



Article

The Impact of Financial Technology on Achieving Financial Stability

Kareem Hasan Ali¹

1. College of Physical Education and Sport Sciences, Al-Qasim Green University, Babylon, Iraq

* Correspondence: kareem@uoqasim.edu.iq

Abstract: The primary goal of the current study is to know the role of financial technology on financial stability in Iraqi commercial banks for the period (2015-2022). In order to accomplish the purpose of the study and arrive at results that are suitable to the field of study, the descriptive-analytical technique was utilized in the process of assessing the relationship between the variables. Research and use of statistical methods such as the multiple regression model using the least squares method and reliance was placed on the statistical program (Eviews-12) in time series analysis. The study concluded that there is a relationship between financial technology indicators and economic stability through its following dimensions (capital adequacy Money, asset quality, profitability, liquidity), and there is also an effect between the research variables mentioned. Therefore, these results can be used in the interest of banking in Iraq through the recommendations reached by the research.

Keywords: financial technology, financial stability, commercial banks

1. Introduction

Since the global financial crisis, significant efforts have been made to build early warning models for financial shocks by studying the causes of the crisis as well as financial stability measures. These efforts have been strengthened by the recent financial tsunami triggered by the United States. It developed models to detect currency and banking crises. The efforts of the monetary authorities were focused on searching for more effective frameworks to monitor the stability of the banking and financial sector. Hence, more attention is paid to policy discussions in this direction. Most of them attributed the crisis primarily to excessive risk-taking by financial institutions and the failure of regulatory authorities to regulate. Observers attribute this failure to the authorities' preference for micro-prudential approaches, which aim only to prevent the costly failure of individual financial institutions. This strategy lies in the widespread belief that the financial crisis occurs randomly as a result of the failure of bad institutions, and ultimately, the failure becomes systemic. However, the experiment revealed a different picture.

The latest crisis begins with a boom. During this period, the majority of financial institutions appeared healthy. Still, during the explosion period, almost all of them seemed to be at risk [1]. The industry has experienced a surge in competition as a result of the recent wave of mergers and acquisitions in financial services and the pervasive availability of cutting-edge technology. The competition for customer financial services is continual, usually based on direct marketing programs. It also appears that customer resistance is

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rising, particularly resistance to new, high-tech alternatives to existing products that consumers already use and comprehend [2]. To know the extent of the impact of financial technology on financial stability through the following indicators (capital adequacy, quality assets, profitability and liquidity). In order to reach the most prominent results of the research, the research was divided into four main sections, the first section: research methodology and the second section: the theoretical and intellectual framework. The third section is the practical aspect of the research, and the fourth section is conclusions and recommendations.

2. Materials and Methods

Research problem

In recent times, the banking sector has witnessed an urgent need to respond to the rapid developments in the field of information technology and the technologies and innovations that the world has seen related to financial technology in particular, which constitute a significant transformation in the way commercial banks and other financial institutions deal with financial operations, as commercial banks seek to adopt Financial technology in order to achieve flexibility and efficiency in meeting customers' financial needs. In the same context. When adopting financial technology, it becomes necessary for banks to achieve financial stability. Therefore, financial stability at the banking level is one of the most prominent priorities of any country's monetary policy, and considering that the banking system is the backbone of the financial and economic system of any country, its stability is a decisive factor for achieving economic stability. And confidence in the financial system in general. In response to this, the legislative and regulatory framework was strengthened, and banking risk management practices were enhanced, given the growing role of financial technology in the banking sector, its pivotal role in the efficiency of banking operations, and its ability to enable banks to adapt to contemporary challenges and provide innovative financial services. To customers, indicating a relationship between financial technology and financial stability. Based on what was mentioned, the need to reveal the nature of the impact of financial technology on financial stability in Iraqi commercial banks appears. Therefore the problem of the study can be formulated as follows: (How do the dimensions of financial technology affect financial stability through influencing both capital adequacy and Asset quality, profitability, and liquidity). Through this central question, several sub-questions emerge, which are:

1. To what extent are the dimensions or indicators of financial technology applied in the commercial banks sample of the current research?
2. What is the level of financial stability enjoyed by the commercial banks sample of the current research?
3. Is there a relationship between the variables of the current research, which are financial technology and financial stability?
4. What is the extent of the impact of financial technology dimensions on financial stability indicators at the level of the banks studied?

The importance of research

The importance of the current research is represented in two aspects: the theoretical aspect and the practical aspect:

The theoretical side :

The research dealt with two variables that represent the most critical challenges of contemporary times in the financial and banking aspect and are closely linked to the work of banks, in addition to the fact that they constitute challenges that banks must confront in order to achieve financial and banking stability as well as economic stability in general, as the banking sector often suffers from risks represented in Responding to unfavourable

economic fluctuations. Therefore, there is a constant need to evaluate its financial stability according to approved indicators.

The practical aspect:

On the practical level, the importance of the study is highlighted by the results the research reached related to the financial stability of commercial banks in Iraq and the extent to which these banks adopt or adopt financial technology in light of the rapid developments at the global and regional levels, in addition to knowing the importance of the impact of the dimensions of financial technology on financial stability through its following indicators (capital adequacy, asset quality, profitability, and liquidity), in addition to the recommendations reached by the research, are in the interest of both the research and practical fields.

Research objectives

The current research aims to:

1. Know the extent to which the dimensions of financial technology are applied in the commercial banks studied.
2. Know the level of financial stability enjoyed by the commercial banks studied.
3. Finding the correlation between the dimensions of financial technology and financial stability indicators.
4. Finding the effect of financial technology dimensions on financial stability indicators in the banks in the research sample?

Research hypotheses

After reviewing the problem of the study and its sub-questions and after defining the objectives pursued by the current research, the research addressed three main hypotheses, which were as follows:

1. The first hypothesis: Financial technology has a statistically significant impact on capital adequacy.
2. The second hypothesis: Financial technology has a statistically significant impact on asset quality.
3. The third hypothesis: Financial technology has a statistically significant impact on profitability.
4. Fourth hypothesis: Financial technology has a statistically significant impact on liquidity.

The hypothetical outline of the research

In view of the problem and objectives of the research, a hypothetical research plan was developed as follows:

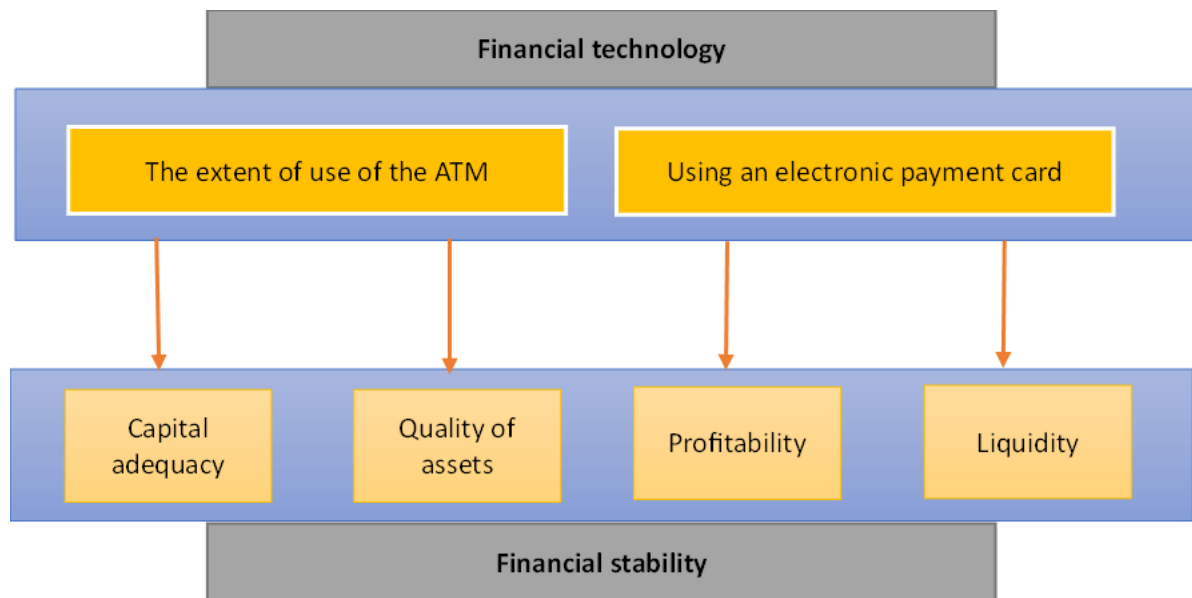


Figure 1. Hypothetical diagram of the study

Source: Prepared by the researcher

Scope of search

The current researcher focuses on commercial banks, and the commercial institutions listed on the Iraq Stock Exchange comprise the study population. The study sample is a group of commercial banks that have complete data that contributes to achieving the research objectives, which are as in the table:

Table 1. Commercial banks, research sample

No.	The Bank	The Site
1	Middle East Investment	Iraq / Baghdad - Al-Arsat
2	Mosul for Development and Investment	Iraq / Baghdad - Al-Nidal Street
3	Ashur International Investment	Iraq / Baghdad - Uqba bin Nafi Square
4	United Investment	Iraq / Baghdad - Al Wahda District
5	Al Mansour Investment	Iraq / Baghdad - Al Wahda District
6	Via Iraq Investment	Iraq / Baghdad – Alawiya
7	Iraqi Union	Iraq / Baghdad - Karada Kharge
8	Iraqi investment	Iraq / Baghdad - adjacent to Al-Alawiya National Hospital

Source: Constructed by the researcher from the Iraq Stock Exchange website

The theoretical framework of the research

The concept of financial technology:

A paradigm transition in the financial sector is necessitated by technological advancement and digital transformation. This revolution is founded on the innovation of business models that are based on emergent technologies in customer service. Furthermore, fintech's value proposition is founded on the capacity to prioritize the consumer and provide financial services that are more adaptable than those provided by the conventional model, as well as on creativity. The initial competition between banking and fintech has transformed into collaboration. The following is suggested by the advancement of financial technology [3].

1. Users can receive assistance through a variety of channels, including smartphones, tablets, PCs, laptops, and smart watches.

2. Cloud technology, which enables decentralized storage and enables the provision of information and financial services without the necessity of physical space.
3. Utilization of cryptocurrency, which facilitates global transactions, reduces the number of intermediaries, and enhances payment transparency.
4. Mobile payment, a novel method of managing money and conducting business, offers security and speed.

FinTech is a novel financial sector that employs technology to enhance financial operations. FinTech can also be regarded as an innovative concept that enhances financial services operations by proposing technical solutions that are tailored to address various business scenarios. Fintech innovation was stimulated by advancements in mobile technology and e-finance for financial institutions following the global financial crisis of 2008. This development has been characterized by the incorporation of e-finance innovation, Internet technology, social networking services, social media, artificial intelligence, and database. Significant analytical capacity. This presents a challenge to numerous conventional financial institutions, including banks, as they attempt to refine their business models in a more practical manner. In addition, startups perceived this as an opportunity to penetrate the financial services sector [4].

The finance sector has the potential to be disintermediated by FinTech. The institutions of the future will be influenced by the competitive pressures that result from this, and the Internet and mobile devices will be the channels that facilitate this. By disseminating white-label products and directly matching loans with savers online, competitors can participate in this. FinTech facilitates banking as a service and mitigates the liquidity mismatch previously mentioned [5].

Dimensions of financial technology:

Four categories are used to categorize fintech elements: efficient payments, robo-advisors, peer-to-peer upload and deposit platforms, and crowdfunding. Additionally, financial technology encompasses banking technology, payment technology, wealth technology, lending technology, and insurance technology. Internet technology, big data, artificial intelligence, distributed technology, and security technology comprise the most prominent financial technologies. Five components of FinTech ecosystems have been identified, including FinTech startups, technology developers, governments, financial consumers, and traditional financial institutions, with a focus on the diverse contexts of FinTech.

The Global FinTech Index offers an aggregate score that denotes the quantity and quality of companies in the fintech ecosystem, thereby demonstrating the extent of fintech's development. The Global FinTech Index is the first global ranking of fintech ecosystems, encompassing 65 countries, over 230 cities, and 7,000 enterprises worldwide. The political and economic environment for fintech development is only partially addressed by the Global FinTech Index, despite its widespread adoption [6]. Some researchers used the questionnaire to measure the degree of financial technology [7]. Two dimensions were used to measure the extent of the use of financial technology in the banking sector in Algeria: [8]

1. Electronic payment service via the Internet (electronic payment cards)

Electronic cards are prepaid plastic cards with financial value stored in them, and they can be used for payment via the Internet. They can also be used as credit cards. Credit cards are the cards that give their users a specific credit limit for withdrawal and often have an annual issuance fee and an interest rate on the balance. These cards work via an electronic chip or magnetic stripe that contains all the necessary information about the beneficiary and his account in order to complete the payment process [9].

2. Payment service via electronic payment stations (ATM service)

They are machines that can be deployed in various places, whether on the wall or independently, and are connected to the bank's computer. The beneficiary uses a plastic card or smart card to obtain various services such as the cash withdrawal process the cash deposit process, as well as inquiring about the account... etc.. They may Since the beginning of their operation in 1975, these machines have become one of the necessities of modern retail banking. Statistics indicate that there are more than one and a half million ATMs in the world. Customers use these machines according to particular instructions [9].

The concept of financial stability:

The economic research conducted during the financial crisis serves as the foundation for the financial stability surveillance framework. The interactions between the leverage accumulation of a financial intermediary and the implications for asset prices and the evolution of financial risks have been modeled in a number of recent papers. The concepts of systemic risk in macroeconomic contexts with fragile financial intermediaries, such as regulated firms and shadow banks, are explicitly incorporated in these papers. During these periods, brokers' high effective risk appetite results in an increase in asset price valuations and pressure on risk pricing. Nevertheless, the financial sector is susceptible to disruptions due to the high leverage and liquidity risks of brokers in these times. Brokers' assets or liabilities may be affected by these adverse disruptions. A revision in asset prices is probable in the event of a decline in real economic growth prospects, which is more probable when prices are overvalued. Liquidity disruptions can necessitate intermediaries to reduce their debt, which is particularly detrimental if they depend on short-term financing [10].

Three conditions regarding financial stability are established by the European Central Bank [11].

1. The financial system must be capable of efficiently and seamlessly transferring resources from savers to investors.
2. Financial risks must be reasonably appraised and priced, as well as managed to a reasonable extent.
3. The financial system must be capable of accommodating genuine financial and economic surprises and disruptions.

Financial stability must be preserved in the event of a micro-level banking crisis to prevent the systemic impact of idiosyncratic disruptions through various contagion links, including contractual, informational, and psychological. For instance, bankruptcy had an impact on the entire banking system through a variety of channels. Its creditors were the first to suffer contractually. Interbank markets have been particularly affected by bankruptcy, which has been characterized as a severe negative signal on financial markets. This could result in banking institutions becoming hesitant to engage in the money market due to a sense of uncertainty and doubt [12].

Dimensions of financial stability:

Financial stability is not easy to define or measure, given the complex interconnections and interactions between the various elements of the financial system and the real economy. What makes matters more complicated is that time-varying and cross-border dimensions characterize these interactions. However, over the past two decades, researchers from central banks and elsewhere have attempted to capture financial stability conditions through various indicators of financial system weakness. In fact, through financial stability reports, many central banks try to evaluate the potential threats to financial stability by concentrating on a limited number of critical indicators. Additionally,

efforts are being made to create a single aggregate measure that can accurately represent the extent of financial fragility or duress. Composite quantitative measurements of financial system stability that can substantiate these conditions are intuitively appealing because they can allow policymakers and financial system participants to: [13]

- 1) Improve monitoring of the degree of financial stability of the system.
- 2) Anticipating the sources and causes of financial stress on the system.
- 3) Report more effectively on the impact of these conditions.

The macro-financial channel, which is a positive feedback loop between the economy and the financial system, is the mechanism by which banks attempt to mitigate cyclical fluctuations in the financial system. A variety of indicators, such as the following, can induce these feedback loops: [11]

1. The bank's lending capital. Banks are compelled to decrease their lending as a result of a decrease in their capital. However, this can have a detrimental impact on the economy, exacerbated by additional capital losses.
2. The ratio of asset value to bank lending. Banks are able to lend less as a result of a decrease in the value of assets, such as real estate, that are used as collateral. However, a decrease in bank lending may lead to further declines in asset values, and so forth.
3. Interactions between the exchange rate and the balance sheet (currency mismatch). If corporations borrow in foreign currencies, a depreciation of the exchange rate results in a decline in net assets. However, this decline has the potential to impede economic expansion, resulting in additional currency depreciation.
4. Liquidity: interbank money markets and other money markets (maturity mismatch). A decrease in confidence in the banking sector can result in a "flight" of deposits or other short-term financing, which can further erode confidence.
5. Financial leverage. Capital losses may result from inadequate economic expansion, which can exacerbate leverage, thereby reducing bank lending and exacerbating economic fragility.
6. Credit risk and interest rates. The capacity of companies to repay debt may be diminished as a result of higher interest rates, which in turn result in higher risk premiums that are evident in higher interest rates.

Based on a study [14], the indicators mentioned above were relied upon to evaluate the financial stability of banks, and they are as in the following table:

Table 2. Financial stability indicators

No.	Indicator	The equation
1	Capital adequacy	Capital/total assets
2	Quality of assets	Total loans/total assets
3	Profitability	Return on equity
4	Liquidity	Total loans/deposits

3. Results and Discussion

Financial analysis

The financial analysis focused on research indicators to know the position of commercial banks in terms of (use of ATMs and use of electronic payment cards) with regard to the independent variable, while the dependent variable, financial stability, focused on (capital structure, asset quality, profitability and liquidity) as follows:

ATM usage rate:

Table 3 shows that the overall rate of ATM usage reached (0.067), which means that the position of the banks in the study sample in this regard is good. We find that the banks that recorded rates higher than the general market rate reached (3) banks out of (8) banks, while the rest of the banks achieved rates lower than the general rate. Regarding the time series, it appears that (4) years achieved rates more excellent than the general average, while the rest of the years achieved rates lower than the general average.

Table 3. Financial analysis of the ATM usage rate of the banks in the research sample for the period (2015-2022)

No	Banks	2015	2016	2017	2018	2019	2020	2021	2022	M	SD
1	Middle East Investment	0.039	0.043	0.033	0.054	0.059	0.080	0.039	0.051	0.050	0.015
2	Mosul for Development and Investment	0.015	0.053	0.076	0.089	0.073	0.084	0.067	0.068	0.066	0.023
3	Ashur International Investment	0.028	0.032	0.059	0.049	0.079	0.086	0.089	0.090	0.064	0.026
4	United Investment	0.040	0.031	0.036	0.074	0.071	0.065	0.092	0.092	0.062	0.024
5	Al Mansour Investment	0.079	0.071	0.077	0.088	0.084	0.077	0.098	0.082	0.082	0.008
6	Via Iraq Investment	0.079	0.075	0.091	0.100	0.059	0.094	0.087	0.037	0.078	0.021
7	Iraqi Union	0.019	0.099	0.066	0.020	0.067	0.047	0.092	0.012	0.053	0.034
8	Iraqi investment	0.045	0.096	0.065	0.095	0.092	0.091	0.089	0.096	0.084	0.019
	the average	0.043	0.062	0.063	0.071	0.073	0.078	0.082	0.066	0.067	

Rate of use of electronic payment cards

Table 4 shows that the overall rate of use of electronic payment cards reached (0.073), which means that the position of the banks in the study sample is good. We find that the banks that recorded rates higher than the general market rate reached (4) banks out of (8) banks, while the rest of the banks achieved rates lower than the general rate. Regarding the time series, it appears that (4) years achieved rates more incredible than the general average, while the rest of the years achieved rates lower than the general average.

Table 4. Financial analysis of the rate of use of electronic payment cards for banks in the research sample for the period (2015-2022)

No	Banks	2015	2016	2017	2018	2019	2020	2021	2022	M	SD
1	Middle East Investment	0.071	0.085	0.091	0.099	0.097	0.090	0.096	0.085	0.089	0.009
2	Mosul for Development and Investment	0.090	0.056	0.007	0.078	0.089	0.078	0.042	0.094	0.067	0.030
3	Ashur International Investment	0.040	0.069	0.044	0.019	0.074	0.076	0.046	0.082	0.056	0.022
4	United Investment	0.091	0.076	0.094	0.089	0.082	0.088	0.065	0.094	0.085	0.010
5	Al Mansour Investment	0.015	0.048	0.075	0.086	0.075	0.049	0.050	0.093	0.061	0.026
6	Via Iraq Investment	0.058	0.068	0.080	0.084	0.087	0.095	0.079	0.082	0.079	0.012
7	Iraqi Union	0.040	0.047	0.047	0.078	0.081	0.080	0.095	0.084	0.069	0.021
8	Iraqi investment	0.039	0.087	0.079	0.082	0.066	0.097	0.093	0.100	0.080	0.020
	the average	0.055	0.067	0.065	0.077	0.081	0.081	0.071	0.089	0.073	

Capital adequacy

Based on Table 5, it appears that the overall capital adequacy ratio reached (0.695), which means that the position of the banks in the study sample in terms of capital adequacy is good. We find that the banks that recorded capital adequacy rates higher than

the general market rate reached (5) banks out of (8) banks, while the rest of the banks achieved rates lower than the general rate. Regarding the time series, it appears that (4) years achieved rates more fantastic than the general average, while the rest of the years achieved rates lower than the general average.

Table 5. Financial analysis of the capital adequacy of the banks in the research sample for the period (2015-2022)

No	Banks	2015	2016	2017	2018	2019	2020	2021	2022	M	SD
1	Middle East Investment	0.792	0.772	0.803	0.798	0.785	0.782	0.854	0.761	0.793	0.028
2	Mosul for Development and Investment	0.738	0.892	0.869	0.893	0.875	0.981	0.75	0.973	0.871	0.089
3	Ashur International Investment	0.712	0.693	0.754	0.945	0.926	0.757	0.804	0.88	0.809	0.097
4	United Investment	0.695	0.633	0.621	0.597	0.507	0.443	0.388	0.569	0.557	0.103
5	Al Mansour Investment	0.345	0.642	0.594	0.807	0.775	0.852	0.823	0.808	0.706	0.172
6	Via Iraq Investment	0.686	0.807	0.789	0.759	0.711	0.758	0.659	0.859	0.754	0.066
7	Iraqi Union	0.484	0.497	0.523	0.569	0.602	0.587	0.597	0.575	0.554	0.046
8	Iraqi investment	0.409	0.509	0.42	0.483	0.547	0.57	0.576	0.587	0.513	0.070
	the average	0.608	0.681	0.672	0.731	0.716	0.716	0.681	0.752	0.695	

Asset quality

Table 6 shows that the general rate of asset quality reached (0.078), which means that the position of the banks in the study sample in terms of debt sustainability is perfect. We find that the banks that recorded asset quality rates higher than the general market average reached (2) banks out of (8) banks, while the rest of the banks achieved rates lower than the general average. Regarding the time series, it appears that (5) years achieved rates more excellent than the general average, while the rest of the years achieved rates lower than the general average.

Table 6. Financial analysis of asset quality for the banks in the research sample for the period (2015-2022)

No	Banks	2015	2016	2017	2018	2019	2020	2021	2022	M	SD
1	Middle East Investment	0.015	0.044	0.09	0.099	0.044	0.045	0.095	0.025	0.057	0.033
2	Mosul for Development and Investment	0.039	0.04	0.073	0.072	0.048	0.015	0.073	0.034	0.049	0.022
3	Ashur International Investment	0.096	0.12	0.15	0.199	0.09	0.067	0.095	0.029	0.106	0.052
4	United Investment	0.031	0.051	0.026	0.039	0.055	0.034	0.09	0.013	0.042	0.023
5	Al Mansour Investment	0.237	0.237	0.268	0.277	0.194	0.099	0.277	0.118	0.213	0.070
6	Via Iraq Investment	0.038	0.056	0.051	0.033	0.038	0.015	0.056	0.013	0.038	0.017
7	Iraqi Union	0.014	0.014	0.014	0.029	0.013	0.066	0.029	0.03	0.026	0.018
8	Iraqi investment	0.196	0.196	0.06	0.09	0.062	0.08	0.036	0.012	0.092	0.069
	the average	0.083	0.095	0.092	0.105	0.068	0.053	0.094	0.034	0.078	

Profitability

Table 7 shows that the overall rate of profitability reached (0.030), which means that the position of the banks in the study sample in terms of profitability is good. We find that the banks that recorded profitability rates higher than the general market rate reached (4)

banks out of (8) banks, while the rest of the banks achieved rates lower than the general market rate. Regarding the time series, it appears that (3) years achieved rates more excellent than the general average, while the rest of the years achieved rates lower than the general average.

Table 7. Financial analysis of the profitability of the banks in the research sample for the period (2015-2022)

No	Banks	2015	2016	2017	2018	2019	2020	2021	2022	M	SD
1	Middle East Investment	0.01	0.013	0.09	0.014	0.027	0.029	0.09	0.01	0.035	0.034
2	Mosul for Development and Investment	0.018	0.023	0.054	0.027	0.047	0.024	0.097	0.018	0.039	0.027
3	Ashur International Investment	0.055	0.009	0.019	0.008	0.051	0.066	0.056	0.011	0.034	0.025
4	United Investment	0.071	0.03	0.024	0.029	0.048	0.016	0.071	0.024	0.039	0.022
5	Al Mansour Investment	0.024	0.005	0.011	0.008	0.023	0.016	0.054	0.005	0.018	0.016
6	Via Iraq Investment	0.025	0.006	0.003	0.004	0.042	0.073	0.022	0.023	0.025	0.024
7	Iraqi Union	0.001	0.066	0.018	0.004	0.046	0.047	0.052	0.001	0.029	0.026
8	Iraqi investment	0.018	0.017	0.012	0.017	0.026	0.016	0.059	0.012	0.022	0.016
	the average	0.028	0.021	0.029	0.014	0.039	0.036	0.063	0.013	0.030	

Liquidity

Table 8 shows that the general liquidity ratio reached (0.603), which means that the position of the banks in the study sample in terms of the cost of debt is good. We find that the banks that recorded liquidity rates higher than the general market rate reached (5) banks out of (8) banks, while the rest of the banks achieved rates lower than the general rate. Regarding the time series, it appears that (6) years achieved rates more incredible than the general average, while the rest of the years achieved rates lower than the general average.

Table 8. Financial analysis of liquidity for the banks in the research sample for the period (2015-2022)

No	Banks	2015	2016	2017	2018	2019	2020	2021	2022	M	SD
1	Middle East Investment	0.643	0.722	0.767	0.714	0.592	0.581	0.633	0.503	0.644	0.087
2	Mosul for Development and Investment	0.976	0.973	0.985	0.99	0.988	0.979	0.975	0.973	0.980	0.007
3	Ashur International Investment	0.688	0.586	0.637	0.666	0.725	0.811	0.574	0.476	0.645	0.102
4	United Investment	0.722	0.808	0.579	0.273	0.352	0.531	0.652	0.352	0.534	0.193
5	Al Mansour Investment	0.543	0.508	0.399	0.403	0.457	0.498	0.49	0.541	0.480	0.056
6	Via Iraq Investment	0.592	0.563	0.612	0.676	0.737	0.683	0.758	0.814	0.679	0.087
7	Iraqi Union	0.196	0.218	0.247	0.19	0.276	0.123	0.145	0.225	0.203	0.051
8	Iraqi investment	0.792	0.5	0.686	0.691	0.712	0.613	0.732	0.577	0.663	0.094
	the average	0.644	0.610	0.614	0.575	0.605	0.602	0.620	0.558	0.603	

Statistical analysis

The researcher used a multiple regression model to test the study hypotheses to verify the impact relationships between financial technology indicators and economic

stability. The statistical program (Eviews-12) was also relied upon, and the analysis method was based on cross-sectional data analysis (Panel Data).

First hypothesis

The study assumes the presence of a statistically noteworthy impact relationship. of financial technology with its dimensions mentioned in capital adequacy, and according to the results of the program (Eviews-12), The outcomes of the several regression analysis shown in Table 9 showed acceptance of the first hypothesis.

Table 9. Statistical analysis of the first hypothesis for the banks of the study sample for the period (2015-2022)

Variables	Estimates	Std. Error	t-Statistic	Prob.
Constant	0.621	0.066	9.383	0.000
Use an ATM	0.003	0.620	0.005	0.996
Using an electronic payment card	1.004	0.700	1.434	0.158
Fixed effect (for banks)		Fixed effect (for periods)		
Iraqi Middle East Investment	0.083	2015--C	0.041	
Mosul for Development and Investment	0.183	2016--C	-0.011	
Ashur International Investment	0.132	2017--C	0.014	
United Investment	-0.150	2018--C	0.013	
Al Mansour Investment	0.023	2019--C	0.033	
Via Iraq Investment	0.053	2020--C	-0.014	
Iraqi Union	-0.136	2021--C	-0.008	
Iraqi investment	-0.189	2022--C	-0.069	
R-squared	0.763			
Adjusted R-squared	0.682			
F-statistic	9.460			
Prob(F-statistic)	0.000			
Dependent variable: capital adequacy				

Source: Constructed by the researcher from the programs (Eviews-12)

The second hypothesis

The study assumes the presence of a statistically noteworthy impact relationship. for financial technology through its dimensions mentioned above on asset quality, and according to the results of the program (Eviews-12), The outcomes of the several regression analysis shown in Table 10 showed acceptance of the second hypothesis.

Table 10. Statistical analysis of the second hypothesis for the banks of the study sample for the period (2015-2022)

Variables	Estimates	Std. Error	t-Statistic	Prob.
Constant	0.096	0.029	3.284	0.002
Use an ATM	0.156	0.273	0.571	0.571
Using an electronic payment card	-0.384	0.308	-1.247	0.219
Fixed effect (for banks)		Fixed effect (for periods)		

Iraqi Middle East Investment	-0.017	2015--C	-0.037
Mosul for Development and Investment	-0.028	2016--C	0.013
Ashur International Investment	0.022	2017--C	-0.024
United Investment	-0.030	2018--C	-0.008
Al Mansour Investment	0.132	2019--C	0.028
Via Iraq Investment	-0.041	2020--C	0.011
Iraqi Union	-0.055	2021--C	0.015
Iraqi investment	0.019	2022--C	0.002
R-squared	0.778		
Adjusted R-squared	0.702		
F-statistic	10.286		
Prob(F-statistic)	0.000		
Dependent variable: quality of assets			

Source: Constructed by the researcher from the programs (Eviews-12)

The third hypothesis

The study assumes the presence of a statistically noteworthy impact relationship. between financial technology on profitability, and according to the results of the program (Eviews-12), The outcomes of the several regression analysis shown in Table 11 showed acceptance of the third hypothesis.

Table 11. Statistical analysis of the third hypothesis for the banks in the study sample for the period (2015-2022)

Variables	Estimates	Std. Error	t-Statistic	Prob.
Constant	0.049	0.015	3.333	0.002
Use an ATM	-0.245	0.137	-1.788	0.080
Using an electronic payment card	-0.028	0.155	-0.178	0.859
Fixed effect (for banks)		Fixed effect (for periods)		
Iraqi Middle East Investment	0.010	2015--C	-0.017	
Mosul for Development and Investment	0.004	2016--C	0.036	
Ashur International Investment	0.003	2017--C	0.008	
United Investment	0.008	2018--C	0.010	
Al Mansour Investment	-0.013	2019--C	-0.015	
Via Iraq Investment	-0.002	2020--C	-0.003	
Iraqi Union	0.002	2021--C	-0.010	
Iraqi investment	-0.011	2022--C	-0.009	
R-squared	0.521			
Adjusted R-squared	0.357			
F-statistic	3.190			
Prob(F-statistic)	0.001			
Dependent variable: profitability				

Source: Constructed by the researcher from the programs (Eviews-12)

Fourth hypothesis

The study assumes the presence of a statistically noteworthy impact relationship. for financial technology through its dimensions, as mentioned above, on liquidity, and according to the results of the program (Eviews-12), The outcomes of the several regression analysis shown in Table 12 showed acceptance of the fourth hypothesis.

Table 12. Statistical analysis of the fourth hypothesis for the banks of the study sample for the period (2015-2022)

Variables	Estimates	Std. Error	t-Statistic	Prob.
Constant	0.671	0.077	8.711	0.000
Use an ATM	-0.746	0.722	-1.034	0.307
Using an electronic payment card	-0.240	0.816	-0.294	0.770
Fixed effect (for banks)		Fixed effect (for periods)		
Iraqi Middle East Investment	0.057	2015—C	-0.043	
Mosul for Development and Investment	0.362	2016—C	0.026	
Ashur International Investment	0.037	2017—C	0.009	
United Investment	-0.070	2018—C	0.008	
Al Mansour Investment	-0.130	2019—C	-0.024	
Via Iraq Investment	0.088	2020—C	0.005	
Iraqi Union	-0.394	2021—C	0.001	
Iraqi investment	0.050	2022—C	0.018	
R-squared	0.848			
Adjusted R-squared	0.796			
F-statistic	16.387			
Prob(F-statistic)	0.000			
Dependent variable: liquidity				

Source: Constructed by the researcher from the programs (Eviews-12)

4. Conclusion

1. The application of financial technology is necessary in order to keep pace with current developments in the banking sector, as it is an important field that organizations, especially financial institutions, seek in order to compete and enhance the service of scholars.
2. The changes in the level of financial technology were not far from the economic reality in Iraq, especially in the banking sector. However, despite this, the levels are still acceptable and do not reach the global level.
3. Financial technology can improve the conditions in the field of banking. Still, at the same time, it represents excellent challenges due to customers' resistance to it due to the weak trust factor between customers and banks.
4. Financial technology can be applied by attracting the most significant number of customers by deploying a large number of ATMs and issuing many electronic payment cards, which facilitates the process of providing banking services.

5. The results of the research showed the interest of the banks, as mentioned above, in applying the principles of financial stability. Still, there are some weaknesses in some aspects, such as periods or some banks, which require attention.
6. The results of the research showed a high degree of cash liquidity with the banks, as mentioned earlier, as well as capital adequacy ratios, which means that commercial banks in Iraq have untapped financial capacity in terms of investment.

5. Recommendations

1. Urging commercial banks and all parties related to monetary policy in Iraq to find a balance between financial technology and the extent of its development and the application of the principles of financial stability.
2. Urging commercial banks in Iraq to pay attention to the quality of assets by following studied scientific methods for granting loans and focusing on investment loans.
3. Urging commercial banks in Iraq to pay attention to profitability by exploiting their financial capacity represented by high liquidity and employing it in profitable investment opportunities.
4. The necessity of adopting more applications and methods for financial technology, especially since it is an important field that banks follow in competing and enhancing customer service.
5. Employing the dimensions of financial technology to increase profits and thus enhance financial stability by enhancing customer service and attracting more customers.

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