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# The role of Iraqi economic performance in explaining market value of shares

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# Abstract

The study used many statistical methods as Kolmogorov – Smirnov Test, as well as Simple and Multi Regression to investigate the role of Iraqi economic performance in explaining market value of shares. As a result, the significant statistical of all study independent variables during the 4-year study period on the dependent variable is the market value of the sample companies. In conclusion, the high real value of assets such as real estate and securities due to the low purchasing power coming from the high inflation rates affecting the purchasing power of the local currency.

Keywords: Iraqi Economic, Performance, Market Value.

El papel del desempeño económico iraquí en la explicación del valor de mercado de las acciones

# Resumen

El estudio utilizó muchos métodos estadísticos como Kolmogorov - Smirnov Test, así como el Simple y Multi Regression para investigar el papel del desempeño económico iraquí en la explicación del valor de mercado de las acciones. Como resultado, la estadística significativa de todas las variables independientes del estudio durante el período de estudio de 4 años en la variable dependiente es el valor de mercado de las empresas de la muestra. En conclusión, el alto valor real de activos como bienes raíces y valores debido al bajo poder de compra que proviene de las altas tasas de inflación que afectan al poder de compra de la moneda local.

Palabras clave: económico iraquí, desempeño, valor de mercado.

# 1. INTRODUCTION

The most underdeveloped countries in the world, including Arab and Middle Eastern countries, face the problem of lack of sufficient capital under appropriate terms and costs to finance private and public economic development projects. This problem arises either from the relative scarcity of financial resources or the relative deficit in the means and tools of their collection; these resources in marginal aspects of activity do little to accelerate the development process. Financial markets have a vital role to play in the economic development process, where they form channels through which cash flows from units that generate surplus cash to units with Deficit Units and need appropriate channels to meet their financing requirements, Institutions or the government sector, regardless of whether they are local, regional or global markets. Stock exchange prices are an indicator of the country's future economic situation. It is an early warning to state economic regulators to make the necessary arrangements and corrective action when necessary. The fall in stock prices is a sign that the economy is in a recession, and that rising prices are a sign of a recovery this study is intended to shed light on the extent to which the market value of companies has responded to some variables that have a significant impact on the economies of countries, including Iraq.

#### 1.1. Importance of the study

The importance of the study was when many countries in the nonindustrialized world, including Iraq started to undergo structural changes since the eighties have reached a degree of depth permeated with the same macroeconomic philosophy. The new philosophy is based on the implementation by these countries of economic programs that are similar in purpose, although their comprehensiveness varied in the pace of their implementation. The majority of these programs aimed at increasing reliance on the market to meet the financing needs of different economic sectors. These significant shifts in financial markets provide a broader dimension, while at the same time placing greater responsibility on raising the efficiency of resource mobilization, providing new funding needs and facilitating the implementation of public sector allocation programs

#### 1.2. Problem of the study

The problem of the study can be clarified through the following questions:

A) A statement of whether there is a significant effect of GDP on the market value of the sample companies shares B) A statement of whether there is a significant effect of Budget Surplus on the market value of the sample companies shares

C) A statement of whether there is a significant effect of Inflation Rate on the market value of the sample companies shares.

D) A statement of whether there is a significant effect of Average Exchange Rate of I.D Per USD on the market value of the sample companies shares.

E) A statement of whether there is a significant effect of Interest Rate on the market value of the sample companies shares.

#### 1.3. Objectives of the study

The study aims at identifying the effect of some economic variables such as GDP, budget surplus, inflation rate, exchange rates and interest rates through:

A) The possibility of determining the explanatory and predictive capacity of the independent variables on the dependent variable by selecting the hypotheses of the study.

B)The possibility of contributing to the provision of assistance in forming the general policy of the financial institutions of the state and expand its powers to achieve stability as much as possible fluctuations in the general level of prices in the Iraqi financial market

C) To advise the clients in the financial market so that they can predict the movement of stock prices.

# 1.4. Hypotheses of the study

According to the study problem, the following hypotheses can be developed:

A) There is a statistically significant impact of the GDP on the market value of the sample company's shares.

B) There is a statistically significant impact of the Budget Surplus on the market value of the sample company's shares

C) There is a statistically significant impact of Inflation Rate on the market value of the sample company's shares.

D) There is a statistically significant impact of Average Exchange Rate I.D Per USD on the market value of the sample company's shares.

E) There is a statistically significant impact of Interest Rate on the market value of the sample company's shares.

#### 2. METHODOLOGY

#### 2.1. Society and the study sample

The study community consists of all companies listed in the Iraqi Stock Exchange for a period of four years from 1/1/2013 to 12/31/2016, which consists of (92) companies represented by eight sectors (industry, agriculture, banks, investment, hotels and tourism), Insurance, services, and communications. The study sample consisted of 40 companies from the banking sector, 25 banks, the investment of 7 companies, hotels of 8 companies, listed on the stock exchange since the beginning of the establishment of the Iraqi financial market in June 2004, which became the most active in terms of trading in accordance with the different economic conditions experienced by the Iraqi census. The study population formed 43.48% of the original population of the Iraqi Stock Exchange and the percentage (95.24%) of the three sectors. To give more accurate results, this large percentage was chosen. This sample was taken to provide all the information for the study, as well as the non-disruption of the circulation of its shares in the market as well as non-integration with other companies.

#### 2.2. The study variables and statistical methods used

The study consisted of five independent variables representing the variables of economic performance which represented of (GDP, Budget Surplus, Inflation Rate, Average Exchange Rate of I.D Per USD and Interest Rate), while the dependent variable in the market value of the shares of companies represented the study sample as follows :

A. The dependent variable: the market value of the shares, as calculated according to the reports of the movement of the prices of shares in the Iraqi market for securities as follows: The Market Value = Number of Shares x Closing Price The annual report of the movement of trading in Iraq stock exchange, 2016). The market value index is used to measure the total supply size, which is the ratio of the market value of the local shares which is included in the country's financial market to GDP. This indicator is appropriate for the country's ability to move the capital and diversify risks at the macroeconomic level although factors such as taxes may the incentives for listing companies in the financial market have changed.

B. The independent variables: Consist of the following:

\* GDP: One way to measure the size of the economy is by value goods and services produced from resources locally located in an area during the period and the size of the total output in the economy has a negative and positive effect on GDP, the increase in gross domestic product leads to a rise in domestic output and thus increases Job opportunities, increased production, increased consumption, Either in the case of a decrease in the total output leading to a reduction in the size of the GDP, leading to lower incomes and employment

opportunities and productivity leading to a decline in investment, and from the above can be determined that the GDP includes the market value of final goods and services where the of values primary commodities or intermediate goods are not calculated In order to avoid falling into the problem of double counting, where GDP is a flow, and then the goods and services produced during the year are calculated only. Also the decline or rise in the GDP is due to the interest rate that is considered one of the important tools used to control the size of credit rate and thus the size of the money supply, and reflects the orientation of monetary policy to encourage them to invest or reduce its role in responding to inflation (Juma, 2000).

\* Budget Surplus: The general budget is the principle of a numerical balance between public revenues and for expenditures a fixed period of one year. The state budget is the principle of digital balance between public revenues and public expenditures for a period of almost a year. Ie, it shows the surplus or the total deficit through the total actual revenues minus the total actual expenditures of the general budget of the state, the importance of the general budget is also evident through financial and economic fields. The government can direct economic changes and influence economic conditions such as the balance of recession. inflation. payments deficits. interest rate determination, income distribution, etc. The situation of the state budget is reflected in the status of its trade balance since the deficit in the balance of trade balance of payments is only a

direct result of the budget deficit internal deficit, and that the internal deficit is the one that automatically leads to the external deficit (Abdelhak, 2008). The fiscal policy in the country tends to affect the exchange rate. Restricted fiscal policy creates a surplus in the budget because it reduces aggregate demand, which leads to a decline in economic activity, leading to lower imports and increased exports and the current account tends to achieve surplus, all of which leads to the appreciation of the exchange rate of the local currency against the low price Foreign Exchange (Abdulazim, 1987). Jamal (2004) noted that the deficit in the public budget occurs when the state's expenditure exceeds its income. This is a real danger because dealing with it through borrowing causes a permanent debt, and the issuance of new notes leads to a permanent inflation.

\* Inflation Rate: Economists disagree on defining a specific definition of inflation, but it can be said that inflation in its economic sense is a weakness of the purchasing power of the currency, and inflation is evident in times of economic crisis because of the weakness of the ability of governments to address the budget deficit. In Iraq, For example, the high rates of inflation during the 1980's as a result of the Iran-Iraq war were observed. These rates increased in the 1990s as a result of the imposition of the economic embargo on Iraq , As well as the cessation of Iraqi oil exports, paralyzing the movement of the Iraqi government in the disposal of its assets of foreign currency contributed remarkably to the aggravation of inflation

and the high levels of public prices significantly (Khazraji, 2007). Several studies have shown a comparison between the evolution of the trend of standard prices and the evolution of inflationary trends, a lack of correlation between economic reality and the stock market in relation to inflation. Those studies concluded that the rise Prices generally (inflation) are not suitable for rising prices in the stock exchange, meaning that the values of securities cannot be in all cases, safe values of inflationary effects. In fact, this contradiction is obvious (Awadallah, 2007). Fama assumes that the relationship between inflation and return on stocks is illogical in nature, and reflects the demand for Money and real activity and inflation and make them an integral part of quantitative theory. If real activity is expected to rise in response to a real positive shock, Stock returns will increase, while the future increase in real economic activity will contribute to increased demand for money. In the central bank's policy to achieve some sort of stability in the growth of money supply, inflation rates will fall, therefore, equity returns and inflation will have a reverse relationship (Haidar, 2002).

\* The exchange rate of the Iraqi dinar against the US dollar: This price is determined by the Central Bank of Iraq through the window of purchase and sale of foreign currency in the Central Bank, and it is the process of stabilizing the currency through direct intervention in the right direction towards foreign savers, which is allowed to secure the transfer of net profit Annually to his native country, Therefore, the exchange rate concept (unit value of Local currency expressed in foreign currency), and note that the content of this concept is emphasized On the nominal value of the local currency (nominal exchange rate) which is not reflected in most Sometimes reality (Alabbas, 2003). The relative stability of the country's currency has a direct impact on the activity of the stock market. That's the exchange rate is an important economic indicator that affects overall economic stability and hence the performance of the securities market (Gabr, 2002). The actual nominal exchange rate is a weighted index of the nominal value of a basket of currencies of trading partners in a particular year compared to the base year (Alsadiq & Latifa, 1997).

Exchange rate fluctuations do not need to deter investors from directing their investments to countries that are characterized by their exchange rate fluctuations. These fluctuations create not only risks but also create opportunities for profit. Their effects are not always negative for foreign investors As long as there are expected profits that exceed the cost of exchange rate fluctuations (risk costs) (Fahrettin, 2001). The decline in stock prices in a market may lead to large quantities being put on the market, thus reducing the demand for these stocks and thus the low prices of the currencies you deal with. Stock prices are also affected by fluctuations in the exchange rates of these currencies (Gabr, 2002).

\*Interest Rate: Lower liquidity may lead to higher interest rates, which in turn will lead to lower borrowing and thus reduce inflation. While investors are advised to borrow when interest rates fall, leading to increased capital and thus a higher rate of return. (Alfarhan, 2002). Siegel believes that short- and medium-term interest rates are the single most important impact on prices and has analyzed the monetary policy of the US Reserve Bank over a period of 42 years from 1955 and until 1996. (Gray, 2007). The relationship between equity prices and interest rates can be illustrated by a review of the relationship between bond prices and interest rates, higher interest rates lead to lower prices of bonds traded in the market, and lower interest rates lead to higher bond prices. That is, there is an inverse relationship between bond prices Interest rates, and the relationship between interest rates and stock prices is also often negative (Gabr, 2002). Interest rates generally rise during the period of economic recovery, which is reflected negatively on prices bonds tend to decline, while bond prices tend to rise during the recession. Because interest rates tend to decline (Matar, 1999).

#### **3. METHODOLOGY**

#### 3.1. Statistical Methods

A) For the normal distribution of the study variables, the test was used *Kolmogorov–Smirnov test* 

# B) Standard deviations

C) To measure the relationship between the independent variables of the study and the dependent variable, simple regression was used

# 3.2. Model of the study

Based on the independent variables of the study, it is possible to predict the market value of the shares of companies according to the following equation:

Y = a + (B1X1) + (B2X2) + (B3X3) + (BX4) + (B5X5)

Whereas:

Y: refers to the market value of the shares

A: refers to the fixed limit

X1: refers to GDP

X2: refers to the surplus in the general budget

X3: refers to rates of inflation

X4: refers to ID exchange rates against the US dollar

X5: refers to the interest rates

#### 4. DISCUSSION AND RESULTS

#### 4.1. Verify data relevance

Table (1) shows the normal distribution of the study variables through the Kolmogorov-Smirnov test. This test requires the availability of normal distribution in the data for the accuracy of the results of the study and the elimination of statistical problems that may adversely affect the results of the hypothesis test. Otherwise, the selfcorrelation between the independent variables of the study will be established so as to exclude the possibility of correct interpretation of the relationship and the proper identification and prediction of the studied phenomenon

N	Variable	Kolmogorov- Smi	Si	Result
1	Market value	0.523	0	Follows normal distribution
2	GDP	0.607	0.	Follows a normal distribution
3	Budget Surplus	0.392	0.	Follows a normal distribution
4	Inflation Rate	0.745	0.	Follows a normal distribution
5	Average Exchange	0.454	0.	Follows a normal distribution
6	Interest Rate	0.604	0.	Follows a normal distribution

Table (1). Natural distribution of variables

\*Alnaimi and Yassin (2008), show that if the mean of the test is 0.05, the distribution of all the variables is normal. Therefore, the

significance of all the variables of the study in the table above is at a level of (0.05) and larger, and thus will be the statistical treatment to test the hypotheses of the study is accurate..

#### 4.2. Presentation of study data:

Table (2) shows the results of the average market value of shares of the sectors (banks, investment, hotels) and the standard deviations of the market value of shares for the years (2013-2016).

Table (2): Averages, standard deviations, the market value of shares of companies in the study sample (Amounts in millions of ID)

No	Sector	average market value of the shares	standard deviati
1	Banking	172348.06	121213.77
2	Investment	36532.67	20023.12
3	Hotel	34978.45	19012.74
Mean and standard devia		81286.39	53416.54

Table (2) indicates that the highest average market value of stocks at the sector level was (172348.06) ID in the banking sector, followed by the average market value of shares in investment sector companies (36532.67) ID, , The average rate in the tourism sector companies (34978.45) ID, and the average market value of the all sectors of study sample (81286.39). As for the risks, the standard deviation (121213.77) for the banking sector was reached. Followed by the risk rate in the investment sector with a standard deviation

(20023.12), while the lowest risk sectors is the tourism sector with a standard deviation. (19012.74), while the average level of sectors in general (53416.54).

#### 4.3. Analysis and testing hypotheses:

A simple linear regression analysis will be used to test the acceptance or rejection of study hypotheses as follows:

(A) Test the first hypothesis

Table (3) shows the results of the statistical analysis that showed the statistically significant relationship between the independent variable (GDP) and the dependent variable (market value of shares) through correlation coefficient (R) (%82.7) at a significant level (0.05). The coefficient of determination, reached (R2) (%59.6), This means that the value of (%59.6) of changes in the dependent variable (market value of shares) is accounted for by the change in the independent variable (GDP), That is, there are other factors (40.4%) that explain the market value of the shares, while the regression coefficient of GDP (-4342.8) means that the increase in gross domestic product by one unit leads to a decrease in market value (4342.8). The value of F (47.41) confirms the level of significance (0.000%) of the validity of the statistical model, which indicates acceptance of the first hypothesis.

# Table (3). The results of the regression analysis of the relationship between GDP and the market value of shares

Variable	R	R2	F	coefficient	Sig.*
			Calculated	Regression B	_
Market value Shares& GDP	%82.7	%59.6	47.41	-4342.8	0.000

Correlation is statistically significant at the level of ( $\alpha \le 0.05$ )

# (B) Test of the second hypothesis

Table (4) shows the results of the statistical analysis that showed the statistically significant relationship between the independent variable (Budget Surplus) and the dependent variable (market value of shares) through correlation coefficient (R) (67.6%) at a significant level (0.05). The coefficient of determination, reached (R2) (52.7%), This means that the value of (52.7%) of changes in the dependent variable (market value of shares) is accounted for by the change in the independent variable (Budget Surplus), That is, there are other factors (47.3%) that explain the market value of the shares, while the regression coefficient of Budget Surplus (9667212.09) means that the increase in Budget Surplus by one unit leads to an increase in market value (9667212.09). The value of F (29.76) confirms the level of significance (0.000%) of the validity of the statistical model, which indicates acceptance of the second hypothesis.

 Table (4). The results of the regression analysis of the relationship

 between Budget Surplus and the market value of shares

Variable	R	R2	F Calculated	coefficient Regression B	Sig.*
Market value Shares & Budget Surplus	% 67.6	2.7	29.76	9667212.09	000

\* Correlation is statistically significant at the level of ( $\alpha \le 0.05$ )

A) Test of the third hypothesis

Table (5) shows the results of the statistical analysis that showed the statistically significant relationship between the independent variable (Inflation Rate) and the dependent variable (market value of shares) through correlation coefficient (R) (%63.8) at a significant level (0.05). The coefficient of determination, reached (R2) (%49.4), This means that the value of (%49.4) of changes in the dependent variable (market value of shares) is accounted for by the change in the independent variable (Inflation Rate). That is, there are other factors (50.6%) that explain the market value of the shares, while the regression coefficient of Inflation Rate (-0.423) means that the increase in Inflation Rate by one unit leads to an decrease in market value ( 0.423). The value of F (47.9) confirms the level of significance (0.000%) of the validity of the statistical model, which indicates acceptance of the third hypothesis.

 Table (5). The results of the regression analysis of the relationship

 between Inflation Rate and the market value of shares

Variable	R	R2	F	coefficient	Sig.*
			Calculated	Regression B	
Market value Shares & Inflation Rate	%63.8	%49.4	47.9	-0.423	.000

\* Correlation is statistically significant at the level of ( $\alpha \le 0.05$ )

# B) Test of the fourth hypothesis

Table (6) shows the results of the statistical analysis that showed the statistically significant relationship between the independent variable (Average Exchange Rate) and the dependent variable (market value of shares) through correlation coefficient (R) (%76.8) at a significant level (0.05). The coefficient of determination, reached (R2) (%54.9), This means that the value of (%54.9) of changes in the dependent variable (market value of shares) is accounted for by the change in the independent variable (Average Exchange Rate), there are other factors (45.1%) that explain the market value of the shares, while the regression coefficient of Average Exchange Rate (-94.019) means that the increase in Average Exchange Rate by one unit leads to a decrease in market value (94.019). The value of F (44.8) confirms the level of significance (0.000%) of the validity of the statistical model, which indicates acceptance of the fourth hypothesis.

Table (6). The results of the regression analysis of the relationship between Average Exchange Rate and the market value of shares

Variable	R	R2	F Calculated	coefficient Regression B	Sig.*
Market value Shares & Average Exchange Rate	%76.8	%54.9	44.8	-94.019	.000

Correlation is statistically significant at the level of ( $\alpha \le 0.05$ )

# C) Test of the fifth hypothesis

Table (7) shows the results of the statistical analysis that showed the statistically significant relationship between the independent variable (Interest Rate) and the dependent variable (market value of shares) through correlation coefficient (R) (%69.8) at a significant level (0.05). The coefficient of determination, reached (R2) (%48.4), This means that the value of (%48.4) of changes in the dependent variable (market value of shares) is accounted for by the change in the independent variable (Interest Rate) , That is, there are other factors (51.6%) that explain the market value of the shares, while the regression coefficient of Interest Rate (-0.021) means that the increase in Interest Rate by one unit leads to a decrease in market value (0.021). The value of F (46.4) confirms the level of significance (0.000%) of the validity of the statistical model, which indicates acceptance of the fifth hypothesis.

 Table (7). The results of the regression analysis of the relationship

 between Interest Rate and the market value of shares

Variable	R	R2	F	Coefficient	Sig.*
			Calculated	Regression B	
Market value Shares & Interest Rate	%69.8	%48.	46.4	-0.021	.000

Correlation is statistically significant at the level of ( $\alpha \le 0.05$ ).

# 5. CONCLUSIONS

According to the results of the test hypotheses of the study that confirms the validity of the relationship between the variables performance of the Iraqi economy in the interpretation of the market value of shares of companies in the sectors to be discussed and listed in the Iraqi market for securities. The following conclusions can, therefore, be clarified:

1. The increase in commodities indicates a decline in commodity prices as a result of the increase in the volume of GDP, leading to lower prices of commodity producers and consequently the decline in the value of the stock in the market.

2. The government's ability to direct financial and economic variables and influence the economic conditions through the public budget as a result of the positive relationship between the surplus budget and the market capitalization of shares.

3. The high real value of assets such as real estate and securities due to the low purchasing power coming from the high inflation rates affecting the purchasing power of the local currency.

4. The desire of investors to transfer their money from the stock market to the currency markets as a result of the positive relationship among the statistical exchange rate of the dinar against the dollar. And the market value of shares listed on the Iraqi Stock Exchange.

5. Investors' tendency to deposit and the lack of a tendency towards loans due to higher interest rates due to the close relationship between the interest rate and the market value of shares. Conversely, investors tend to deposit at low-interest rates.

# REFERENCES

- ABDELHAK, B. 2008. Effects of devaluation of the currency on the state budget a case Algeria, Journal of Human Sciences. Economic Research, University of Mentori, Constantine, N° 31, Algeria. North Africa.
- ABDULAZIM, H. 1987. Exchange rate policy and its relation to the state budget. Cairo. Egypt.
- ALABBAS, B. 2003. Exchange Rate Policy. Nº 23. France.
- ALFARHAN, O. 2002. Determinants of the interest rate in the Jordanian economy. Unpublished MA Thesis, University of Jordan, Amman. Jordan.
- ALNAIMI, M., and YASSIN, H. 2008. Statistics applications. The first edition, Dar Wael for Publishing, Jordan.
- ALSADIQ, A., & LATIFA, N. 1997. Policy and Management of Exchange Rates: Issues, Options and Contents. Policies and Management of Exchange Rates in Arab Countries, Series of Research and Discussion, Workshops, N° 3, Institute for Economic Policy, Arab Monetary Fund, Abu Dhabi. United Arab Emirates.
- AWADALLAH, Z. 2007. Economics of Money. New University House, Alexandria. Egypt.
- FAHRETTIN, Y. 2001. Choice of Exchange Rate Regimes for Developing Countries Africa Region. Working Papers Series, N° 16, UK. www.world bank.org/afr/wps/indexs.htm.

- GABR, M. 2002. Financial Institutions. Al-Quds Open University, Palestine.
- GRAY, G. 2007. **Translation of the Jarir Library.** Your Guide to Evaluation of Shares, Jarir Library, Riyadh. Saudi Arabia.
- HAIDAR, F. 2002. Economic Analysis of Stock Price Changes. Dar Al-Marikh, Riyadh. Saudi Arabia.
- JAMAL, A. 2004. **Fundamentals of the State Budget.** Dar Al-Fajr Publishing and Distribution, Amman, Jordan.
- JUMA, M. 2000. Monetary policy in Syria and its impact on GDP from 1970 to 2000. Saudi Arabia.
- KHAZRAJI, S. 2007. Evaluation of performance of monetary policy in Iraq and the reduction of inflation. Journal of the Faculty of Management and Economics, N<sup>o</sup>.48, p. 9. Poland.
- LEVINE, R., and ZEROS, S. 1996. Stock Market And long Run Grow the World Bank Review. Vol, 2. Poland.
- MATAR, M. 1999. **Investment Department.** Al-Warraq Publishing and Distribution, Amman-Jordan.





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