


**THE IMPACT OF MICRO FACTORS ON THE PERFORMANCE OF THE IRAQ STOCK EXCHANGE INDEX FOR THE PERIOD 2005-2021**

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ARTICLE INFO	ABSTRACT
<p><b>Article history:</b></p> <p>Received 22 May 2023</p> <p>Accepted 16 August 2023</p>	<p><b>Purpose:</b> The purpose of this study is to determine the impact of some micro factors (liquidity and profitability factors) of the Iraqi banking sector in determining the return of the stock market represented by the return of the Iraqi financial market index using time series analysis according to the ARDL methodology for the period 2005-2021.</p>
<p><b>Keywords:</b></p> <p>Micro Factors; Profitability Indicators; Liquidity Indicators; Financial Market Index; ARDL; Financial Market Performance Indicators.</p>	<p><b>Design/methodology/approach:</b> The study adopted an econometrics analysis of time series using the ARDL (auto-regressive distributed lag) methodology for the period 2005-2021 to investigate the impact of some micro factors (liquidity and profitability ratios) in Iraqi banking sector listed in Iraq stock exchange market on market return (Iraq Stock Exchange Index as a benchmark).</p> <p><b>Findings:</b> The results of this study reveal significant effects of the financial factors for micro factor on the Iraqi Stock Exchange index. It is interesting that the variables of banking liquidity showed a stronger logical relationship with the dependent variable in line with financial theory than the variables of banking profitability. The relationship between the micro factors model and the financial market index required a long-term adjustment equivalent to (0.2124) of the time needed to adjust to the balanced state according to the error correction equation.</p>
	<p><b>Research, Practical &amp; Social implications:</b> These results confirm the importance of taking into account micro-financial factors when making financing and investment decisions, as well as when evaluating the economic situation in the Iraqi banking sector. Understanding the impact of these factors and their relationships contributes to decision-making and enhances general forecasting of future economic volatility and risk management.</p> <p><b>Originality/value:</b> This study provides valuable insights into the dynamics of the Iraqi financial market and highlights the importance of incorporating micro-financial factors into financial analyzes and investment strategies. The study recommends that future research should explore the complex links between macroeconomic factors and the financial market to gain a comprehensive understanding of the economic environment.</p> <p>Doi: <a href="https://doi.org/10.26668/businessreview/2023.v8i9.3462">https://doi.org/10.26668/businessreview/2023.v8i9.3462</a></p>

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Iraqi financial market index using time series analysis according to the ARDL methodology for the period 2005-2021.

**Design/methodology/approach:** The study adopted an econometrics analysis of time series using the ARDL (auto-regressive distributed lag) methodology for the period 2005-2021 to investigate the impact of some micro factors (liquidity and profitability ratios) in Iraqi banking sector listed in Iraq stock exchange market on market return (Iraq Stock Exchange Index as a benchmark).

**Findings:** The results of this study reveal significant effects of the financial factors for micro factor on the Iraqi Stock Exchange index. It is interesting that the variables of banking liquidity showed a stronger logical relationship with the dependent variable in line with financial theory than the variables of banking profitability. The relationship between the micro factors model and the financial market index required a long-term adjustment equivalent to (0.2124) of the time needed to adjust to the balanced state according to the error correction equation.

**Research, Practical & Social implications:** These results confirm the importance of taking into account micro-financial factors when making financing and investment decisions, as well as when evaluating the economic situation in the Iraqi banking sector. Understanding the impact of these factors and their relationships contributes to decision-making and enhances general forecasting of future economic volatility and risk management.

**Originality/value:** This study provides valuable insights into the dynamics of the Iraqi financial market and highlights the importance of incorporating micro-financial factors into financial analyzes and investment strategies. The study recommends that future research should explore the complex links between macroeconomic factors and the financial market to gain a comprehensive understanding of the economic environment.

**Keywords:** Micro Factors; Profitability Indicators; Liquidity Indicators; Financial Market Index; ARDL; Financial Market Performance Indicators.

## EL IMPACTO DE LOS MICROFACTORES EN EL DESEMPEÑO DEL ÍNDICE DE LA BOLSA DE VALORES DEL IRAQ PARA EL PERÍODO 2005-2021

### RESUMEN

**Objetivo:** El objetivo de este estudio es determinar el impacto de algunos microfactores (factores de liquidez y rentabilidad) del sector bancario iraquí en la determinación del rendimiento del mercado de valores representado por el rendimiento del índice del mercado financiero iraquí utilizando análisis de series temporales de acuerdo con la metodología ARDL para el período 2005-2021.

**Diseño/metodología/enfoque:** El estudio adoptó un análisis econométrico de series temporales utilizando la metodología ARDL (auto-regresivo distribuido lag) para el período 2005-2021 para investigar el impacto de algunos microfactores (ratios de liquidez y rentabilidad) en el sector bancario iraquí que cotiza en el mercado de valores de Iraq sobre el rendimiento del mercado (índice de la Bolsa de Valores de Iraq como referencia).

**Hallazgos:** Los resultados de este estudio revelan efectos significativos de los factores financieros para el micro factor en el índice de la Bolsa de Valores de Iraq. Es interesante que las variables de liquidez bancaria mostraron una relación lógica más fuerte con la variable dependiente en línea con la teoría financiera que las variables de rentabilidad bancaria. La relación entre el modelo de microfactores y el índice del mercado financiero requirió un ajuste a largo plazo equivalente a (0,2124) del tiempo necesario para ajustarse al estado equilibrado según la ecuación de corrección de errores.

**Investigación, implicaciones prácticas y sociales:** Estos resultados confirman la importancia de tener en cuenta los factores microfinancieros al tomar decisiones de financiación e inversión, así como al evaluar la situación económica en el sector bancario iraquí. Comprender el impacto de estos factores y sus relaciones contribuye a la toma de decisiones y mejora la previsión general de la volatilidad económica futura y la gestión de riesgos.

**Originalidad/valor:** Este estudio proporciona información valiosa sobre la dinámica del mercado financiero iraquí y destaca la importancia de incorporar factores microfinancieros en los análisis financieros y las estrategias de inversión. En el estudio se recomienda que en futuras investigaciones se estudien los complejos vínculos entre los factores macroeconómicos y el mercado financiero para comprender cabalmente el entorno económico.

**Palabras clave:** Microfactores; Indicadores de Rentabilidad; Indicadores de Liquidez; Índice del Mercado Financiero; ARDL; Indicadores de Desempeño del Mercado Financiero.

## INTRODUCTION

The Iraqi economy is an economy of a rentier nature as oil revenues constitute more than 95% of budget revenues. Therefore, decisions at the monetary and fiscal policy level and the financial sector, in general, are governed by the nature of external demand for oil. On the other hand, the imbalance of the structure of trade balance, economic openness, and financial globalization greatly facilitated the economy's exposure towards global financial crises. The fluctuations of this market, whether at the level of micro factors (profitability indicators, liquidity, activity, etc., for institutions of the financial market sectors) or macro factors (inflation, exchange rate, interest rate, etc.) are critical for individual investors as well as market and policymakers alike, especially when making economic plans or making investment decisions, forecasting financial crises, and managing financial risks. Based on this importance, the current study deals with three indicators since studying and knowing the details of their work is considered one of the challenges facing economic policy makers and individual investors. These indicators include micro factors represented by some liquidity and profitability indicators, whose analysis as determining factors for evaluating the financial sector is a source of consensus in the financial literature on the one hand, and the financial market index, which in turn reflects the market portfolio, on the other hand.

The relationship between the micro factors of the economy and the stock market has been the focus of studies for many years, as this relationship derives its importance from two basic elements, represented by the variables of the financial structure in financial institutions and the financial market being the reflection of economic activity. However, the issue of micro factors determining the prices of financial market shares is still open for discussion. Yartey (2008) was one of the proponents that micro variables are the determinants of the prices of financial market shares. He conducted a study on the data of 42 developing country economies for the period from 1990-2004 and used the method of data panel analysis. The results indicated that the level of income, GDP, growth, private capital flows, and financial market liquidity are what determine the development and progress of financial markets in developing countries or could be one of the main reasons for the deterioration of these markets. He stated that political, legal, systemic, and quality risks impact the development of financial markets; when they occur, institutions resort to external financing. He stressed that developing solutions in the first place to political risks, compared to other problems, contribute significantly to the further development and progress of these markets in developing countries.

Talla (2013) used the unit root test and the multiple linear regression OLS model and was calculated using the least squares method as well as Granger's causality test to verify the impact of macroeconomic variables on stock prices of the Stockholm Stock Exchange for the period from 1993-2012. It was found that inflation, low exchange rates, and interest rates have a negative impact on stock prices. On the other hand, money supply is positively correlated with stock prices, and Granger's one-way causality was not found between Stock prices and micro variables of the study, except for a one-way causal relationship from stock prices to inflation. Through their study in Turkey, Rjoub et al. (2017) explained that banking stock prices react negatively to economic crises; therefore, investors should pay attention to the specified banking information in their decisions. In this sense, micro factors contribute significantly to the pricing of bank shares, as the quality of assets, instruments, profits, size, money supply, and interest rate are closely related to bank share prices. Adding to that a two-way causal relationship between the size of the bank and the quality of assets and between the money supply and prices of banking stocks. The fixed panel data analysis method and causality test were used for the period from the third quarter of 1995 to the fourth quarter of 2015. The contribution of Sadeghzadeh (2018) appears in the analysis of micro-variables and their impact on the financial markets. Through his study on Istanbul Stock Exchange, he found that the high circulating rate of shares and net profit to total assets positively affect short- and long-term dividends. He also noticed that the impact in the short term was higher, and that the increase in total sales led to an increase in dividends as well as an increase in growth in total assets in the long term. Also, the high capital ratio to tangible assets, private capital ratio to total assets, receivables turnover ratio, net profits, equity ratio, and market and book value led to high dividends in the short term. On the contrary, the high debt-to-tangible assets ratio and asset turnover ratio led to decreased dividends in the short term. In this study, the time series model, unit root tests, structural breaks, as well as the panel data analysis method were used for the period from 2000-2017 with 130 micro variables.

The study of Sayedy & Ghazali (2018) focused on the debt-to-equity ratio, earnings per share, QR ratio, size, and book value of the market. The results showed that the increase in the value of debt to equity leads to a decrease in return per share and that institutions with a high percentage of QR and dividends per share have a return on equity returns. The study found that the money supply may reduce the impact of the debt-to-equity ratio and QR on stock returns while it has no impact on earnings per share. The GLS technique was used to estimate the regressions in the form of multiple models for panel data sets for 300 companies listed on the

Kuala Lumpur Stock Exchange for the period 2003-2013. Benson et al. (2019) conducted a study in Nigeria using the annual financial data of banks listed in the financial market for the period from 2012-2017, where the descriptive statistical method and multiple linear regression were relied on to analyze these data. The study concluded that the ratio of debt to equity and earnings per share significantly affect the share prices of banks listed in the financial market. In contrast, the QR ratio does not significantly affect these prices. The study recommended the importance of controlling securities brokers and NSE agents for the purpose of protecting public investments in the stock market. Through their study conducted in the Iraqi financial market, both Kadhum & Al-Yassin (2020) proved the impact of micro variables, represented by debt ratio, trading ratio, earnings per share, return on investment, and return on equity, on market value, as the study relied on the use of a regression model that uses the method of combining time series and cross-sectional data. The study found that all variables are statistically significant, except for the variable of return on equity, which is statistically significant, with the earnings per share being the most influential variable. This study, Kadhum & Al-Yassin (2020), tested three models represented by the pooled regression model, the fixed effects model, and the random effects model to find out the impact of microeconomic variables on market value and that the fixed effects model is the appropriate model. The study concluded that the debt ratio, trading ratio, earnings per share and return on investment are statistically significant variables, except for the return on equity variable, which is not statistically significant, with earnings per share being the most influential variable.

Akib et.al. (2023) found that the capital structure (debt-to-equity ratio as a proxy), profitability (return on asset as a proxy), and dividend policy (dividend payout ratio as a proxy) have a simultaneous impact on the closing price of stocks of companies in the consumer goods manufacturing industry sector listed on the Indonesia Stock Exchange from 2018 to 2020. AL Anssari (2023) examine the relationship between the accounting measurement of financial instruments at fair value and changes in stock prices for banks listed on the Iraqi Stock Exchange, the study results show the relation between stock market prices and comprehensive income is higher than that the relation stock market prices and net income, and also the relation between stock market returns and comprehensive income is higher than that the relation stock market returns and net income.

The study of Kratzer (2021) suggested that some micro-variables affect others, as the relationship between stock market prices and micro-variables in Austria was analyzed using the time series method and Granger's causality test. The results indicated that inflation and



unemployment have a long-term impact on stock prices in the financial market, and the same applies mostly to all micro variables while it always applies to the ADX Index, while there are some individual stocks associated with a short-term relationship with micro- variables. As for the study conducted by Kadhum & Mohamed (2021) on the Iraqi market, the effect of the ratio of total debts to total assets, the ratio of total deposits and current accounts to total liabilities, and the ratio of capital and reserves to total assets on the profitability and liquidity of banks listed in the financial market were measured using the pooled regression model, the fixed effects model, and the random effects model. The results indicated a positive correlation between the ratio of equity, liquidity, and profitability, as well as a positive correlation between the ratio of debt, liquidity and profitability. The study sample banks relied heavily on debt in financing their assets, while the relationship was negative between the ratio of deposits, liquidity, and profitability in Iraqi commercial banks.

## **THEORETICAL FRAMEWORK**

In this context, we will briefly address the impact of liquidity and profitability indicators and their relative importance in determining the performance of the financial market. Profitability is one of the important indicators on which investment decisions are built and knowing whether the policy followed by the company is moving in the right direction, as well as through which it is possible to know the efficiency of management. The liquidity, the ability of an entity to convert its assets into cash quickly and without risk, is the main core of the institution's work due to the continuous needs to finance investments and repay the obligations of the institution and operational activities as well as providing liquidity in a timely manner indicates how management is efficient.

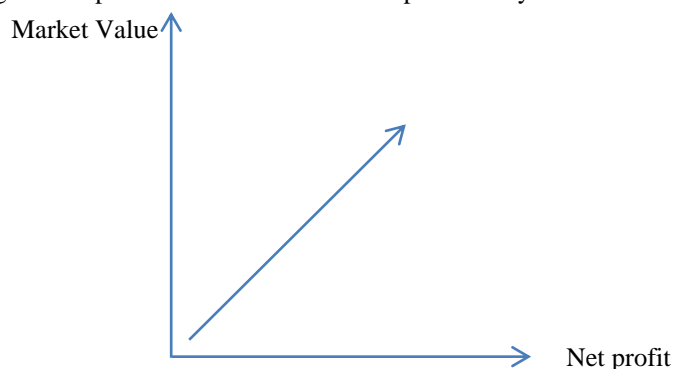
### **First: The Impact of Profitability Indicators on the Performance of the Financial Market**

The main problem facing dealers in the financial market, whether investors or shareholders, is to understand the mechanism of the price movements of companies' financial assets with the changes in economic activity in general and the financial sector in particular, with the influence of multiple variables and factors. It is known that prices of financial assets are more sensitive to fluctuations on the level and speed of information in the financial market; this affects the degree of prediction of shareholders and investors in their ability to make financial decisions, which reflects positively or negatively on the performance of the financial market. The profitability indicator is one of the most essential indicators (Nadyayani, 2021:

697). Profitability in companies has a positive correlation with the prices of financial assets, as the demand for shares of companies with high profitability increases, which gives an indication to investors of good future returns, and vice versa. In other words, that the decline in the profitability indicator leads to a general trend towards selling shares, which decreases the value of financial assets, and the final result of the rise or fall of this indicator is the rise or fall of the performance of the financial market (Sholichah, 2021: 891).

According to the Signal Theory, the high profitability indicator gives a sign to investors in the financial market on the quality of resource management by the company in generating income that is received in the form of profits, leading to an increase in the prices of the company's assets due to the high demand for its shares (Fajaria, 2018: 58). In line with the efficient market theory, the prices of financial assets reflect all available data, whether in the company's financial statements, historical record or in the media, etc. In addition to profitability, it achieves in maximizing the returns of investors and shareholders, it is in harmony with the satisfaction of stakeholders, including owners and shareholders. In this sense, the company that is characterized by high profitability indicators will push investors, shareholders, and stakeholders to understand these assets of the company, which will raise the value of its financial assets and the performance of the market in general. Figure (1) shows the positive correlation between the profitability indicator and the market value in the financial market (Al-Amiri, 2007: 39).

Fig. 1. The positive correlation between profitability and market value



Source: Al-Sayyah & Al-Amiri (Financial Management), 2007: 42

## **Second: The Impact of the Change in Liquidity Indicators on the Performance of the Financial Market**

Liquidity, as mentioned earlier, is the speed of converting traded assets into cash. The flexibility degree of converting current assets differs from each other, as some of them are

difficult to convert into cash liquidity such as reserves, and others are easy to convert, such as investments in financial assets. As far as the performance of the financial market is concerned, there is a positive correlation between liquidity and the market value of a financial asset, where the higher the degree of liquidity, the higher the value of financial assets. The high ratio of liquidity can push the facility towards entering wider investment opportunities or areas, whether internal or external, leading to an increase in the company's profits by increasing the demand for its financial assets.

The availability of efficient and good management as well as the adoption of a correct and balanced liquidity policy that contributes to enhancing the liquidity of the enterprise contribute to enhancing the confidence of stakeholders from investors and shareholders, leading to an increase in demand for financial assets. This is reflected in the high prices of the financial assets of the company. Whenever there is a decrease in the degree of liquidity, it leads to a decrease in the value of financial assets. In other words, the shortage or decrease in liquidity leads to a halt in the company's wheel towards entering into investment opportunities or areas, whether internal or external. This will lead to a decrease in the company's profits, which leads to a decrease in the demand for its financial assets, and thus to a decrease in the value of its financial assets. Likewise, the decrease in liquidity from its permissible limit or from the minimum limit leads to a loss of confidence by depositors, which is reflected in the financial assets of the company. It is also necessary to know the volume of liquidity specified by the Central Bank for measurement, and therefore, if the liquidity decreases from its specified level, it will be a negative indicator of the bank's inability to invest and, thus, the lack of profitability, which leads to a decrease in the prices of its financial assets (Abid, 2019: 117).

## **METHODOLOGY**

The study methodology is based on analyzing and measuring the impact of micro financial factors represented by the following independent variables:

- 1- Profitability indicators (return on assets, return on deposits, and return on equity).
- 2- The liquidity indicators (the ratio of cash balance, the ratio of liquidity to assets, and the ratio of liquidity to deposits) for the leading sector in the financial market, represented by the banking sector in the case of the Iraq Stock Exchange, on the dependent variable represented by the index of the Iraq Stock Exchange as a proxy indicator for the performance of the financial market or The market portfolio using the

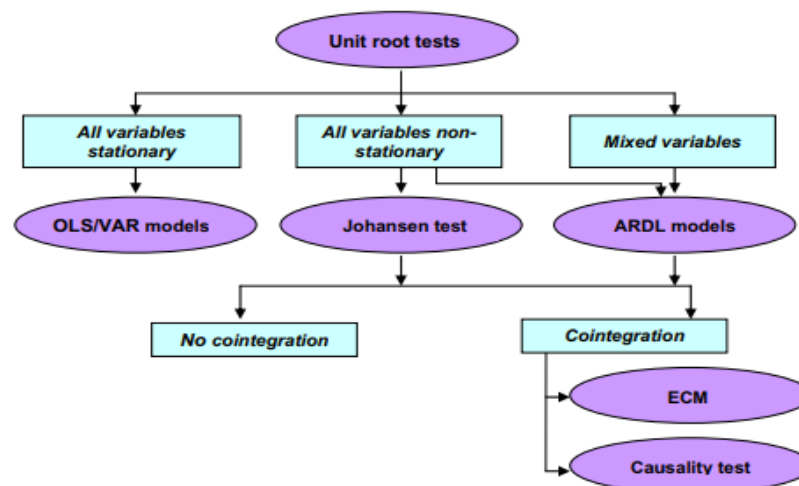


ARDL methodology as a model for measurement. Accordingly, the following steps are taken:

- 1- Using a time series analysis on the data of the study variables to ensure that there is a trend in the time series (stationary or non-stationary) through unit root tests for static.
- 2- Applying the ARDL methodology to determine the short and long-term effects and the direct and total effects of the independent variables on the dependent variable, in addition to the possibility of ensuring the existence of a structural balance between the estimated parameters in the two terms through appropriate diagnostic tests.

The following Figure serves as an illustration of the previous methodology:

Fig. 2. Methodology study for time series data



Source: Min B. Shrestha, Guna R. Bhatta. (2018). "Selecting appropriate methodological framework for time series data analysis". The Journal of Finance and Data Science.p76.

## Research Hypothesis

H0: There is no impact of micro factors on Iraq stock market index.

H1: There is an impact of micro factors on Iraq stock market index.

## RESULTS AND DISCUSSION

### Results of Unit Root Tests for Stationary

There are several tests to detect whether the time series is static or non-static, and both the Phillips-Perron (P.P) and the Augmented Dickey-Fuller (ADF) tests will be used to detect the stability of the time series, and these tests are among the most accurate tests to detect the stability of the time series as well as to know the order of its integration. The results of Table (1) indicate that the time series for independent variables (cash balance ratio (x1), liquidity to

assets ratio (x2), liquidity to deposit ratio (x3), return to assets ratio (x4), return to deposit ratio (x5) and return on equity ratio (x6) have a unit root, meaning that the series is unstable at its original level of these variables. This is attributed to the p-values that are statistically insignificant at a level less than (5%). This means that the characteristic of stationary is achieved at the original level of the dependent variable Market Index (MI) at a significant level of less than (5%). Thus, rejecting the null hypothesis and accepting the alternative hypothesis that states that there is no unit root, i.e., it is integrated of order I (0), where the first differences of the independent variables will be taken, as shown in Table (2).

Table 1. Results of unit root tests according to (ADF) for micro variables at the original level

Augmented Dickey-Fuller (ADF) tests									
	Without Constant & Trend			With Constant & Trend			With Constant		
Variable	t-Statistic	Prob	sig	t-Statistic	Prob	sig	t-Statistic	Prob	sig
mi	4.635-	0.035	**	-3.754	0.0464	**	-4.242	0.0199	**
X1	0.867	0.887	Ns	-3.421	0.043	Ns	-2.026	0.273	Ns
X2	0.607	0.837	Ns	-1.226	0.871	Ns	-1.298	0.605	Ns
X3	1.224	0.935	Ns	-3.291	0.101	Ns	-1.822	0.357	Ns
X4	1.292-	0.1732	Ns	-4.101	0.0267	Ns	-0.939	0.749	Ns
X5	0.958-	0.2881	Ns	-2.604	0.283	Ns	-1.469	0.524	Ns
X6	-0.575	0.452	Ns	-2.968	0.142	Ns	-1.598	0.4616	Ns

(\*\*): Significant at 5%

Ns: Not significant

Source: Prepared by the researchers based on the outputs of the statistical program EViews 9.

Table 2. Results of unit root tests according to the ADF test for the study variables at first difference

Augmented Dickey-Fuller (ADF) tests									
	Without Constant & Trend			With Constant & Trend			With Constant		
Variable	t-Statistic	Prob	sig	t-Statistic	Prob	sig	t-Statistic	Prob	sig
X1	5.684-	000	***	-6.262	000	***	-5.974	000	***
X2	4.979-	000	***	-5.121	0.004	***	-4.969	0.002	***
X3	6.0913-	000	***	-8.642	000	***	-6.92	000	***
X4	4.187-	0.004	***	-5.146	0.004	***	-4.256	0.005	***
X5	5.819-	000	***	-12.577	000	***	-5.731	0.003	***
X6	5.911-	000	***	-9.746	000	***	-10.488	000	***

(\*\*\*): Significant at 1%

Source: Prepared by the researchers based on the outputs of the statistical program EViews 9.

According to Table (2), which explains the results of the unit root tests for the variables under consideration at the first difference, it was found that all variables of the time series are stable (static) at the first difference, according to the Augmented Dickey-Fuller (ADF) test, meaning that the time series in question is integrated at the original level and the first degree.

### Estimation of the Regression of Micro Factors on the Market Index According to the ARDL Model

Based on the outcomes of the variables examined in the stability test, the researchers found that some variables were stable at the original level of the series, while some variables were stable after taking the first difference, that is, they were unstable at the original level of the series. As a result of studying the joint integration for all study variables and the existence of long-term balance, and accordingly, in order to study the model for all micro variables, the ARDL model can be used. This model is one of the most appropriate models that match the nature of the data under study, and based on that, an estimate of the model parameters could be specified, and the quality of the model could be revealed, as well as it is free from the standard problems shown in Table (3).

Table 3. Results of estimating short-term, long-term and error correction (ECM) parameters for micro factors model

ARDL Cointegrating And Long Run Form				
Cointegrating Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	179.2729	134.8936	1.328994	0.4107
Y(-1)	0.044272	0.054070	0.818776	0.5632
Y(-2)	-0.025090	0.040236	-0.623553	0.6450
X1	0.106561	1.794949	0.059367	0.9623
X1(-1)	4.844010	1.676595	2.889195	0.2121
X2	-5.813836	2.773021	-2.096571	0.2833
X2(-1)	-0.085125	2.532404	-0.033614	0.9786
X3	0.353194	0.589275	0.599370	0.6563
X3(-1)	-2.524589	0.799487	-3.157759	0.1952
X4	-21.75265	17.32508	-1.255558	0.4282
X4(-1)	22.19027	17.24237	1.286961	0.4205
X5	-17.31777	13.79240	-1.255602	0.4282
X5(-1)	-15.57065	12.68933	-1.227067	0.4353
X6	12.30250	6.841609	1.798189	0.521
CointEq(-1)	-0.2124	0.003190	4.559186	0.0075
- (9.6603*X1 -49.6736*X2 + 3.9626*X3 -81.9207*X4 -46.5608*X5 +68.7778*X6 +1567.6486)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1	9.660308	2.118867	4.559186	0.0375
X2	-49.67364	3.783737	-13.12820	0.0000
X3	3.962613	0.627486	6.315065	0.0000
X4	-81.92067	18.88502	-4.337866	0.0442
X5	-46.56079	19.09163	-3.438806	0.024
X6	68.77783	5.595773	12.29103	0.000
C	1567.649	63.94328	24.51624	.0000
R-squared	0.52	F-statistic	17.655	0.000
Jarque-beara	2.0747	Prob	0.094	
Heteroskedasticity Test: ARCH	F-statistic	2.230452	Prob. F (1,62)	0.7183
	Obs*R-squared	4.974916	Prob. Chi-Square (1)	0.713
Breusch-Godfrey Serial Correlation LM Test	F-statistic	2.210057	Prob. F (1,58)	0.1425
	Obs*R-squared	2.385876	Prob. Chi-Square (1)	0.1224

Ramsey RESET Test			
Test	Value	df	Probability
t-statistic	0.776952	13	0.4511
F-statistic	0.603654	(1, 13)	0.4511

Source: Prepared by the researchers based on the outputs of the statistical program EViews 9.

Through the tests for the model in the table, which shows that the model does not suffer from standard problems, the following is noted:

1- Heteroscedasticity test: Table (3) shows that the model used does not suffer from the problem of variance heterogeneity through the test results. It shows that the calculated (F-statistic) value was (2.230452), which is a non-significant value at a significant level (5%), which means accepting the null hypothesis (H0) that states that the variance of the random error term is constant.

2. Autocorrelation test: The Breusch-Godfrey test value for F-statistic is (2.210057), as well as the probability value of the Chi-square statistic was (0.1224), both of which were less than the value of the significance level (5%), meaning accepting the null hypothesis (H0) which states that there is no serial correlation problem between the residuals, i.e., the model does not suffer from the autocorrelation problem.

3. Multicollinearity test: It was also clear that the model is free from the problem of linearity through Klein's test, where the simple correlation coefficient between the variables under study was compared with the square root of the coefficient of determination. The results showed that the value of the square root of the determinant's coefficient was greater than the correlation coefficients between the variables of the model.

4. The Jarque-Bera test: It showed that the residuals are distributed normally, since the value of the significance level was 0.094, which is higher than the level of significance.

After ensuring that the model is free of standard problems, it is noted that there is a co-integration relationship between the dependent variable (MI) and the independent variables, and this is confirmed by the CointEq(-1) error correction parameter of (0.2124), which is a negative and a significant value at the same time at a significant level of (1%). This means that (0.2124) of the short-term errors have been automatically corrected over time in order to reach balanced state in the long term, meaning that (MI) requires (0.2124) time to reach its balanced value in the long term. Likewise, the model was able to interpret 52% of the (MI) value if the value of the coefficient of determination reached (0.52), while the remainder is explained by other variables.

It is noted that the cash balance ratio variable has an important and positive role in (MI). Where the coefficient of the X1 variable indicated that there is a positive and significant effect in the long term between it and the dependent variable at the level of probability of (5%), that is, an increase in the independent variable in the long term by one unit leads to an increase in (MI) by (9.66), with other factors remaining constant.

It appears that the liquidity-to-asset ratio variable (X2) has an important negative role in (MI), as the coefficient of the independent variable indicated that there is a negative and significant effect in the long term between it and the dependent variable at a probability level of (5%). That is, an increase in the independent variable (X2) in the long term by one unit leads to a decrease of (MI) by (49.67), with other factors remaining constant.

We can notice that the variable liquidity-to-deposit ratio (X3) has an important positive role in (MI), as the coefficient of the independent variable showed a positive and significant effect in the long term between it and the variable (MI) at a probability level of (5%), meaning that the increase in the independent variable (X3) in the long term by one unit leads to an increase in (MI) by (3.96), with other factors remaining constant. It can be seen that the return on assets variable (X4) has an important negative role in (MI). Where the coefficient of the independent variable showed a negative and significant effect in the long term between it and the variable (MI) at the probability level of (5%). That is, an increase in the independent variable in the long term by one unit leads to a decrease in (MI) by (81.92), with other factors remaining constant.

It is also noted that the return on deposits variable (X5) has an important negative role in (MI). Where the coefficient of the independent variable showed a negative and significant effect in the long term between it and the dependent variable at the level of probability of (5%), meaning that an increase in the independent variable (X5) in the long term by one unit leads to a decrease in (MI) by (46.56), with other factors remaining constant. It is also clear that the return on equity variable (X6) has an important positive role in (MI). Where the coefficient of the independent variable showed a positive and significant effect in the long term between it and the dependent variable at the probability level of (5%). That is, an increase in the independent variable (X6) in the long term by one unit leads to an increase in (MI) by (68.77), with other factors remaining constant.

## CONCLUSION

The financial market is a reflection of economic activity which makes identifying and understanding the factors affecting its fluctuations essential for economic decision making and evaluation. This study aimed to determine the role of micro factors of the Iraqi banking sector in determining the return of the stock market represented by the return of the Iraqi financial market index using time series analysis according to the ARDL methodology for the period 2005-2021. This study revealed significant effects of the financial factors for micro factor on the general index of the Iraqi Stock Exchange. It is interesting that the variables of banking liquidity showed a stronger logical relationship with the dependent variable in line with financial theory than the variables of banking profitability. The relationship between the micro factors model and the financial market index required a long-term adjustment equivalent to (0.2124) of the time needed to adjust to the balanced state according to the error correction equation. These results confirm the importance of taking into account micro-financial factors when making financing and investment decisions, as well as when evaluating the economic situation in the Iraqi banking sector. Understanding the impact of these factors and their relationships contributes to decision-making and enhances general forecasting of future economic volatility and risk management. Overall, this study provides valuable insights into the dynamics of the Iraqi financial market and highlights the importance of incorporating micro-financial factors into financial analyzes and investment strategies. The study recommends that future research should explore the complex links between macroeconomic factors and the financial market to gain a comprehensive understanding of the economic environment.



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