AMERICAN JOURNAL OF ECONOMICS AND BUSINESS MANAGEMENT



ISSN: 2576-5973 Vol. 6, No. 1, 2023

# Measuring and Analyzing the Impact of the Iraqi Stock Market Indices on the General Taxes in Iraq During the Period (2008-2020)

Khitam Hatim Hamuwd, Al Moataz Star Nouri

Imam Al-Kadhim College of Islamic Sciences, University Departments of Babylon Finbabel9@alkadhum-col.edu.iq

Mohmmed Mohsin Bdaiwi

Imam Al-Kadhim College of Islamic Sciences, University Departments of Babylon Mohmmedmohsen9@gmail.com

**Abstract:** This research attempts to answer the following questions (Do the Iraq Stock Exchange indicators have an impact, whether directly or indirectly, on tax revenues, and how will this impact be, is it positive or negative, and how does the Iraq Stock Exchange contribute through the companies dealing in it in financing the revenues? tax.

As the importance of the research emerges by enabling researchers and those interested in scientific research to identify the most important indicators of the Iraqi market for securities and their impact on Iraqi tax revenues, giving more light on tax revenues, which has become one of the important areas, the researcher hopes that the research will contribute to increasing knowledge Scientific and practical in this field, and thus the study will form the starting point for other future studies.

As this research started from the hypothesis that ((the financial market indicators do not directly affect the public tax revenues in Iraq during the period (2008-2020)).

In order to prove this hypothesis, the Toad Yamoutou causal model was used in order to measure and analyze the impact of the Iraq Stock Exchange indicators on tax revenues for the period (2008-2020).

This research has reached a set of conclusions, including (based on the Toda Yamoto causality test, which showed that the independent variables (financial market indicators) do not cause or affect public tax revenues in Iraq during the period (2008-2020)

The reason why the indicators of the Iraq market for securities did not affect tax revenues in Iraq during the study period according to the economic perspective is the weakness of the economic role of the private sector in all its joints in Iraq, and since the private sector in all its branches is the main engine of

	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 1 in Jan-2023 https://www.globalresearchnetwork.us/index.php/AJEBM
230	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

the financial markets, so we note that the Iraq market for securities Finance is an ineffective market in Iraq compared to the financial markets in Arab countries or foreign countries).

Keywords: financial markets, tax, tax revenues, Iraq Stock Exchange

#### INTRODUCTION

With the expansion of the state's role and its increased involvement in economic life, and with the development of the concept of government finance or fiscal policy, tax policy has become influential in all aspects of economic, social and even political life.

Various countries of the world have drawn increasing interest in tax policy, because it is one of the most important financial policy tools that the state uses within the framework of its general policy in directing and influencing economic activity, in addition to its traditional role as one of the most important sovereign tools of the state in providing revenues

Since the financial markets are the places that bring together borrowers (companies, banks, ...., etc.) with lenders (investors), and what is generated by those economic activities (selling, buying, transferring ownership of shares and bonds, or registering or joining companies) from imposing taxes, Therefore, financial market activities are among the most important sources of tax financing for the general budget of any country

#### First: the importance of research

1. Enabling researchers and those interested in scientific research to identify the most important indicators of the Iraqi stock market and their impact on Iraqi tax revenues.

2. Giving more light to tax revenues, which has become one of the important areas.

3. The researcher hopes that the research will contribute to increasing scientific and practical knowledge in this field.

Thus, the study will constitute the starting point for other future studies.

#### Secondly, the research problem

1.Do the indicators of the Iraqi stock market have an impact, whether directly or indirectly, on tax revenues?

2. How will this effect be, is it positive or negative?

3. How does the Iraqi Stock Exchange, through the companies dealing in it, contribute to the financing of tax revenues?

224	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 1 in Jan-2023 https://www.globalresearchnetwork.us/index.php/AJEBM
231	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

#### Third: the purpose of the research

The research aims to: - Analyzing the elements of the Iraqi tax policy and setting an evaluation framework for it in light of the economic changes that Iraq has gone through, and then formulating some necessary mechanisms to qualify the tax policy to perform its financing and corrective role, especially through financial transactions that take place in the Iraqi market for securities.

#### Fourth: research hypothesis

The research stems from the hypothesis that (financial market indicators do not directly affect the general tax revenues in Iraq during the period (2008-2020.)).

#### Fifthly: the research method

The research adopted the two methods (inductive and deductive) as well as the quantitative method in analyzing the relationship between the indicators of the Iraqi stock market and tax revenues in Iraq for the period from (2008-2020).

#### The first topic

#### THEORETICAL FRAMEWORK FOR TAXATION AND FINANCIAL MARKET

#### The first requirement: the theoretical aspect of taxation

#### First: the concept of taxation

The tax can be defined as a financial deduction from the income and wealth of members of society by the government forcibly in order to achieve public services provided by the state without there being a direct return to the individual(Nashed, 2006, p. 117), as we can know the tax in its modern concept as "a sum of money imposed by the state and taxed." Compulsorily, permanently, and free of charge for the purpose of covering public expenditures or achieving economic or social objectives\_ (Awada and Qutaish, 1995, p. 347)

On this basis, the tax is defined as (a forced cash deduction made by the state or one of its public bodies without a specific consideration and the distribution of these burdens among economic units according to their costing ability).

Thus, taxes can be defined from the researcher's point of view as ((a cash deduction made by the government on natural and legal persons, both according to their mandated ability to pay.))(Holly, 2011, p. 10).

#### 2. Capital markets

The capital market represents the space in which the forces of supply and demand for trade and capital meet

	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 1 in Jan-2023 https://www.globalresearchnetwork.us/index.php/AJEBM						
232	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/						

Medium and long-term, such as securities and loans of all kinds...etc. It is therefore a space in which economic agents with financial deficits and those in need of funds meet, and those with a surplus who are looking to invest their money and invest it in long-term terms such as factories, farms, etc., it is the market that resorts to in search of medium and long-term capital to finance their investment expenses (F. Leroux, 1995, P303).

The second topic: - Analysis of the reality of tax revenues and the stock market in Iraq during the period (2008-2020)

The first requirement: - the components of Iraqi fiscal policy and tax revenues

### First: The components of the Iraqi financial policy

The fiscal policy in Iraq consists of the following tools, as shown in Table No. (1):

1. Public expenditures: they consist of two parts:

A - Operational (current) expenditures: They constitute the largest part of public expenditures, and constitute approximately (80%) of those expenditures during the research period.

B - Investment expenditures: The second part of these expenditures is represented by a small percentage, and constitutes approximately (20%) during the research period.

### 2. Public revenues: It consists of the following:

A- Oil revenues: They constitute approximately (90%) of those revenues.

b- Tax revenues.

C- Other revenues: including (fees, state property revenues, ..., etc.) (Al-Jubouri et al., vol. 20, p. 112).

## Second: Analysis of the reality of tax revenues in Iraq during the period (2008-2020)

Through table (1), we note that the percentage of the contribution of tax revenues in Iraq to the total public revenues amounts to (3.9) of the total public revenues during the period (2008-2020), which is a very small percentage. We also note that the amounts of tax revenues fluctuate during the aforementioned period. The reason for this is due to the fact that the Iraqi economy is a rentier economy that depends on oil revenues by more than (90%). In addition to the lack of a complete database on taxpayers and tax bases, this has led to a large number of cases of tax evasion.

233	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 1 in Jan-2023 https://www.globalresearchnetwork.us/index.php/AJEBM						
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/						

Table (1) Public expenditures and public revenues and percentages of their contributions in Iraq for the period (2008-2020) at current prices (million dinars)

Other revenue	Contributio n percentage of public revenues	tax revenue	Percentage of oil revenues from public revenues	Oil revenues	general revenue	Percentage of investment expenditure s out of total public expenditure s%	investment expenses	Percentag e of current expenditu res out of total public expenditu res	current expenses	overhead	the year
3908054	1.3	985837	93.9	75358291	80252182	20.0	11,880,675	80.0	47,522,700	59,403,375	2008
155485	6	3334809	93.6	51719059	55209353	20.0	42,053,620	80.0	42,053,620	52,567,025	2009
1826115	2.1	1532438	95.2	66819670	70178223	27.8	19,472,000	72.2	50,662,201	70,134,201	2010
8933585	1.6	1783593	90.2	98090214	108807392	22.6	178,321,125	77.4	609,255,535	78,757,666	2011
586791	2.1	2633357	97.3	116597076	119817224	27.9	293,509,513	72.1	757,886,237	105,139,575	2012
285678	2.5	2876856	97.2	110677542	113840076	33.9	403,842,415	66.1	787,433,145	119,127,556	2013
6406764	1.7	1885127	92.1	97072410	105364301	21.9	253,903,699	78.1	905,473,921	115,937,762	2014
1314262 1	3	2015010	77.1	51312621	66470252	26.4	218,627,934	73.6	609,508,176	82,813,611	2015
6280320	7	3861890	81.4	44267060	54409270	23.7	174,363,278	76.3	561,346,752	73,571,003	2016
6051972	8.1	6298272	84.0	65071929	77422173	21.8	164,568,451	78.2	590,332,699	75,490,115	2017
5263803	5.3	5686211	89.7	95619820	106569834	17.1	13,820,300	82.9	67,052,900	80,873,200	2018
4336.100	3.7	4014.500	92	99,216.300	107567000	0.22	24422.600	0.78	87301000	111723.600	2019
4033000	7.4	4718.200	86.2	54,448.500	63199.700	4.2	3208.900	95.8	72873.500	76082.400	2020
	3.9		90								المتوسط

Source: Central Bank of Iraq, Department of Statistics and Research, Annual Bulletin (2006-2017), Annual Economic Report for the years (2019, 2020).

Columns (4, 5) are from the researcher's work, as the annual rate of change was calculated according to the following equation: -Y1)/Y1 \* 100 2 Y) R=

234	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 1 in Jan-2023 https://www.globalresearchnetwork.us/index.php/AJEBM
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

#### The second requirement:

# ANALYSIS OF THE REALITY AND INDICATORS OF THE IRAQI MARKET FOR SECURITIES

#### First: The reality of the Iraqi market for securities:

The Iraq Stock Exchange is considered one of the modern financial markets in the Arab region, as its basis is the Baghdad Stock Exchange, which began operating in Iraq during the year 1991, but after the political change that occurred in Iraq during the year 2003, the name of the market was changed to the current one. (Iraq Stock Exchange) according to Law No. (74) of 2004, Since this law granted the market an administratively and financially independent entity, and it has the same financing through fees paid by the companies organizing the market, as well as through commissions taken from commercial transactions, and fines imposed on companies that violate the regulations and instructions that violate the market.

The market held its first session on (6/28/2004) with (15) listed companies, and the market made a big leap in its trading, as the number of listed companies until 2020 reached (104) companies (Al-Barzanji, 2016, pp. 105-107).

#### Second: Analyzing the indicators of the Iraqi market for securities:-

Through the above table, indicators (the general index of traded stock prices, the number of shares traded, the trading volume index, the number of completed contracts index) were selected in order to analyze the market reality for the period (2008-2020), We note that these indicators have achieved a quantum leap over the year 2008 as a result of the increase in the number of companies traded in the market, and the data of these indicators are what will be used to measure and analyze the relationship between financial markets and tax revenues in Iraq during the mentioned period.

Indicator of the number of completed contracts	Trading volume indicator	Index of the number of shares traded	The general index of traded stock prices	the year
31.108	301.35	150.853	34.59	2008
49.339	411.928	211.29	58.36	2009
71.722	400.359	255.659	100.86	2010
132.574	941.198	492.371	100.98	2011
136.039	893.825	625.639	136.03	2012
126.57	284.022	871.182	125.02	2013
104.566	898.315	743.852	113.15	2014

Table (2) Indicators of the Iraq Stock Exchange during the period (2008-2020)

235	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 1 in Jan-2023 https://www.globalresearchnetwork.us/index.php/AJEBM						
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/						

# AJEBM, Vol. 6, No. 1, Jan 2023

120.698	456.64	579.64	92.99	2015
111.242	426.788	917.542	730.56	2016
94.994	386.879	631.42	649.48	2017
87.512	232.681	376.806	580.45	2018
77.814	164.592	917.542	493.76	2019
70.945	236.818	262.911	508.03	2020

Central Bank of Iraq / Department of Statistics and Research Statistical releases for the years (2008-2020)

#### The third topic:

## MEASURING AND ANALYZING THE IMPACT OF THE IRAQ STOCK EXCHANGE INDICATORS ON PUBLIC TAXES IN IRAQ DURING THE PERIOD (2008-2020)

#### The first requirement: a description of the standard model

First: Model Variables:

Table No. (3) shows the independent variables and the dependent variable:

Table (3) the variables of the harsh model

Туре	code	Variable name
independent	GITSP	The general stock price index
independent	INCC	Indicator of the number of completed contracts
independent	INST	Index of the number of shares traded
independent	VIN	Trading volume indicator
dependent	TAX_REVENUE	tax revenue

#### Second: Form data:

The study relied on the data of the time series consisting of (52) observations, which are (4) chapters for the period (2008-2020), as this data was obtained from (the statistical bulletins of the Central Bank of Iraq / Department of Statistics and Research).

Second: Measuring and analyzing the impact of the Iraq Stock Exchange indicators on tax revenues in Iraq for the period (2008-2020)

#### **First: stability**

236	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 1 in Jan-2023 https://www.globalresearchnetwork.us/index.php/AJEBM						
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license,						
	visit https://creativecommons.org/licenses/by/4.0/						

# AJEBM, Vol. 6, No. 1, Jan 2023

Table No. (4) Results of the extended Dickey Fuller test for the stability of time series

Stability at the second			Stability a	at the first	difference	stability	at level I(0)		significance	Variable name
difference I(2)			( <b>1I</b> )						level %	
Lack of	Having a	There is	Lack of	Having a	There is	Lack of	Having a	There is		
hard	hard limit	a hard	hard	hard limit	a hard	hard	hard limit	a hard		
limit	and	limit	limit and	and	limit	limit	and	limit		
and	general		general	general		and	general			
general	trend		tren	trend		general	trend			
tren						tren				
			0.0077						1%	GITSP
			0.0404						1%	INCC
		0.0000							%1	INST
			0.0105						%1	TAX_REVENUE
			0.0494						%1	VIN
			0.0200						%5	PR
								0.0296	%5	TR

237	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 1 in Jan-2023 https://www.globalresearchnetwork.us/index.php/AJEBM
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

Through Table No. (4), we note that the independent variable (GITSP), which represents the general index of stock prices, settled at the first difference, when there was no conclusive or general trend, and at the level of significance (1%). We note that the independent variable (INCC), which represents the indicator of the number of completed contracts, settled at the first difference as well, when there was no conclusive or general trend, and at the level of significance (1%). While we note that the independent variable (INST), which represents the index of the number of traded shares, settled at the second difference as well, when there is a categorical one, and at the level of significance (1%). We also note that the dependent variable (TAX\_REVENUE), which represents the general tax revenue, settled at the first difference, when there was no conclusive or general trend, and at the level or general trend, and at the level of significance (1%).

We also note that the independent variable (VIN), which represents the trading volume indicator, settled at the first difference, when there was no categorical or general trend, and at the level of significance (1%).

#### Second: The co-integration test

Through Table No. (5), we notice through the impact test that there is one complementary vector between the variables of the standard model, which indicates the existence of a long-term complementary relationship between the vectors of the standard model.

Table No. (5) Johansen cointegration test

Date: 08/13/22 Time: 19:19 Sample (adjusted): 2008Q4 2020Q1 Included observations: 46 after adjustments Trend assumption: Linear deterministic trend Series: GITSP INCC INST TAX\_REVENUE VIN Lags interval (in first differences): 1 to 1

Prob.**	0.05 Critical Valu	Trace le Statistic	Eigenvalue	Hypothesized No. of CE(s)
0.0141	69.81889	76.21034	0.518460	None *
0.1427	47.85613	42.59513	0.392184	At most 1
0.4439	29.79707	19.69252	0.256380	At most 2
0.6877	15.49471	6.066170	0.122562	At most 3
0.8200	3.841466	0.051735	0.001124	At most 4

Unrestricted Cointegration Rank Test (Trace)

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

238	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 1 in Jan-2023 https://www.globalresearchnetwork.us/index.php/AJEBM
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license,
	visit https://creativecommons.org/licenses/by/4.0/

Prob.**	0.05 Critical Value	Max-Eigen Statistic	Eigenvalue	Hypothesized No. of CE(s)
0.0537	33.87687	33.61521	0.518460	None
0.1777	27.58434	22.90261	0.392184	At most 1
0.3964	21.13162	13.62635	0.256380	At most 2
0.6113	14.26460	6.014435	0.122562	At most 3
0.8200	3.841466	0.051735	0.001124	At most 4

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Max-eigenvalue test indicates no cointegration at the 0.05 level \* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

#### Third: Determine the optimal number of deceleration times for the standard model

Through Table No. (6), we notice that the number of optimal deceleration times for the standard model is two time periods according to the standards of Swartig (SIC), Akake (AIC) and Hanan Coen (HQ).

Table No. (6) Determining the number of optimal deceleration times for the standard model

		Endogenous VIN	variables: Gl	VAR Lag Of ITSP INCC I	NST TAX_R	EVENUE
		VIIV		Exogenous v Date: 08/13/2 Sample: 200 Included obs	ariables: C 22 Time: 19 8Q1 2020Q4 ervations: 44	:22
HQ	SC	AIC	FPE	LR	LogL	Lag
79.41775	79.54531	79.34256	1.98e+28	NA	-1740.536	0
67.83796	68.60332	67.38683	1.28e+23	497.4998	-1452.510	1
<mark>65.69882*</mark>	67.10198*	<mark>64.87174*</mark>	1.08e+22*	120.4979*	<mark>-1372.178</mark>	<mark>2</mark>
66.71929	68.76025	65.51626	2.33e+22	13.77146	-1361.358	3
67.42725	70.10600	65.84828	4.15e+22	18.50001	-1343.662	4

\* indicates lag order selected by the criterion

~ . .

LR: sequential modified LR test statistic (each test at 5% level)

239	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 1 in Jan-2023 https://www.globalresearchnetwork.us/index.php/AJEBM		
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/		

FPE: Final prediction error AIC: Akaike information criterion SC: Schwarz information criterion HQ: Hannan-Quinn information criterion

#### Fourth: Diagnostic tests of the standard model

1. The (LM) test: - Through Table No. (7), which shows the results of the (LM) test to check whether or not there is a problem of autocorrelation between the variables of the standard model, as we note that the value of (P. value) appeared by (0.9490), which is greater than of (0.05), which indicates that the standard model is free from the autocorrelation problem.

Table No. (7) Test (LM)

VAR Residual Serial Correlation					
LM Tes	ts				
Null	Hypothesis: n	o serial			
correlati	ion at lag order h				
Date: 08	8/13/22 Time: 19	9:23			
Sample:	Sample: 2008Q1 2020Q4				
Included observations: 46					
Prob LM-Stat Lags					
<mark>0.9490</mark>	14.66069	1			
1.0000	4.506164	2			

Probs from chi-square with 25 df.

2. Test of instability of variance homogeneity: - From Table No. (8) we note that the value of (P. value) appeared by (0.0000), which is less than (0.05), and this indicates that the standard model is free from the problem of instability of variance homogeneity.

Table No. (8) Test (existence of the problem of instability of variance homogeneity)

VAR Residual Heteroskedasticity Tests: No Cross Terms (only levels and squares)

Date: 08/13/22 Time: 19:24 Sample: 2008Q1 2020Q4 Included observations: 46

240	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 1 in Jan-2023 https://www.globalresearchnetwork.us/index.php/AJEBM
240	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license,
	visit https://creativecommons.org/licenses/by/4.0/

	Joint te	est:
Prob.	df	Chi-sq
<mark>0.0000</mark>	300	429.1811

3. The stability of the standard model as a whole: - Through Figure (1), we notice that all roots are located within the unit circle, which indicates the stability of the standard model as a whole.





# Inverse Roots of AR Characteristic Polynomial

#### Fourth: Toda Yamoto causality test

1. Statistical analysis: - Since the standard model variables, some of them settled at the first difference and others settled at the second difference, and since the model variables are associated with a long-term complementary relationship, the best standard model for analyzing the relationship between the independent variables (financial market indices) and the dependent variable (revenues) tax is model (Todayamoto), As we note from Table No. (9) that the values of P. value)) of the independent variables (GITSP, INCC, INST, VIN), which represent the indicators of financial markets in Iraq, all appeared with values greater than (0.05), meaning that they are not significant, and this means that the

241	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 1 in Jan-2023 https://www.globalresearchnetwork.us/index.php/AJEBM
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license,
	visit https://creativecommons.org/licenses/by/4.0/

variables The independent does not cause the independent variable according to Toda Yamoto causality test.

2. Economic analysis: - Based on the Toda Yamoto causality test, which showed that the independent variables (financial market indicators) do not cause or affect public tax revenues in Iraq during the period (2008-2020), and the reason for this is due, according to the economic perspective, to the weakness of the role The economic sector of the private sector in all its joints in Iraq, and since the private sector in all its branches is the main engine of the financial markets, therefore we note that the Iraqi market for securities is an ineffective market in Iraq compared to the financial markets in the Arab countries.

This will be reflected in the decline in public tax revenues (direct and indirect) resulting from private sector transactions, whether inside or outside the financial market.

Table No. (9) Towadayamooto causality test

VEC Granger Causality/Block Exogeneity Wald Tests Date: 08/13/22 Time: 19:20 Sample: 2008Q1 2020Q4 Included observations: 45

Dependent variable: D(TAX_REVENUE)				
Prob.	df	Chi-sq	Excluded	
0.4554 0.4963 0.9657 0.3699	2 2 2 2	1.572941 1.401148 0.069742 1.989185	D(GITSP) D(INCC) D(INST) D(VIN)	
0.8210	8	4.383717	All	

#### **Conclusions and recommendations:**

#### **Conclusions:**

1. The Todayamoto model was used to measure and analyze the relationship between the indicators of the Iraqi market for securities and tax revenues in Iraq during the period (2008-2020), because some of the standard model variables settled at the first difference and others at the second difference, in addition to the existence of an integrative relationship between the standard model variables .

242	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 1 in Jan-2023 https://www.globalresearchnetwork.us/index.php/AJEBM			
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/			

2. Based on the Toda Yamoto causality test, which showed that the independent variables (financial market indices) do not cause or affect public tax revenues in Iraq during the period (2008-2020).

3. The reason why the indicators of the Iraqi market for securities did not affect tax revenues in Iraq during the study period according to the economic perspective is the weakness of the economic role of the private sector in all its joints in Iraq, and since the private sector in all its branches is the main engine of the financial markets, so we note that the market The Iraq Stock Exchange is an ineffective market in Iraq compared to the financial markets in Arab countries or foreign countries.

This will be reflected in the decline in public tax revenues (direct and indirect) resulting from private sector transactions, whether inside or outside the financial market.

4. From the above, the research hypothesis was proven, which states (that financial market indicators do not directly affect public tax revenues in Iraq during the period (2008-2020).

#### **Recommendations:**

1. Activating the role of the private sector in Iraq, through setting up a new mechanism by the government with all its financial and monetary apparatus, tools, and policies, in order to help the government solve most of the economic problems in Iraq, including (unemployment, increasing public revenues, especially tax ones).

2. Activating the role of foreign direct investment, which leads to an increase in the number of private foreign companies in all sectors, which carry with them large capital, expertise and high technologies, which leads to increased competition in the private sector, and thus moving and developing the Iraqi private markets.

3. Adopting a wise tax policy towards the private sector, the aim of which is to support that sector and its various activities, which leads to the growth of the private sector, and thus an increase in tax revenues in Iraq in the long term as a result of the increase in the number of private companies, especially those dealing in the Iraq Stock Exchange.

#### Sources:

#### Arabic sources:

- 1. Suzy Adly Nashed, Public Finance, Beirut, Al-Halabi Human Rights Publications, 2006.
- 2. Hassan Awada, Abdul Raouf Qutaish, Public Finance (Budget, Taxes and Fees), Dar Al-Kulud Press, 1st Edition, Lebanon, 1995.
- 3. d. Taher Al-Janabi, Science of Public Finance and Financial Legislation, Baghdad, Dar Al-Kutub for Printing and Publishing, University of Mosul.
- 4. Dr. Ahmed Hafez Al-Jawini, Economics of Public Finance, Dar Al-Ahd Al-Jadeed for Printing, 1st edition, Cairo 1967.
- 5. Abdel-Hamid Mohamed Al-Qadi, 1980, Economics of Public Finance, Al-Rashad Press, Alexandria, Arab Republic of Egypt.

243	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 1 in Jan-2023 https://www.globalresearchnetwork.us/index.php/AJEBM
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license,
	visit https://creativecommons.org/licenses/by/4.0/

- 6. Abdel Moneim Fawzi, 1972, Public Finance and Fiscal Policy, Dar Al-Nahda Al-Arabiya for Printing and Publishing, Beirut, Lebanon, 1972.
- 7. Muhammad Taqah, Hoda Al-Azzawi, 2010, Economics of Public Finance, Dar Al-Maisarah for Printing and Publishing, Amman, Jordan.
- 8. Tariq Al-Hajj, Public Finance, Dar Safaa for Publishing and Distribution, Amman, Jordan 2009.
- 9. Marwan Atoun, Financial and Monetary Markets, Stock Exchanges and Their Problems in the World of Money and Money, Tools and Mechanisms of Stock Exchange Activity in the Modern Economy, Part One, University Press, Algeria 1993.
- 10. Muhammad Majd al-Din Bakir, Investment Portfolios, Management and Strategies, Shuaa Publishing and Science, Aleppo, Syria, 2008.
- 11. Rachid Houli, The extent of the effectiveness of the Maghreb stock market in implementing the privatization program, a case study of Tunisia, Algeria and Morocco, Faculty of Economics and Management Sciences, Mentouri University, Master Thesis, 2010-2011.
- 12. Atef William Andrews: Stock Markets, University Thought House, Alexandria, 2007.
- 13. Haider Abdul-Hussein Al-Jubouri and others, a vision on the level of coordination between monetary and fiscal policies for the period (2003-2010), Journal of Human Sciences, University of Babylon, Volume 20, Number 1.
- 14. Ahmed Muhammad Fahmy Saeed Al-Barzanji, The Role of the Iraq Stock Exchange in Attracting and Directing Investments (exploratory research), Journal of Al-Rafidain University College of Science, Issue (39)/2016.
- 15. The Central Bank of Iraq, Department of Statistics and Research, Annual Bulletin (2006-2017), Annual Economic Report for the years (2019, 2020).

#### **Foreign sources:**

- 1. Musgrave Richard A. "Principle of Budget" Washington D.C. Joint Economic committee, .1967.
- 2. f.leroux, Marcher internationaux des capitaux Montréal, 2eme édition

244	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 1 in Jan-2023 https://www.globalresearchnetwork.us/index.php/AJEBM
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license,
	visit https://creativecommons.org/licenses/by/4.0/