



ELECTRONIC PAYMENT METHODS AND THE IMPACT OF THEIR SPREAD ON THE MARKET VALUE OF THE SHARE (AN APPLIED STUDY IN A SAMPLE OF PRIVATE BANKS)

¹Hedia Abdulridha Zaidan
hedaa73@gmail.com

Imam Jaafar Al-Sadiq University, College of Administrative and Financial Sciences

²Nashtaman Sami Rustum
nashtaman.sami.rustum@gmail.com

Imam Jaafar Al-Sadiq University, College of Administrative and Financial Sciences

³Zahraa Ali Mahdi

Zahraaali9994@gmail.com

Imam Jaafar Al-Sadiq University, College of Administrative and Financial Sciences

Article history:	Abstract:
Received: 8 th September 2024 Accepted: 7 th October 2024	The research problem was represented in the weak adoption of modern technologies by banks represented by electronic payment methods (payment cards, ATMs) and working to spread them in a way that meets the needs and desires of society as well as in line with government policies, as the level of spread of electronic payment channels in Iraq is still below the level of ambition. The research also aimed to highlight the importance of electronic payment methods in expanding the scope of banking business and its impact on the financial market and on the market value of banking institutions in particular. The research sample was represented by each of the banks (Al-Ahli Bank of Iraq, Baghdad, International Development, Ashur International, Middle East, Commercial Gulf) for the period (2017-2021). The study relied on the inductive approach and the descriptive analytical method in studying and analyzing information and data in the available literature on research concepts, and using the statistical program (SPSS V.25) by relying on the value of the statistical significance correlation coefficient (p_value) in testing the research hypotheses. The study reached a set of results, the most important of which are: that adopting electronic payment methods helps greatly in reducing the problems of cash liquidity in the Iraqi financial and banking system and makes settlement operations more flexible. The results of the statistical analysis also proved the existence of a statistically significant effect of the number of electronic cards and the number of ATMs combined on the market value of the stock.

Keywords: Market value, electronic payments, electronic cards

CHAPTER ONE: RESEARCH METHODOLOGY

First: The research problem:

The research problem is represented in observing the weak adoption of modern technologies by banks represented by electronic payment methods (payment cards, ATMs) and working to spread them in a way that meets the needs and desires of society as well as in line with government policies, as the level of spread of electronic payment channels in Iraq is still below the level of ambition. Therefore, the research problem is summarized in the following questions:

1. What is the nature of the relationship between the spread of electronic payment methods and the market value of the shares of the banks in the research sample?
2. Which of the electronic payment channels is most closely related to and influential in the market value of the shares of the banks in the research sample?
3. Have government directives and policies contributed to enhancing financial inclusion? By spreading electronic payment methods in raising the market value of the shares of the research sample banks?



Second: The importance of the research :

The research derives its importance from shedding light on a modern, vital topic that plays a very important role in the financial and banking sector in general and the banks in the study sample in particular , namely electronic payment methods, as they have become the standard used to achieve the greatest degree of market competition for the stock, and for the advantages they provide (reducing routine, reducing costs , simplifying procedures, and effective communication with customers and other institutions) in order to attract the greatest number of customers to generate more profits.

Third: Research objectives: The research aims to achieve the following- :

1. Identifying the impact of the spread of electronic payment methods on the market value of banking institutions.
2. Identifying the reality of the spread of electronic payment methods in banks, research sample.
3. research sample banks' work and their impact on the financial market.
4. input in Discussion National Circle around to update means Payment Electronic And more Its spread.

Fourth : Research hypotheses: The research is based on the hypotheses that were formulated as follows:

Hypothesis President First : There relationship Self-relationship indication Statistics between The spread of electronic payment methods and the market value of banking institutions. The following two sub-hypotheses emerge from this.

- 1- The first sub-hypothesis which states: There is relationship statistically significant correlation between Spread of the number of electronic cards with Value Market share.
- 2- The second sub-hypothesis which states: There is relationship correlation same indication Moral statistic between Spread of number Devices The cashier The robot with Value Market share.

The second main hypothesis : There is a statistically significant effect . The moral impact of the spread of electronic payment methods on the market value of the stock . And it emerges About her The two hypotheses The two branches The next two .

1. The first sub-hypothesis states : There is a statistically significant effect of the number of electronic cards on the market value.
2. The second sub-hypothesis states: There is a statistically significant effect of the number of ATMs on the market value.
3. Hypothesis President Third : there impact With indication Moral statistic To spread means Payment Electronic In its dimensions in Value Market share .

Fifth: Research community and sample:

The spatial boundaries were represented To search a sample of Iraqi private banks (Baghdad) which includes: (National Bank of Iraq, Bank of Baghdad, International Development Bank, Ashur International Bank, Middle East Bank, Gulf Commercial Bank)

1. While it was adopted in this Research on the financial data of banks. The research sample is from (2017-2021), which is its time limits.
2. Sixth: Research Methodology
3. The researcher relied on The statistical and descriptive analytical approach to achieve the objectives of this research.

The second topic

First: Electronic payment methods

Banks are one of the most important sectors affected by the accelerating technology as a result of globalization , the spread of companies across continents, the great competition between financial institutions, and the emergence of e-commerce, which requires the existence of new financial needs for cases that are difficult to resolve through traditional methods. Therefore, these institutions have resorted to electronic payment methods and precedence in all aspects to keep pace with these developments and to take sufficient space and a field in the banking market and in order to remain in the field of continuous competition in providing the best services to its clients in an integrated manner from these services. The nature of electronic payment methods can be explained through the following paragraphs.

1. Electronic Payment System



Before starting to define the electronic payment system , it must be noted that payments mean transferring money and financial assets between the parties concerned; to settle the relationships generated as a result of carrying out transactions related to goods, services and assets . They are tangible and familiar operations (Al-Barzanji , 2007 : 6) (Thus, the definitions of electronic payment systems have multiplied , as shown in Table No. (1) :

Table (1) Definition of the payment system

Definition	Source	T
practical Payment that It is done Without Use Tools Paper .	Junadi & sfenrianto , 2015:14	1
A set of banking instruments and procedures, typically interbank money transfer systems , that ensure the circulation of money .	CPSS Glossary,2003: 38	2
System Integrated from Systems And programs Aims to Facilitate procedure Operations shopping Electronic And be This is amazing The system under umbrella from Rules And the laws that Includes secrecy insurance And protection procedures Buy And guarantee access Service	Confused, 2020: 87	3
The means by which individuals and organizations execute and receive payment orders for goods. Services , can be made, and orders executed. Payment by transferring funds from one person's account, or business to another. .	Reserve Bank of New Zealand ,Payment System ,2008: 29	4

The table was prepared by the researcher based on the sources mentioned above.

Through the definitions mentioned in the previous table , it can be noted that all definitions may be similar in terms of content, but differ in terms of formulation, as the previous points of view focused on defining electronic payment methods as a means of exchanging payment orders between parties . On the other hand, the definition of electronic payment methods can be formulated in a more accurate and comprehensive manner, the technologies that ensure facilitating the circulation of cash between the payer and the beneficiary, by executing and receiving payment orders through an electronic payment system using a technical structure and agreed upon technologies.

2. The importance of payment systems

payment methods are important to customers, companies and merchants, including: (Jaber, 2022: 41).

- It gives the customer the advantage of benefiting from the discount granted by the companies, merchants and hotels with which he deals. This enables the customer to obtain goods and services at a low price, such as purchasing a specific item from a specific company or staying in a specific hotel.
- It saves time and effort for the customer. Through electronic business, the customer can visit different stores in a short time and order a specific product from home without going to the store.
- Its tools are easy to use by its holder, and it is sufficient that he does not use paper money with it, but rather keeps the money electronically, and the money in it is in the form of digital information representing any bank account. (Al-Abd Al-Lat and Al-Shammari, 2008: 73-74.)
- It provides the customer with confidentiality and credibility in dealing, as he does not have to write his name, document his address and account number in front of others, so the transactions are protected from fraudsters.
- It provides security to the customer in terms of theft, loss or damage of his money, as he does not carry paper money, in addition to the speed of dealing and completing transactions immediately, as once the card number is written, the financial transactions take place and then the data and information related to it are exchanged immediately and without the need for any intermediary (Saleh and Maarifi, 2007: 9.)



- f. The holder of its instruments can obtain free credit for specific periods and without paying other expenses. The customer also obtains cash during official holidays or in case of emergency, which makes the customer balance rates high with the bank.
 - g. It is considered the strongest real guarantee for the merchant and prevents him from embezzlement of the fund and also contributes to increasing sales considering that the customer does not usually look at spending through it like the paper money agreement. (Al-Tard and Abdullah, 2006: 206.)
 - h. It saves merchants a lot of effort and removes the burden of following up on customer debts as long as the burden falls on the bank and the issuing company and is considered an acceptable payment tool all over the world.
3. Types means Payment And payment Electronic (Rahhal, 2017: 22)
 - a. The card Electronic
 - b. Sukuk Electronic
 - c. The governor Electronic
 - d. Money Electronic
 - e. device The cashier Automatic Teller Machine (ATM)
 - f. points Sell Electronic Points Of Sale (POS)

Secondly : The Value Of Stocks And The Factors Affecting Their Prices: (Jaber, 2022: 71-74)

The values of shares in companies vary, as the value of shares plays a role in determining the direction of investment decisions for the investor. In this section, the meaning of value in the economy in general and its types will be explained.

The concept of value:

The philosophy or science of values (value) or theory of values goes back to the word axios. axios Greek, meaning what is (valuable) or (precious) or (new) and axiology is the science that studies what It is (valuable), (precious), and (new), and the philosophy related to it is the philosophy of values . The origins, so the value for them: "that a man gives a man a garment and he evaluates it at thirty dirhams and then says: Sell it, and whatever is more is yours, and the value, and its origin is the waw because it takes the place of the thing, and the value is the price of the thing by evaluation" (Ibn Manzur, 1994: 402). So the value is considered the feature that, when available, gives value to the thing and makes it desirable to others, while the value judgments are what provide individuals with the approval resulting from those good values. of values or theory of values, or value (Qasim, 2016: 345).

a. Types of values

- Investment value: It is the sum of the total future flows of an asset, i.e. what the asset generates during the investment period . Its value is expressed taking into account two factors:
 - The additional value that can be achieved in subsequent years.
 - The magnitude of risks, asset price volatility, the impact of inflation and general conditions (Al-Saeed and Samir, a published research without a year.
- a. Use value and exchange value:
 - b. Par Value : It is the value that is determined according to the general or special laws of each company. Many countries specify in the laws of companies or financial markets a nominal value for the common share (Al-Shabib, 2012: 240) . For example, in Iraq, the Companies Law No. (21) of 1997, as amended, specified the nominal value of one common share as (1) one dinar, and it may not be issued for less or more than that upon establishment or upon increasing the capital .
 - c. Book Value : It is the accounting value of the share recorded in the company's accounting books. It represents the ownership right after excluding preferred shares as obligations on the company (Al-Shammari et al., 2017: 149.)
 - d. Liquidation Value of the Share : The value that a shareholder in the company expects to obtain for the common share in the event of the company 's liquidation after excluding all obligations arising from it (Adnan, 2008: 73.)
 - e. Market Value : It is defined as "the price at which a stock is traded in the stock market, which is not stable, but rather The market value of the stock fluctuates from time to time, and is determined in light of the general economic conditions and the company's expected performance (Hassan and Al-Hakim, 2010: 57) . The market value of the stock refers to the company's closing price at the end of the period. It is also viewed as the sum of the listed shares of companies in the market at their average prices at the end of the period. Thus, it can be



considered one of the most important indicators of measuring the efficiency of the market and the development of its activity. This indicator is relied upon by many analysts, evaluators, and financial controllers (Al-Hamdani and Al-Juwaijati , 2007: 139)

Market value can be classified into: (Arab Monetary Fund, 2003: 3)

1. Market value of the share : It represents the closing price of the company's share at the end of the period.
 2. Market value of subscribed shares : This represents the number of subscribed shares multiplied by the closing price of the company's share at the end of the period.
 3. Market value of listed companies: represents the sum of the market values of the subscribed shares of companies listed in the market.
- 2. Factors affecting stock price: (Kashmiri, 2020: 211)**
- a. Realized earnings : Stocks that are increasing in earnings are bought, and stocks that are expected to have declining earnings are sold.
 - b. Dividends: These are the cash profits distributed on the stock from one period to another. Increasing the profit percentage leads to an increase in the expected returns from the stock, followed by an increase in the stock price and its trading volume. In the event of a decrease in the distributed profits, the stock returns decrease, followed by a decrease in the stock price and its trading volume.
 - c. Expectations of the company's future and the strength of its financial position : If expectations are optimistic about the company based on the strength of its financial position, its success and its ability to achieve greater profits in the future, this will lead to an increase in the price and volume of its shares traded. On the other hand, expectations of the company's weak financial position and its failure to achieve greater profits will lead to a decrease in the price and volume of its shares traded in the market.
 - d. General economic conditions of the country : The economic activities of the country and the growth that accompanies them represent economic growth, which leads to an increase in demand for the stock and its price and trading volume in the market increases, while economic recession or contraction leads to a decrease in demand for the stock, and consequently its price and trading volume decrease.
 - e. Interest rate: The rise in interest rate leads to a decrease in the level of consumption in various economic sectors, and thus leads to a decrease in demand for sales volume and profits. With the continued rise in interest rates, the costs of servicing the debts incurred by the borrowing companies increase, and it is natural that the profits distributed on shares decrease and investors do not want to buy, and thus the prices of shares and their trading volume in the market decrease.
 - f. The level of financial market efficiency : an element that affects the prices and volume of trading in the shares of companies traded in it, regarding the level of market efficiency and the transparency it enjoys, and thus the accuracy and fairness of share prices. This is based on the fact that the higher the efficiency of the market, the less likely it is that the phenomenon of rumors will spread and private information will be leaked, which leads to the emergence of the phenomenon of harmful speculation.

It can be said that the calculation of this value changes according to the change in facts, the change in the future conditions of the national economy, and the growth of the sector to which the company belongs. Usually, the real value of the share is equal to its value in the market in the event that basic and new information is available about the company, and for all investors in an efficient capital market. The value of the share in the market may differ from the real value of the share due to speculation and manipulation of share prices in the market and the lack of information about the company's performance or the high cost of obtaining information or insufficient disclosure of information by the company and incorrect analysis of information by investors (Al-Mashhadani, 1995: 15.)

3. Market Value Assessment Methods

Accounting thought has addressed the concept of value through accounting measurement tools that are adopted to calculate the cost of assets according to a time approach. In this regard, a distinction can be made between the following evaluation methods (Abdul Qader and Bahriya, 2016: 90-91):

- a. Valuation based on historical cost: Historical cost is a term that expresses the price paid to obtain the commodity in the past, in addition to all other costs spent on it until it began to be used. And benefit from it, and some believe that this value is determined in an objective manner, meaning that personal estimation has no role in determining it, as everything spent to obtain the original was actually done and there are documents available for it that can be verified, and therefore no one disagrees in determining it and it does not require an expert.
- b. Current value method : This method is based on re-evaluating money and assets at the present time. Here, it requires either the existence of a market for this commodity or asset in its current condition , or the presence of an expert evaluator to re-evaluate in light of the change that has occurred in the purchasing power of money and



market conditions. There are several sub-methods for determining this current value, the most important of which are the selling value, the replacement value, and the index number method.

- c. Present value method : This method is based on linking the value of the asset with the net benefits expected to be obtained from it in the future.

THE SECOND TOPIC

Testing research hypotheses

First: Description of the study variables

This study contains several variables and 6 banks were selected for the years 2017-2021 as follows:

1. Number Cards Electronic:

Table (2) Number of electronic cards for banks for the period (2017-2021)

Middle East Bank	Ashur Bank	Gulf Bank	Bank of Baghdad	International Development Bank	National Bank of Iraq	Years
1041.00	4149.00	4098.00	6983.00	52028.00	4240.00	2017
1750.00	7106.00	2747.00	10339.00	112867.00	12500.00	2018
4238.00	13512.00	5860.00	15985.00	151617.00	24382.00	2019
585.00	23193.00	641.00	9413.00	32663.00	17501.00	2020
1073.00	10566.00	1349.00	10539.00	91004.00	91755.00	2021

Source: Prepared by the researcher based on the financial data of the research sample banks.

From Table (2) we notice the following:

1. National Bank of Iraq There is an increase in the number of electronic cards from 2017 to 2019, where there was a slight decrease in 2020 and then a significant increase in 2021.
2. International Development Bank There was an increase in the number of electronic cards from 2017 to 2019, with a high decrease in 2020 and then an increase in 2021.
3. Bank of Baghdad There is an increase in the number of electronic cards from 2017 to 2019, where there was a decrease in 2020 and then an increase in 2021.
4. Gulf Bank There is a clear fluctuation in the number of electronic cards, as there has been an increase and decrease every year.
5. Ashur Bank There was an increase in the number of electronic cards from 2017 to 2020, with a decrease in 2021.
6. Middle East Bank There was an increase in the number of electronic cards from 2017 to 2019, with a decrease in 2020 and then an increase in 2021.

2. Number Devices The cashier The robot

Table (3) Number of ATMs for banks for the period (2017-2021)

Middle East Bank	Ashur Bank	Gulf Bank	Bank of Baghdad	International Development Bank	National Bank of Iraq	Years
32.00	14.00	32.00	47.00	165.00	20.00	2017
34.00	21.00	34.00	49.00	15.00	38.00	2018
46.00	32.00	32.00	55.00	26.00	45.00	2019
60.00	44.00	36.00	67.00	15.00	153.00	2020
40.00	51.00	38.00	72.00	10.00	46.00	2021

Source: Prepared by the researcher based on the financial data of the research sample banks.

From the following table (3), we note the following:

1. National Bank of Iraq There is an increase in the number of devices The cashier Automated from 2017 to 2020, with a significant decline in 2021.
2. International Development Bank There is a significant decrease in the number of devices The cashier Automated from 2017 to 2018, then a slight increase in 2019 and then a decrease until 2021.
3. Baghdad Bank There is an increase in the number of devices The cashier Automated from 2017 to 2021.
4. Gulf Bank There is an increase in the number of devices The cashier Automated from 2017 to 2018, with a decrease in 2019 and then an increase until 2021
5. Ashur Bank There is an increase in the number of devices The cashier Automated from 2017 to 2021.



6. Middle East Bank There is an increase in the number of devices The cashier Automated from 2017 to 2020, then decreased in 2021.

3. Value Market For stocks

Table (4) Market value of banks in the research sample for the period (2017-2021)

Middle East Bank	Ashur Bank	Gulf Bank	Bank of Baghdad	International Development Bank	National Bank of Iraq	Years
87500.00	75000.00	117000.00	152500.00	200000.00	117500.00	2017
32500.00	57500.00	57000.00	72500.00	202500.00	85000.00	2018
25000.00	60000.00	42000.00	75000.00	202500.00	152500.00	2019
30000.00	70000.00	42000.00	102500.00	202500.00	230000.00	2020
50000.00	110000.00	45000.00	257500.00	202500.00	307500.00	2021

Source: Prepared by the researcher based on reports of the Securities Commission for various years.

From Table (4) we note the following:

1. National Bank of Iraq There was a decrease in the market value of shares for the year 2018, and after that and until 2021 there was a regular increase.
2. International Development Bank There was a significant increase in the market value of shares for the year 2018, and after that and until 2021, there was stability in the market value.
3. Bank of Baghdad there is a decrease In value Market For stocks For the year 2018 and after and until 2021, there was an increase.
4. Gulf Bank There is a decrease In value Market For stocks For the years 2018 and 2019 and after that until 2021, there will be some stability.
5. Ashur Bank there is a decrease In value Market For stocks For the year 2018 and after and until 2020, there was stability with a slight increase, and in the year 2021 there was a noticeable increase in the value. Market.
6. There is a decrease Clear in value Market For stocks For the year 2018 and after and until 2020, there was a decrease and some stability, and in the year 2021 there was a slight increase.

Second: Applying the linear regression model

One of the conditions for applying linear regression and correlation is that the data must be normally distributed.

1. Testing the normal distribution of variables

Below is a description of these variables for each bank with a test of the normal distribution of each variable using the Kolmogorov-Smirnov Z test where we will test the following general hypothesis:

- Null hypothesis: Data for a given variable are normally distributed.
- Alternative hypothesis: Data for a given variable are not normally distributed.

1-1 National Bank Iraqi

Table (5) shows the description and test of the normal distribution of the study variables for Al-Ahli Bank. Iraqi

decision	p-value	Kolmogorov-Smirnov Z	Standard deviation	Arithmetic mean	Variables
Normal distribution	0.521	0.814	352.53	30075.60	Number of electronic cards
Normal distribution	0.378	0.911	5.28	60.40	Number of ATMs
Normal distribution	0.995	0.415	0.37	0.68	Price per share
Normal distribution	0.976	0.478	900.45	178500	Market value of shares

Source: Prepared by the researcher based on the results of the SPSS program analysis.



From the table, we notice that all the significance values of the Kolmogorov-Smirnov Z test are greater than the significance level (0.05), which means that the data of the variables are distributed normally in the National Bank of Iraq.

2- 1International Development Bank

Table (6) shows the description and test of the normal distribution of the study variables for the International Development Bank.

decision	p-value	Kolmogorov-Smirnov Z	Standard deviation	Arithmetic mean	Variables
Normal distribution	0.998	0.393	475.14	88035.80	Number of electronic cards
Normal distribution	0.344	0.937	6.67	46.20	Number of ATMs
Normal distribution	0.214	1.057	0.09	0.84	Price per share
Normal distribution	0.214	1.057	111.80	202000	Market value of shares

Source: Prepared by the researcher based on the results of the SPSS analysis.

From the table, we notice that all the significance values of the Kolmogorov-Smirnov Z test are greater than the significance level (0.05), which means that the data of the variables are normally distributed in the Development Bank. International.

3-1Bank of Baghdad

Table (7) shows the description and test of the normal distribution of the study variables for the Bank of Baghdad.

decision	p-value	Kolmogorov-Smirnov Z	Standard deviation	Arithmetic mean	Variables
Normal distribution	0.709	0.701	329.96	10651.80	Number of electronic cards
Normal distribution	0.983	0.463	1.10	58.00	Number of ATMs
Normal distribution	0.963	0.501	0.31	0.500	Price per share
Normal distribution	0.916	0.556	771.84	132000	Market value of shares

Source: Prepared by the researcher based on the results of the SPSS analysis.

From Table (7), we note that all the significance values of the Kolmogorov-Smirnov Z test are greater than the significance level (0.05), which means that the data of the variables are distributed normally in the Bank of Baghdad.

4-1Gulf Bank

Table (8) shows the description and test of the normal distribution of the study variables for Gulf Bank.

decision	p-value	Kolmogorov-Smirnov Z	Standard deviation	Arithmetic mean	Variables
Normal distribution	0.998	0.391	21.04	2939.00	Number of electronic cards
Normal distribution	0.967	0.495	2.61	34.40	Number of ATMs
Normal distribution	0.214	1.057	0.08	0.14	Price per share
Normal distribution	0.593	0.771	32.13	60600.0	Market value of shares

Source: Prepared by the researcher based on the results of the SPSS analysis.

From the table, we notice that all the significance values of the Kolmogorov-Smirnov Z test are greater than the significance level (0.05), which means that the data of the variables are distributed normally in the Gulf Bank.

5-1Ashur Bank

Table (9) shows the description and test of the normal distribution of the study variables for Ashur Bank.

decision	p-value	Kolmogorov-Smirnov Z	Standard deviation	Arithmetic mean	Variables
Normal distribution	0.986	0.453	73.27	11705.20	Number of electronic cards
Normal distribution	0.998	0.39	1.54	32.40	Number of ATMs



Normal distribution	0.577	0.78	0.09	0.26	Price per share
Normal distribution	0.793	0.650	21.09	74500.00	Market value of shares

Source: Prepared by the researcher based on the results of the SPSS analysis

From the table, we notice that all the significance values of the Kolmogorov-Smirnov Z test are greater than the significance level (0.05), which means that the data of the variables are distributed normally in the Ashur Bank.

6-1 Middle East Bank

Table (10) shows the description and test of the normal distribution of the study variables for the Bank of the East. Middle East

decision	p-value	Kolmogorov-Smirnov Z	Standard deviation	Arithmetic mean	Variables
Normal distribution	0.771	0.663	14.58	1737.40	Number of electronic cards
Normal distribution	0.996	0.412	1.13	42.40	Number of ATMs
Normal distribution	0.577	0.780	0.05	0.16	Price per share
Normal distribution	0.803	0.643	25.56	45000.00	Market value of shares

Source: Prepared by the researcher based on the results of the SPSS analysis.

From the table, we notice that all the significance values of the Kolmogorov-Smirnov Z test are greater than the significance level (0.05), which means that the data of the variables are normally distributed in the East Bank. Middle East

Third: Simple linear correlation

Linear correlation between the number of electronic cards and the market value of stocks:

Table (11) The correlation between the number of electronic cards and the market value of shares

Test result	Relationship direction	p-value	Correlation coefficient	The bank
Not significant	My expulsion	0.074	0.841	National Bank of Iraq
Not significant	My expulsion	0.477	0.424	International Development Bank
Not significant	reverse	0.585	-0.332	Bank of Baghdad
Not significant	My expulsion	0.632	0.293	Gulf Bank
Not significant	reverse	0.910	-0.071	Ashur Bank
Not significant	reverse	0.457	-0.441	Middle East Bank

Source: Prepared by the researcher based on the results of the SPSS analysis

The correlation is significant at a significance level of (0.05)

From Table (11), we note that there is no statistically significant correlation between the number of electronic cards and the market value of shares for all banks, as all p- values were greater than the significance level (0.05.)

Linear correlation between the number of ATMs and the market value of stocks:

Table (12) shows the correlation between the number of ATMs and the market value of stocks.

Test result	Relationship direction	p-value	Correlation coefficient	The bank
Not significant	My expulsion	0.489	0.414	National Bank of Iraq
Dal	reverse	0.000	-0.996*	International Development Bank
Not significant	My expulsion	0.307	0.578	Bank of Baghdad
Not significant	reverse	0.366	-0.523	Gulf Bank
Not significant	My expulsion	0.270	0.614	Ashur Bank
Not significant	reverse	0.290	-0.595	Middle East Bank



Source: Prepared by the researcher based on the results of the SPSS analysis.

*: The correlation is significant at a significance level of (0.05).

From Table (12), we note that there is no statistically significant correlation between the number of Devices The cashier The mechanism with the market value of shares for all banks except the Development Bank , where all p-values were greater than the significance level (0.05), while the Development Bank's p- value reached (0.000 (which is smaller than the significance level (0.05), which means that there is a significant correlation between the number of Devices The cashier The mechanism with the market value of shares in the Development Bank, as the value of the correlation coefficient reached (0.996), which is a negative value, meaning that the relationship will be inverse between the number Devices The cashier Automated with market value of shares.

Hypothesis President First : There relationship Statistically significant association between The spread of electronic payment methods and the market value of the share. And emerged from Hypothesis President First Hypotheses Sub Next:

1. To test the first sub-hypothesis arising from the first main hypothesis, which states: There is relationship correlation same indication Statistics Morale between Increase in the number of electronic cards And the value Market share.

Table (13) shows the simple linear correlation with the t- test for the relationship between the number of Cards Electronic with Value Market share

Significance	value (5%)t	Degree of freedom	t Calculated value	Correlation coefficient value
Dal	2.57	5	4.53	0.65

Source: Prepared by the researcher based on the results of the SPSS analysis.

From Table (13) we notice:

t value was (4.53), which is greater than its tabular value at a significance level of (0.05) and a degree of freedom of (5), which is (2.57). This means that there is a relationship. correlation same indication Morale between Increase in the number of electronic cards with Value The market value of the stock reached (0.65), which is a positive value. This means that the overall relationship between the number of electronic cards and Value Market is direct.

2. To test the second sub-hypothesis arising from the first main hypothesis, which states: There is: relationship correlation same indication Statistics Morale between Increased spread of the number Devices The cashier The robot with Value Market share.

Table (14) shows the simple linear correlation with the t- test for the relationship between the number of Devices The cashier The robot with Value Market share

Significance	value (5%)t	Degree of freedom	t Calculated value	Correlation coefficient value
Not significant	2.57	5	1.60	0.29

Source: Prepared by the researcher based on the results of the SPSS analysis.

From Table (14) we notice:

t value was (1.60), which is smaller than its tabular value at a significance level of (0.05) and a degree of freedom of (5), which is (2.57). This means that there is no relationship. correlation same indication Statistics The number of ATMs was correlated with the market value of the banks' shares in the research sample. The correlation coefficient value was (0.29), which is a positive value.

Fourth: Simple linear regression

1. Existence impact With indication Morale For number Cards Electronic in Value Stock market.

Table (15) Effect of number Cards Electronic in Value Stock market

Significance	F Calculated value	R ² value	test t-for test B	B value	Constant value	Banks
No effect	7.24	0.71	2.69	0.84	113909	National Bank of



						Iraq
No effect	0.66	0.18	0.81	0.42	201122	International Development Bank
No effect	0.37	0.11	0.61	-0.33	214723	Bank of Baghdad
No effect	0.28	0.09	0.53	0.29	47452	Gulf Bank
No effect	0.02	0.01	0.12	-0.07	76893	Ashur Bank
No effect	0.73	0.20	0.85	-0.44	58438	Middle East Bank

F value at significance level (0.05) and degree of freedom (4.1) = 7.71

Tabular t value at significance level (0.05) and degree of freedom (4) = 2.78

The table is the work of the researcher based on the results of the SPSS program.

From Table (15) we notice:

1. The Bank Al-Ahly Iraqi : The calculated F value was (7.24), which is smaller than its value. Tabular when level Significance (0.05) means that there is no statistically significant effect . For number Cards Electronic in Value Market For the stock The bank , and the regression equation was as follows:

$$Y1 = 113909 + 0.84 X1$$

Whereas:

Y1 : represents the value Market For the stock

X1 : represents the number Cards Electronic

2. Bank Development International : The calculated F value was (0.66), which is smaller than its value. Tabular when level Significance (0.05) means there is no significant effect . indication Statistics Morale For number Cards Electronic in Value Market For the bank's stock , the regression equation was as follows:

$$Y1 = 201122 + 0.42 X1$$

3. Bank Baghdad : The calculated F value was (0.37), which is smaller than its value. Tabular when level Significance (0.05) means there is no significant effect . indication Statistics Morale For number Cards Electronic in Value Market For the stock The bank , and the regression equation was as follows:

$$Y1 = 214723 - 0.33 X1$$

4. Bank Gulf : The calculated F value was (0.28), which is smaller than its value. Tabular when level Significance (0.05) means there is no significant effect . indication Statistics Morale For number Cards Electronic in Value Market For the stock The bank , and the regression equation was as follows:

$$Y1 = 47452 + 0.29 X1$$

5. Bank Ashur International : The calculated F value was (0.02), which is smaller than its value. Tabular when level Significance (0.05) means there is no significant effect . indication Statistics Morale For number Cards Electronic in Value Market For stocks The bank , and the regression equation was as follows:

$$Y1 = 76893 - 0.07 X1$$

6. Bank the East Middle : The calculated F value was (0.73), which is smaller than its value. Tabular when level Significance (0.05) means there is no significant effect . indication Statistics Morale For number Cards Electronic in Value Market For stocks The bank , and the regression equation was as follows:

$$Y1 = 58438 - 0.44 X1$$

2. Existence impact With indication Morale For number ATMs in Value Market share.

Table (16) shows the effect of the number Devices The cashier The robot in Value Market share

Significance	Calculated valueF	R² value	test t-for B test	B value	Constant value	Banks
No effect	0.62	0.17	0.79	0.41	135877	National Bank of Iraq
There is an effect	386.32	0.99	19.66	-0.99	202771	International Development Bank
No effect	1.51	0.34	1.23	0.58	-102436	Bank of Baghdad
No effect	1.13	0.27	1.06	-0.52	282176	Gulf Bank
No effect	1.82	0.38	1.35	0.61	47243	Ashur Bank
No effect	1.65	0.35	1.28	-0.60	102263	Middle East Bank

F value at significance level (0.05) and degree of freedom (4.1) = 7.71



Tabular t value at significance level (0.05) and degree of freedom (4) = 2.78

The table is the work of the researcher based on the results of the SPSS program.

From Table (16) we notice:

1. The Bank Al-Ahly Iraqi : The calculated F value was (0.62), which is smaller than its value. Tabular when level Significance (0.05) means there is no significant effect . indication Statistics Morale For the number of ATMs in Value Market For the stock The bank , and the regression equation was as follows:

$$Y1 = 135877 + 0.41 X2$$

Whereas:

X2 : represents the number of ATMs

2. Bank Development International : The calculated F value was (386.32), which is greater than its value. Tabular when level Significance (0.05) means the presence of impact With indication Statistics Morale For number Devices The cashier The robot in Value Market For the bank's share, And since that signal Factor Beta Negative this It means Ban Impact Reverse (relationship) (reverse) , And it reached value Factor Selection (0.99) and this It means Ban (99 %) of Changes The recipient in Value Market For the bank's share Its interpretation from during Increased spread of the number Devices The cashier The robot And I reached value Factor Beta (0.99-) is value Positive Function where I reached value t Calculated It has (19.66) and it is greater from Its value Tabular when level Significance (0.05) and this It means when changing lonliness one in number Devices The cashier The robot will He is there decrease By (99 %) in Value Market For the stock, But equation Slope So it was In shape the next:

$$Y1 = 202771 - 0.99 X2$$

3. Bank Baghdad : The calculated F value was (1.51), which is smaller than its value. Tabular when level Significance (0.05) means there is no significant effect . indication Statistics Morale For the number of ATMs in Value Market For the bank's stock , the regression equation was as follows:

$$Y1 = -102436 + 0.58 X2$$

4. Bank Gulf : The calculated F value was (1.13), which is smaller than its value. Tabular when level Significance (0.05) means there is no significant effect . indication Statistics Morale For the number of ATMs in Value Market For the bank's stock , the regression equation was as follows:

$$Y1 = 282176 - 0.52 X2$$

5. Bank Ashur : The calculated F value was (1.82), which is smaller than its value. Tabular when level Significance (0.05) means there is no significant effect . indication Statistics Morale For the number of ATMs in Value Market For the bank's stock , the regression equation was as follows:

$$Y1 = 47243 + 0.61 X2$$

6. Bank the East Middle : The calculated F value was (1.65), which is smaller than its value. Tabular when level Significance (0.05) means there is no significant effect . indication Statistics Morale For the number of ATMs in Value Market For the bank's stock , the regression equation was as follows:

$$Y1 = 102263 - 0.60 X2$$

The third main hypothesis : There is a statistically significant effect of the spread of electronic payment methods in all their dimensions on market value.

Table (17) shows

Significance	F Calculated value	R ² value	test t- for test	valueB	Constant value	independent variable	Dependent variable
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			B				
having an impact	16.04	0.54	5.20	0.68	47120.40	electronic cards	Value Market
			2.62	0.34		number Devices The cashier The robot	

F value at significance level (0.05) and degree of freedom (3.2) = 9.55

t- value at significance level (0.05) and degree of freedom (5) = 2.57

The table is the work of the researcher based on the results of the SPSS program.

According to Table (17), the calculated F value reached (16.04), which is greater than its tabular value at a significance level of (0.05) and a degree of freedom of (3.2), which is (9.55). This means that there is a statistically significant effect of the number of electronic cards and the number of ATMs combined on the market value of the stock . Since the sign of the beta coefficient is positive for both the number of electronic cards and the number of ATMs, the relationship will be directly proportional between them and the market value of the stock . The value of the determination coefficient reached (0.54), which means that (54%) of the changes in the market value of the stock can be explained by the spread of the number of electronic cards and the number of ATMs. The value of the beta coefficient reached (0.68) for the number of electronic cards, which is a positive and significant value, as the calculated t value for it reached (5.20), which is greater than its tabular value at a significance level of (0.05). This means that when changing one unit in the number of electronic cards, there will be an increase of (68%) in the market value with the presence of a variable The number of ATMs, as the value of the beta coefficient reached (0.34) for the number of ATMs, which is a positive and significant value, as the calculated t value for it reached (2.62), which is greater than its tabular value at a significance level of (0.05). This means that when changing one unit in the number of ATMs, there will be an increase of (34%) in the market value with the presence of the variable of the number of electronic cards. As for the regression equation, it was as follows:

$$Y = 47120.40 + 0.68 X1 + 0.34 X2$$

Conclusions and recommendations

Conclusions

1. The adoption of electronic payment methods greatly helps in reducing the cash liquidity problems in the Iraqi financial and banking system and makes settlement operations more flexible.
2. Expanding the spread of electronic payment methods contributes to increasing confidence in the formal financial and banking system, and enhancing the transparency of financial transactions, which positively reflects on economic targets.
3. The growth in the number of electronic cards for most of the banks in the research sample, and their decline in 2020, which may be due to the effects of the Corona pandemic, until most banks, with the exception of Ashur Bank, have resumed the number of cards they have after 2020.
4. ATMs in Iraq has increased for all banks in the research sample due to the policies of the Central Bank and the salary localization project, which has increased citizens' use of electronic cards and the need to spread outlets providing ATM services.
5. The results of the statistical analysis proved that there is a statistically significant effect of the number of electronic cards and the number of ATMs combined on the market value of the stock.
6. There is no statistically significant correlation between the number of ATMs and the market value of the banks' shares in the research sample.
7. There is a significant correlation between the increase in the number of electronic cards and the market value of the stock.

RECOMMENDATIONS

1. Banks should intensify financial education campaigns to increase citizens' banking awareness of the importance of electronic payment methods in daily transactions and to avoid carrying cash.
2. Deploying the largest possible number of ATMs in different geographical locations to meet the needs and desires of the customers dealing with and targeted, providing them with comfort and speed, which will positively reflect on the use of these devices.



3. The necessity of studying the satisfaction of bank customers on an ongoing basis, which will positively reflect on the level of quality of electronic payment services, their profitability, and consequently their market value.
4. their profitability should focus on improving their own electronic systems and training their employees to use them efficiently, effectively and safely.
5. We recommend that banks encourage and promote electronic payment and salary settlement services for non-governmental organizations with the aim of adopting electronic payment services in making their payments
6. Supporting and encouraging merchants to use electronic payments and electronic teller machines, through exemptions and attractive offers, and educating citizens on how to use them

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