The Impact of Changing the Exchange Rate of the Iraqi Currency on the Value of Trading Stocks in the Iraqi Stock Market (an Applied Study in the Iraqi Private Banking Sectors for the Period 2019-2021)

Zaid Raad Younis Al-Sammak[1]

Abstract

The study aimed to know the impact of fluctuations in the exchange rate of the Iraqi dinar against the US dollar during the period from 2019-2021, and to identify the nature of the relationship between changes in the exchange rate of the Iraqi dinar against the dollar and stock trading in the Iraqi market, through financial and statistical analysis of bank stock trading bulletins, the study sample. The descriptive approach was used in the theoretical side of the study, and the analytical approach in the applied side of the study. The results showed that there is a statistically significant correlation between the exchange rate and the study variables (share value and stock return), and that there is a direct relationship between the rise in the exchange rate of the US dollar and the study variables in the stock market. Iraqi stock market. The study recommended the need for the bank to maintain a large reserve of foreign currencies to maintain the stability of the Iraqi dinar, and to adopt inferential mathematical relationships as a means of estimating the variables of the study in the short term, as well as encouraging foreign companies to invest in the Iraqi market by providing a safe environment that guarantees the flow of capital to Iraq.

Keywords: *exchange rate, value of trading stocks, stock market, banking sectors.*

Introduction

Over the past few years, interest has increased significantly in mobilizing and mobilizing foreign and local savings and directing them towards the most profitable investment channels, as the development of the Arab financial markets, including the Iraqi ones, has been accompanied by taking measures to hedge against the challenges resulting from the instability of the stock markets, which directly affects the results of companies' businesses and in a way. It is indirect on the financial performance of financial markets and their basic management, of which stocks are one of the most important tools. The stock market is considered a contributing part of economies, as it follows the redistribution of financial resources between different economic activities, and explains the performance of the stock market and the economic condition of the country. The rise in stocks is a positive indicator of economic activity and their decline is a negative indicator, and the reason for the rise and fall in stocks is due to fluctuations in indicators market. The most important of these fluctuations that result from the failure to achieve monetary balance are exchange rate fluctuations because of their effects on the performance of financial markets, as the exchange rate is one of the issues that receives

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[1] University of Mosul / Iraq, Email: zaidraadalsammak@gmail.com

attention from countries in general and oil in particular, and the reason is that the exchange rate plays an important and influential role in the economy. The local currency has a large and influential role in the financial markets, and the reason is that one of the most important investment requirements is the stability of currency exchange rates, and avoiding fluctuations in prices that affect the economy as a whole, and since the exchange rate of the local currency against foreign currencies is one of the most important fluctuations that has received great importance among analysts. As one of the external factors affecting the stock market, this study came to focus on the impact of the change in the Iraqi currency exchange rate on stock trading in the Iraqi stock market. Keywords (Iraqi currency, exchange rate, stocks, financial markets, securities).

The First Axis: The General Framework of the Study

First: The Problem of the Study

The phenomenon of exchange rate volatility is one of the most important obstacles facing investors and economic and financial institutions of all kinds, as Iraq suffers from changes in the exchange rate of the local currency, and these unexpected changes in the exchange rate will lead to losses in the activity of institutions that are not taken into account, and disrupt the most important goals. Drawn, as the decline in the exchange rate of the Iraqi dinar against the US dollar during the study period was reflected in the economic variables in Iraq, as the prices of goods and services rose, and per capita income decreased as a result of the weak purchasing power of the Iraqi dinar, and Iraq's markets suffered from wide fluctuations during the same period, and this is due to the instability of the local currency exchange rates. The problem of the study lies in the fact that the fluctuation of the exchange rate of the Iraqi dinar affects the trading of bank shares in the study sample, and therefore the instability of the exchange rate will reduce investors' interest in investing in bank shares. Therefore, the problem is mainly focused on answering the main question. (What is the impact of changing the exchange rate of the Iraqi dinar on the shares of banks listed on the Iraqi Stock Exchange? This question leads us to the following questions.

1- What is the type of relationship between the exchange rate and the trading value of stocks in the Iraqi Stock Exchange.
2- What is the type of relationship between the exchange rate and stock return on the Iraqi Stock Exchange.
3- Does the change in the exchange rate of the Iraqi dinar against the US dollar affect the trading of shares of banks listed on the Iraqi Stock Exchange.

Second: The Aim of the Study

1- Knowing the impact that fluctuations in the exchange rate of the Iraqi dinar against the dollar have during the study period on one of the most important economic sectors in Iraq, which is the banking sector.
2- Identify the nature and direction of the relationship between fluctuations in the exchange rate of the Iraqi dinar against the US dollar and the trading of shares of the banks sampled in the study and listed in the Iraqi market.
3- Analyzing the paths of exchange rates, the value of stock trading and stock returns during the study period, in order to determine the behavior of fluctuations in exchange rates and their impact on the trading of bank shares in the Iraqi market.

Third: The Importance of the Study

The importance of the study lies in shedding light on one of the most important macroeconomic variables, which is the exchange rate, which is the main link between the local economy and the international economy. Since exchange rate fluctuations leave an inevitable impact on a country's economy, whether in its internal or external transactions, therefore, studying the impact of exchange rate fluctuations on macroeconomic variables is extremely important for an economy searching for internal and external balance, as well as it plays a major role in the growth of financial markets. The importance of the exchange rate also emerges from the fact that it attempts to find a relationship between the fluctuation in the exchange rate of the Iraqi dinar against the US dollar and the trading of bank shares listed in the Iraqi Stock Exchange, while clarifying whether stability in the exchange rate will lead to increased confidence and dealing in securities in the Iraqi market by the investor.

Fourth: The Study Hypothesis

The study is based on the main hypothesis that ((There is a relationship and a statistically significant effect between fluctuations in the exchange rate and the trading of stocks in the Iraqi Stock Exchange in all its dimensions)). Two sub-hypotheses branch out from it:

1- There is a statistically significant relationship and impact between fluctuations in the exchange rate and the trading value of stocks.
2- There is a statistically significant relationship and impact between fluctuations in the exchange rate and the return of traded stocks.

Fifth: Study Methodology

The researcher relied on the descriptive and analytical approach, because it is compatible with the study in collecting and analyzing data, as the descriptive approach was adopted in the theoretical side of the study, and the analytical approach was adopted in the applied side of it.

Sixth: Limitations of the Study

1- Temporal limits: The study extends from January 2019 until December 2021, using (12) quarterly views of the stock trading bulletins of the banks sampled in the study and listed in the Iraqi market, and exchange rate bulletins taken from the Central Bank of Iraq.
2- Spatial boundaries: It includes the State of Iraq only, represented by the Iraqi Stock Exchange.

Seventh: Study Population

The Iraq Stock Exchange was chosen as a research community for the study, relying on the private banks included in it as a sample for the study, which numbered (10) banks, to demonstrate the impact of changing the exchange rate of the Iraqi dinar on the trading of their shares.

The Second Section: The Theoretical Framework of the Study

The First Requirement: What is the Exchange Rate

First: The Concept of the Exchange Rate

The exchange rate is one of the important concepts in the financial and economic world

because the value of the currency has a significant impact on financial and economic operations, whether international or local. Money plays the role of an intermediary in internal and external commercial transactions, but there are clear and large differences between external payments in foreign currency and internal payments in local currency. Settlement of payments and international transactions requires the existence of a currency standard and a settlement tool. Purchasing a commodity from a country is not paid for in the local currency, but rather knowing the ratio of units in the local currency to foreign currencies. In economic literature, this ratio is called the "exchange rate" (Mido, 2016). : 8). The exchange rate is defined as "the number of units of foreign exchange equal to one unit of local currency" (Adeniji, 2013: 5). It is also defined as "the price of one unit of foreign currency denominated in a number of units of the national currency" (Eichenbaum, 2017: 115). It is also known as "the ratio of exchange of two currencies, or the price of one currency for another currency, as one of the two currencies is considered a commodity and the other is considered its price" (Steh, 2022: 2)

Second: Exchange Rate Functions

1- Standard function: It is the link between local prices and international prices. Through the exchange rate, international prices are expressed in the local currency, and the national product compares local prices with international prices through the exchange rate.
2- Developmental function: represented by motivating the producer to increase and develop his exports in the event that the producer obtains profitable returns, and in the event that imported products are available at a price lower than what is produced at home, this matter leads to disrupting the branches of this industry, dispensing with them and compensating them with imports, because the import price Lower than local price.
3- Distributive function: It is represented in the case of raising the value of the country's currency, and this makes the country pay more for its imports in a ratio equal to the rate of raising the value of that country's currency, and thus increasing the foreign currencies it obtains. However, in the event that that country reduces the value of its currency, this leads to Increasing the foreign currencies he obtains in exchange for his exports to other countries (Al-Shammari and Hamza, 2015: 274).

Third: Characteristics of the Exchange Rate

1- Arbitration: It means buying the currency from a specific place where it is cheap and selling it in another place where its price is higher with the intention of achieving profits. This leads to achieving a balance at the exchange rate in the financial market, and it is divided into direct and indirect arbitration processes (Hussein and Noureddine, 2017: 13).

* Direct arbitrage operations: This process is generated as a result of comparing the price of one currency in terms of another currency in two different financial centers.
* Indirect arbitration operations: This type of operation appears as a result of the presence of three currencies, and one of these currencies is not taken in terms of one of the other two currencies, but rather taken in terms of a second currency (Hajira, 2012: 38).

2- Speculation: Speculation is usually in order to achieve profit, either by rising or falling prices. Speculators achieve profit by predicting changes in the exchange rates of various currencies in the future, and the futures market is a means of implementing their operations.
3- Hedging: This is done by resorting to forward exchange operations, in order to avoid the risks resulting from fluctuations in the exchange rate (Zian, 2013: 22).

Fourth: The Importance of the Exchange Rate

The exchange rate contributes to achieving macroeconomic goals, which are external and internal economic balance, and its importance is highlighted through the following:

1- The external balance, which is represented by the balance of payments balance, which shows all of the country's trade exchanges.
2- Internal balance, which is represented by the stability of local prices while achieving a level of economic growth (Salma, 2015: 13).
3- The exchange rate can be used as an indicator of a country's competitiveness and therefore of the balance of payments, as it represents prices and costs inside or outside the country (Salim and Narges, 2018: 4).
4- The exchange rate is important because it affects the relative prices of national goods compared to foreign goods (Bin Khatam, 2016: 24).

Fifth: Forms of the Exchange Rate

1- The nominal exchange rate: It is the number of units of the local currency that are paid to buy one unit of the foreign currency. The nominal exchange rate on the currency is determined according to the forces of supply and demand in the exchange market and at a specific moment in time (Taha, 2017: 16). It is divided into:

* The official price: It is the price that is determined by the monetary authority represented by the Central Bank, that is, the internationally recognized price that is applied in various international exchanges and commercial deals.
* Parallel price: It is the price whose value is determined in the parallel exchange market and in which informal economic transactions take place, and they are called parallel black markets (Mosleh, 2019: 14).

2- The real exchange rate: It is the price that gives the local currency its real value. It expresses the number of units of foreign goods needed to buy one unit of local goods. The real exchange rate is an indicator of the competitive strength of the local currency, and it is the indicator that combines the variation in exchange rates. Inflation and changes in the nominal exchange rate (Zahra, 2020: 6).
3- The effective nominal exchange rate: It is defined as "the number of units of local currency actually paid or received in exchange for an international transaction worth one unit, including duties, customs tariffs, and financial subsidies" (Baaloul, 2018: 8). The effective exchange rate expresses the index that measures the arithmetic average of the exchange rate of a particular country's currency against other currencies in a certain period of time, and is equal to the average of several bilateral exchange rates (Oliveira & Castro, 2011: 2).
4- The real effective exchange rate: It is the average of several bilateral exchange rates. In order for this indicator to be an appropriate indication of the country's competitiveness abroad, it must be subject to correction by removing the effect of relative price changes, taking into account the difference between the weighted average inflation rates and foreign exchange rate and the inflation rate of a country (Al-Nahal, 2016: 30-31).
5- The equilibrium exchange rate: The equilibrium exchange rate is defined as "the price that leads to a permanent equilibrium in the balance of payments, when the economy grows at a sufficient and natural rate," and it is also defined as "the price determined by the forces of demand and supply when the value offered equals the value requested in a transaction."

Regardless of the effect of speculation and abnormal capital movement, the equilibrium exchange rate is the equilibrium for any commodity that is traded in the free market with perfect competition (Baaloul, 2018: 10).

6- Cross exchange rate: It represents the exchange rate of a foreign currency against the exchange rate of a second foreign currency in terms of a third local currency, and it arises due to the existence of interest from the exchange between currencies (Musleh, 2019: 14-15).

7- The urgent exchange rate: The urgent exchange rate is defined as the foreign exchange rate that is used in buying and selling foreign currencies in exchange for immediate delivery, which usually occurs within two business days (Mido, 2016: 12).

8- Forward exchange rate: The forward exchange rate is defined as the exchange rate on the basis of which a specific currency is bought or sold on the date of concluding the contract, and the price of the two currencies that are the subject of the transaction and the date of delivery are determined at the same moment of concluding the contract (Zarari, 2016: 3-4).

The Second Requirement: The Nature of Financial Markets

First: The Concept of Financial Markets

The idea of the financial market is based on the classical theory of Adam Smith, which is based on the division of labor and specialization. It works within specialization in the field of mobilizing and developing capital and directing it towards efficient economic activities. It varies according to its duration, the nature of the financial instruments traded in it, and the method of executing transactions. Therefore, financial institutions include money in short-term transactions, called the money market, and stocks and bonds in long-term transactions, called the capital market (Kharbous et al., 2013: 12). Financial markets are defined as "the mechanism that runs and enables people to issue and trade medium- and long-term investment instruments at low cost and at prices that reflect the efficient market hypothesis" (Balaam and Polgriblat, 2021: 4). It is also known as "the organized place through which buyers and sellers of securities are brought together, to complete the trading process between them with complete transparency and in accordance with specific controls in the law (Ahmed, 2017: 19).

Second: The Importance of Financial Markets

The Importance of these Markets is Embodied in the Following Points

1- An accurate indicator of the confidence existing in the economy of any country. Through these markets, the movements of the economy can be recorded with high accuracy to reflect the recovery, recession, or growth it is going through.

2- It plays a major role in implementing the state's monetary policy.

3- Monitoring and organizing the issuance of securities and those dealing with them in a way that ensures the safety and speed of this dealing, and thus providing a guarantee for small savers that reflects positively on the economic situation in general (Al-Zubaidi, 2014: 46).

4- Fairness in determining stock prices.

5- It represents the link between sectors that have financial surpluses and wish to invest them and sectors that suffer from financial deficits and lack liquidity to finance their investments (Madura, 2012: 3).

6- It is an important source of financing that achieves targeted growth rates in many economic sectors, by attracting foreign investments as a result of financial liberalization and the information revolution, as well as economic globalization that results from the removal of

restrictions (Anthony, 2011: 123).

Third: Types of Financial Markets

1- The money market: It is a short-term investment market in which short-term securities are traded, through commercial banks, brokers, and some government agencies that deal in securities. Here the security is considered an instrument of debt, and gives its holder the right to recover the amount that was previously paid. Lend it to another party. The maturity period of the security usually does not exceed one year, and it can be recovered with minimal or no loss due to the guarantee of the repayment process. The money market is divided into several submarkets.

A - The discount market: In this market, short-term financial instruments such as treasury bills and commercial papers are discounted, and the Central Bank presides over the sessions in this market, because it is considered, on the one hand, the bank of banks, and on the other hand, the main active intervener in this market (Khairan, 2017: 214- 215).

B- The collateral loan market: This branch of the money market specializes in dealing in loans with short-term guarantees, and this task is carried out by many institutions, including stock market brokers and commercial banks.

C- Loan call market: These sub-markets specialize in short-term loans that do not exceed seven days, and often for one or two days.

D- The acceptance market: It is one of the sub-markets of the money market that specializes in accepting remittances for the benefit of their beneficiaries (Al-Jameel: 2011: 124-125).

2- The capital market: These are the markets that are distinctly called long-term capital markets. Capital markets are known as "the place where the buyer and seller of financial assets meet," through administrative, legal, and financial procedures that represent the system by which the financial market operates. During it (Kenza, 2020: 12). It is also known as "the market that is concerned with long-term investments that cover a period of time exceeding one year and which are implemented, either in the form of issuances of long-term securities or in the form of direct long-term loans" (Al Touma, 2014: 16). The capital market is divided into two parts:

A- The present (spot) market: These are the markets in which long-term securities are traded, as receipt and delivery take place immediately, that is, at the time of concluding the deal (Zahra, 2020, 35). It is divided into three sections:

* Primary markets or issuance market: These are the markets in which securities are issued between banks and the investor, whether another bank or an investor, and the primary market specializes in issuing and selling the security for the first time (Mido, 2016: 65).

* Secondary markets: These are the markets in which securities are dealt with after they are issued in the primary market and distributed by investment banks, that is, securities are traded in buying and selling after their issuance in the primary market (Shendi, 2013: 62). It is divided into two parts:

- The organized market: It is the market that takes the form of a stock exchange and is called the stock exchange, as dealing in securities is of an official nature, and there is a specific place for trading in these securities, such as the London Stock Exchange (Zahra, 2020: 37).

- The unregulated market: These are the markets in which securities are dealt with, whether

they are registered in the regulated market or not, and this term is applied to transactions that take place outside the regulated market (Al-Masry, 2011: 7).

B - The third market: It is part of the parallel market, as this market consists of brokerage houses and those who are not members registered in the regulated market, and these houses have the right to trade securities registered in the regulated market (Taha, 2017: 8).

T - The fourth market: These are the markets in which businessmen and large investment institutions deal directly, buying and selling, without the mediation of securities dealers, in order to get rid of the commissions paid to brokers (Al-Shammari and Hamza, 2015, 237).

Fourth: Characteristics of Financial Markets

Financial markets have a set of characteristics that distinguish them from other markets.

1- It is a means of meeting between buyers and sellers without taking the physical location of the market into consideration
2- An increase in the volume of commercial transactions and exchanges related to foreign investment courses
3- The work is carried out by relying on international communications networks
4- It suffers from severe fluctuations as a result of the high degree of sensitivity in these markets due to speculation
5- It is a source of financing the national economy (Zahra, 2020: 41).

Fifth: The Main Pillars of the Financial Markets

The Financial Market Includes Three Main Pillars

1- Investors or (lenders): Lenders in the financial markets are considered an important source of funds, and this category includes institutions and individuals whose funds exceed their consumption needs, so they resort to the financial market to invest these funds either directly or through specialized commercial banks, and investors are interested in (Lenders) depends on several factors, the most important of which are the risk associated with the investment and the interest rate (Khairan, 2017: 218).
2- Exporters or (borrowers): who represent individuals, financial institutions, brokerage companies, and government agencies such as the central bank, and those in need of credit, as they borrow money from the money market, have a financial deficit, and want to spend more money than their cash income.
3- Brokers or agents: They represent the last pillar of the financial market, whose role is limited to the reconciliation process between the buyer and the seller. These intermediaries are usually companies or individuals, and brokerage institutions play an important role in serving buyers and sellers, as they help securities issuers to issue these securities. Papers, their disposal, and the execution of purchase orders (Musleh, 2019: 22-23).

Sixth: Securities traded in financial markets

The security represents the asset that is traded, bought and sold, in the financial market. It is the backbone of contemporary markets. It is a document or instrument that gives its holder the right to obtain specified or undetermined returns. It also guarantees the right to its owners to import the nominal value of the security at the end of the year. A certain period, or the right to obtain part of the corresponding financial assets under certain conditions, and the right to dispose of the security itself at any time, meaning that it is tradable by buying and selling (Adnan, 2013: 109). It is divided into:

1- Securities traded in the money market, including (treasury bills, commercial papers, bank bills, certificates of deposit and repurchase agreements).
2- Securities traded in capital markets, including (common stocks, preferred stocks, and bonds) (Kunduz, 2021: 25-26).

Seventh: Shares

It is a security that proves to its bearer the ownership of part of the capital of the institution or company that issued it, while enjoying all rights in the institution, and bearing all the burdens that result from its ownership. Among the rights enjoyed by shareholders are the right to distributed profits, the right to vote in the General Assembly, and the right to obtain the remaining value upon liquidation, which is part of the assets of joint-stock companies, and issuing and selling them to investors is one of the ways through which companies obtain the necessary funds. To finance the company's economic activities. Upon subscription, the subscriber becomes the owner of part of this project, and if the project is exposed to a loss, the subscriber may not be compensated, but in return he benefits from the profits that the project achieves after deducting the tax (Mahdi, 2021: 26). The stock is characterized by a number of characteristics, the most important of which are:

1- They are of equal value
2- The indivisibility of shares
3- In principle, it is based on equality in obligations and rights, whether it is a preferred or ordinary share
4- The tradability of the stock from one investor to another (Jannat and Boqtoush, 2020: 18).

* Sharing Values

1- Nominal value: This is the value of the share when it was first issued. It is less than the market value and is stipulated in the articles of association.
2- Book value: It is the value of the company's shares according to its accounting records.
3- Market value: It is the value of the stock that is traded in the financial markets. Market value is determined based on future expectations, the degree of information available to investors in the stock market, and the state of the economy (Hirschey, & John, 2010: 6).
4- Liquidation value: This is the value that the shareholder is expected to receive when the company is liquidated and all its obligations are paid in addition to the rights of preferred shareholders (Jannat and Baqtoush, 2020: 20).

The Third Axis: The Applied Framework (An Analytical Study of Exchange Rate Fluctuations on Stock Trading in the Iraqi Market)

The period from 2019-2021 witnessed changes in the exchange rate, as the Iraqi government reduced the exchange rate of the Iraqi dinar and raised the exchange rate of the US dollar for several reasons, including addressing the deficit in the balance of payments, stopping the use of foreign reserves, and saving the collapsed economic situation in Iraq, and these changes affected as well as trading stocks in the Iraq Stock Exchange. We will notice this through tables showing the trading of shares of the banks in the study sample in the Iraq Stock Exchange during the study period from 2019 to 2021.

The First Requirement: Analysis of Annual Trading Bulletins for Bank Shares Listed on the Iraq Stock Exchange

This can be proven through the following tables

Table No. (1) The Trading Value of Shares of the Banks in the Study Sample in the Iraqi Market Against the Exchange Rate for the Year 2019-2020.

s	Bank name	Trading value in 2019	Trading value in 2020	% change in trading value	Total trading value for the year 2019-2020	The percentage of each bank in the total trading value for the year 2019-2020	Exchange rate 2019	Exchange rate 2020	% change in exchange rate
1	Commercial Bank of Iraq	2,151,094,330.37	602,258,589.07	-72%	2,753,352,919.44	4.65%			
2	Bank of Baghdad	12,308,012,619.00	22,144,175,796.92	80%	34,452,188,415.92	58.16%			
3	Iraqi Islamic Bank	443,140,251.60	6,120,071,230.19	1281%	6,563,211,481.79	11.08%			
4	Iraqi Middle East of Iraq	2,128,369,164.34	792,277,017.92	-63%	2,920,646,182.26	4.93%			
5	Investment Bank of Iraq	2,288,635,102.25	404,113,355.98	-82%	2,692,748,458.23	4.55%	1196.233	1233.944	3.15%
6	National Bank of Iraq	522,277,532.00	1,972,760,859.78	278%	2,495,038,391.78	4.21%			
7	Sumer Commerical Bank	257,646,708.68	521,750,201.34	103%	779,396,910.02	1.32%			
8	Gulf Commercial Bank	2,065,265,902.58	689,192,298.19	-67%	2,754,458,200.77	4.65%			
9	Mosul Bank	653,862,903.43	234,368,873.60	-64%	888,231,777.03	1.50%			
10	United Bank for Investment	2,069,686,358.53	868,486,069.87	-58%	2,938,172,428.40	4.96%			
	Total	24,887,990,872.78	34,349,454,292.86	38%	59,237,445,165.64	100.00%			

Reference: Prepared by the Researcher based on Stock Trading Bulletins in the Iraq Stock Exchange for the Year 2019-2020.

The results in Table No. (1) showed thatthe total value of trading in bank shares in the study sample for the year (2019) amounted to (24,887,990,872.78) dinars when the average exchange rate was (1196.233) dinars per US dollar, while the total value of trading in shares in the year (2020) was (34,349,454,292.86) dinars when the exchange rate rose to (1233.944) dinars per US dollar, as the rate of change in the trading value in the year (2020) increased by (38%) from the year (2019), as a result of the decline in the exchange rate of the Iraqi dinar and the rise in the price The exchange rate of the US dollar, as the rate of change in the exchange rate in (2020) increased by (3.15%) over the year (2019), and we note that the Bank of Baghdad recorded the highest trading value in shares compared to the total trading value for the year (2019 and 2020), as it reached (58.16%) This indicates an increase in the pace of this bank's economic activity during the two years. As for the lowest trading value in shares compared to the total trading value for the years 2019 and 2020, it was the share of Sumer Commercial Bank, reaching (1.32%), and this indicates a decline in its economic and investment activity during These two years.

Table No. (2) The Trading Value of Shares of the Banks in the Study Sample in the Iraqi Market Against the Exchange Rate for the Year 2020-2021.

s	Bank name	Trading value in 2020	Trading value in 2021	% change in trading value	Total trading value for the year 2020-2021	The percentage of each bank in the total trading value for the year 2020-2021	Exchange rate 2020	Exchange rate 2021	% change in exchange rate
1	Commercial Bank of Iraq	602,258,589.07	12,873,751,543.78	2038%	13,476,010,132.85	7.13%			
2	Bank of Baghdad	22,144,175,796.92	46,593,355,587.54	110%	68,737,531,384.46	36.37%			
3	Iraqi Islamic Bank	6,120,071,230.19	3,942,258,606.84	-36%	10,062,329,837.03	5.32%			
4	Iraqi Middle East of Iraq	792,277,017.92	33,440,343,683.51	4121%	34,232,620,701.43	18.11%			
5	Investment Bank of Iraq	404,113,355.98	5,227,881,394.03	1194%	5,631,994,750.01	2.98%			
6	National Bank of Iraq	1,972,760,859.78	37,995,183,141.54	1826%	39,967,944,001.32	21.15%	1233.944	1474.055	19.46%
7	Sumer Commerical Bank	521,750,201.34	4,753,409,485.22	811%	5,275,159,686.56	2.79%			
8	Gulf Commercial Bank	689,192,298.19	4,055,869,987.96	488%	4,745,062,286.15	2.51%			
9	Mosul Bank	234,368,873.60	1,946,667,740.00	731%	2,181,036,613.60	1.15%			
10	United Bank for Investment	868,486,069.87	3,832,233,892.60	341%	4,700,719,962.47	2.49%			
	Total	34,349,454,292.86	154,660,955,063.02	350%	189,010,409,355.88	100.00%			

Reference: Prepared by the Researcher based on Stock Trading Bulletins in the Iraq Stock Exchange for the Year 2020-2021.

The results in Table No. (2) showed that the total value of trading in bank shares in the study sample for the year (2020) amounted to (34,349,454,292.86) dinars when the average exchange rate was (1233.944) dinars per US dollar, while the value of trading in shares in the year (2021) amounted to, (154,660,955,063.02) dinars when the exchange rate rose to (1474.055) dinars per US dollar, as the rate of change in the trading value in the year (2021) increased by (350%) from the year (2020), as a result of the decrease in the exchange rate of the Iraqi dinar and the increase in the exchange rate The US dollar increased at a high rate, as the rate of change in the exchange rate increased in the year (2021) by (19.46%) compared to the year (2020). We note that the Bank of Baghdad recorded the highest trading value in shares compared to the total trading value for the year (2020 and 2021), as it reached (36.37%), and this indicates a high rate of investment and economic activity for this bank during these two years. As for the lowest trading value in shares, compared to the total trading for the year (2020 and 2021) were the share of the Mosul Bank for Development and Investment, as it amounted to (1.15%), and this indicates a decline in its economic and investment activity during these two years. Through Table No. (1) and Table No. (2), we note that when the exchange rate of the US dollar rose and the exchange rate of the Iraqi dinar decreased during the study period, the trading value of shares of the banks sampled in the study and listed on the Iraqi Stock Exchange increased, and this indicates the existence of a (direct) relationship.) between the rise in the exchange rate of the US dollar and the value of stock trading for the banks in the study sample. There is an (inverse) relationship between the decline in the exchange rate of the Iraqi dinar and the value of stock trading for the banks in the study sample during the study period.

Table No. (3) Stock Returns for the Study Sample Banks in the Iraqi Market Versus the Exchange Rate for the Year 2019-2020.

s	Bank name	Closing price of 2019	Closing price of 2020	% change in closing price	Stock returns	Exchange rate 2019	Exchange rate 2020	% change in exchange rate
1	Commercial Bank of Iraq	0.44	0.45	0%	0.00			
2	Bank of Baghdad	0.29	0.36	22%	0.06			
3	Iraqi Islamic Bank	0.39	0.38	-3%	-0.01			
4	Iraqi Middle East of Iraq	0.10	0.11	12%	0.01			
5	Investment Bank of Iraq	0.24	0.24	-1%	0.00			
6	National Bank of Iraq	0.44	0.57	30%	0.13	1196.233	1233.944	3.15%
7	Sumer Commerical Bank	0.62	0.44	-29%	-0.18			
8	Gulf Commercial Bank	0.15	0.14	-12%	-0.02			
9	Mosul Bank	0.15	0.13	-12%	-0.02			
10	United Bank for Investment	0.05	0.13	156%	0.08			
	Total	0.288	0.294	1.97%	0.006			

Reference: Prepared by the Researcher based on Stock Trading Bulletins in the Iraq Stock Exchange for the Year 2019-2020.

The results in Table No. (3) showed that the average closing price in the year (2019) was (0.288), while the average closing price in the year (2020) was (0.294), meaning that there was an increase in the rate of change in the closing price by (1.97%).) for the previous year, and the average exchange rate in (2019) was (1,196,233) dinars per dollar, while the average exchange rate in (2020) was (1,233,944) dinars per dollar, and it can be noted that the total stock returns

of the banks in the study sample increased. By (0.006) compared to the previous year, as the highest return rate was recorded by the National Bank of Iraq, as it reached (0.133), and this indicates an increase in the investment and economic activity of these banks in this year. As for the lowest rate of return, it was recorded by the Bank of Sumer, as it reached (- 0.183) This indicates a decline in the economic and investment activity of these banks this year.

Table No. (4) Stock Returns for the Study Sample Banks in the Iraqi Market Versus the Exchange Rate for the Year 2020-2020.

s	Bank name	Closing price of 2020	Closing price of 2021	% change in closing price	Stock returns	Exchange rate 2020	Exchange rate 2021	% change in exchange rate
1	Commercial Bank of Iraq	0.45	0.60	34%	0.15			
2	Bank of Baghdad	0.36	0.73	104%	0.37			
3	Iraqi Islamic Bank	0.38	0.45	19%	0.07			
4	Iraqi Middle East of Iraq	0.11	0.20	86%	0.09			
5	Investment Bank of Iraq	0.24	0.27	14%	0.03			
6	National Bank of Iraq	0.57	1.18	106%	0.61	1233.944	1474.055	19.46%
7	Sumer Commerical Bank	0.44	0.35	-20%	-0.09			
8	Gulf Commercial Bank	0.14	0.18	33%	0.05			
9	Mosul Bank	0.13	0.17	26%	0.04			
10	United Bank for Investment	0.13	0.13	3%	0.00			
	Total	0.294	0.426	45.05%	0.132			

Reference: Prepared by the Researcher based on Stock Trading Bulletins in the Iraq Stock Exchange for the Year 2020-2021.

The results in Table No. (4) showed that the average closing price in the year (2020) was (0.294), while the average closing price in the year (2021) was (0.426), meaning that there was an increase in the rate of change in the closing price by (45.05%).) for the previous year, and the average exchange rate in (2020) was (1,233,944) dinars per dollar, while the average exchange rate in (2021) was (1,474,055) dinars per dollar, and it can be noted that the total stock returns of the banks in the study sample increased. By (0.132) compared to the previous year, as the highest return rate was recorded by the National Bank of Iraq, as it reached (0.606), and this indicates an increase in the economic and investment activity of these banks in this year. As for the lowest rate of return, it was recorded by the Bank of Sumer, as it reached (- 0.088), and this indicates a decline in the investment and economic activity of this bank in this year, and through Table (3) and Table (4) it can be said that when the exchange rate of the US dollar rose, the stock returns of the banks in the study sample that were listed on the Iraqi Stock Exchange rose, This indicates the existence of a (direct) relationship between the rise in the exchange rate and the stock return of the banks in the study sample, and an (inverse) relationship between the decline in the exchange rate of the Iraqi currency and the stock return of the banks in the study sample during the study period.

The Second Requirement: Statistical Analysis to Prove the Study Hypotheses

The researcher transcribed the data through the SPSS statistical program, and the following statistical tests were used

1- Kolmogorov-Smirnov test, to determine whether the probability distribution of the data represents a normal distribution or not

2- Correlation test, to ensure that there is a relationship between the exchange rate variable and

the variables (share value and return)
3- Regression analysis, to clarify the formula for the mathematical relationship between the exchange rate variable and the variables (share value and return)

First: The Normal Distribution Test: The majority of statistical analyzes are based on this test, including the correlation and regression analyzes used in the research. Without it, the statistical results cannot be relied upon to a high degree (because there is an immoderate trend in the data, which makes it biased in the direction it is skewed). This test is conducted to find out whether the data follows Normal distribution or not? This test can be conducted in different ways, including some that rely on a numerical scale such as the Kolmogorov-Smirnov Z test used in our current research, and some that rely on graphing methods. Table No. (5) shows the test results that were applied to the study variables:

Table No. (5) Normal Distribution Test (Kolmogorov-Smirnov Z Test) For the Study Variables.

Earnings per share	Trading value	Standard and result	The bank
0.836	1.216	Z value	Commercial Bank of Iraq
0.486	0.104	P value (significance level(	
Natural	Natural	The result	
0.881	0.638	Z value	Bank of Baghdad
0.420	0.811	P value (significance level(	
Natural	Natural	The result	
0.797	1.571	Z value	Iraqi Islamic Bank
0.549	0.014☆	P value (significance level(	
Natural	Abnormal	The result	
1.043	1.371	Z value	Middle East Bank
0.227	0.047☆	P value (significance level(	
Natural	Abnormal	The result	
0.617	1.131	Z value	Iraqi Investment Bank
0.842	0.155	P value (significance level(	
Natural	Natural	The result	
0.587	1.138	Z value	National Bank of Iraq
0.881	0.150	P value (significance level(	
Natural	Natural	The result	
1.049	1.498	Z value	Sumer Commercial Bank
0.221	0.022☆	P value (significance level(	
Natural	Abnormal	The result	
0.779	0.820	Z value	Gulf Commercial Bank
0.579	0.512	P value (significance level(	
Natural	Natural	The result	
0.866	0.877	Z value	Mosul Bank For development
0.441	0.425	P value (significance level(	
Natural	Natural	The result	
0.933	0.742	Z value	United Investment Bank
0.349	0.641	P value (significance level(	
Natural	Natural	The result	

Reference: Prepared by the Researcher Based on the Outputs of the SPSS Program

Table (5) shows that the value of the significance level of the variables test (Kolmogorov-Smirnov Z test) is greater than (0.05) in the vast majority of variables, and therefore the hypothesis that these variables follow a normal distribution is accepted, while the significance

level was less than (0.05).) for other variables marked with the symbol (☆), which indicates that these variables do not follow a normal distribution, and therefore the data for these variables cannot be relied upon except after converting them to a normal distribution, and this is what the researcher conducted before starting the correlation and regression analyses.

Second: Analyzing the Data to Test the Extent to which the Study Hypotheses have been Verified

The researcher conducted the analysis on all banks to find out whether there is a relationship and a significant effect of the exchange rate variable on the variables (share value and return) for the banking sector in general.

1- Correlation analysis: Correlation analysis was conducted to ensure the existence of a linear relationship between the exchange rate variable and the variables (share value and return), and the results were as shown in Table No. (6).

Table No. (6) Correlation Analysis of the Exchange Rate Variable and Variables (Share Value and Return) For Banks as a Whole.

The decision	Moral	Correlation coefficient	Dependent variable
Positive significant correlation	0.001	0.301**	Trading value
Positive significant correlation	0.014	0.224*	Earnings per share

Reference: Prepared By the Researcher Based on the Outputs of the SPSS Program.

From Table No. (6) we notice the presence of a positive linear correlation between the exchange rate variable and the variables (value and stock return) for banks as a whole, and this is a good preliminary indication of the existence of a positive and significant influence relationship.

2- Regression Analysis: Regression analysis was conducted to determine the form of mathematical relationships between the exchange rate variable and the variables (share value and return), and the results were as shown in Table No. (7)

Table No. (7) Results of Regression Analysis of the Exchange Rate Variable and Variables (Share Value and Return).

Earnings Per Share	Trading Value	The Test
6.261	16.886	F test for significance of linear model
0.014	0.000	Significance of F test
-0.052	-13661155050	Regression constant α
0.024	0.000	Significant regression constant
4.32395E-05	11866845.83	Regression coefficient β
0.0137	0.000	Significant regression coefficient

Reference: Prepared By the Researcher Based on the Outputs of the SPSS Program

Table No. (7) Shows the Following:

1- The (F) test is used to test the null hypothesis that (there is no significant effect of the

exchange rate variable on the variables (trading value, number of shares, stock return and number of transactions), meaning that all regression parameters are equal to zero except for the parameter that represents the limit Constant, and from observing the results of the statistical analysis, it is clear that the (F) values calculated for the total bank data and for all variables are highly significant, as the levels of significance were smaller than 0.05, which leads us to say that the linear model is appropriate to explain the relationship between the exchange rate and the rest of the dependent variables, and that the regression coefficients are real and vary. less than zero, and this was shown by the significance of the regression coefficients for all variables, as they were overall less than 0.05.

The above-mentioned results indicate the fulfillment of the main research hypothesis, which states (there is a relationship and a statistically significant effect between fluctuations in the exchange rate and stock trading in the Iraqi Stock Exchange in its dimensions), and the results also indicate the fulfillment of all sub-hypotheses to verify the existence of a relationship and effect between the price variable. Exchange and variables (trading value, stock return).

2- The regression equations that describe the mathematical relationships between the exchange rate and the variables (trading value and stock return) can be written as follows:

Trading value = 11866845.83 + 13661155050 **-** (exchange rate)

Which indicates that if there is a change in the independent variable (exchange rate) by one unit, the trading value will change by (11,866,845.83) units.

Equity return = 4.32395E-05 + 0.052 - (exchange rate)

Which indicates that if there is a change in the independent variable (exchange rate) by one unit, the stock return will change by (4.32395E-05) units.

Recommendations

1- The researcher recommends the necessity of adopting deduced mathematical relationships as a means of estimating variables (trading value, stock return) in the short term because there are many variable factors surrounding accounting work that cannot be controlled except in the short term.
2- The central bank must maintain large foreign currency reserves to maintain the stability of the local currency, which reflects the economic reality of that country.
3- Encouraging foreign companies to invest in the Iraqi market by providing a safe and suitable environment for them, in order to ensure a higher flow of foreign capital into Iraq
4- The investor must form an investment portfolio that contains a group of shares of economic sectors present in the Iraqi Stock Exchange and avoid investing in a specific type of stock in order to avoid loss
5- A complete database must be designed for companies that show their financial data and disclose that data that helps investors make the appropriate investment decision
6- Supporting banks listed on the Iraqi Stock Exchange by granting them additional privileges that allow them to avoid fluctuations in the exchange rate
7- Fixing the exchange rate of the Iraqi dinar against the US dollar because its volatility and instability will lead to a decrease in trading, as the exchange rate is closely linked to stock trading in the Iraqi market
8- Holding seminars and meetings to introduce the importance of investing in bank stocks in

the Iraqi market

9- The researcher recommends conducting similar studies on unstudied Iraqi banks so that the idea of the study becomes comprehensive for the Iraqi banking community, which gives a clearer character to the objectives of the study.

Conclusions

1- It was found that there are statistically significant correlations between the exchange rate variable and the variables (share value and return).

2- There is a statistically significant effect of the exchange rate variable and the stock trading value variable on the overall level of the banking sector, and the mathematical relationship formula that describes this effect is as follows:

Trading value = -13661155050 + 11866845.83 (exchange rate)

3- There is a statistically significant effect of the exchange rate variable and the stock return variable on the overall level of the banking sector, and the mathematical relationship formula that describes this effect is as follows:

Equity return = -0.052 + 4.32395E-05 (exchange rate)

4- The instability of prices leads to the spread of the phenomenon of global inflation in the values of currencies of countries with hard currencies, which is reflected in the prices of local goods linked to imports.

5- The decline in the exchange rate of the Iraqi dinar against the US dollar during the study period led to an increase in the value and stock returns of the banks in the study sample.

-6The researcher found that there is a direct relationship and impact between the rise in the exchange rate of the US dollar (and the trading value of stocks, and the stock return), and an inverse relationship between the decline in the exchange rate of the Iraqi dinar (and the trading value of stocks, and the stock return), for the bank shares in the study sample

7- The researcher concluded that the effect of the exchange rate on stock trading in the year 2019-2020 was very little. The reason is that the exchange rate was fixed and the change in it was very slight. As for the year 2020-2021, which is the year in which there was a significant rise in the exchange rate, this rise significantly affected the stock trading of the banks sampled in the study

8- The results of the financial analysis conducted by the researcher on the stock trading bulletins of the banks sampled in the study and listed on the Iraqi market confirmed that the trading value of stocks and the stock return) all increased when the exchange rate rose during the study period, and this indicates that there is a relationship and impact between the change in the exchange rate and... Variables (stock trading value, stock return).

9- Banks in the Iraq Stock Exchange constitute the largest portion of the market, in the absence of other sectors, which leads to reducing the opportunities available to diversify the financial portfolio.

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