Journal of Information Systems Engineering and Management
2025, 10(33s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

The Impact of Monetary Policy on The Performance of The Iraq Stock Exchange for The Period (2006-2023)

Prof. Dr. Fadhil Abbas Kadhim[1] , Hussein Abd Shanan Hashim[2]
[1]*fadhil.abbas@qu.edu.iq, Economics Department, College of Administration and Economics, University of Al-Qadisiyah. Iraq*
2Researcher.hussein Abed 198511@gemil.com

ARTICLE INFO

Received: 01 Mar 2025
Revised: 05 Apr 2025
Accepted: 08 Apr 2025

ABSTRACT

The research aims to analyze the impact of monetary policy on the performance indicators of the Iraq Stock Exchange (ISX) for the period (2006-2023) through direct or indirect channels, through the interaction between economic and financial policies in monitoring developments in the Iraq Stock Exchange. Therefore, investors and financial analysts in the Iraq Stock Exchange must understand the relationship between macroeconomic policies, represented by monetary policy, and stock market performance, and view monetary policy as a policy with a significant impact on the functioning of the financial market. The research relied on annual data for the period from 2006 to 2023, with the aim of demonstrating the impact of monetary policy on the performance of the Iraq Stock Exchange through a quantitative and analytical reading of all variables and determining the type and extent of the relationship. Advanced standard methods and approaches were used, including the Autoregressive Distributed Lag (ARDL) model.

Keywords: Stock Exchange, impact of Monetary Policy,Iraq.

INTRODUCTION

Monetary policy represents the most effective tool for directing financial activity in a direction that contributes to achieving monetary and economic growth and stability. In light of this, the economic and financial transformations that have taken place in countries around the world have not left Iraq far behind in the developments in financial market systems witnessed worldwide. After 2003, the Iraqi economy witnessed a new phase of development for the Iraq Stock Exchange and all related laws and regulations. In 2004, the Iraq Stock Exchange (ISX) was established pursuant to Law No. (74), which was adopted by the Iraqi Securities Commission (ISC). ISX represents the regulatory entity responsible for protecting investors and regulating the Iraqi stock market in the Iraqi economy, which is beginning to show signs of transitioning towards a market economy. These laws and regulations represent the tool that enables the financial system to keep pace with financial and banking developments in countries around the world, expand investment in various fields, and accelerate economic growth. 1- Research Problem.

The research problem we seek to address revolves around clarifying the impact of monetary policy tools on the performance of the Iraq Stock Exchange in light of economic and financial developments in Iraq for the period (2006-2023).

2-RESEARCH HYPOTHESIS.

The research is based on the hypothesis that monetary policy has an impact on the performance of the Iraq Stock Exchange and has long-term direct and inverse relationships with the performance of the Iraq Stock Exchange for the period (2006-2023)

3-RESEARCH OBJECTIVE

1-To clarify the importance of the Iraq Stock Exchange for the period (2006-2023).

2-To explain the impact of monetary policy on the performance of the Iraq Stock Exchange and how to enhance market efficiency.

Journal of Information Systems Engineering and Management
2025, 10(33s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

4THEORETICAL ASPECT

First: Monetary Policy as a Conceptual Framework.

1-The Concept of Monetary Policy.

The term monetary policy emerged at the beginning of the nineteenth century, and interest has evolved since then with the development of the various stages of the quantity theory of money, from a neutral concept to a non-neutral concept with a less significant impact compared to fiscal policy, and then to the stage of maximizing the role of money and monetary policy in economic activity, according to the third stage of this theory. Monetary policy is an economic policy that manages the volume and growth rate of the money supply in the economy. It is a powerful tool for regulating macroeconomic variables such as inflation and unemployment. Monetary policy is the demand side of economic policy. It usually refers to the decisions taken by a country's central bank to maintain economic stability. (1)

Monetary policy has two concepts, a narrow one and a broad one. Monetary policy, in its narrow sense, is the set of measures used by the monetary authority to monitor the money supply to achieve economic goals such as full employment. In this sense, it includes expansion and contraction of the volume of money in circulation. Monetary policy, in its broad sense, includes all measures taken by the government and the central bank to influence the amount and volume of money and credit, as well as the size of public debt. (2)

Economist Bach defined it as the work carried out by the monetary authority that effectively influences the size and composition of assets held by the non-banking sector, whether cash, deposits, or government bonds. (3) Iordachioaia & Titu defined it as the process by which the government, central bank, or monetary authority in a country controls the money supply, financial liquidity, and interest rates to achieve a set of objectives directed toward economic growth and stability. (4)

2-Objectives of Monetary Policy.

Economic thought leaders agree that the objectives of monetary policy are convergent with the objectives of economic policy, as they are an integral part of it. The objectives of monetary policy vary according to the economic development of societies, the prevailing economic and social systems, and the economic conditions of each country. The following are the main objectives of monetary policy:

1-Full employment. This is a situation in which everyone who wants to work has a job. Keynes called for increasing effective demand to cause a decline in real wages. Therefore, the problem of full employment is the problem of maintaining sufficient effective demand.

2-Price stability. One of the objectives of macroeconomic policy is to stabilize the price level. Economists support this policy because price fluctuations bring uncertainty and instability to the economy. (5)

3-Economic growth. Economic growth is defined as the process by which real per capita income in a country increases over a long period of time. Economic growth is measured by the increase in the quantity of goods and services in each successive period. Thus, growth occurs when an economy's productive capacity increases, which in turn is used to produce more goods and services.

4-Income distribution. A fair distribution of income means that income is distributed in a way that ensures fairness and allows everyone to have equal opportunities. A fair distribution of income does not mean that income is distributed equally; it only means that income is distributed fairly. However, income distribution is simply a statistical measure of how many people earn or receive different amounts of income.(6)

3-Monetary Policy Tool.

The monetary policy tools used by the central bank depend on the level of development of the economy, especially the financial sector. These tools can be direct or indirect.

1- Open Market Operations. The most important and flexible tool of monetary policy is open market operations. These are the purchase and sale of government securities in the open market (primary or secondary) with the aim of expanding or reducing the amount of money in the banking system. By purchasing securities, the central bank injects money into the banking system and stimulates growth, while by selling securities, it absorbs excess funds.

2- Legal Reserve Requirements. The monetary authority exercises regulatory oversight over banks. Monetary policy can be implemented by changing the percentage of total assets that banks must hold as reserves with the central

Journal of Information Systems Engineering and Management
2025, 10(33s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

bank. Banks hold only a small portion of their assets as cash available for immediate withdrawal; the rest is invested in illiquid assets such as mortgages and loans. By changing the percentage of total assets that must be held as liquid cash, the Federal Reserve changes the availability of loanable funds. This acts as a change in the money supply. Central banks do not usually change reserve requirements very often because this creates highly volatile changes in the money supply due to the lending multiplier.

3- Rediscount Rate. The rediscount rate is where commercial banks and other depository institutions can borrow reserves from the central bank at a discount rate. This rate is typically set below short-term market rates (Treasury bills). This enables institutions to change credit terms (i.e., the amount of money they are required to lend), thereby influencing the money supply. (7)

4- Prudential Guidelines. The central bank may require credit management banks to exercise special care in their credit operations to achieve specific outcomes. The main elements of prudential guidelines remove some discretion from bank management and replace it with rules.

5- Moral Persuasion. The central bank issues licenses to credit management banks and regulates the operation of the banking system. Therefore, it can persuade banks to pursue certain policies, such as controlling or expanding credit, increasing savings mobilization, and promoting exports through financial support, which they might not otherwise do, based on a risk/return assessment. (8)

Second: The relationship between fiscal policy and stock market performance.

Fama's efficient financial markets hypothesis states that an efficient financial market is one in which financial asset prices always and fully reflect all available information. Fama also refers to an efficient financial market as one in which changes in asset prices are random; more specifically, prices follow a random path. In the presence of high randomness, the financial market operates at full efficiency because it reflects the full spectrum of expectations formed from existing information about the economic and financial situation. Within this framework, in an efficient market, at any point in time, the asset price will always be a good estimate of its intrinsic value. Therefore, it is not possible to observe revaluation periods in which asset prices rise far from their fundamental values. Several theories attempt to explain the reasons that might lead to a loss of efficiency in the financial market. Since the implementation of an expansionary monetary policy affects public expectations, it can transmit distortions that affect agents' ability to evaluate asset prices. (9)

In the above context, it is reasonable to think that the simple implementation of a restrictive monetary policy would reduce the growing public optimism. The prevailing view is that raising interest rates would increase the cost of money and would halt lending and investment. However, the process does not stop completely once expectations are generated. They are returned through the money created by banks and financial markets. This property is explained by the ability of commercial banks to lend resources to firms for the production process. In addition, we emphasize that money creation also occurs through financial markets. The process of money creation in the market is initiated by rising stock prices (also due to falling money prices as a result of low interest rates). Consequently, stocks are sold and money with low interest rates is reintegrated into the net credit in the economy, which is measured by the money supply (M1). The mutual information effects between the money supply (M1) and the financial market reveal the reinvestment process (originating from a fall in interest rates) that feeds expectations in the financial market, through commercial loans, while creating monetary wealth in financial turmoil; this is a measure of the Ponzi scheme mentioned by Minsky. This means that monetary wealth does not fully reach net credit and can therefore generate inflation. Money is not invested in the financial market, and when it is converted into money, it creates slack in the real economy to liquidate funds from loans that are not supported by real production, as the central bank keeps the interest rate artificially low. A possible explanation for the inertial expansion of credit can be found within the post-Keynesian view of monetary economics, which studies the relationship between money, uncertainty, and time. (10)

Third: The Iraq Stock Exchange

The Baghdad Stock Exchange was established in Iraq during the era of the national government in 1921 and is locally called the Baghdad Stock Exchange. Attempts to establish an Iraqi financial market date back to the late 1930s, following the issuance of a law permitting the trading of stocks and bonds in 1939. The number of companies increased until, by 1950, there were (40) companies trading their shares on an unofficial market. In 1957, Law No. (31) was issued, allowing the public to subscribe to shares in these companies. During the period during which Iraq experienced significant political events in the first half of the 1960s, Law No. (100) of 1964 was issued, pursuant to which companies and commercial banks were nationalized, leading to a significant and clear decline in stock trading. In the mid-1980s, economic activity became state-run. In 1987, the Iraqi economy shifted toward private

Journal of Information Systems Engineering and Management
2025, 10(33s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

sector involvement, embodied in the privatization of some state-owned enterprises and the establishment of joint-stock companies. (11)

Later in 1991, a law was issued establishing the Iraqi Stock Exchange, and the Baghdad Stock Exchange was established the following year. It is a non-profit organization that monitors and regulates the stock market, under the supervision of the Ministry of Finance. In 2004, the Iraq Stock Exchange (ISX) was established under Law No. (74). It is a stock market modeled after the New York Stock Exchange (NYSE). It is a separate entity from the Ministry of Finance. It is a non-profit organization, financially and administratively independent, operating under the supervision of the Securities Commission and receiving its payments through company registration fees and commissions from transactions. (12)

THE APPLIED ASPECT.

1- Model variables.

It is possible to formulate the standard model for the independent variables represented by the Monetary Policy tools followed in Iraq and the dependent variables represented by (performance indicators of the Iraqi Stock Exchange), which can be explained through the following table:

Table (1) Definition and measurement of research variables

Variable Type	Variable Code	Variable Name
Monetary Policy Variables		
Independent	M2	Money Supply
Independent	EXC	Exchange Rate
Independent	INF	Inflation
Iraq Stock Exchange Variables		
Continued	GI	General Stock Price Index
Continued	MV	Market Value
Continued	VS	Trading Volume

2- Formulating the standard model

The standard model includes five equations for each of (Monetary Policy) in Iraq, and each equation includes a dependent variable and independent variables, and it is a mathematical equation for the standard model consisting of the independent variables and the dependent variable, and for the purpose of estimating the relationship between the variables, it is required to describe and formulate the model standardly through the following formulas:

1- The general index of market prices as a function of the Monetary Policy variables, as the model consists of three independent variables and a dependent variable, as in the following formula:

$$GI = \beta_0 + \beta_1 M2 + \beta_2 EXC + \beta_3 INF + Ui$$

2- Market value as a function of Monetary Policy variables, as the model consists of three independent variables and a dependent variable, as in the following formula:

$$MV = \beta_0 \beta_1 M2 + \beta_2 EXC + \beta_3 INF + Ui$$

3- Trading volume as a function of Monetary Policy variables, as the model consists of three independent variables and a dependent variable, as in the following formula:

$$VS = \beta_0 + \beta_1 M2 + \beta_2 EXC + \beta_3 INF + Ui$$

3-Estimating models and analyzing their results according to the ARDL methodology

1- Results of testing the relationship between Monetary Policy variables and performance variables of the Iraq Stock Exchange.

The results of testing the relationship between Monetary Policy variables and performance variables in the Iraq Stock Exchange for the period (2006-2023) represent an important study to understand how economic policies affect market performance. In this context, the study focuses on examining the impact of Monetary Policy (Money

Journal of Information Systems Engineering and Management
2025, 10(33s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

Supply, Exchange Rate, Inflation) on performance variables in the market, represented by the main indicators of the Iraq Stock Exchange.

A- Results of the unit root test.

Unit root tests are essential tools for checking the stationarity of a time series before using it in econometric analysis. The (Dickey-Fuller) and tests will be used to check for the presence of a unit root. If the series contains a unit root, taking the first difference to convert the series to stationary becomes necessary to ensure the validity of the econometric results. Before conducting any econometric study and determining the appropriate methodology, it is methodologically necessary to investigate the stationarity of all variables in the research. (12)

Table (2) Results of the augmented Dickey-Fuller (ADF) test for the variables of the econometric model

	With Constan			With Constant & Trend			Without Constant & Trend		
	t-Statistic	**Prob.**		**t-Statistic**	**Prob.**		**t-Statistic**	**Prob.**	
M2	2.104183-	0.2438	no	1.129627-	0.9155	No	0.810389-	0.3610	No
EXC	2.915364-	0.0489	**	3.221511-	0.0891	*	0.220192-	0.6033	No
INF	4.961375-	0.0001	***	4.879429-	0.0009	***	4.512032-	0.0000	***
GI	0.924831-	0.7745	No	3.328998-	0.0704	**	0.311597	0.7729	No
MV	0.088928-	0.9457	No	2.857825-	0.1831	No	1.622880	0.9734	No
VS	0.881462-	0.7861	No	0.867112-	0.9517	No	1.069852	0.9236	No
M2) (d	1.276028-	0.6356	no	2.010900-	0.5840	No	1.442464-	0.1379	No
(EXC) d	2.832335-	0.0592	*	2.428475-	0.3620	No	2.860593-	0.0048	***
(INF) d	2.633649-	0.0914	*	2.483067-	0.3354	No	2.750492-	0.0066	***
(GI) d	3.031264-	0.0371	**	3.076833-	0.1203	No	2.827802-	0.0053	***
(MV) d	2.733093-	0.0742	*	2.751125-	0.2206	No	1.694745-	0.0851	*
VS) (d	1.899355-	0.3300	No	1.879522-	0.6502	No	1.485010-	0.1273	No

Notes: (*) Significant at the 10%; (**) Significant at the 5%; (***) Significant at the 1%. and (no) Not Significant

Source: Researcher's own work based on program results(Eviews : 12)

It is clear from Table (2) that both the dependent variables and the independent variables are stable at the original level and some of them are stable at the first difference using the Dickey-Fuller method. Based on these results, the appropriate methodology for the standard analysis can be chosen, as the stability of the variables was first verified so that the results are valid and accurate. Based on the stability results that were shown, the autoregressive distributed lag (ARDL) methodology developed by (Pesaran et al. 2001) can be used. This methodology is particularly suitable when the variables contain different levels of stability, i.e. some variables are stable at the level and some at the first difference. It is a common technique used to analyze the long-term relationships between economic or financial variables in time series.

First - Estimation of the autoregressive distributed lag (ARDL) model for the general index function of stock prices.

1- Initial estimation of the model.

The initial estimation of the ARDL model is an important step in analyzing the economic relationships between variables.This model provides a framework for examining the relationship between variables in the long run and the short run. In the long run, the model helps identify stable coefficients that reveal the continuous relationships between variables in the long run. On the other hand, in the short run, this model allows measuring the short-term effects on variables due to sudden changes in economic factors, which is an essential step for understanding the dynamics of relationships between economic variables. This estimation includes checking the stability of time series, choosing appropriate lags for the model, and estimating the economic coefficients that determine the short- and long-term effects, which provides a powerful tool for economic analysis and decision-making. (13)

Table (3) Initial estimation of the ARDL model for the general index function of stock prices

Variable		Coefficient		Std. Error		Prob.*
GI(-1)		1.315567		0.137527	9.565864	0.0000
GI(-2)		-0.520892		0.194768	-2.674423	0.0111

Journal of Information Systems Engineering and Management
2025, 10(33s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

GI(-3)	0.001654	0.179069	0.009237	0.9927	
GI(-4)	-0.175268	0.119279	-1.469395	0.1502	
M2	-23.22454	2.979717	-7.794210	0.0000	
M2(-1)	27.71562	5.478686	5.058807	0.0000	
M2(-2)	-11.35596	3.714525	-3.057176	0.0041	
EXC	800.8411	319.3988	2.507340	0.0167	
EXC(-1)	-1270.552	529.0799	-2.401436	0.0215	
EXC(-2)	595.0934	484.6085	1.227988	0.2272	
EXC(-3)	68.95672	438.3554	0.157308	0.8759	
EXC(-4)	384.8870	283.8222	1.356085	0.1833	
INF	-4546.222	3487.839	-1.303450	0.2005	
INF(-1)	6898.059	5885.393	1.172064	0.2487	
INF(-2)	-3559.984	5783.720	-0.615518	0.5420	
INF(-3)	4647.059	5403.183		0.860059	
INF(-4)	-7019.706	3096.263		-2.267154	
C	-762528.2	283040.1		-2.694064	
R-squared	0.997414	Mean dependent var		365174.4	
Adjusted R-squared	0.995527	S.D. dependent var		256324.4	
S.E. of regression	17142.88	Akaike info criterion		22.63462	
Sum squared resid	1.09E+10	Schwarz criterion	23.57128		

Source: Researcher's own work based on program results(Eviews : 12)

It is noted from the results of Table (3) that the relative quality of the estimated model is through the high coefficient of determination (0.997414) and it is shown that the model explains 99% of the changes in the general index of stock prices, which is a very strong percentage. The results also indicate that the relationship between the general index of stock prices variable and the Monetary Policy variables is not false, as the value of the Fisher test statistic reached (F-statistic = 528.5721), which means that the model is statistically significant. We note that the value of (Durbin Watson statistic) which is equal to (2.310393) indicates the absence of the problem of serial autocorrelation of the residual.

2- Bounds Testing:

To detect the existence of a long-term equilibrium relationship (co-integration) between the general index of stock prices and Monetary Policy variables, the bounds test is used, which is a statistical method that aims to examine whether the studied variables follow a common long-term pattern. This is done by comparing the calculated value of the (F) statistic for the long-run coefficients in the model with the tabular value of the (F) statistic according to the limits set by (Pesaran, 2001). This comparison is based on the following basic hypotheses:

Alternative hypothesis (H_1): indicates the existence of a joint integration relationship between the studied variables. In other words, there is a long-term relationship between the general index of stock prices and the Monetary Policy variables.

Null hypothesis (H_0): It assumes that there is no joint integration relationship between the variables, i.e. the changes in the general index of stock prices and the Monetary Policy variables.

If the calculated value of (F) is greater than the table value of the (F) statistic at the upper limits, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted, indicating the existence of joint integration between the general index of stock prices and the Monetary Policy variables. However, if the calculated value of (F) is less than the table value, the null hypothesis is accepted, which means the absence of an integral relationship between the variables.

Table (4) Results of the boundary test for the estimated model of the general index of stock prices function

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif	I(0)	I(1)
Asymptotic: n=1000				
F-statistic	4.657807	10%	1.99	2.94
K	6	5%	2.27	3.28

Journal of Information Systems Engineering and Management
2025, 10(33s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

	2.5%	2.55	3.61
	1%	2.88	3.99
Actual Sample Size 56	Finite Sample: n=65		
	10%	2.12	3.145
	5%	2.473	3.583
	1%	3.225	4.571

Source: Researcher's own work based on program results(Eviews : 12)

According to the results shown in Table (4), it appears that the calculated value of the (F) statistic of (4.657807) was greater than the tabular value at all levels of statistical significance used (such as 1%, 5%, 10%). This means that according to the Bounds Testing, the null hypothesis indicating the absence of a relationship for the test is rejected, indicating that there is a long-term relationship or joint integration between the studied variables, and thus, the existence of a stable equilibrium relationship between Monetary Policy on the one hand and the general index of stock prices on the other hand. Thus, the existence of joint integration means that Monetary Policy variables can be linked in the long term with the general index of stock prices, indicating that there is a stable relationship linking these variables in the long term. Joint integration between Monetary Policy variables and the general index of stock prices, in other words, the calculated value of (F) exceeded the upper limit determined by the tabular values.

Second - General estimation of the (ARDL) model for the market value function.

1- Results of the initial estimation of the model for the market value function.

Table (5)Initial estimation of the ARDL model for the market value function

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
MV(-1)	1.472188	0.088504	16.63408	0.0000
MV(-2)	-0.646041	0.082081	-7.870741	0.0000
M2	0.002614	0.006814	0.383670	0.7027
EXC	3.049951	2.022200	1.508234	0.1372
EXC(-1)	-5.188386	2.190707	-2.368361	0.0214
INF	-28.78155	30.03432	-0.958289	0.3421
INF(-1)	49.84537	27.84800	1.789908	0.0790
C	1163.236	971.1865	1.197747	0.2362
R-squared	0.997656	Mean dependent var		9089.827
Adjusted R-squared	0.997187	S.D. dependent var		4790.797
S.E. of regression	254.0883	Akaike info criterion		14.07409
Sum squared resid	3550847.	Schwarz criterion		14.46896
Log likelihood	-459.4820	Hannan-Quinn criter.		14.23034
F-statistic	2128.032	Durbin-Watson stat		2.203269
Prob(F-statistic)	0.000000			

Source: Researcher's own work based on program results(Eviews : 12)

It is noted from the results of Table (5) that the relative quality of the estimated model is through the high coefficient of determination (0.997656) and it is shown that the model explains 99% of the changes in the market value, which is a very strong percentage. The results also indicate that the relationship between the market value indicator and the Monetary Policy variables is not false, as the value of the Fisher test statistic reached (F-statistic = 2128.032), which means that the model is statistically significant. We note that the value of (Durbin Watson statistic) which is equal to (2.203269) indicates the absence of the problem of serial autocorrelation of the residual.

2. Bounds Testing:

According to this test, the lower and upper limits of the possible values of the co-integration coefficients between the variables are determined, and the (F) statistic resulting from the model estimates is compared with the upper and lower limits. If the F statistic is greater than the upper limit, this means that there is a co-integration relationship between the variables. If the F statistic is less than the lower limit, this indicates that there is no co-integration between the variables. Table (27) shows the bounds test for the ARDL model.

Journal of Information Systems Engineering and Management
2025, 10(33s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

Table (6)Results of the bounds test for the estimated model of the market value function

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif	I(0)	I(1)
Asymptotic: n=1000				
F-statistic	5.542853	10%	1.99	2.94
K	6	5%	2.27	3.28
		2.5%	2.55	3.61
		1%	2.88	3.99
Actual Sample Size	76	Finite Sample: n= 67		
		10%	2.1	3.121
		5%	2.451	3.559
		1%	3.18	4.596

Source: Researcher's own work based on program results(Eviews : 12)

According to the results shown in Table (6), it appears that the calculated value of the (F) statistic was greater than the tabular value at all levels of statistical significance used (such as 1%, 5%, 10%). This means that according to the Bounds Testing, we can reject the null hypothesis that there is no co-integration relationship between the fiscal policy variables and market value. In other words, the calculated value of (F) exceeded the upper limit determined by the tabular values of the test, indicating that there is a long-term relationship or co-integration between the studied variables, and thus, the existence of a stable equilibrium relationship between Monetary Policy on the one hand and market value on the other hand. Thus, the existence of co-integration means that Monetary Policy variables can be linked in the long term with market value, indicating that there is a stable relationship linking these variables in the long term. Third: General estimation of the (ARDL) model for the trading volume function.

1- Results of the initial estimation of the trading volume function.

It is noted from the results of Table (7) the relative quality of the estimated model through the high coefficient of determination (0.981659) and it is shown that the model explains 98% of the changes in the trading volume indicator, which is a very strong percentage. The results also indicate that the relationship between the trading volume indicator variable and the Monetary Policy variables is not false, as the value of the Fisher test statistic reached (F-statistic = 109.7211), which means that the model is statistically significant. We note that the value of (Durbin Watson statistic) which is equal to (1.994752) indicates the absence of the problem of serial autocorrelation of the residual.

Table (7) Results of the initial estimation of the trading volume function

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
VS(-1)	1.172498	0.104344	11.23680	0.0000
VS(-2)	-0.243794	0.168893	-1.443487	0.1565
VS(-3)	-0.152531	0.098268	-1.552194	0.1283
M2	57.68243	14.59724	3.951598	0.0003
M2(-1)	-75.90042	25.43287	-2.984343	0.0048
M2(-2)	68.88897	16.50963	4.172653	0.0002
EXC	-1029.011	1217.792	-0.844981	0.4030
EXC(-1)	-4901.936	2233.693	-2.194543	0.0339
EXC(-2)	5617.845	2262.560	2.482959	0.0172
EXC(-3)	-2221.578	1213.718	-1.830391	0.0745
INF	2271.293	4457.641	0.509528	0.6131
C	4134598.	767001.5	5.390600	0.0000
R-squared	0.981659	Mean dependent var		718526.8
Adjusted R-squared	0.972712	S.D. dependent var		545254.4
S.E. of regression	90070.86	Akaike info criterion		25.91844
Sum squared resid	3.33E+11	Schwarz criterion		26.63892
Log likelihood	-782.4716	Hannan-Quinn criter.		26.20132
F-statistic	109.7211	Durbin-Watson stat		1.994752
Prob(F-statistic)	0.000000			

Source: Researcher's own work based on program results(Eviews : 12)

Journal of Information Systems Engineering and Management
2025, 10(33s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

2- Bounds Testing.

According to the results shown in Table (8), it appears that the calculated value of the (F) statistic was greater than the tabular value at all levels of statistical significance used (such as 1%, 5%, 10%). This means that according to the bounds test, we cannot accept the null hypothesis that there is no joint integration relationship between the variables of Monetary Policy and trading volume. In other words, the calculated value of (F) exceeded the upper limit determined by the table values of the test, indicating that there is a long-term relationship or joint integration between the studied variables. Therefore, there is a stable equilibrium relationship between fiscal policy on the one hand and trading volume on the other hand. Thus, the existence of joint integration means that Monetary Policy variables can be linked in the long term with trading volume, indicating the existence of a stable relationship linking these variables in the long run.

Table (8)Bounds Test Results for the Estimated Model of the Trading Volume Function

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif	I(0)	I(1)
Asymptotic: n=1000				
F-statistic	9.931069	10%	1.99	2.94
K	6	5%	2.27	3.28
		2.5%	2.55	3.61
		1%	2.88	3.99
Actual Sample Size	26	Finite Sample: n=65		
		10%	2.12	3.145
		5%	2.473	3.583
		1%	3.225	4.571

Source: Researcher's own work based on program results(Eviews : 12)

CONCLUSIONS

1- The statistical results indicate that the relationship between the Iraq Stock Exchange indicators and monetary policy variables is not spurious based on the Fisher test (F-statistic), meaning that the model is statistically significant.

2- According to the bounds test, there is a stable equilibrium relationship between monetary policy on the one hand and the general index of stock prices, market capitalization, and trading volume on the other. Thus, the presence of cointegration means that fiscal policy variables can be linked to market indicators in the long run, indicating a stable relationship between these variables over the long term.

REFERENCES

[1] Direct monetary policy tools and variables to a high degree of efficiency and effectiveness to stimulate and implement these tools in the Iraq Stock Exchange, enabling it to absorb large quantities of stocks and bonds issued by the Central Bank, the government, and companies.
[2] Encourage individuals to invest in the Iraq Stock Exchange by instilling a culture of savings and investing them in investment portfolios and diversifying financial services to meet investment requirements.
[3] Sources
[4] Samir Mahmoud Moatouq - Monetary Theory and Policies - The Egyptian Lebanese House, Cairo, 1989, pp. 145-149.
[5] Norman, Loayza & Klaus Schmidtz – Hebbel, Monetary Policy Functions and Transmission Mechanism, an Overview,Central Bank of Chile,2012,pp.1-2
[6] Bach.G. L .Money and Banking - Federal Reserve Policy-Making .New York: Alfred A. Knopf, Inc., 1950. p. 239
[7] Iordachioaia Adelina-Geanina, Titu Maiorescu, Monetary Policy and Economic Policy, journal of knowledge management, economics and information technology, volume1, Issue no: 2 University of Romania, February 2011, p 2
[8] Marie Delaplace - « Money and Finance Economy » - edition DUNOD , Paris ,2021, pp.123-129
[9] Friedman.B.M, "Monetary Policy," Abstract.". International Encyclopedia of the Social & Behavioral Sciences. 2001. p. 9976

Journal of Information Systems Engineering and Management
2025, 10(33s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

[10] Christian. G & Pascal .T , Reserve Requirements for Price and Financial Stability: When Are They Effective, International Journal of Central Banking , 2012,PP.65-67
[11] Hill Ajami Al-Janabi, Ramzi Yassin Arslan, Money, Banking and Monetary Theory, First Edition, Wael Publishing House, Amman, 2009, p. 271
[12] Fama, E. F. "Efficient Capital Markets: A Review of Theory and Empirical Work". The Journal of Finance, 25(2),1970, 387-391
[13] Minsky, H. P. "The Financial Instability Hypothesis", Working Paper no. 74. The Jerome Levy Economics Institute,1992,pp.2-8
[14] Imad Abdul Hussein, Talat Abdul Hakim, Electronic Trading System and its Impact on Stock Market Trading Indicators: An Analytical Study of the Iraqi Stock Market. Journal of Economic and Administrative Sciences, Vol. 22, No. 92, 2016, p. 264
[15] Bayar MohamedRasheed Marane,Iraq Stock Exchange Performance Determinants: A literature review,Technium Social Sciences Journal,Vol.31,2022,p.398