be exchanged between financial institutions through

communication networks and data processing centers such as credit transfers that represent the transfer of money from the bank to customers, the internal clearing system, direct debt payment orders (Li and Marin, 2015). The electronic check clearing system is to conduct electronic deposit and withdrawal operations between the branches of member banks In the clearing house under a photocopy of the electronic magnetized instrument (coded instrument) between two parties (the drawer and the beneficiary) and under the auspices and supervision of a third person represented by the Central Bank after recognition and reading of the electronic instrument by the instrument reader and sending it via the Internet, which represents the developed version of what the banks have reached Electronic in the field of clearing operations between banks at the local international levels (Hamdan and Hashem, 2017). By electronic clearing we mean that the checks are cleared between banks, through the Central Bank, according to the electronic forms of the checks, without the actual exchange of the checks between the banks, as the main objective of the system is to transform the process of clearing the checks from the manual or automatic method to become electronic and collecting its value within a short period on the same day of presenting the check, so that the check becomes an immediate payment tool, similar to the cash deposit in the account (Raskin and Yermack, 2018). Since the use of the internet as a means of transferring information pertaining to the customer's authorization and communications in digital form between the bank and the customer, the internet services are fully integrated and relying on banking payment networks such as clearing and settlement systems between banks for payment systems, and from a contractual perspective, banks must implement the customer's delegation to the bank with reasonable care and skill The required standard of skill and care is to perform what is reasonably expected of competent and understanding persons (Chiu, 2017), as it is seen by Goodell et al., (2021) that electronic clearing means is practical of granting authority to a bank by another bank to carry out credit and debit financial transfer transactions electronically from one bank account to another bank account and dealing is done through what is known by automated clearing.

#### (2) Real Time Gross Settlement (RTGS)

It is an electronic central system that operates on an immediate, total and final continuous basis to implement credit transfer orders and provides a settlement point for liquidation systems operating in a country through bank accounts and works to process



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payments and settle amounts individually and in real time and reduce risks (Kahn and William, 2001), Through this system, the time interval between the moment of submitting payment operations and the moment of final settlement is removed, which is very short, and thus reduces uncertainty regarding the possibility of problems occurring at the level of the sending bank between the two moments of sending and settling the payment process (Morales et al., 2010), The main objective of the system is to address the problems of manual settlement resulting from the settlement of large amounts and to ensure a final and irrevocable settlement. This is a good and valuable feature for the customer as well as providing speed, shortening time, executing payments, and eliminating credit and liquidity risks (Rijanto, 2021), as for the researcher, the (RTGS) system It is a group of systems specialized in transferring funds or securities from one bank to another in real time and in a total manner, meaning that the payment transaction is not subject to any waiting period and is not subject to cancellation.

#### **Banking Profitability**

The profitability variable is a basic goal for all banks and is necessary for their survival and continuity and a goal that investors aspire to deal with the bank, the bank is to generate income from the resources available. However, the profitability variable is the measure of the investment, operational, and financing policies of the company's management and the decisions taken (Nahang and Araghi, 2013).

Therefore, profitability ratios are considered one of the most difficult indexes for the bank in terms of its measurement and control. Because there is no integrated method that determines when the bank is in a profitable position, many of the investment opportunities include sacrificing the current profit in order to obtain a greater profit in the future (Kumar and Reinartz, 2016). For example, the new service requires high administrative costs, which generates low profit at the beginning, so the current profit becomes weak, but this may mean higher levels of profitability in the future and higher profitability rates. As in wealthier markets, mobile channels and improved processing efficiency are add-on benefits to help meet customer expectations and improve profitability. Among low-income communities, however, these are must-have features that enable the sustainable provision of financial services to lowerincome consumers (Abel et al.., 2018). Below Clarification of some financial ratios that will be used in practice.

(1) Return on Assets (ROA)

The return on assets is a financial indicator that reveals the bank's ability to achieve profits by investing in its assets (Gul et al., 2011) and depends to a large extent on the amount of profits that are realized from these assets (Boyd and Runkle, 1993). It also reflects the efficiency and effectiveness of management in operating assets and gives confidence in its management of funds and the soundness of investment and operational decisions. Taken, this indicator is calculated by dividing the net profit into the total assets as follows

al assets as follows
$$ROA = \frac{Returns}{Assets}......(1)$$

(2) Return on Equity: (ROE)

This indicator receives great attention from bank management because it measures the extent to which the goal sought by banks is achieved, which is the rate of return on the funds invested by the owners, which is the criterion for maximizing their wealth (Gul et al., 2011). The ratio indicates the efficiency of the bank's management. At the same time, it indicates the high risk resulting from the increase in financial leverage (the degree of the bank's dependence on borrowing and its decrease indicates the bank's adoption of conservative financing with loans.

$$ROE = \frac{Returns}{Equity}....(2)$$

## Digital finance and its impact on the profitability of banks

Investing in modern technology plays an important role in reducing operations costs, distinguishing its services, and giving the banks a competitive advantage, which is reflected in increasing net profit (Al Duhaidahawi et al., 2020) Technology contributes to the efficiency of customer services. The deployment of ATMs by banks will lead to an increase in the volume of services provided to customers, without the need to hire more employees and open more branches for geographical expansion, thus positively affecting the profitability of banks (Nataraian et al., 2019). The process of developing services is very important for banks in light of the challenges imposed on them by economic developments and transformations in exchange for the information and communication technology revolution. As development is represented by adding advantages to banking services, as these advantages lead to an increase in demand for them, and enhance the competitive position of the banks, which leads to an increase in profitability in the long term (Leu et al., 2004).

Since the internet revolution and smartphones, financial technology has grown exponentially with a wide range of technological



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interventions in personal affairs and business finance. Fintech now describes a variety of financial activities, such as transferring money, depositing a check with your smartphone, bypassing a bank branch to apply for credit, raising money to start a business, or generally managing your investments without someone's help. FinTech adoption Indexed, at least one-third of consumers uses two or more FinTech services, and these consumers are increasingly aware of FinTech as part of their daily lives (Gomber et al., 2018)

#### **DATA ANALYSIS**

### Profitability analysis Bank of Baghdad and Iraqi Middle East Investment Bank For (2000-2021).

Table (1) shows the values of return on assets, which is one of the most important indicators for evaluating the profitability efficiency of commercial banks, as it indicates the extent to which banks are efficient in generating financial returns through their financial investments and banking operations. As it is well known, the success of financial institutions is linked to their ability in achieving profits from their daily operations, as they are developmental and commercial banks which is the primary goal of it is to achieve profits, and the achievement of financial returns to ensure the continued survival of these institutions in

continuous activity. This indicator is very important for the parties dealing with the bank. They are the investing parties who want to invest their money in commercial banks. Achieving profits from these banks means that the bank is able to pay all its financial obligations, since banks have financial obligations towards individuals, so achieving returns enables it to fulfill these obligations and vice versa. Also, the competition in the market and the appearance of many financial institutions that began to provide financial services similar to banking services imposed a new challenge, which prompted these banks to work seriously to search for the best investment opportunities to generate financial returns from them in a way that enhances the position of the bank in the market and develops its and financial capabilities, This indicator has a positive relationship with the risks associated with investment projects

When risks increase, financial returns increase with them.

Therefore, bank managers must pay attention to the process of managing risks in a balanced manner and the process of generating profits in a manner that preserves the rights of shareholders and guarantees the funds of depositors. When this indicator increases, its impact is positive on the bank, and when it decreases, the effect is negative as shown in table (1).

Table (1)
Return on Assets for Bank of Baghdad for (2000-2021)

										-,		
Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	AVR
ROA	3.06%	1.87%	2.24%	0.91%	5.02%	0.75%	2.54%	5.43%	3.94%	1.97%	1.69%	2.10%
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
ROA	2.85%	2.28%	2.27%	1.80%	0.86%	1.67%	0.68%	0.37%	0.64%	1.42%	1.95%	

Source: Iraqi Securities Commission

Through figure (1) we note the decline in (2000) and continued until (2003), which is the year of the occupation of Iraq, which witnessed major economic events that changed the country's economy towards a free economy, in both returns and assets.

However, it is clear that the Bank of Baghdad did not achieve losses over the years under study, and this matter is very important, meaning that the bank continues its commercial activity and conducts its business well. As it is known that Iraq went through two very dangerous phases, in the year 2003 and in

the year 2014, which witnessed the collapse of global oil prices, Which reflected negative effects on the country's economy and, consequently, affected all financial institutions operating in the country. The bank achieved the best rate in 2007, which witnessed a significant increase in oil prices, which increased government spending, and banks entered the stage of financing investment projects, which was reflected in their performance significantly, and the worst performance was in the year 2015, which witnessed the collapse of oil prices.



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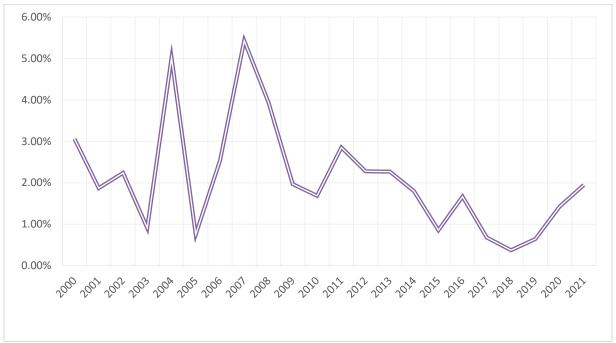


Figure (1)

#### Return on Assets for the Bank of Baghdad

Table (2) refers to the second indicator for measuring profitability, which is the return on equity, which is an important indicator that indicates the number of financial returns that have been generated from investing shareholders' money. Thus, it reflects the ability of banks to achieve financial returns. Where investors are interested in determining the efficient bank it is usually higher than the return on assets indicator since shareholders' equity constitutes the second part of the left side of the statement of financial position. What applies to the first indicator applies to this indicator. This indicator also declined during 2003, which is the same year of decline in the first indicator. Bank profits decreased in 2003 and the economy suffered from many changes.

The banks were closed for a long time and were unable to carry out their activities, which affected their returns directly.

But it returned in 2007, and it also witnessed a decrease in 2017 and 2018 due to a decrease in the profits achieved over these two years. With almost constant shareholder rights, it returned to an increase in 2020 and 2021, which indicates that the bank has been exposed to conditions in certain years that have negatively affected its performance directly. Covid 19, which imposed restrictions on the comprehensive ban on individuals and prevented them from dealing with banks directly.

This matter stimulated the need for technology to be used extensively in banking transactions. Some banks, including the Bank of Baghdad, were able to introduce some electronic banking services such as electronic money transfer and obtaining soft loans electronically for users dealing with it and other financial services. These banks are considering other alternatives in order to deliver their services to all customers who deal with them, as shown in Table (2) and Fig (2).

Table (2)

Return on equity for the Bank of Baghdad for the period (2000-2021)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	AVE



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ROE	31.50 %	30.09 %	30.43 %	16.10 %	36%	4.24 %	14.13 %	25.95 %	22.94 %	14.47 %	13.65 %	15.10 %
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	)20	)21	
ROE	17.89 %	14.30 %	13.32 %	11.23 %	4.94 %	7.07 %	2.67 %	1.56 %	2.67 %	7.25%	9.70%	

Source: Iraqi Securities Commission



Figure (2)
Return on Equity for the Bank of Baghdad

Table (3)
Return on assets of the Iraqi Middle East Investment Bank for the period (2000-2021)

	Return on assets of the fragilificate East Investment bank for the period (2000 2021)											
Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	AVE
ROA	2.06	2.24 %	2.28	1.86 %	3.03	2.45 %	1.88	3.55 %	2.45 %	2.10%	1.49%	1.67%



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Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	020	021
ROA	2.01	3.49 %	3.16 %	0.63 %	0.98 %	1.79 %	- 0.08 %	- 0.29 %	0.01 %	-0.32%	0.05%

Source: Iraqi Securities Commission

Table (3) shows that the profitability values for the study period showed some of them negative values. This means that the bank has achieved losses during the years that bear a negative sign, as the total operating expenses were higher than the realized profits.

When studying the financial reports of 2017, it was found that the bank's profits from investments decreased significantly compared to the previous year. Also, expenses for the same year increased, which led to losses.

In 2018, it was also noticed that some services provided by the bank decreased, and this matter affected its revenues, because these services are essential for the bank.

However, in 2019, the bank resumed its activities in these services, which contributed to reducing losses and achieving small profits.

We also noticed that there are losses in 2020 due to exposure to comprehensive bans due to the Covid-19 pandemic. The losses were the largest compared to the past two years

In 2021, the bank returned and improved its activity in dealing with losses and making a profit despite its decline, but we indicate that the bank is trying hard to overcome the difficulties it faces in its business. In the light of the foregoing, we note that the indicators of the Bank of Baghdad were better than the Iraqi Middle East Investment Bank by comparing the general average of the two banks, although the assets of the Bank of Baghdad are twice the assets of the other bank.

Therefore, the Bank of Baghdad is more efficient than the other in generating financial returns from its investments in assets. From the aforementioned, the Middle East Bank is supposed to take into account the search for new investments that generate financial returns, so that it can cover its expenses, achieve financial returns for its shareholders, and ensure the possibility of growth and expansion in the future.

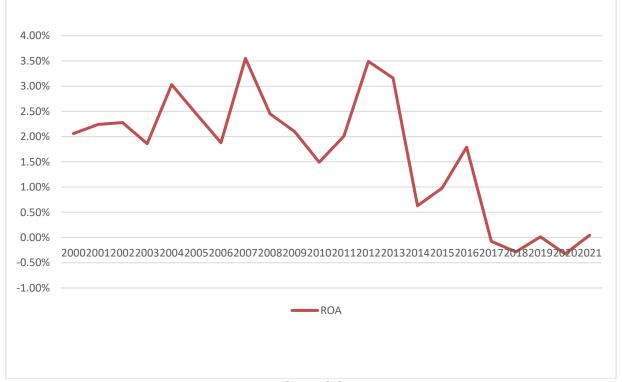


Figure (3)



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#### **Return on assets of the Iraqi Middle East Investment Bank**

Table (4) represents the return on equity for the Iraqi Middle East Investment Bank, as we notice through Fig (5) it indicates that 2004 was the highest performance compared to all years of study.

As it is clear that the bank's performance was in a continuous decline despite the rise in certain years, but the graph line is clear and a continuous decline until the last year, and this matter is due to the weakness of the profits achieved by the Middle East Bank, as we indicated earlier. Therefore, the bank must review its situation and work to reform its plans and developing plans to suit the economic fluctuations in the country, since Iraq is characterized by its constantly volatile environment.

Table (4)
Return on equity for the Iraqi Middle East Investment Bank for the period (2000-2021)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	AVE
ROE	30.3 0%	30.39 %	31.67 %	18.22%	39.69 %	30.75 %	15.73 %	28.65 %	21.85 %	15.50 %	10.26 %	14.65 %
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	)20	021	
ROE	15.8 7%	15.23 %	12.07 %	1.40%	2.39%	4.09 %	- 0.22 %	- 0.86 %	0.03 %	- 0.79%	0.11%	

Source: Iragi Securities Commission

Regarding to the first indicator- Real Time Gross Settlement (RTGS), we notice from table (5) that there is a discrepancy in the growth rates of this indicator for the Bank of Baghdad, where the first three years obtained positive growth rates, unlike the next three years, which were negative and, respectively, with increasing rates, while the third year obtained the highest evaluation, which amounted to

(26.05%) This indicates that the Bank of Baghdad is highly dependent on the use of technological means in transferring funds between the banks benefiting from this in order to shorten the time and effort that was in the process of traditional transfers.

Therefore, this system is reflected in achieving financial resources for the banks from which the transfer was made, since the transfer process



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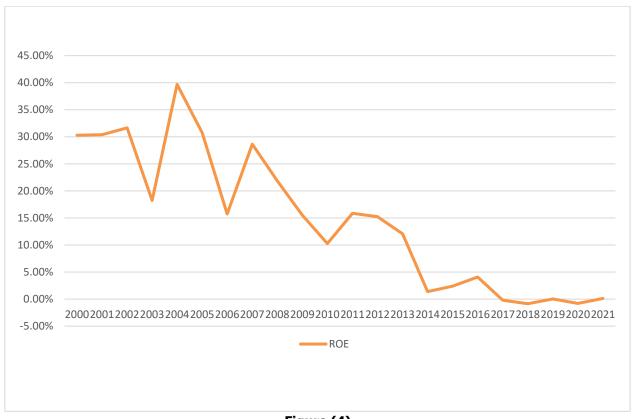


Figure (4)

# Return on equity for the Iraqi Middle East Investment Bank

through which the bank obtains financial commissions, and from here it can be said that the development of this system and reliance on it in conducting financial transfers contributes to enhancing

banking efficiency in terms of financial returns as well for the completion of financial operations without any errors or delays, as shown down.

Table (5)

Real-time settlement and electronic cheques of the Bank of Baghdad

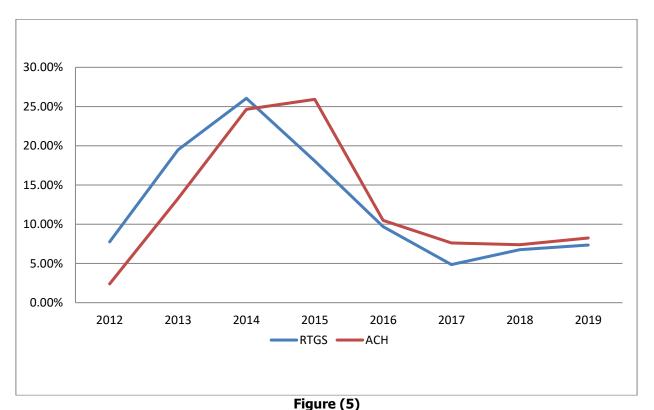
Real-time settlement and electronic cheques of the bank of bagnidad											
Year	2012	2013	2014	2015	2016	2017	2018	2019	AVE		
RTGS	%7.75	%19.49	%26.05	%18.07	%9.69	%4.86	%6.75	%7.35	%12.50		
ACH	%2.40	%13.29	%24.65	%25.92	%10.49	%7.61	%7.39	%8.25	%12.50		

Source: Iraqi Securities Commission



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#### **Bank of Baghdad electronic settlements**

The second indicator of the settlement systems is the Automated Clearing house (ACH). It is a system similar to the clearing of credit transfers, but through magnetic electronic bank cheques, especially between the banks participating in this system. These instruments are encoded and follow-up through the Central Bank, which handles the process of settling these instruments. Copies of electronic instruments are kept. With the banks, this system made it easy for customers dealing with Iraqi banks to easily collect the amounts of their bank cheques instead of cash deposit operations that were prevalent in the traditional clearing system, and therefore the employment of technology through these systems contributed to

increasing the financial operations of banks, but when referring to the table 5, we notice that the indicator fluctuated over the years, as the first four years witnessed continuous growth, but it decreased over the following years, up to the last year, and when searching for the reasons for that, it became clear that this system witnessed gaps through which some of those in charge of it were able to present bank cheques without balance that contributed to the bankruptcy of some banks, which made the judiciary intervene and stop this matter, so the performance of the bank according to this system was low, as shown in Fig (5).

Table (6)
Real-time settlement and electronic cheques of the Iraqi Middle East Investment Bank

Year	2012	2013	2014	2015	2016	2017	2018	2019	AVE
RTGS	%14.78	%9.36	%18.22	%9.98	%15.47	%15.42	%8.99	%7.87	%12.51
111.00	702 0	705.50	70-0:	705.50	7020	/020112	700.22	707.07	/012.01
ACH	%1.32	%12.05	%21.60	%19.41	%15.28	%6.48	%11.38	%12.48	%12.50



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Table (6) and Fig (6), refers to the values of real-time settlements and electronic cheques in the Iraqi Middle East Investment Bank, as we note that the first indicator has witnessed fluctuation overall years, up and down, as it rises one year and decreases another, it is unlike the first bank, as its value is variable and not growing, as the highest this bank reached was in 2014, which amounted to (18.22%), which is less than what the Bank of Baghdad achieved.

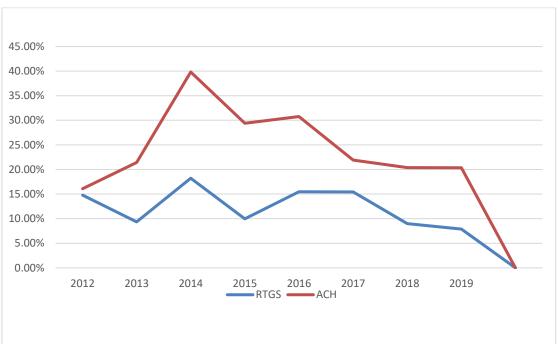


Figure (6)
Real-time settlement and electronic cheques of the Iraqi Middle East Investment Bank

This indicates an increase in the Bank of Baghdad's dealings in this system, which indicates the desire of the Bank of Baghdad to apply modern technological means in the banking business and benefit from its innovations in serving banking operations and providing the best E-banking services to all individuals dealing with the bank.

The second indicator, we note that there is a growth for the first three years, which reached the highest value in the third year, reaching (21.60%), then it gradually decreased until 2018, and then returned slightly higher.

Also, the Bank of Baghdad, according to these values, was higher than the Iraqi Middle East Investment Bank That is; the Bank of Baghdad has higher dealings in electronic cheques.

#### **Hypothesis Testing**

Table (7)
Correlation and effect data for the research variables

No	Dependent variable/pro fitability	R	R2	F	Sig
1	RTGS	0.5451	29.71	21.34	0.00
			%		0
2	ACH	0.5406	29.23	20.86	0.00
			%		0

The first hypothesis: there is no correlation and statistically significant effect of real-time settlements on profitability:

Table (7) above indicates the nature of the impact relationship and the correlation between the variables of the study. The first hypothesis was the

relationship between electronic settlements as the first axis of the independent variable and the dependent variable represented by the axis of return on assets and return on equity, as it appeared that there is a correlation between the two variables through The correlation coefficient, which is approximately (54.5%),



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in contrast to achieving an effect between the variables of the study, represented by the coefficient of determination, which amounted to approximately (30%).

This means that there is a clear impact of digital financing operations through the electronic settlement dimension in achieving financial returns for the study sample banks, and this matter is evident through the results, as the study sample banks direct to employ technological means in providing banking services and creating new services that are appropriate to the renewed reality of the financial sector as well That technology has proven that it is able to shorten time and access financial services with ease, and that its innovations have become in line with the renewable needs of individuals, and the relationship was significant through the value of (p) that was less than (0.05), and therefore we reject the null hypothesis and accept the hypothesis alternative.

The second hypothesis/ there is no correlation and statistically significant effect of electronic cheques on profitability, through Table (7) which indicates the relationship of impact and correlation between the second axis of the independent variable represented by electronic instruments with profitability, with its two axes, return on assets and return on equity, as it appeared that there is a correlation between the two variables through the value of the correlation coefficient, which is approximately (54%) in contrast to achieving an effect between the variables of the study represented by the coefficient of determination, which amounted to approximately (29%), and this means that there is a clear impact of digital financing operations through the axis of electronic instruments in achieving financial returns for the banks of the study sample, and this matter is clear through the results shown in the table, and in the light of these results can be said that the banks direct the research sample to apply the idea of electronic instruments in their banking operations that can achieve good financial returns for them. Traditional cheques operations and the relationship were significant through the value of (p) that was less than (0.05), and therefore we reject the null hypothesis and accept the other hypothesis.

#### **CONCLUSION**

The transformation of technology in providing banking services has greatly contributed to facilitating the procedures for obtaining many distinguished services that have become in line with the requirements of the modern era, the research sample banks tended to employ technology innovations through digital finance,

which is an indication of the desire of these institutions to achieve operations of sustainability and financial liberalization and keep pace with what is happening in the world. The banks witnessed a fluctuation in the values of electronic settlement operations in their two axes over the period of the study, and this is due to the conditions that Iraq was exposed to, as the nature of its environment is constantly volatile. Profitability indicators were also fluctuating, as the first years were better in their performance than the recent years due to the conditions of the country, in addition to the exposure of the Middle East Bank to some losses, which made its performance according to the profitability indicators to be negative.

The statistical results achieved correlation and effect relationships between the variables of the study, which were significant, which led to the rejection of the null hypothesis and the acceptance of the alternative hypothesis.

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