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Measuring The Impact Of Dollar Exchange Rate Changes On Stock Trading; A Case Study Of The Iraqi Market For Securities For The Period

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ABSTRACT

The research dealt with the study of the effects of changes in exchange rates on the volume of trading in shares in the Iraqi Stock Exchange, and the standard analysis was used by the method (OLS, ARDL) in an attempt to search for non-false relationships between the variables studied through the stability and consistency of the type and strength of the relationship between the two methods. The research aims to identify the causes of exchange rate fluctuations and the knowledge and impact of those fluctuations on trading in shares of the Iraqi market for securities. Or the stability of the type and strength of the relationship between the variables studied, and the research suggests knowing the reasons for the changes taking place in the Iraqi market for securities in order to reduce the severe fluctuations in the volume of traded shares.

Keywords: Stock Trading Volume, Exchange Rate, Pseudo-Regression

INTRODUCTION

The exchange rate plays an important role in the economic activities of any country, and may affect the financial markets, as it is known, the exchange rate is a window or link between the local economy and the global economy, and therefore the research deals with the study of exchange rate fluctuations and its effects on the volume of stock trading in the Iraq Stock Exchange, The standard analysis method was used to identify the nature of the relationship between the researched variables, by comparing the results of the (OLS) method and (ARDL) which shows the constancy and stability of the inverse relationship, as the higher the exchange rates, this led to a decrease in the volume of trading in stocks, which means that the exchange rate is One of the most important leading variables in the fluctuations of the Iraqi stock market First: The research problem: The fluctuations in currency exchange rates and the associated risks are among the most important issues facing various financial institutions, as Iraq has fluctuations in the exchange rates of its currency. So there is an urgent need to ask the question: How does the exchange rate fluctuations exchange trading on stocks?

This question leads us to another question: Do fluctuations in the exchange rate of the Iraqi dinar against the dollar affect the general index for stock trading in the short and long term?

Second: The importance of the research: The importance of this research stems from studying the most important fluctuations in the exchange rates of the Iraqi currencies and their impact on the traded stocks through the policies followed by the Iraqi Stock Exchange, in order to diagnose the imbalances and seek to achieve relative stability of the exchange rate between the local and foreign exchange of currencies.

Third: Research Objectives: This research mainly seeks to study and analyze fluctuations in the exchange rates of the dollar in Iraq and to clarify and diagnose the impact of these fluctuations on stock trading, in addition to study and analyzing the sub-objectives, which are shown as follows: .

- Determine what are the reasons for fluctuations in the exchange rate of the US dollar

-Determining the role of the Iraqi stock exchange in managing dollar exchange rates

- Knowing the impact of these fluctuations on trading in shares of the Iraqi Stock Exchange.

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Fourth: Research Hypothesis: The study starts from a major assumption that fluctuations in the exchange rate of the US dollar will affect the business of traded stocks because of the level of its activity in the Iraqi Stock Exchange.

Fifth: Research Methods: The descriptive and analytical methods of the study were developed by presenting a theoretical framework for the variables of the volatility of the Iraqi dinar against the US dollar and linking it to stock trading.

Sixth: Statistical Analysis Methods: Through research objectives and assumptions, and relying on various statistical methods, including the Eviews 10 statistical program.

Seventh: Scope of the research: The research sample is represented by a group of the most active sectors in the Iraqi stock market, namely, the banking sector, the insurance sector, the investment sector, the services sector, the industrial sector, the hotel and tourism sector, and the agricultural sector. The research is limited to the State of Iraq, and the annual reports of the Iraqi Stock Exchange have been used, and the period of the research study extends from 2001-2021.

THEORETICAL FRAMEWORK FOR TRADING IN FINANCIAL MARKETS ADVANTAGES OF FOREIGN TRADE

First: the concept of trading volume: Trading volume can be defined as a group of stocks on which deals have ended only during a certain time from among all offers and requests. In a second sense, it represents how many shares were sold during a period of five minutes or within an hour, for example. As long as this is the number of shares sold, it also represents the number of shares purchased. It must have a seller in order to be bought, and it must have a buyer in order for it to be sold in the end, because the size shows us the amount of executed shares out of the total requests and offers (Hashem and others, 2020, p. 158).

Second: The importance of trading volume in determining stock prices (Hantush, 2021,: 443 p.): The changes that may occur in the volume of trading indicate the quality of both buying and selling and the extent of the intensity of trading. The pattern itself and its direction, and by following the volume of trading, it is possible to measure the strength of the buying or selling quantity behind the price movement, since the volume of trading is proceeding in accordance with the price movement. Double the trading volume.

Third: The stages of trading in the Iraq Stock Exchange. (Annual Report of the Iraq Stock Exchange, 2012: 3): Since its establishment in 2004, the trading process in the Iraq Stock Exchange went through two phases:

1- The phase of manual trading from 2004 to April 2009: The first trading session was held on June 24, 2004, where this session was working with manual trading mechanisms, which is the registration of purchase and sale orders on plastic plates. The trading process for the companies' shares takes place as soon as the purchase price matches the selling price according to supply and demand.

2-The electronic trading phase since April 2009: Trading in the Iraq Stock Exchange has moved from the Sunday session of April 19, 2009 to electronic trading, where plastic boards were replaced by electronic trading stations, in addition to the Securities Commission's website carrying out monitoring tasks on trading.) After this stage, a clear development occurred in the market. Iraq Securities, and in relation to the number of sessions, the number of sessions has become up to five sessions per week, starting from the first of November of the year 2009, and it takes place according to the (Horizon) trading system.

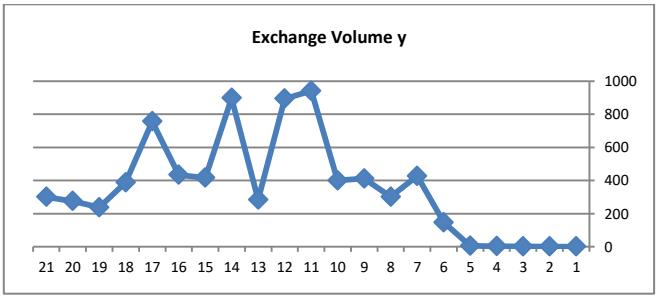

Figure 1. Changes in trading volume in the Iraq Stock Exchange

Source: Prepared by the researchers, based on the Eviews statistical program.

Fourth: Types of traders in financial markets There are three types of traders:

A- Liquidity traders, as indicated by (Harris), where I assume that there is risk neutrality among liquidity traders and they aim to achieve the maximum range of the expected selling price of the ordinary share, which in turn is the lowest selling price for the costs incurre in executing the order (Harris: 24 1998).

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B- Insider traders are a group of traders who have special information about the underlying value. Which allows him to predict changes in prices in the future, as well as the knowledgeable trader having information about the movements of the financial market (Aldridge, 2010: 131).

C- Value-motivated traders: Value-motivated traders aim to maximize the value of the investment portfolio, as the goal differs in seeking to obtain the highest price for each trade, because the value-motivated trader may return to the financial market after the completion of each trade. (Dalloul Akharon, 2016: 257.)

Fifth: Place of trading in the foreign exchange market: The foreign exchange market is not similar to the financial markets in terms of how it is not specific to a specific place that brings together buyers and sellers on what is happening in the stock exchange, as foreign exchange deals are done in what is known as the informal market, which consists of a group of cable and telephone communication systems that connect Among the dealers (Sorour, 2014: p. 15).

CONCEPTUAL ASPECT OF THE EXCHANGE RATE

First: What is the exchange rate?

Every country has economic and financial relations with the rest of the world, so it must have an exchange rate that represents the parity of its currency against other currencies, and every commercial or financial transaction that takes place between the country and other countries. (Al-Fouli 2010: 260). Settlement of international transactions and payments requires settlement tools and a measure of value. The price of buying a particular commodity from a country is not paid in a local currency, but requires the determination of the ratio of local currency units to foreign currency (Al-Fouli and Shehab, 1997: 292).

It is also defined as: “The ratio at which a unit of national currency is exchanged for a unit of foreign currency at a known time – we mean here by foreign currency all payments and deposits due in a currency in addition to remittances and checks (Shehab and Nashed, 2006:129) define some others Exchange rate is the rate at which a unit of local currency is exchanged for a unit of foreign currency at a known time. It is also known as: the main tool that has a direct impact on the relationship between local prices and foreign prices, and it is often the most effective tool (Humaidat, 1966: 105).

Second: the importance of the exchange rate (Bashichi, 2009: 7) The importance of the exchange rate as one of the economic variables is shown by the following: The exchange rate plays an important role in the economic activities of any country, whether it is a business or an investment. - Its importance is represented by the relationship between exports and imports, as it is a mirror of the government's business center with the outside world, because the exchange rate is a tool for linking the local economy with the global economy, i.e. the link between the open economy and the global economy.

Third: The official and real exchange rate systems: (Sari and Saidani, 2021: 27) Exchange system means the method by which exchange rates are determined, i.e. the basis on which the exchange rate of one currency against other currencies is determined, and this is determined according to the nature of the exchange system followed by the country.

1-constant exchange rate system: This system is based on accepting the constant value of the national currency in relation to foreign currencies on a specific monetary or metallic basis or reference. Various types of systems fall under this system, including: highly constant exchange rate systems and constant and adjustable exchange rates.

2- Intermediate Exchange Rate Systems: The two extremes hypothesis is outdated due to the existence of intermediate exchange rate systems. The International Monetary Fund classifies more than half of its members as subsystems that fall between free-floating and a solid screw.

3- The floating exchange rate system: If the monetary authority does not intervene in the exchange market to support its currency or make economic decisions based on considerations of its own exchange rate, then it is considered a floating or free system. A flexible exchange system leaves the determination of the exchange rate entirely to market forces based on the rules that determine the price of each commodity in price theory. Economists also distinguish between two types of flotation: a clean flotation and an unclean flotation.

Fourth: The functions of the exchange rate (Al-Husseini, 149, 1999) The exchange rate has many functions that we can summarize as the standard function, the developmental function, and the distribution function

Fifth: Types of Exchange Rates: The most important and common ones can be found in the following points:

1- Nominal exchange rate: The nominal exchange rate is a measure of the value of a country's currency compared to the currency of another country in which currencies are exchanged or traded between countries. (Hussain et al., 2017, 14)

2-The actual exchange rate: The actual exchange rate refers to the competitiveness of national products because it shows the number of foreign production units needed to purchase a unit ofdomestic goods, and on the light economists make their decisions. (Yahya, 2001: 245).

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ESTIMATING THE RELATIONSHIP BETWEEN THE EXCHANGE RATE AND THE VOLUME OF STOCK TRADING

According to the economic indicators reviewed, it is possible to study the policy of trade openness and its impact on the poor social strata in light of an unstable economic environment.

First: specification of the model: This is the first stage of preparing and formulating the standard model, in which economic variables are identified as follows: Explanatory variables: exchange rate, symbolized by x1, and the number of shares, symbolized by x2. The dependent variable: represented by the size of the trader in the Baghdad Stock Exchange and is symbolized by (y). It must be noted that the variables were converted to logarithmic relations, because the units of economic variables are different.

Second: The Test of Causal Relationships (Granger): This test examines the causal relationships between economic variables. This test implicitly specified that the variables (x1, x2) are explanatory (independent) variables, and the variable (y) is the dependent variable that represents the volume of stock trading. Table (5) shows the direction of the causal relationship from the exchange rate (lnx1) to the trading volume (lny), which means accepting the alternative hypothesis. A causal relationship between the two variables.

Table 1: The causal relationship between economic variables

Pairwise Granger Causality Tests			
Date: 03/04/23 Time: 15:21			
Sample: 2001 2021			
Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Prob.
LNX1 does not Granger Cause LNYLNY does not Granger Cause LNX1	19	5.36688 0.84290	0.0186 0.4512
LNX2 does not Granger Cause LNYLNY does not Granger Cause LNX2	19	0.75521 0.81882	0.4881 0.4610
LNX2 does not Granger Cause LNX1LNX1 does not Granger Cause LNX2	19	6.33666 0.29249	0.0110 0.7509

Source: prepared by the researchers, based on the Eviews 10 statistical program

ESTIMATING THE STANDARD MODEL USING THE OLS METHOD: THE LOGARITHMIC EQUATION

Table 2. Logarithmic equation for simple linear regression

Dependent Variable: LNY Method: Least Squares Date: 03/04/23 Time: 15:29Sample: 2001 2021, Included observations: 21			
Variable	Coefficient	Std. Error t-Statistic	Prob.
C	49.91784	5.645860 8.841495	0.0000
LNX1	-6.246780	0.777834 -8.030990	0.0000
R-squared	0.772446	Mean dependent var	4.623982
Adjusted R-squared	0.760470	S.D. dependent var	2.431403
S.E. of regression	1.189973	Akaike info criterion	3.276131
Sum squared resid	26.90467	Schwarz criterion	3.375609
Log likelihood	-32.39937	Hannan-Quinn criter.	3.297720
F-statistic	64.49680	Durbin-Watson stat	1.373120
Prob(F-statistic)	0.000000		

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Source: prepared by the researchers, based on the Eviews 10 statistical program.

THE REGRESSION EQUATION IN THE PRESENCE OF THE GENERAL TREND (TREND)

Table 3. Simple Linear Regression with Trend

Dependent Variable: LNY Method: Least Squares Date: 03/04/23 Time: 15:41Sample: 2001 2021, Included observations: 21			
Variable	Coefficient	Std. Errort-Statistic	Prob.
C	44.59207	7.870487 5.665732	0.0000
LNX1	-5.588580	1.031809 -5.416291	0.0000
@TREND	0.055333	0.056886 0.972703	0.3436
R-squared	0.783810	Mean dependent var	4.623982
Adjusted R-squared	0.759789	S.D. dependent var	2.431403
S.E. of regression	1.191663	Akaike info criterion	3.320140
Sum squared resid	25.56108	Schwarz criterion	3.469357
Log likelihood	-31.86147	Hannan-Quinn criter.	3.352524
F-statistic	32.63008	Durbin-Watson stat	1.303394
Prob(F-statistic)	0.000001		

Source: prepared by the researchers, based on the Eviews 10 statistical program

MULTIPLE LINEAR REGRESSION EQUATION

Table 4. Multiple Linear Regression

Dependent Variable: LNY Method: Least Squares Date: 03/04/23 Time: 15:45Sample: 2001 2021, Included observations: 21			
Variable	Coefficient	Std. Errort-Statistic	Prob.
C	18.95261	10.48125 1.808239	0.0873
LNX1	-2.631512	1.268854 -2.073928	0.0527
LNX2	0.931735	0.283585 3.285562	0.0041
R-squared	0.857754	Mean dependent var	4.623982
Adjusted R-squared	0.841949	S.D. dependent var	2.431403
S.E. of regression	0.966620	Akaike info criterion	2.901542
Sum squared resid	16.81839	Schwarz criterion	3.050759
Log likelihood	-27.46619	Hannan-Quinn criter.	2.933926
F-statistic	54.27061	Durbin-Watson stat	1.394586
Prob(F-statistic)	0.000000		

Source: prepared by the researchers, based on the Eviews 10 statistical program

ANALYSIS OF THE RESULTS OF THE (OLS) METHOD

Table (5) shows the stability of the inverse relationship between the economic variables under study, despite the use of more than one standard method, as shown in Tables (2), (3) and (4), as we clearly note that the more The exchange rate increased, which led to a decrease in the trading volume of shares in the Baghdad Stock Exchange, as the values of the estimated parameters were (-6.24), (-5.58) and (-6.23), which are respectively according to the used measurement methods, with a statistical significance of (0.05).) and less in all models.

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The acceptance of the estimated standard models came as a result of the acceptance of statistical tests, including the (R2) and (F) tests. Table (5) shows that the coefficient of determination (R2) was the values of (0.77), (0.78) and (0.85), respectively, which indicates that The exchange rate was able to explain the changes in the dependent variable, with a rate ranging from (77%) to (85%), which is statistically acceptable. This is confirmed by the overall significance of the (F) test, as it was significant (0.00) in all standard forms.

It must be mentions that the use of the regression equation in the presence of the general trend (Trend), which is represented by the second standard model, was an attempt to reveal the extent of the existence of the problem of spurious regression, and we note from the table (5) that the variable (Trend) is not significant, as it reached (0.34), which is the largest From (0.05) according to the (t) test, which indicates that there are no non-true relationships or what is known as pseudo-regression. And what confirms this is that the values of the coefficient of determination (R2) are less than the value of (D-W).

Table 5. Results of Standard Models Estimated by OLS Method

MODEL	Sig t	R^2	Sig F	D-W	Result
Lny=49.91-6.24lnx1	0.00 0.00	0.77	0.00	1.37	statistically acceptable
Lny=49.91- 5.58lnx1+ Tend	0.00 0.00 0.34	0.78	0.00	1.30	statistically acceptable
Lny=18.95-6.23lnx1+0.93lnx2	0.08 0.05 0.00	0.85	0.00	1.39	statistically acceptable

Source: prepared by the researchers, based on the Eviews 10 statistical program

Fourth: using the (ARDL) method to estimate the standard model: The time series stability test: The unit root test is one of the most important basic tests to detect the stability of the time series. The participant depends on the time gap (K)) (Christiaan and el al, 2004, 536).

The importance of time series stability tests is due to many considerations, including knowing the behavior of economic variables over time, as well as helping researchers to determine appropriate statistical methods (OLS, ARDL) or others (Atiyah, 2005: 670). In order to avoid the emergence of the problem of spurious regression (Khalaf, 2015: 76).

Table 6. Results of stability tests (ADF) at the Level

result	significance	* ADF_t	ADF_C	variants
non stationary	0.15	3.02	2.41	Trading volume (Y) in the presence of the constant limit
non stationary	0.99	3.69	0.14	Turnover (Y) In the presence of T,C
non stationary	0.99	3.05	1.47	Exchange rate(x1) in the presence of constant limit
non stationary	0.99	3.71	0.50	Exchange rate(x1) In the presence of T,C
non stationary	0.54	3.02	0.54	The number of shares (X2) in the presence of constant limit
non stationary	0.91	3.65	1.02	The number of shares (X2) with the presence of T,C

Source: prepared by the researchers, based on the Eviews 10 statistical program

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Based on the foregoing, the time series (x1, x2, y) were tested, with the presence of a constant limit, constant limit and a general trend (Trend). It is observable from Table (6) that all economic variables under study are unstable at the level (Level). According to the Dickie Fuller test (ADF), the calculated values (ADFC) are less than their tabulated values (ADFt), so the tests appeared with non-significant significance and for all economic variables. Table (7) shows the stability of the time series after taking the first differences and with the presence of a fixed limit, as we note the time series (exchange rate, number of shares, and volume of trading in shares) are stable at the first difference and have a significant and amounted to (0.00) according to (ADF) tests, and this implies that these The series are integrated of first degree I(1) for all studied variables .

Table 7. Results of (ADF) tests in the presence of the constant limit

degree of integration	result	significance	ADF_t*	ADF_C	variants
I(1)	stationary	0.00	3.02	6.62	Trading volume (Y)
I(1)	stationary	0.00	3.05	10.70	Exchange rate (x1)
I(1)	stationary	0.00	3.02	3.96	The number of shares (X2)

Source: prepared by the researchers, (*): tabulated τ values (ADF) at the 5% level.

Fifth: The optimal period for deceleration: An unrestricted autoregressive model is used to determine the optimal period for deceleration. Table (8) shows that the optimal period is the first period according to the approved standards (HQ, SC, AIC).

Table 8. Determine the optimal period for slowing down.

VAR Lag Order Selection Criteria Endogenous variables: LNY LNX1 LNX2Exogenous variables: C, Date: 03/04/23 Time: 16:16Sample: 2001 2021, Included observations: 20						
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-52.80228	NA	0.053229	5.580228	5.729588	5.609384
1	-24.19534	45.77109*	0.007614*	3.619534*	4.216974*	3.736161*
* indicates lag order selected by the criterion LR: sequential modified LR test statistic (each test at 5% level)FPE: Final prediction error AIC: Akaike information criterion SC: Schwarz information criterion HQ: Hannan-Quinn information criterion						

Sixth: Cointegration Test: As it is known, economic theory assumes the existence of long-term equilibrium relationships between economic variables with imbalances in the short term, but there are economic forces that may be influential that re-correct these imbalances through slow dynamic movement. towards long-run equilibrium. Undoubtedly, there are many standard tests for cointegration, but the (ARDL) test is superior to other standard tests, for many reasons, including that it is suitable for small samples and is used in the case of more than two variables and is not affected by the different ranks of cointegration I(0). And (I(1), as well as the possibility of estimating the Error Correlation Model.

Seventh: Error Correction Model (ECM): It is one of the statistical methods for estimating the standard model, in which short-term and long-term elasticities are determined, in addition to that it measures the speed of adaptation to return to the equilibrium position in the long term. The research reached an estimate of the error correction model (ECM) according to the following two formulas:

Table 9. Error correction models (ECM) and its statistical tests

MODEL	Sig	F- Bounds Test	F_t I(0) I(1)	R^2	Coint- Eq
Lny= 51.91 - 6.48 lnx1 D	0.00 0.00	6.61	3.62 4.16	0.60	-0.98 (0.00)
Lny=78.71-10.23lnx1-0.03lnx2 D	0.00 0.00	4.85	3.10	0.98	-3.14 (0.00)

Source: prepared by the researchers, based on the Eviews 10 statistical program

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Table (9) indicates the stability of the inverse relationship between the exchange rate and stock trading volume, as the estimated parameters (-6.48) and (-10.23) were significant for the two estimated models and amounted to (0.00) and (0.00), in addition to that the statistical tests (F - Bounds Test) amounted to (6.61) and (4.85), which is greater than the critical values (Ft), the upper limit I (1) and the lower limit I (0), which means that there is a co-integration in the two estimated models, the first representing (logarithmic linear regression) and the second (linear regression Multiple logarithmic), and that the coefficient of determination is statistically acceptable, with a value of (0.60) and (0.98), respectively, and gives explanatory power to the standard model.

Also, the speed of adaptation (Coint Eq (-1)) is acceptable, as it amounted to (-0.98) and (-3.14). They are negative values and have significant values (0.00), which indicates that the time period for the transition from the short term to the long term takes (one year) in the first model and (three months) in the second standard model, and it must be emphasized that the second standard model is better than the model The first is for many reasons, the first of which is that the coefficient of determination is better and reached (0.98). Also, the statistical criteria (AIC) and (SC) were close to zero. Which gives it an advantage over the first standard model. Therefore, we will test the quality of the model and study the standard problems that it may suffer from.

Eighth: Goodness of Fit tests: Estimating the parameters of the standard model and determining the nature of the relationship between economic variables in the short and long terms, it is necessary to ensure that the model is free of standard problems, which requires some statistical tests, as follows:

The test of the normal distribution of the residuals: It can be noted that the test of the normal distribution of the residuals depends mainly on the probability value of the statistic (Jarque-Bera). Which means that the residuals are distributed normally, and this indicates that there is no standard problem.

2- The self-correlation test (LM test): It is clear from the results of Table (10) that the probability value of the (F) test amounted to (0.51) and that it is not significant as it was equal to (0.65) and is greater than (0.05), which means that the null hypothesis is accepted. That the model does not suffer from the problem of autocorrelation.

Table 10. Autocorrelation test.

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic Obs*R-squared	0.516259 5.788194	Prob. F(2,2) Prob. Chi-Square(2)	0.6595 0.0553

3 -Test of heterogeneity of variance (Breuch - Pagan - Godfrey): It is noted from table (11) that the standard model in question does not suffer from the problem of heterogeneity of variance, because the value of (F) reached (0.50) and a significant value (0.83), which is greater than (0.05) This means that the null hypothesis can be accepted, that is, the variance of the error limit is constant.

Table 11. Test for heterogeneity of variance.

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic Obs*R-squared Scaled explained SS	0.504948 10.24014 1.085692	Prob. F(12,4) Prob. Chi-Square(12) Prob. Chi-Square(12)	0.8383 0.5949 1.0000

4- Structural stability test for the residuals: To ensure the stability and consistency of the estimates of the long-term parameters with the estimates of the short-term parameters, and to show that the estimated standard model is free of any structural changes, two tests were used:

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CUMULATIVE SUM TEST

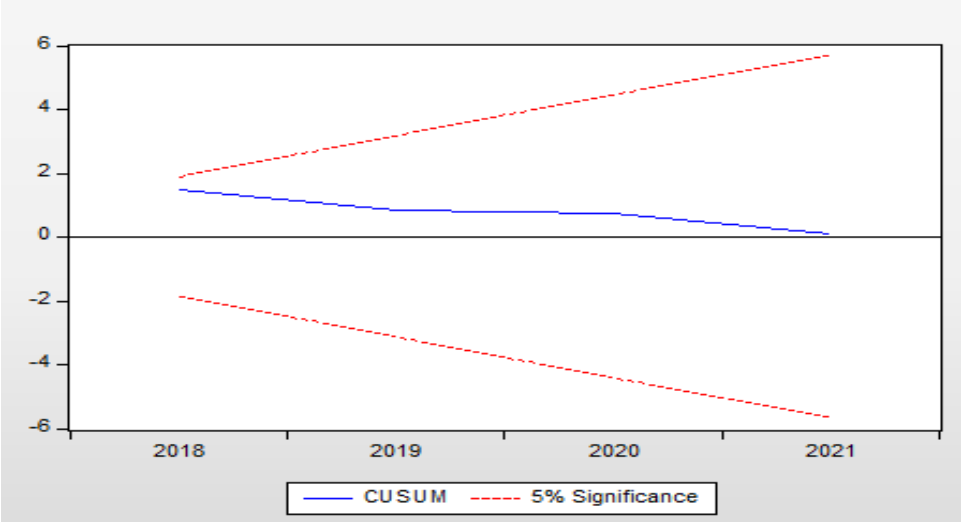

Figure 2: The cumulative sum of residuals test

The cumulative sum of squares test (Cusum of Sq.):

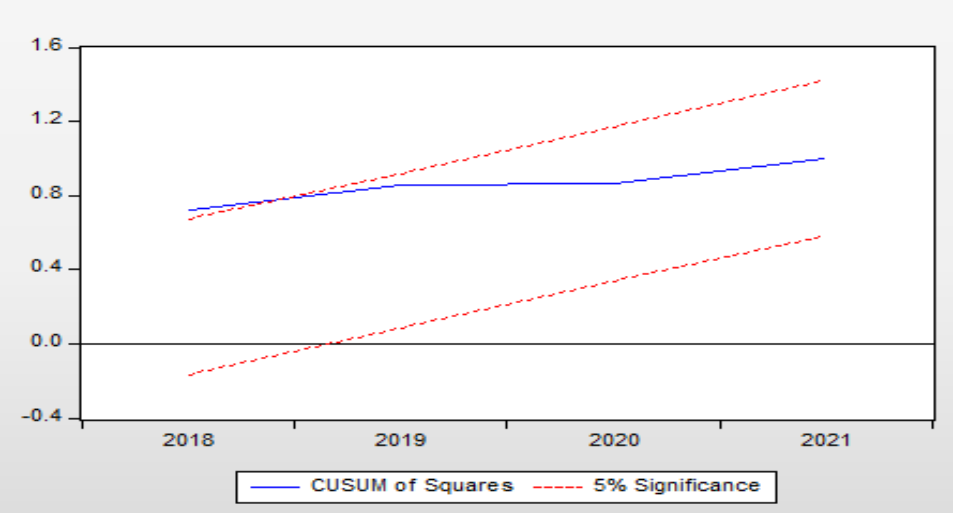

Figure 4: Cumulative sum of squares test for residuals

According to these tests, we note that the hypothesis of structural stability has been achieved for the capabilities of the estimated standard model, and as shown in Figures (3) and (4), the graph of the standard model is within the critical limits at the level of (0.05), which means the possibility of accepting the null hypothesis that states that all The capabilities are stable and do not suffer from any structural imbalances.

ninth: Analyzing the results of standard tests - a comparative study between the method of OLS and ARDL: From the foregoing, it is clear that there is an effect of exchange rate changes on the volume of stock trading in the Baghdad Stock Exchange, and this implies that there are no false relationships between the studied economic variables, based on standard models It was first estimated by the (OLS) method, especially the model estimated by the presence of the general trend according to Table (3), and the stability or stability of the inverse relationship between the volume of trading in the stock and the changes in exchange rates despite the difference in the standard methods in the two estimated standard models, and many studies indicated the weakness of the estimates of the method (OLS) under the assumption of instability of time series, which required the use of the modern standard method (ARDL) to avoid false regression, which shows the presence of adverse effects of exchange rate changes on the volume of stock trading in the Baghdad Stock Exchange.

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Series: Residuals Sample 2005 2021

Observations 17

Mean Median Maximum Minimum Std. Dev. Skewness Kurtosis	-6.69e-15 -0.017676 0.425376 -0.252028
Jarque-Bera	5.443728

CONCLUSIONS

-The emergence of severe changes and fluctuations in the volume of trading in the Iraq Stock Exchange during the study period (2001-2020).

-The existence of an inverse relationship between exchange rate changes and the volume of trading in stocks, and this is indicated by the (OLS, ARDL) method, which indicates the stability or stability of the type and strength of the relationship.

-The standard experimental method contributes to the search for the best unbiased linear estimators, including the method of comparison between standard methods to avoid false regression.

SUGGESTIONS

-Studying the reasons for the changes taking place in the Iraqi market for securities, in order to reduce the severe fluctuations in stock prices.

The study recommends that those interested try to use the experimental standard method and compare between statistical tests and standard methods, which may lead to avoiding false regression.

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