STOCK PRICE TRENDS FOR JOINT STOCK COMPANIES LISTED ON THE IRAQ STOCK EXCHANGE

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Abstract

This research objective to analyze the stock prices of the banks listed in the Iraq Stock Exchange for the period (2007-2021) and predicts the trends of their stock prices. The research problem centers on answering the following questions: Are stock prices affected by economic, political and security fluctuations? Is the Iraqi environment attractive to financial investment (investment in shares)? What are the future trends of stock prices for the research sample banks? In order to answer the questions, the researcher developed a hypothesis that there is a relationship and a significant effect between (assets, net profit, earnings per share, market value and investments) as internal independent variables and stock prices as a dependent variable. . The internal variables of the research sample banks (assets, net profit, earnings per share, market value and investments) were independent, while the stock prices of each bank were a dependent variable. The researcher reached the following results: The stock prices of the Iraqi stock market in general and the banks of the research sample in particular are affected by economic, political and security fluctuations and thus are negatively reflected on the internal variables of each bank, which leads to a decrease in the prices of its shares.

Keywords: Stock prices, capital, market value of shares ,financial investments, net profit after tax, earnings per share, assets.

Introduction

Stock price trends (market trends) are lines drawn between the high and low points of the stock price so that it can diagnose its upward trend or downward trend and know which two directions it will take in the future, and the trend line shows the change that occurs in the expectations of investors and their conviction With levels of change in the price above or below its value, the upward trend is the line that connects the points of decline during the rise of the market or the stock, and whenever these points are spaced and at equal distances, the stronger this trend is, and the downward trend represents the line of communication between Rising points when the market or stock is falling. And that stock prices in the Iraqi market for securities and banks, the research sample in particular, are affected by the political, security and economic fluctuations that occur from one period to another, which is reflected on the bank's performance and thus the share prices of each bank are affected.

Research Importance

The importance of the research comes from the fact that stocks are one of the financing tools by ownership and contribute to increasing the production capacity of the national economy, and help investors make their investment decisions by knowing the trends of stock prices up or

down in the Iraqi stock market through the factors affecting them such as external influences (oil price fluctuations, Exchange rate changes, fiscal and monetary policies, security fluctuations and political problems)

Research problem

The research problem is to answer the following questions:
1. What are the factors affecting stock prices in the Iraqi Stock Exchange?
2. Are stock prices affected by economic, political and security fluctuations?
3. Is the Iraqi environment attractive to financial investment (investment in shares)
4. What are the future trends of stock prices for the research sample banks?

Research Aims

1. Analysis of the indicators of the Iraq Stock Exchange for the period (2007-2021)
2. Analysis of stock prices and financial indicators for the research sample banks for the period (2007-2021)
3. Measure and analyze the impact of the independent variables for each bank on the dependent variable (stock prices)
4. Predicting stock price trends for the research sample banks.

Research Hypothesis

The research stems from the hypothesis that there is a relationship and a significant effect between the independent variables (assets, net profit, earnings per share, market value and investments) and the dependent variable (stock prices) for each bank.

   – Research Methodology: The researcher relied on the deductive inductive approach and the quantitative approach in knowing the stock price trends of the joint stock banks listed in the Iraq Stock Exchange.
   – Research limits: The Iraq Stock Exchange was chosen - a current study and focus on some of the listed banks (Bank of Baghdad, Commercial Bank of Iraq and the Middle East Bank). For the period (2007 – 2021)
   – The first topic: the concept of money markets and stock prices

First: The concept of money markets

It can also be defined as the market that mobilizes and mobilizes financial resources, as it represents a mechanism through which financial resources are transferred from economic units (sectors) that have financial surpluses, and represents the supply of funds to economic units (sectors) that suffer from a deficit in resources. Financial, and represents the demand for financial resources that want to carry out the investment process (Miskin, 2007: 23)

Second: Financial Market Functions

Capital markets perform many functions as follows (Al-Tamimi, 2018: 25-26)

1. Expand the base of ownership and indebtedness to the capital structure of joint stock companies.
2. Adding liquidity and high flexibility to financial assets, which is difficult to imagine in the absence of these markets.
3. Capital markets contribute to reducing the cost of information and the cost of searching for a deal.
4. Expand the base of options for owners of savings and wealth.
5. It helps to consolidate the capital base and the fair and efficient allocation of resources.
6. Contribute to achieving economic and social development.
7. Achieving financial and monetary stability in the national economy.

Third: The concept of shares

A share is a document issued by a joint stock company that represents the right of ownership of a common share in the company's capital and the ensuing rights that rest on the net assets of the company and its management and control (Abu Qahf, 1996: 21)

Financial institutions dealing in the stock market:There is a group of financial and banking institutions that contribute to the buying and selling of shares in the stock market, as shown in Table (1)

Table (1) stock market institutions

Its role (tasks) in the stock market	Enterprise type
Issuing shares Managing investment portfolios for clients	commercial banks
Investing in stocks for its investment portfolio Undertaking to cover new releases Providing advice and advice on new releases.	investment banks
stock issuance	financial companies
Proceeds from the sale of its investment units are used to purchase shares.	Equity mutual funds
Issuance of shares New shares are offered for sale Providing advice to companies and individuals wishing to purchase shares of new companies Executing stock buy and sell orders.	brokerage firms
Issuing shares Investing large percentages of insurance premiums in the stock market	Insurance companies
Investing large proportions of retirement contributions in the stock market.	pension funds

Source: Suleiman Moussalli and Adnan Salman, Financial Markets, Damascus University Publications, 2013, p. 41

The second topic

Measurement and analysis of stock price trends for the research sample banks.

Or not. Stability Tests (Levin, Lin & Chu Unit Root Test) Through the tables (36), (37) and (38), it is clear that all the model variables stabilized at the level and at the first difference, all of the variables (MV_BB, SP_MEB, NP_MEB INV_MEB, ES_EMB) were stabilized, whether with categorical or categorical and direction or without categorical and direction The level of significance ranged between (5%-1%)As for the variables (AS_BB INV_BB, ES_BB, MV_MEB, AS_MEB, SP_TBI, NP_TBI, INV_TBI, AS_TBI), all of them stabilized at the first difference, whether with categorical or categorical and direction or without categorical and direction, and the level of significance ranged between (5%-1%)

Secondly. Model Rating

Common Constant Model

It is the method of estimating the normal constant model for all sections, which means that there is no difference between the estimated sections and the assumption of homogeneity of the data set among the study samples (here are the three banks)Through Table (39), we find that the effect of the independent variable earnings per share (ES) on the dependent variable stock price (SP) amounted to (1.202296), meaning that a change of one unit in the earnings per share variable leads to an increase in the independent variable (share price) by (1.2), all the parameters of the parameters are positive except for the variables of assets (AS) and net profit (NP)

The Fixed Effect Model

It is a linear regression model with a fixed, variable limit between sample units, that is, it allows the fixed term to vary for each group.Through Table (40), we find that the effect of the independent variable earnings per share (ES) on the dependent variable stock price (SP) amounted to (4.308637), meaning that a change of one unit in the earnings per share variable leads to an increase in the dependent variable (share price) by (4.3), the signs of all parameters were positive except for the signs of the investment variables (INV) and net profit (NP)As for the effect of sections for each bank, the Trade Bank of Iraq (TBI) had a distinction or difference from other banks in the model with a negative relationship of (-0.187552), that is, the cumulative effect of the independent variables (assets, net profitability, earnings per share, market value, And investments) had a negative impact on the bank's stock prices, and the Middle East Bank (MEB) came in second place with a negative relationship as well, with a value of (-0.219117), and the Bank of Baghdad (BB) came in third place with a positive relationship and a value of (0.406669)

Random Effect

Here the fixed limit of each segment in the random effect model is fixed and it is a random parameter.Through table (41) we find that the effect of the independent variable earnings per share (ES) on the dependent variable stock price (SP) amounted to (2.584883), that is, a change

of one unit in the earnings per share variable leads to an increase in the independent variable (share price) by (2.5), the signs of all parameters were also positive except for the signs of the investment variables (INV) and net profitability (NP)As for the effect of sections for each bank, the Trade Bank of Iraq (TBI) had a distinction or difference also from other banks in the model with a negative relationship amounted to (-0.286551), and the Middle East Bank (MEB) came in second place with a negative relationship also and a value of (-0.225357) And the Bank of Baghdad (BB) came in third place with a positive relationship and a value of (0.511908)

Hausman Test

For the purpose of choosing between the fixed effect or the random effect of the estimate, we resort to the (Hausman) test. We note that the (p-value) amounted to (0.000000), which is less than 0.05. Therefore, we reject the null hypothesis of the estimate with Random Effect and estimate instead with (Fixed Effect)

Third: Diagnostic tests
The problem of heteroscedasticity
Here, the model is tested for whether or not the homogeneity of variance is inconsistent through the estat hottest. that the (P-value) amounted to (0.0962), so we conclude that the model does not suffer from the problem of instability of homogeneity of variance.

The model has no omitted variable problem
Here, whether the model contains a deleted variable or not is tested through the estat ovtest. If the (P-value) value is greater than (0.05), then the model does not contain a deleted variable, and we find in Table (44) that the value of (P-value) has reached (0.2119), so we conclude that the model does not suffer from the problem of having an omitted variable.

The problem of multicollinearity
The presence or absence of a multilinearity problem is detected by the variance inflation factor (VIF), which is a measure of the amount of multicollinearity in a set of multiple regression variables. Mathematically, the VIF) of a regression model variable is equal to the ratio of the total model variance to the model variance that includes only that single independent variable. This ratio is calculated for each independent variable. A high VIF (greater than 3) indicates that the correlated independent variable is closely related to the other variables in the model.Through table (45), we find that all values of (VIF) were less than (3) and they range between (1.39-1.02), so we conclude that the model does not suffer from the problem of multilinearity.

Autocorrelation problem
The model is tested to discover the autocorrelation problem through the Breusch-Godfrey LM test. If the (P-value) is significant, i.e. less than (0.05), the model does not suffer from the autocorrelation problem, and we find through the table (46) The (P-value) was (0.003), and we

conclude from this that the model does not suffer from the problem of autocorrelation.

Fourthly. Application of the Autoregressive Distributed Gaps Model (Panel ARDL)
table (4) It shows long-term estimates (LR), short-term estimates (SR), adjustment coefficients or error correction coefficients (ADJ), and we note the following:

Long-Range Estimates (LR): The results of long-term estimates indicate the following
A. There is an inverse relationship between each of the assets and the earnings per share on the one hand and the dependent variable the stock price on the other hand. As for the assets, when they are purchased, they are recorded according to the cost price. However, this price is subject to increase or decrease as a result of different economic conditions and as a result of inflation factors. It is possible that It is negatively reflected on the stock prices, except in the event that the bank re-estimates its assets and considers the increase in its value as an increase in its capital after approval of this by the general assembly. As for the net profit per share, it is possible for the bank to borrow from the central bank at a low interest rate to finance the repurchase of its shares, to reduce the number of issued shares and increase the profitability of the share immediately after the same profits were divided among a smaller number of shareholders, so it does not reflect the real value For profit, noting that all probability values (P-value) are significant except for the investment variables (INV) and assets (AS)
B. The greatest impact on the dependent variable on the part of the independent variables came from the earnings per share (ES) variable. The importance of earnings per share in influencing the stock price is not hidden, as it is a guide to the expected cash earnings divisor. Positively reflected in an increase in the cash dividends received by the shareholder.Therefore, we find that the results of analyzing and testing the impact of earnings per share on the value of the bank measured by the value of its common stock in the money markets, using regression analysis, resulted in a (direct) effect on the rise in the share price, and this means the possibility of relying on this indicator when making the decision to invest in common stocks. Determine the best investment.
C. The least impact on the dependent variable (the share price) came from the market value of the share. It is known that the dividend policy is one of the most important financing policies in companies due to its direct relationship with shareholders and its repercussions on the share price in the market, as it relates to the decision to divide the company's profits between profits Distributed to shareholders and retained earnings, so we find that the amendment of this policy by the three banks is enough to restore balance to that relationship, and this will be clarified in the paragraph (Error Correction Transactions)

Short Run Estimates (SR)
The estimates of the short-term parameters are in line with the long-term estimates, as the variable (assets) has an inverse relationship with the stock price in the Middle East Bank and Baghdad, while it is linked to a direct relationship in the Trade Bank of Iraq, and the opposite

happened to the variable (investment) as it is directly related to the stock price in Banker of the Middle East and Baghdad, while related to an inverse relationship in the Trade Bank of Iraq.Here, we find that the difference in the dividend distribution policy is what led to this understanding in the relationship between investment and the stock prices of the three mentioned banks, as retained earnings are a major source of investment financing and expansion in the bank, and although the expansion of the bank is desirable, the distribution of profits is also desirable.

Error Correction Coefficients (ADJ): The error correction coefficient (adjustment speed) was significant and negative as expected, as its value was (-0.25). This means that the policy taken by the three mentioned banks can be corrected within a period of four years and return to a state balance in the long run.

Fifth: Post-tests

Test (Kao)

The decision of co-integration depends on the (Kao test), which is an alternative to the test of limits in time series, which measures the absence of a co-integration relationship with the alternative hypothesis versus the absence of a co-integration relationship with the null hypothesis, and it is separated by noting the (P-value), If it is significant, i.e. less than (0.05), we judge the model variables as including co-integration, and if their value is not significant, i.e. greater than (0.5), then there is no co-integration.Through the table (48), we find that the values of (P-value) were four of them less than (.05), and thus there are four co-integration radiations, and this enables us to estimate the parameters of the short and long run, with the presentation that the time series should be stable at their level Only at the first difference, with the stability of the dependent variable at the first difference, otherwise the ARDL model cannot be used in estimating, and the reason for this is that in the ARDL model there is a dimensional test called the Bound test and this test has two limits (as it is clear from its name) the upper Sunday It is assumed that all variables are stable at the first difference, and the minimum is assumed that all variables are stable at their level, and therefore there is no special limit for the second difference.The relevant theoretical literature indicates that the variables (assets, net profit, earnings per share, stock value, and investments) can affect stock prices positively or negatively depending on the bank's policies. Here, a statistically significant relationship was found between the independent variables and the dependent variable. Thus, the variables (assets, net interest, earnings per share, stock value, and investments) were important factors behind influencing the stock price in the Iraqi trade banks, the Middle East and Baghdad in the long run.

Cum Sum Test: Cumulative Sum

The stability of the estimated regression coefficients is achieved if the graph of the CUM SUM statistic falls within the critical limits and at a level of significance of 5%, and then these coefficients are unstable if the graph of the mentioned test statistic moves outside the critical limits and at the same level of significance.From the graph (33) we find that the graph of the

CUM SUM statistic fell within the boundary D critical and at the level of significance of 5%, and then these coefficients are stable.

Shape (33)
Cusum Test Results
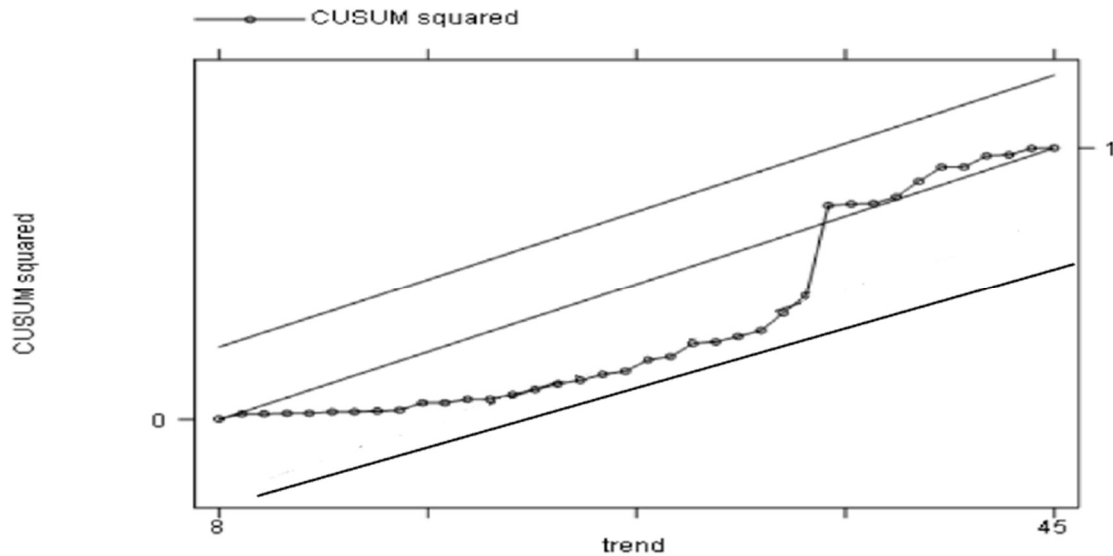
Source: STATA 15 . programming package output

Wald test: It is the basic test in the ARDL model and important decisions are made regarding the acceptance of the model or whether the model includes a long-term equilibrium relationship or not.

Wald's test is based on your hypothesis

a. As for the values of the parameters (other than the constant) equal to zero, assuming that we have five independent variables in the model, the hypothesis is as follows:

$C(2) = C(3) = C(4) = C(5) = 0$

B. Or the parameter values (other than the constant) are equal to one.

$C(2) = C(3) = C(4) = C(5) = 1$

If the Wald test shows that the parameters of some explanatory variables are zero, you can remove the variables from the model, this strongly indicates that removing them from the model will not significantly reduce the fit of this model, because the independent variable whose parameter is too small for its standard error does not It generally does a lot to help predict the dependent variable, and if the test shows that the parameters are not zero, you should include the variables in the model.

Table (49) shows that the probability value (P-value) and value (F) are not equal to zero, that is, all independent variables have a significant effect on the dependent variable and thus we can reject the null hypothesis, which again indicates that the coefficients do not equal zero at the same time. time, which means that including these variables creates a statistically significant improvement in the fit of the model.

Conclusions and recommendations

First, the conclusions

1. Money markets are one of the components of the financial system, and contribute to the transfer of financial surpluses from financial surplus units (lenders) to units with financial deficit, and shares are a form of financing by ownership and contribute to financing the production capacity of the national economy.

2. The results of the standard test showed that all the variables of the standard model of the Bank of Baghdad (BB) stabilized at the first level and difference, and the level of morale ranged between (5% - 1%). As for the Commercial Bank of Iraq (TBI), all of them settled at the first difference, and the level of morale ranged between (5% - 1%)

3. The results of the standard test through the normal method showed that the effect of the independent earnings per share (ES) on the dependent variable stock prices (SP) was (1.202296), that is, by one unit in the earnings per share variable, it leads to an increase in the dependent variable (the stock price) by) 1.2), all the parameters of the parameters are positive except for the variables of assets (AS) and net profit (NP)

4. The results of (Hausman's) test showed that the (P-value) is less than (0.05), so we reject the null hypothesis that says to estimate with the random effect (Random effect) and we estimate the fixed effect (Fixed Effect)

Second: Recommendations

1. Encouraging and supporting the wider use of banking services and electronic payment services to support the liquidity of investment in shares.

2. Developing laws, regulations, and rules, diversifying financial instruments and employing savings in the financial markets.

3. Cooperation and the Iraqi governorates through universities and investment bodies to encourage investors to invest in securities and open branches of brokerage companies and remote trading via the Internet to attract and diversify investments.

4. Issuing rules for establishing Iraqi investment funds to attract national savings and direct them towards multiple investment and to compete with investment funds that deal in shares in the Iraqi Stock Exchange.

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