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## **Analysis of the relationship between the exchange rate and stock market indicators: Evidence from Iraq**

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**Abstract.** The research seeks to identify the impact of exchange rate fluctuations on the most prominent indicators of the Iraqi stock market, such as market value and trading volume in the market, as these variables affect the activity of various productive institutions by providing the necessary funding to carry out new investment projects or sustain ongoing projects, as well as the possibility of confusing their plans and disrupting the achievement of their set goals in the event of inability to provide the necessary funding. The research studied the theoretical aspect of the exchange rate in general and in Iraq in particular, and the market value and volume of trading in the financial markets and the Iraq stock exchange. As for the analytical side, it relied on the annual data of the exchange rate, which is issued in the form of periodic bulletins by the Central Bank of Iraq, and the market value index and trading volume in the Iraqi Stock Exchange in Iraq for the period 2009-2019. The research reached a set of conclusions, the most prominent of which is that there is a long-term two-way reciprocal relationship between the exchange rate and the indicators of the mentioned financial markets in Iraq, despite the existence of an imbalance in the short time, the research also found that there is a possibility to consider the market value and trading volume indicators as general indicators about the direction of future economic activity in any national economy.

**Keywords.** Exchange rate, stock market, market value index, trading volume index.

### **1. Introduction**

The exchange system enjoys the attention of researchers in various fields of international economic relations because the exchange rate is one of the essential factors in economic life, in addition, it affects competitiveness, the balance of payments, inflation rates, real growth, and other macroeconomic variables. Exchange rate shocks and the risks associated with them

represent one of the most important problems facing investors and financial institutions of all kinds, and exchange rate stability is one of the priorities of monetary policy in different countries. The stability of the exchange rate is the basis for the availability of the appropriate environment for investment to attract savings and to maintain price stability. Therefore, countries seek to adopt policies to ensure the stability of the exchange rate to avoid shocks and sharp fluctuations that they are going through[1].

Financial markets are a mirror of the general economic situation, and therefore their stability represents a measure of the success of the economic policy, and in light of economic openness and the emergence of globalization and electronic commerce, as well as fluctuations in the exchange rate, instability appeared in financial markets and increased risks of stock price fluctuations, which directly affected In the business results of companies, and indirectly in the performance of those markets and their investments. Therefore, it was necessary to identify the factors causing these fluctuations, how their effects are transmitted and address them, and to know the extent of the impact of these shocks on the indicators of market value and trading volume.

## **2. Literature review**

### **2.1. Exchange rate shocks**

Foreign exchange rate shocks are complementary to monetary shocks and sometimes are part of them. Shocks in this field are divided into two parts according to the nature of exchange rates, namely shocks to the fixed exchange rate and shocks to the flexible exchange rate[2]. The exchange rate is the tool that links the local currency with foreign currencies, that is, the process of buying and selling foreign currencies against the local currency. The exchange rate represents the exchange rate between the two currencies[3]. In the event of an increase in the demand for the local currency, that is, an increase in the purchase of local financial assets in the currency of another country, this leads to an increase in the value of the local currency against foreign currencies[4].

When the foreign exchange rate rises, the value of the local currency decreases and vice versa. When the foreign exchange rate decreases, the value of the local currency rises against the value of foreign currencies [5]. Since the increase in the value of the local currency over the value of the foreign currency indicates a decrease in the foreign exchange rate, this leads to a decrease in the demand for local goods due to the increase in their prices against foreign goods, and then leads to a decrease in the relative price of the local currency due to the low demand for it, in the event of a decrease The value of the local currency needed to buy a unit of foreign exchange, will lead to an increase in the demand for local goods due to a decrease in their prices against foreign goods, and then an increase in demand for them, and this leads to an influx of capital and then leads to a decrease in the foreign exchange rate [6].

### **2.2. Market capitalization index**

Market capitalization What is meant by market capitalization is the sum of the market values of the shares listed in the market multiplied by the prices at the end of the period. The value of this indicator measures the size of the financial markets in the national economies[7]. it is also considered more indicative of the extent of the development of the financial markets, as sometimes the number of companies listed in the financial market may be large. However, it does not mean an increase in the market value[8]. Market capitalization shows the level of market activity, the more its value increases, the higher the level of market performance, whether from the increase in the number of companies listed in the market or from the increase

in the number of shares, or the increase in prices that may be due to the expansion of the volume of financial transactions or both. Mostly, the market capitalization rate is measured by dividing the market value of the shares listed in the stock market by the gross domestic product[9].

### ***2.3. Volume Indicator***

It is the total value of stocks and bonds that are traded in the market at various prices in a specific period. since the increase in the trading volume indicates an increase in activity in the financial markets, and this indicates the presence of a large number of traders and investors who carry out buying and selling operations within the financial markets [10]. Through the trading volume indicator, it is possible to know whether the trading is positive or negative in the direction of a particular stock [11]. This indicator is measured by dividing the total traded shares by the gross domestic product in the stock market, and the trading index for companies' shares is measured as a percentage of the gross domestic product. Therefore, it mainly reflects the liquidity in the macro economy, and it is better to use the two indicators together, in order to obtain sound and accurate information about the stock market[12]. The trading volume gives indications about the strength of the market and the possibility of its rise or fall in the future[13]. The intensive buying or selling of shares generates a heavy volume in itself, and then the possibility of a price rise is the next step, and this means the optimism of investors, these possibilities are what drive more investors to enter the stock market and raise prices, either if there is no big trading in stocks, this leads to investors' anxiety and pessimism, and they will rush to liquidate their investment positions, and this causes pressure on prices and then lowers them. Thus, it can be said that the demand for shares is not the thing that leads to an increase in prices, rather it is the intensity of trading and the increase in prices that generate demand and then lead to a new increase in prices[14].

### ***2.4. Relationship between exchange rate and market value***

The market value is constantly changing from time to time. Whenever changes or fluctuations occur, or new information arrives in the market, the market value changes due to the change in investment decisions regarding buying and selling. In light of these new changes, investors reconsider their investment decisions regarding the securities offered in The market. Therefore, the exchange rate affects the market value of securities, whether local or foreign [9]. The relationship between the foreign exchange rate and the market value is a direct relationship, an increase in the foreign exchange rate with the stability of other factors leads to a decrease in the prices of domestic goods and services in exchange for foreign goods and services, and this leads to an increase in demand for local goods and services in global markets, and thus increase competitiveness and increase exports[15]. Increasing the inflow of capital. If this is done, the market value of the companies that export their local products on a large scale or the companies that produce goods that compete with the imported ones, the market value of their shares in the markets will rise due to the increase in demand for them and the increase in sales and profits, while the market value will decrease for companies that use expensive imported raw materials as a result of the high foreign exchange rate[16][17]. But in the event of a decrease in the foreign exchange rate, assuming the stability of other factors, this decrease will lead to a rise in the prices of domestic goods and services in exchange for foreign goods and services, and then it will lead to a decrease in exports and a decrease in the competitive advantage of domestic goods in global markets, and then the demand for goods will decrease. If this is done, the market value of the companies that buy imported goods will increase due to the increase in demand for them,

while the market value of the companies that export their products will decrease because of the decrease in demand for them[18].

As for bonds, when the foreign exchange rate rises, the market value of the bonds decreases with it, and the reason for this is that the bond value depends on the expected present value of the income that represents the value of this paper during the investment period, and the higher the maturity, the more exposed the securities to the risks of exchange rate fluctuations. Some investors believe that they can reduce the risk of exchange rate fluctuations by investing in short-term securities, and these bonds are less exposed to price risk than long-term securities[19].

### ***2.5. Relationship between exchange rate and stock prices***

The exchange rate is directly related to stock prices according to the capital account in the balance of payments that would affect the global stock markets in general, as exchange rate fluctuations affect economic activity in general, and affect stock prices in particular. Fluctuations and a rise in the foreign exchange rate, i.e. a decrease in the value of the currency against the currencies of other countries, will affect the financial markets, thus, it leads to a decrease in the prices of local shares for other investors[20]. assuming that other factors remain constant, so the increase in the foreign exchange rate, as the value of the local currency decreased against foreign currencies would lead to an increase in foreign investors' demand for local shares due to their low prices, and that the increase in demand On stocks leads to an inflow of capital and thus will lead to a rise in stock prices, in addition to local investors buying local shares due to their low prices, as well as to get rid of their financial surplus[21]. In the event of a decrease in the foreign exchange rate, this will lead to a rise in stock prices and a rise in the prices of domestic financial assets compared to foreign financial assets, assuming that other factors remain constant[22]. Therefore, investors seek to achieve profits and obtain the best possible return, so they will seek to buy the lowest price shares, risks and achieve the highest possible return, and then the decrease in the foreign exchange rate will lead to a decrease in the demand for domestic financial assets because of their higher prices compared to foreign prices. This phenomenon can occur in markets where the exchange system is either floating (managed float or free float), as well as it can occur in the framework of developed countries that have developed financial markets and are able to direct investments quickly, easily and at low cost. This from the side of the capital account can be That its effects appear in the short term[23].

Changes in exchange rates affect the movement of investments in general within the country or abroad between different sectors, whether they are production sectors or consumer sectors, and whether they are service sectors or commodity sectors, and these changes also affect the freedom of local economic activity differently according to the economic nature of the country[24].

### **3. Methodology**

The current study utilizes three main indicators of stock market trading, namely (Trading volume, Market value, and Exchange rate). Data has been extracted from official reports of Iraq stock exchange from 2009 to 2019. To unveil the relation amongst variables, the study uses multiple regression and co-integration analysis. Which performed via EViews software.

#### 4. Results and Discussions

##### 4.1. Data Trends Statics

Table (1) shows that the trading volume index increased during the study period. After it was (411,928) billion dinars in 2009, it rose in 2011 to (941.198) billion dinars, with an increase rate of (128.48%), the gradual rise continued to reach its peak in 2013 when it amounted to (2,840,220) billion dinars, an increase of (589.49%) compared to 2009. the reason for this is due to the change in the exchange rate of the Iraqi dinar, the rise in oil prices, which is the main source of Iraqi public revenues, and the increase in the volume of the general budget and public spending, which clearly affected the volume of trading in the Iraqi stock market, As well as the application of the (X Stream) electronic trading system, the development of the technical environment of the market and the change of legal mechanisms, databases, and other trading mechanisms, all of which contributed to improving work in the Iraqi market Securities .then the trading volume took a gradual decrease to reach (284,894) billion dinars in 2019, with a decrease rate of (30.83%) compared to 2009. this was due to the depreciation of the exchange rates and the drop in oil prices on the one hand, and the political and security turmoil and the war on terrorism on the other.

**Table (1)**  
**Market value index, trading volume and exchange rate in**  
**Iraq 2009 - 2019 (billion Iraqi dinars)**

Year	Trading volume	Market value	Exchange rate
2009	411,928	3,125	1182
2010	400,359	3,447	1185
2011	941,198	4,626	1196
2012	893,825	4,522	1233
2013	2,840,220	11,451	1232
2014	898,315	10,612	1214
2015	456,179	8,149	1247
2016	426,869	7,282	1275
2017	386,879	8,107	1258
2018	447,252	10,674	1209
2019	284.894	11,322	1196

**Source:** The annual economic report of the Central Bank of Iraq, multiple publications for the years 2009-2019, Iraq stock market reports for the years 2009-2019.

In table (1), it reveals that the market value of the Iraqi market for securities increased for the period 2009-2013 which amounted to )11,451( billion dinars in 2013, with an increase rate of (226.43%) and this was due to the stability of the relative exchange rate, the increase in oil prices, the volume of cash flow and the decrease in interest rates, which was reflected in the commercial banks financing investors and the increase in the number of traded shares, as well as the stability The relative security and political situation that Iraq witnessed during that period.

Referring to the percentage of the economic sectors' contribution to the market value, we find that the banking sector accounted for (77%), followed by the industrial sector with (9.1%) and then the hotel sector (8.4%) (Annual Report of the Central Bank of Iraq, 2011, p. 37).

This improvement and development in the Iraqi economy continued until the first half of 2014. The security and political situation in Iraq began to collapse and deteriorate. This year witnessed government elections, as well as Iraq entering a war against terrorism and a significant drop in oil prices. The market value index decreased in 2014 to reach to (10612) billion dinars, after it was in 2013 (11079) billion dinars, with a decrease of (4.4%). the economic deterioration and the deterioration of financial market indicators continued in 2015 due to the weakness of the productive sector, mismanagement, corruption, and weak bank credit. all of this greatly affected the work of the economy and financial markets, as it decreased from the previous year by (30.2%) to reach in 2015 (8149) billion dinars. the decline continued in 2016 due to the payment of war expenses, public debt and a budget deficit. The market value this year reached (7282) billion dinars.

But at the beginning of 2017, the economic situation began to improve slightly due to the relative improvement in the security situation and signs of reassurance for investors, which led to an increase in the market value index, which reached in 2017 (8107) billion dinars, an increase of (9%) from the previous year. in 2018, the market value increased due to the increase in foreign investments and the increase in the purchase of shares by foreign investors. The market value reached (10,674) billion dinars. this rise continued until 2019 to reach (1,322) billion dinars due to the stability of the security and economic situation, as well as the stability of the exchange rate.

For exchange rate, table (1) shows that the year 2009-2011 witnessed stability in the Iraqi dinar exchange rate against the US dollar, where the official exchange rate ranged between (1182, 1185, 1196) dinars to one dollar, respectively, and the reason. Because this is an improvement in the economic situation in Iraq, an increase in revenues, an increase in the flow of capital, and an increase in demand for the Iraqi dinar according to annual economic report of the central bank of Iraq.

In 2012, the Iraqi dinar exchange rate rose to (1233) dinars per dollar, in 2013 it fell very slightly, reaching (1232) dinars per dollar. This was accompanied by stability in commodity prices in local markets, and in 2014 with the beginning the decline in oil prices and the decline in oil revenues in foreign currencies. On the other hand, the Central Bank kept large reserves of foreign currencies and gold, and this reserve contributed to the drop in the exchange rate to reach (1214) dinars per dollar. At the beginning of 2015, the House of Representatives voted to set a higher ceiling for foreign currency sales from the Central Bank of Iraq, which led to an increase in the exchange rate to (1247) dinars per dollar, in 2016 the exchange rate continued to fluctuate up and down within small limits. In the same year, it amounted to (1275) dinars to one dollar.

In 2017, the exchange rate decreased due to the improvement in the security and economic situation and the announcement of the liberation of Iraq from terrorism, as the exchange rate reached (1285) dinars per dollar.

The Central Bank of Iraq continued to control the exchange rate through the currency auction and worked to make the Iraqi currency strong against the dollar, and thus the exchange rate fell in 2018 to (1209) dinars per dollar. The exchange rate continued to decline due to the improvement of the economic situation, the increase in investment allocations, the rise in oil prices and the increase in exports, which led to a decrease in the exchange rate to reach in 2019 (1196) dinars to the dollar.

4.2. *Effect of the exchange rate on market value index and trading*

Measuring the stability of the trading volume index data in the Iraqi Stock Exchange for the monthly period from 2010 to 2019 using the Extended Dickey-Fuller Test (ADF)

Through the data of table (2), it is clear when measuring the calculated absolute value (Tc) with the tabular value (Tt). If the calculated absolute value at significant levels (1%, 5%, 10%) is greater than the tabulated value, this indicates the stability of the series. The time series is in the plane when there is a fixed limit and there is a fixed limit and direction.

Measuring the stability of market value index data in the Iraqi Stock Exchange for the monthly period from 2010 to 2019 using the expanded Dickey Fuller test (ADF) Through the data of table (2), the expanded Dickey Fluor test shows the series of market value data in the Iraqi market, when measuring the absolute value of (Tc) calculated in tabular value (Tt), if the tabular value is (t. ) is greater than the value (t) calculated at significant levels (1%, 5%, 10%), which indicates the instability of the time series at the level with a fixed limit and a fixed limit and a trend and without a limit and trend constant, and when analysing the time series with the first difference if it becomes Time series is stable at all levels.

Measuring the extrapolation of the foreign exchange rate index data against the Iraqi dinar for the monthly period from 2010 to 2019 using the expanded Dickey-Fuller test (ADF).

Table (2) shows the results of the exchange rate data test in the financial market for the monthly period (2010 - 2019), as the expanded Dickey Fluor test shows a series of foreign exchange rate data against the Iraqi dinar in the Iraqi Stock Exchange, when measuring the absolute value (Tc) calculated in value ( Tt) tabular, if the absolute value calculated at the significant levels (1%, 5%, 10%) is less than the tabular value, this indicates the instability of the time series in the level with a fixed limit and a fixed limit and a trend without a fixed limit and direction, And when conducting the analysis of the time series with the first difference if the time series becomes stable at all significant levels with a fixed limit and a fixed limit and trend without a fixed limit and trend.

**Table (2)**

**The results of the time series stability test by (ADF) method in the Iraqi Stock Exchange for the period (2010-2019)**

variable	the level			The first difference		
	No fixed limit and time direction	fixed limit	Fixed boundary and time trend	No fixed limit and time direction	Fixed limit	Fixed boundary and time trend
Trading volume						
Market value	-8.140421	-9.311315	-9.475303	-10.34193	-10.29609	-10.25323
Exchange rate	0.013469	-1.98566.	-2.535584	-16.18523	-16.17493	-16.10935
Morale level%1	0.006999	-3.037006	-2.968395	-7.879002	-7.845962	-7.779787
Morale level 5%	-2.584539	-3.486064	-4.036983	-2.584707	-3.486551	-4.037668
Morale level 10%	-1.943540	-2.885863	-3.448021	-1.943563	-2.886074	-3.448348

Note: Dependent variables: Trading volume (V), market value (M), The independent variable is the exchange rate (X)

#### 4.3. Joint integration test for the market capitalization index and the trading volume index

The co-integration test is used to establish long-term equilibrium relationships between unstable variables. The Johansen method was used, which can be applied in multivariate co-integration equations, after the time-series stability of the study variables was tested and it was found that some variables are unstable at the level, and they stabilize in the difference. The first at all significant levels and according to the expanded Dickey-Fuller test, and this means that it is integrated of the first degree, as the Johansen test is more efficient than the two-step Engle-granger test, especially when it is more than two variables or in small samples, when the variables are integrated of the same degree indicating To the existence of a long-term equilibrium relationship, but if the variables differ in the degree of their integration, the equilibrium relationship becomes short-lived, and in the event that the studied time series are integrated of the first degree, we can subject them to a test Johansen- Juselius cointegration test [25].

Table (3) shows that the results of the Johansen test for the impact test (trace statistic) and the maximum value test (Max - Eigen Statistic) for the foreign exchange rate against the Iraqi dinar, the market value index, and the trading volume index. Its amount is (0.0000), meaning that the calculated value is greater than the tabular value and in terms of the value of P-value at the level of significance of 5%. It is clear from the two tests that there is a co-integration for the presence of at least one vector of co-integration. The Max-Eigen Value test determines the number of co-integration vectors. The results of table (3) above show that the calculated value of the largest probability rate amounted to (50.49196) is greater than the tabular value in terms of the probability value at a significant level of 5%, which is greater than the criticality value (21.13162), and this indicates that they are not far from each other, So that similar behaviour appears over time.

Included observations: 120 after adjustments

Trend assumption: Linear deterministic trend

Series: X V M

Lags interval (in first differences): 1 to 2

Unrestricted Cointegration Rank Test (Trace)

	0.05	Trace		Hypothesized
Prob.**	Critical Value	Statistic	Eigenvalue	No. of CE(s)
0.0000	29.79707	65.35291	0.348122	None *
0.0621	15.49471	14.86095	0.081563	At most 1
0.0281	3.841466	4.821312	0.040035	At most 2

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

\* Denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Prob.**	0.05	Max-Eigen		Hypothesized
	Critical Value	Statistic	Eigenvalue	No. of CE(s)
0.0000	21.13162	50.49196	0.348122	None *
0.2093	14.26460	10.03964	0.081563	At most 1
0.0281	3.841466	4.821312	0.040035	At most 2

Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level

\* Denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

**Table (3) The results of the joint integration test by (Johansen) method for the Iraqi Stock Exchange for the period (2010-2019)**

*4.4. Estimation and analysis of the impact of exchange rate shocks on the trading volume index*

Data in table (4) shows results of the estimation show that the significance of the job in general was not proven in the moral level according to the (F) test, which amounted to (0.43). It turns out that the exchange rate does not affect the trading volume index in the Iraqi stock market through the (t) test, which confirms that the estimated equations are not important because the probability degree is (0.5138) for the slope and (0.5768) for the fixed limit. Thus, any change in the foreign exchange rate against the Iraqi dinar does not affect the trading volume. The volume indicator is affected by other factors not included in the model.

**Table (4)  
Effect of exchange rate shocks in the trading volume index in the Iraqi Stock Exchange for the period (2010-2019)**

Dependent Variable: Volume				
Method: Least Squares				
Included observations: 120				
Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.5768	-0.560626	9.15E+11	-5.13E+11	C
0.5138	0.656135	7.50E+08	4.92E+08	X
8.72E+10	Mean dependent var		0.005863	R-squared
1.94E+11	S.D. dependent var		-0.007755	Adjusted R-squared
54.85376	Akaike info criterion		1.95E+11	S.E. of regression
54.91555	Schwarz criterion		2.77E+24	Sum squared resid
54.87843	Hannan-Quinn criter.		-2055.016	Log likelihood
1.776550	Durbin-Watson stat		0.430513	F-statistic
			0.513800	Prob (F-statistic)

*4.5. Estimation and analysis of the impact of exchange rate shocks on the market value index*

The data in table (5) shows that the foreign exchange rate against the Iraqi dinar affects the market value index in the Iraqi stock market, so that the change in the foreign exchange rate against the Iraqi dinar by one unit leads to an increase in the market value index by (47406.83 units), and the effect has varied The independent variable in the dependent variable (M), as the exchange rate had the effect on the market value index, and it showed the calculated (t) value as it reached (4.214), and this value confirms the significance of the estimated function because

the degree of probability is (0.0001) for the slope and (0.0004). In addition, the (F) test confirms the significance of the estimated function as a whole with a degree of probability (0.0004). The value of (R2) of (19%) showed the explanatory power of the estimated model, while the changes in the market value index are due to other factors that fall within the random error variable.

**Table (5)**  
**The impact of exchange rate shocks on the market value index in the Iraqi Stock Exchange for the period (2010-2019)**

Dependent Variable: market value index  
Method: Least Squares  
Included observations: 120

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0004	-3.692242	13726354	-50681024	C
0.0001	4.213692	11250.66	47406.83	X
7140144.	Mean dependent var		0.195638	R-squared
3234231.	S.D. dependent var		0.184620	Adjusted R-squared
32.63868	Akaike info criterion		2920459.	S.E. of regression
32.70048	Schwarz criterion		6.23E+14	Sum squared residue
32.66336	Hannan-Quinn criter.		-1221.951	Log likelihood
0.155234	Durbin-Watson stat		17.75520	F-statistic
			0.000071	Prob(F-statistic)

### 5. Conclusions

Based on the previous results, the study concludes several findings:

1. The rentier feature of the Iraqi economy and the weakness of the production base led to the Iraqi economy being largely linked to the outside, and this made the external factors control most of the variables of the Iraqi economy, including the exchange rate.

2. The devaluation of the currency at high rates repeatedly during successive years will lead to fear of foreign and local investors to invest, because they will expect a greater decline in the value of the local currency in the next few years and the existence of a state of instability.

3. The policy of devaluing the currency is not the only factor to stimulate capital to enter the country, but there are other important factors to encourage capital to enter, and these factors include the country's economic climate, which is a fertile ground for attracting investments, due to the availability of raw materials, and the existing developed markets Inside the country, which absorbs most of the products, there is also an important factor which is the political and security stability of the country, all of these are temptations to attract investors and then the flow of capital to it, and this helps the capital to enter the country.

4. The results of the stability test showed that the time series of the exchange rate and market indices in Iraq do not contain the unit root and that it is stable and the other unstable and contain the unit root in the level at a significant level (1%, 5%, 10%), while these variables become stable in the first differences, according to the extended Dickey-Fuller test, this means that they are integrated of the first degree and at a significant level (1%, 5%, 10%).

5. The joint integration test, using the Johansen methodology, revealed the existence of a vector of joint integration between the foreign exchange rate against the Iraqi dinar and some indicators of the Iraqi market for securities, and at a level of significance (5%), and this means that there is a long-term, two-way reciprocal relationship between the mentioned indicators in Iraq. However, there is an imbalance in the short term.

6. Based on the results of estimating the model, it becomes clear the stability of the significance of the function between the study variables (exchange rate, market value index and trading volume) in the Iraqi Stock Exchange and the immutability of the significance of the function (exchange rate, index and trading volume), and this shows that changes in the exchange rate cause changes in the Some market indicators, and this is consistent with the analytical aspect of the study, which confirms the precedence of movement in the indicators compared to the change in exchange rate fluctuations, and then the possibility of market indicators as a general indicator about the direction of future economic activity.

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