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## THE IMPACT OF TAX REVENUES ON THE TRADING VOLUME IN THE IRAQI STOCK EXCHANGE-FOR THE PERIOD (2009-2023)

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### Abstract

The change in the function of the state from that of a guardian state to its intervention in economic activity led to an increase in the volume of public expenditures, and the state had to search for alternative sources of revenues and to balance its payments. Taxes are considered one of the important tools that the government relies on to obtain revenues, in addition to their importance in economic life. And social by reducing inequality between classes, rationalizing consumption, reducing saving and investment, and reducing inflation and unemployment rates, which made the state resort to it to obtain revenues, in addition to its impact on many other variables, Hence the importance of the current research emerged by testing the impact of tax revenues on the trading volume in the Iraq Stock Exchange for the period from (2009 - 2023). The current research has concluded that tax revenues have a slight impact on the trading volume in the Iraq Stock Exchange. This is certainly true. This is due to the lack of tax justice in addition to the weak trading volume in Iraq.

**Keywords:** revenues, Taxes, Iraq Stock Exchange, trading volume.

### Introduction

The need to increase additional tax revenues is essential for countries that seek to increase public spending, reduce dependence on foreign aid, and limit resorting to borrowing. Increasing the tax-to-GDP ratio is an explicit and central policy goal in many countries, especially developing countries, the starting point. The natural approach for countries aiming to increase revenue from taxes is to consider the question: How much additional revenue can be raised?

The question of how much revenue a country can earn is distinctly different from the question of how much tax revenue it should collect, and its answer will depend on a variety of political and technical factors such as population preferences, investment rates, tax equity implications, and average incomes of individuals and businesses.

It is no secret to anyone that the increase in taxes certainly affects economic activity in terms of undermining it and thus affects investment rates in any country. Therefore, the amount of

taxes must be proportional to investment rates on the one hand and inflation rates on the other hand, and this is an important goal of policy. The research problem arises. Current by knowing the impact of tax rates on investment, specifically the trading volume of companies listed on the Iraq Stock Exchange.

## **2- Research problem**

Taxes play a major role in advanced, emerging, and developing economies, to varying degrees depending on the economic progress of the country, and in Iraq, which is classified as a developing country, their effects are rarely noticeable, but when they are imposed to relatively high degrees, they lead to obstructing the growth movement and economic development, and this appears clearly. It is evident in the financial markets, whether on the general market index, stock prices, or market trading volume.

## **3- Research hypothesis**

Since the imposition of taxes has a negative impact on the movement of economic activity in Iraq, especially on the Iraqi stock market, this imposition process must be gradual in ascending and in proportion to the economic development in the real sector. Observing the high growth rates in this sector encourages the tax policy maker. To expand the imposition of taxes within limits that do not affect the achieved growth rates. The study hypotheses can be written as follows:

H0) There is no significant correlation between tax revenues and trading volume.

H1) There is a significant correlation between tax revenues and trading volume.

## **4- Study sample**

The sample of the current study includes the Iraqi Stock Exchange, as it included the amount of tax revenues and trading volume for the period from (2009 - 2023).

## **5- The theoretical aspect of the study**

### **First: the concept of tax**

Tax is an essential means of expressing the state's relationship with individuals. It is the source of funding for the state's public treasury. Its importance has increased since it became used to achieve political and economic goals. Like other financial elements, it has been subject to various political, economic and social trends. Due to the diversity and multiplicity of economic activities, the process of imposing the tax was not an easy process. Therefore, Countries are skilled at determining the tax base (Yassin, 2005:95), Therefore, the tax is a sovereign deduction by public authorities to achieve general goals and distribute its burden according to the tax capacity of the citizen (Bazza and Khaznaji, 2020:9). Some of them believe that the tax is a financial obligation imposed by the state on taxpayers without compensation, with the aim of achieving social justice and carrying out development projects that It will serve society equally (Noor et al., 2003:76), Therefore, the taxpayer is forced to pay the tax to the bodies authorized to do so. The person's failure to pay it causes the tax administration to practice its arbitrariness, which appears in the form of simple smuggling (Qataf, 2008:39).

## **Second: Types of taxes**

Tax systems in various countries of the world take different divisions. They are either divided according to their price, or according to the item subject to tax, or according to the method of direct and indirect deduction, or in terms of their being relative or progressive. These classifications must be organized, and we will discuss these divisions with some clarification (Adas And others, 200315:), (Abu Sneina, 200840:), (Abu Hashish, 2004:37): -

### **Taxes, according to their price, are divided into:**

1- **Distributive taxes:** Taxes whose price is not determined in advance. Rather, the financial authorities determine their total return and then distribute this total proceeds to the regions of the country to collect this proceeds so that the final outcome of the amount of the distributive tax is a predetermined amount.

2- **Standard taxes:** These are taxes whose price is determined in advance without specifying their final proceeds and are in the form of a specific percentage applied to the value of the base subject to them.

### **Taxes, according to their level, are divided into:**

1- **Taxes on persons:** - The basis of this tax is the real existence of the person himself, which is of two types: -

- The simple individual tax: It is imposed at a uniform price on all individuals regardless of gender and age, and because of its uniform view of all individuals, it does not achieve justice.  
- Listed individual tax: It is imposed on people at different rates depending on gender, age, or social status.

2- **Taxes on funds:** These are taxing whose source is funds and are imposed on them either directly or indirectly, as follows:

#### **- Direct taxes, which are divided into two types: -**

- Income taxes: These are taxes that take income as their basis.
- Taxes on capital: These are taxes that take people's capital as their basis. Capital means the group of funds that a person owns at a specific moment.
- Indirect taxes: - They share with direct taxes in that they take income and wealth as their basis.

## **Third: General principles of tax**

There are a set of principles on which the tax is based, including (Ben Toumi & Wahab, 2017:78): -

1- The rule of justice: It means that all members of society participate in paying the tax.

2- The rule of certainty: - That is, the tax must be clearly defined in terms of value, base, date of payment, as well as the administrative authority responsible for collection.

3- Appropriateness in payment: - That is, the date of paying the tax must coincide with the date of achieving the taxable base, that is, the tax must not be paid before achieving its base.

4- Economy in expenditures: Tax collection must be organized so that the costs of collecting the tax are less than what enters the state treasury as a tax amount.

#### **Fourth: Trading volume in the Iraqi Stock Exchange**

Financial markets are considered one of the basic pillars of the economy due to their vital role in advancing economic development by collecting individuals' savings and converting them into useful investment channels for securities. Investing in stocks is considered the most widely used by companies to obtain the financing resources they need for their investment projects (Shakhtra, 2005:61), through trading in the financial market, which is defined as the number of shares that were traded during a specific period, as this period may be 5 minutes, 15 minutes, or a day.....etc, That is, how many shares were sold during the five minutes, during the hour, or during the day, and it also represents the number of shares purchased because as long as there are shares sold, there must be a second party who made the purchase, so the trading volume shows us the number of shares executed out of the total offers and requests, As the trading volume of the stock is one of the factors upon which the investment decision is based, as well as a factor of technical analysis (Hani, 2015:23), the trading volume is also the value of the shares that are traded on the stock exchange at different prices during the year, as it gives investors an idea of the market's strength and potential. It will rise or fall in the future, especially since trading volume is one of the main elements that is relied upon in predicting the movement of stocks, as it is a measure of the number of shares that transfer ownership of securities between dealers (Tawfiq, 2016:89).

#### **Fifth: The impact of tax revenues on the volume of trading in the financial market**

Investment is the main focus of economic development. It is a tool for achieving economic growth, as the rate of economic growth depends on the quantity of investments and their distribution among the different branches of economic activity, and the tax affects the tendency to invest. When a tax is imposed on an economic sector at a low rate or the exemption is broad, taxpayers direct their investments towards this sector because it is more profitable. The tax is also an effective tool to prevent the investment of capital in productive sectors subject to a high tax rate (Jammam, 2010:63), Therefore, the impact of tax policy on stock markets is through studying the effects of reducing the tax rate, if the government resorts to reducing the tax rate on the profits of all companies. This would have a positive impact on its net profits, which would subsequently lead to an increase in stock prices in general. However, reducing the tax rate has negative effects, which are represented by a reduction in the state's budget resources, which may force the government to resort to deficit financing, that is, issuing more treasury bonds, which usually causes inflation (Belkhiri, 2021:40), The government hopes that the positive effect of reducing the tax, represented by an increase in corporate profits, will be greater than the negative effect, represented by a decrease in the real value of those profits resulting from the occurrence of inflation. The most recent result is an upward trend in stock prices (Al-Zubaidi, 2014:28). If the opposite happens and the negative effects of reducing the tax rate are greater than its positive effect, then it is expected that prices will tend to decline. Based on the above, the inverse relationship linking tax revenues to stock market performance indicators can be explained, as reducing tax rates is reflected in the income index, The first effect of reducing the tax is an increase in private income as a percentage of any level of total income, and higher private income means greater purchasing

power in the hands of individuals and companies (Futtaima & Hanan, 2022:28), :), Despite the inability to predict the actual pattern of distribution of the increase in purchasing power, this increase will follow three paths, the first of which is increased demand for goods and services, meaning increased production and thus increased profits, increased demand for bonds and increased demand for money. In addition, reducing the tax rate creates incentives to exert additional effort in work and investment, and then there is an increase in production and an increase in profits, which in turn leads to an increase in national income and increases in the three types of demand. In any case, this will work to increase Demand for shares in the stock market (Bouchloush, 2016: 382).

### **Sixth: The applied aspect**

The researcher sought to test the research hypotheses by collecting data on (172) historical observations that extended from 1/31/2009 until 3/31/2023, with a month between each observation and another, meaning that the researcher conducted the observation at the end of each month, and the following is the analysis of the data that was conducted. Obtained: -

#### **1- Descriptive statistics**

This paragraph includes an analysis of the arithmetic mean and standard deviation of the study data, according to the following table:

Table (1) Descriptive statistics for the study variables

Trading volume	Tax revenue	Study variables Statistical method
71677.70	1501923.75	Arithmetic mean
146701.03	1299939.86	standard deviation
1702487.00	6298272.00	highest value
1469.00	67151.00	less value

Source: Prepared by the researcher

It is evident from the above table that:

- 1- The average tax revenues during the study period of 172 months amounted to (1,501,923.75) million dinars, with a standard deviation of (1,299,939.86) million dinars. There is a large dispersion in the amount of tax revenues.
- 2- The average trading volume during the study period of 172 months was (71,677.70) million dinars, with a standard deviation of (146,701.03) million dinars, where the large dispersion in the trading amount is also noted.
- 3- The highest value of tax revenues was (6,298,272.00) million dinars. While the highest trading value was (1702487.00) million dinars.
- 4- The lowest value of tax revenues was (67151.00) million dinars. While the lowest trading value was (1469.00) million dinars.

#### **Second: Testing correlations between the study variables**

(H0) There is no significant correlation between tax revenues and trading volume

(H1) There is a significant correlation between tax revenues and trading volume.



The researcher used the Pearson correlation coefficient to test the correlation between the study variables, according to the following table:

Table (2) Correlation between the study variables

		Tax revenues	Trading volume
Tax revenues	Pearson Correlation	1	.031
	Sig. (2-tailed)		.689
	N	171	171
Trading volume	Pearson Correlation	.031	1
	Sig. (2-tailed)	.689	
	N	171	171

Source: Prepared by researchers

It is noted from the table above that the value of the correlation between tax revenues and trading volume reached (0.031), which is a positive value but not significant, as its significance level reached approximately (0.69). Which means a significant weakness in the relationship between tax revenues and trading volume in the Iraq Stock Exchange. The above result prompts researchers not to reject the null hypothesis, meaning (there is no significant correlation between tax revenues and trading volume).

**Third: Testing the influence relationships between the study variables**

(H0) Tax revenues do not affect trading volume

(H1) Tax revenues affect trading volume

The researcher used a simple regression coefficient for the purpose of testing the size of the effect of tax revenues on the trading volume in the Iraqi Stock Exchange. The result was according to the following table:

Table (3) Testing the influence relationships between the study variables

value R <sup>2</sup>	The calculated F value and its significance level	The calculated value and its significance level T	Exchange volume		Dependent variable  Independent variable
			$\beta$	$\alpha$	
0.001	0.16	0.401	0.003	66447.642	Tax revenue

Source: Prepared by researchers

It is evident from the above table that:

- 1- The exchange volume in the absence of any tax revenues is (66,447,642) million dinars.
- 2- Tax revenues positively affect trading volume by (0.003). This means that the more tax revenues the state collects from companies listed on the Iraq Stock Exchange, the greater the trading volume in the shares of those companies.
- 3- This effect was not significant, as the value of (t) calculated for the regression coefficient was (0.401), which is not a significant value at the level of (5%), but its level of significance was (69%), which indicates that the significance of the relationship is greatly weak.
- 4- The value of (f), which measures the significance of the regression model, was (0.16), and it is also a weak value with significant significance at the level of (69%), which indicates its weak significance.

5- The value of the interpretation coefficient (R<sup>2</sup>) was (0.001), which means that tax revenues explain less than (1%) of the changes that occur in trading volume. This also indicates the weakness of the influential relationship between the variables of the study.

6- The researcher infers that the null hypothesis should not be rejected, meaning (tax revenues do not affect trading volume).

**Fourth: Testing the variance of the study variables**

The researcher conducted a one-way ANOVA test for the purpose of testing the extent to which the study variables varied according to the time period, and according to the two hypotheses below:

(H0) Tax revenues do not vary over the study period.

(H1) Tax revenues vary over the study period.

Table 4 shows the above hypothesis test

Table (4) Variance test for the tax revenue variable

ANOVA					
Tax revenues					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.82E+13	14	4.87E+12	3.467	0.000
Within Groups	2.19E+14	156	1.40E+12		
Total	2.87E+14	170			

Source: Prepared by the researcher

It is clear from the above countries that the value of (f) reached (3.467), which is a significant value at the level of (1%), which the researcher infers by rejecting the null hypothesis, meaning (tax revenues vary during the study period).

(H0) The volume of exchange does not vary during the study period.

(H1) Exchange volume varies over the course of the study.

Table 5 shows the above hypothesis test

Table (5) Variance test for exchange size

ANOVA					
Trading volume					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.5962E+11	14	3.283E+10	1.601	0.084
Within Groups	3.19898E+12	156	2.051E+10		
Total	3.6586E+12	170	3.283E+10		

Source: Prepared by the researcher

It is clear from the above countries that the value of (f) reached (1.601), which is a non-significant value at the level of (1%), which the researcher infers not to reject the null hypothesis, meaning (the volume of exchange does not vary during the study period).

## **7- Conclusions**

The primary purpose of the current research is to test the effect of the size of taxes on the rates of trading volume in the Iraqi market for securities. The results showed that tax rates slightly affect the volume of trading in the Iraqi market for securities, and that there is no significant relationship between the tax rates imposed in the Iraqi market. For financial markets and trading volume This is due to the fact that the volume of trading in the Iraqi market for securities is basically weak and does not have much importance due to the specificity of the Iraqi market for financial securities and the companies listed in it and the lack of clarity and seriousness of the Iraqi government in imposing taxes. This is also due to the economic and political situation and the continuous and multiple political changes in the Iraqi government and this. It certainly had a negative impact on the economic situation in general and the ability of the Iraqi government to implement a unified and consistent policy that contributes to financial and monetary stability, in addition to the weak desire of many investors at home and abroad to trade in the Iraqi stock market due to the existing state of instability and also the lack of certainty in Iraq due to political and economic instability.

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