BLOCKCHAIN APPLICATION AND THEIR TAX TREATMENT IN THE KINGDOME OF Saudi Arabia – PROBLEM AND SULOTIONS (PROPOSED FRAMEWORK)

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ABSTRACT:

Following the vision of Saudi Arabia 2030 changing to a digitalized government and organization. This study aims to determine the tax problems related to block chain technology in Ministry of Zakat and TAX at Saudi Arabia, and they recommended the solution. It's considers one of the first studies that present the advantages and disadvantages of applying blackchin technology in Saudi Arabia for the Ministry of Zakat and Tax. In addition, this study present the problem that could be caused by applying block-chain and it tries to solve it by proposing a framework for better application. The study uses a survey method to collect information from the Ministry of Zakat and Tax. The result confirms the hypotheses that "Blockchain technology and its applications create tax problems". Further, the study suggest a framework to solve this problem, and it add some recommendation for future references some of them to develop

new accounting and auditing stander to provide clear understanding for the measurement. In addition to train, the related party to deal with block-chain activity.

Keywords:

Zakat and tax, blockchain, Saudi Arabia, tax treatment.

I.   INTODUCTION:

Blockchain technology represents one of the foundations of progress in the financial sector because of the characteristics of this technology of accuracy, transparency, disclosure, and speed. These advantages address part of the current challenges facing the business sector related to keeping and protecting transaction records (Kunduz, 2019).

The tool or method used by cryptocurrencies and smart contracts to implement secure transactions, whether public or anonymous, as the digital currency is an application that works on the blockchain network, which works like accounting books, and the tax treatment of the blockchain application varies from one country to another, as there are countries that are subject to these applications to taxes and other countries temporarily exempt.

It is noted that the increasing development in blockchain technology and global interest showed many accounting and tax issues. (SECO, 2017) examined the role of modern technologies blockchain and digital currencies in the speed of conducting tax transactions in the United States of America,

and it reached a weak interest in these technologies and their impact on the structure because of how it used to limit tax evasion. (Webb,2018) indicate that tax authorities in the United Kingdom did not take into account the use of blockchain technology in tax work. However, with the technology developments in business environment, authorities began to pay attention to blockchain technologies. (chason, 2019) present tax problems of cryptocurrencies and confirmed that American cryptocurrency exchange offered trading against the dollar for more than one cryptocurrency and concluded that there are problems with imposing tax when creating bitcoin because the profits were not achieved. (Hagiwara, etal, 2019) also found that to improve management systems we should reduce the reliance on paper invoices and tax documents using blockchain technology. In mean time the 2030 vision of Kingdom of Saudi Arabia has adopted modern technologies that contribute to raising the pace of digital transformation to provide efficiency and effectiveness in all transactions.

From the previous studies, we can say that the main issue that could arises in tax transaction, that may be imposed by the activities and operations of blockchain technology in the Kingdom of Saudi Arabia and how to solve them, are as follow:

1- The central authorities for controlling blockchain technology and its applications in the Kingdom of Saudi Arabia are still unclear and non-binding, which does not guarantee reliability in the transaction record stored on private blockchain networks used by the tax administration.

2- The tax examination procedures and methods currently used in the Kingdom of Saudi Arabia require development skills to suit the uses and applications of blockchain technology.

Therefore, in this paper we aim to identify the problems of tax treatment it's activities, and the operations of blockchain technology and its applications in the Kingdom of Saudi Arabia. We also, develop a proposed framework for a clear tax treatment that can contribute to solving such problems. Henceforth, the research hypothesis will be:

 Blockchain technology and its applications create tax problems.

The important of this research are as follow:

1- This research is considered one of the primary studies that introduce tax treatment of blockchain activities, operations, and its applications in the Kingdom of Saudi Arabia, and try to analysis it's tax problems.

2- This research, try to address solutions to the problems of tax treatment of blockchain technology activities and operations.

Which leads to an attempt to advance the tax system in the Kingdom of Saudi Arabia.

The reminder of the paper will be as follow, blockchain technology concept. Blockchain technology activities and operations and its tax problems. The methodological framework of the research. The proposed framework for the tax treatment of blockchain applications in the Kingdom of Saudi Arabia. The result, and lastly the recommendation.

II. BLOCKCHAIN TECHNOLOGY ACTIVITIES AND THEIR TAX PROBLEM:

The interest in encrypted currencies such as Bitcoin and its spread around the world has made the Blockchain technology a subject of interest to many. As it is the basis of cryptocurrency, and despite its spread, it faces problems related to its mechanism of work, and these problems did not enable us to take advantage of its great advantages and opportunities that it creates.

There has been a difference between the tax authorities in many countries of the world about the nature of some applications of the Blockchain, the most important of which are cryptocurrencies. Therefore, in this topic, we will discuss the nature of the activities and operations of the Blockchain and the tax problems facing these activities and operations.

Blockchain Concept - Applications:

Blockchain is primarily an accounting technology as it helps maintain financial information including the distributed ledger, which enhances the profession's ability to reduce ledger maintenance and settlement costs and provide certainty regarding asset ownership and acquisition dates.

2/1 The Concept of Blockchain Technology:

(Coyne, etal, 2017) Block-chain is defined as a giant decentralized database that contains a wide variety of records. It is created by the parties that deal with it according to rules that achieve high quality. It is worth noting that this decentralized technology is not subject to any authority. Therefore, it has a high degree of security. (Wang, etal, 2019) indicates that it is a series of blocks used to establish or register the ownership of assets between the parties. Furthermore, (Viriyasita and Hoonsopon, 2019) also, define it as a technology that enables the stability and integrity of the data of operations recorded on the system and maintained through multiple distributed nodes and connected to a network Peer to Peer.

2/2 How Blockchain Works:

(SECO, 2017) indicate that Blockchain technology operates according to controls and main methods, and it represents the basis of this technology through which all operations are accomplished:

1- Deposited ledger:

A distributed ledger is a decentralized financial record that includes data of financial, physical, legal, and electronic assets and can be shared across similar sites or institutions, and all network participants can obtain their own identical copy of this record. This ledger is one of the basic elements of the blockchain (Muzamma, etal, 2019)

2- Decentralized database:

This method aims to eliminate the idea of data centralization. Where there is no one party, one server, or one device that controls the Blockchain. All connected parties around the world can upload, download document and look at it, and therefore limit any hackers (Reyna, etal,2018)

3- prospecting:

This method is intended to use the energies of electronic computers and the Internet in solving a mathematical equation and documenting transactions to extract encrypted assets. These transactions are combined in one block to solve a puzzle. The first person who solves this equation is rewarded through transaction fees or obtaining new units of digital currency Participant in it, and these miners perform a set of complex calculations through their devices to obtain a correct link that links this transaction to the previous one in the chain (reference previously mentioned)

2/3 Characteristics of Blockchain Technology:

(Al-Subaiy, Fatima, 2019) Blockchain technology is characterized by several characteristics, the most important once are:

a. worldwide technology:

They are not linked to a specific geographical area and are not under the control of any country, and therefore transfers made via the Blockchain avoid the risks of confiscation and freezing.

B. Decentralized and Autonomous Technology:

One of the most important pillars on which blockchain technology depends is that it relies on a network of computers spread across the world and thus achieves a higher degree of security.

c. open-source technology:

As all changes that occur in the general transaction logbook can be seen by all the devices included in the network, but after the approval of all relevant parties (Khalifa, Ehab, 2018)

2/4 Blockchain Technology Activities:

There is a clear confusion in most of the writings between the Blockchain and Bitcoin. Although there are differences between them, as Bitcoin is a digital currency, while the Blockchain is the technology that allows the exchange of this digital currency. The activities of this technology are multiple to:

a. Cryptocurrency:

It enables digital currency dealers to deal with the blockchain network. Therefore, they must have programs that store private and public keys, and they need digital wallets. These wallets do

not store currency, but its records of transactions stored on the blockchain.

B. smart contracts:

(Gatteschi,etal, 2018) They are self-contained contracts that are built or programmed, within the framework of a decentralized distribution network. The terms and conditions regulate the relationship between two or more parties without the need for a central authority. Blockchain-based platforms use smart contracts as an independent judgment to ensure the fulfillment and commitment of each party.

c. Initial coin offerings:

(Howell, etal, 2018) startups companies need sources to finance their projects and cannot borrow from banks or issue shares. Therefore, they collect money through initial offering of cryptocurrency and use blockchain to issue digital tokens and sell them to the public in order to collect funds to finance their activities.

D. Payments for goods and services:

Where it is possible to obtain in exchange for a service or a commodity provided in encrypted digital currencies, where some companies have agreed to pay for services or employment for these currencies

2/5 Reality of blockchain in Kingdom of Saudi Arabia:

The Kingdom has taken serious steps to adopt blockchain technology. One of the most important authorities' Saudi central banks that made an agreement with Ripple to test the use of the

company's technologies in implementing external transfers between banks. The Ministry of Communications and Information Technology held a specialized training course for blockchain technology. Further the Saudi Arabia customs start selling trial setups Implementation of the blockchain in cooperation with IBM for the system of incoming dispatches through seaports (http://bit.ly/2hpcmdb). It also known that the city of Riyadh hosted in April 2018 a conference (Decoding Block Chain). Further, the giant national oil company Aramco started to apply Blockchain technology for many reasons, including that the next generation of smart contracts will play a big role in the future of the energy market in Saudi Arabia (http://bit.ly/zjsakzx).

2/6 Tax Problems of Blockchain Activities:

The issue of tax treatment of blockchain technology activities and operations has several problems, some of which are related to the theoretical aspect of the absence of tax concepts and rules that take the characteristics and applications of this technology into account, and others are related to the practical aspect of the difficulty of dropping current tax legislation in the Kingdom of Saudi Arabia on blockchain applications. In this part, we present the most important problems and challenges facing the use of blockchain and its applications in the Kingdom of Saudi Arabia.

(a) Problems related to taxation or exemption from these activities:

Opinions are divided about the tax treatment of blockchain activities, as there are those who see its subordination and justification. (Rijswijk & etal, 2018) Exempting such transactions will violate the principle of tax justice and will also lead to the loss of part of the revenues, especially with the growth of digital economy activities.

As for those who see that it is not subject to or exempted, it is justified to encourage investors and business organizations to carry out blockchain activities. As well as to avoid falling into the problems of double taxation because of imposing a tax on encrypted digital transactions in more than one country. (Krivtsov, Artem, 2019) see that exempting Such activities are an obligated because they are modern fields, and they must have tax exemption period, so they can be able to deal with tax treatment in developed countries. The tax treatment will be different from one country to another, as well as the training of tax administrations to deal with such activities.

b- Problems of shortcomings in tax treatment:

(Mordecai, 2019) Looking at the tax legislation in place in the Kingdom of Saudi Arabia, there is no specific tax treatment for blockchain activities. There is no tax treatment for the activity of payment for goods and services, and there is no tax treatment for the use of smart contracts, and so on.

C- The problem of the occurrence of international double taxation:

Blockchain technology relies on the abolition of time and place restrictions in its transactions, and this contradicts the concept of tax sovereignty, which depends on the tax being limited to its interest or state borders.

D- The problem of control and collection:

Which is represented in the difficulty of inventorying the tax community who engage in commercial and financial transactions through the Blockchain, which leads to the lack of evidence on which the tax administration is based, and the lack of sophisticated tax accounting methods that enable the Tax Authority to examine and link the tax on transactions and transfers that take place through the Blockchain.

E- Problems related to tax administration:

It is known that the tax administration is the entity in charge of implementing tax laws and legislation and protecting the rights of both the state and the financiers. The tax administration lacks specialized means to achieve effective control over digital assets and the lack of trained examiners to deal with such activities.

F- Problems related to accounting and control systems:

So far, there is no clear standard or interpretation governing the accounting treatment of financial transactions using blockchain technology, and professional organizations for review, for

example, have not issued any guidelines for reviewing the operations of using encrypted digital currency in money transfer.

III. THE METHODOLOGY:

This part aims to support the theoretical study and test the research hypothesis. By doing a field study on a sample of tax examiners in a group of zakat and income departments across the Kingdom of Saudi Arabia. To identify the most important tax problems they face when dealing with blockchain activities and then presenting a special proposed framework with the tax transactions of Blockchain technology activities and operations to contribute to solving these problems.

Here, we will set the general framework for the field study and deal with it as follows:

- The objectives of the field study.
- Determine the study population.
- Determine the study sample.
- How to design and prepare the survey list.
- Data collection method.
- Statistical methods used in analyzing data for the field study.
- Discussing and analyzing the results of the study.
- Develop the proposed framework.

First - the objectives of the field study:

The field study aims to support the results of the theoretical study reached by the authors. By knowing the applications of the blockchain and its tax treatment in the Kingdom of Saudi Arabia,

problems, and solutions with the development of a proposed framework.

Second - Determining the study population:

The study population includes a sample of tax examiners in a group of zakat and income departments throughout the Kingdom. The researcher has selected a percentage of the study population using the simple random stratified sampling method.

Third - Determining the study sample:

The study sample was selected according to statistical criteria that the authors will review as follows:

1- The research sample was selected in terms of size in line with the researcher's temporal and spatial potential at the time of the study.

2- A sample of tax examiners was selected from a group of zakat and income departments across the Kingdom of Saudi Arabia.

Fourth- How to design and prepare the survey list:

For us to be able to conduct the necessary statistical analyzes to test the validity of the research hypothesis. The ease of the survey list was taken into consideration, and then five levels of answer were put in the form of points according to the Credit five-point scale, which are (strongly support, support, not sure, do not support, do not strongly support) and the weights are taken from (1:5) respectively, and the sample size amounted to (180) forms that were distributed electronically, and 155 of them were responded to.

Fifthly, the method of data collection:

For us to be able to test the hypothesis, this required the collection of data to conduct the hypothesis tests, according to the survey forms.

- Distribution of the survey form: after preparing and designing a survey form and distributing it to tax examiners in a group of zakat and income departments throughout the Kingdom of Saudi Arabia.

Further, we relied on the formulation of the list. Which considered the balance in its distribution between the interests of zakat and income under study. These lists contained 20 statements or variables to prove the validity of the hypothesis.

Sixth- Statistical methods used in analyzing field study data:

We analyzed the study data using a set of statistical analysis methods appropriate to the nature of the study data and that fit the hypothesis.

The study relied on the following statistical methods:

Descriptive statistical methods, and other tests to test the hypothesis. Those methods were as follows:

1- Arithmetic mean, standard deviation, which is one of the descriptive statistics methods that help in presenting the data more clearly and easier to understand, which helps in describing the study variables.

2- Measures of dispersion, which measure the dispersion of values from their arithmetic mean.

3- The validity and reliability coefficient for the content of the survey lists.

4- Pearson correlation coefficient.

5- Coefficient of determination.

6- The method of analysis of variance (ANOVA) to measure the extent of variance or difference in the research variables, which is the method that is more appropriate to the nature of the data and the nature of the study variables.

Reliability and validity coefficients for the survey list:

To measure the validity and reliability of the Cronbach's Alpha sample (the Cronbach's Alpha coefficient was used)

And it was found that the stability coefficient for each of the study paragraphs is higher than (0.60) and that the reliability coefficients for the questionnaire amounted to (0.735), and thus the questionnaire list is characterized by a high degree of stability.

Table No. (1): Resilience and validity of the questionnaire's list paragraphs:

honesty	constancy	axles	
0.854	0.729	The problem of taxing or exempting blockchain applications	
0.855	0.731	The problem of international double taxation	
0.863	0.744	The emergence of an imbalance in tax justice	
0.857	0.735	There is no specific tax treatment for cryptocurrency mining revenues	
0.838	0.702	There is no specific tax treatment for the gains or losses of dealing in cryptocurrencies	

0.841	0.707	There is no specific tax treatment for holding cryptocurrencies	
0.864	0.746	There is no specific tax treatment for the ICO activity	
0.864	0.746	No specific tax treatment for the use of smart contracts	
0.864	0.746	Reluctance of individuals to report capital gains or losses resulting from dealing with digital assets	
0.859	0.738	The tax administration's lack of advanced means and software specialized in monitoring blockchain activities	
0.835	0.697	There is no specific tax treatment for the activity of payment for goods and services	
0.836	0.699	Difficulty in calculating the cost basis of crypto-digital assets	
0.860	0.739	The tax legislation did not include how to report tax on the use of the blockchain and its applications.	
0.855	0.731	The difficulty of defining tax community	
0.862	0.743	Unavailability of evidence for blockchain transactions and applications	
0.863	0.744	The problem of the difficulty of determining the identity of dealers on the Blockchain network	
0.841	0.708	The lack of sophisticated tax accounting methods that enable the tax authority to examine and link the tax on transactions conducted via the blockchain network	
0.838	0.703	The absence of a standard or interpretation governing the accounting treatment of financial transactions using blockchain applications.	
0.830	0.689	Lack of Standards or Guidelines for Audit and Assurance Services under Blockchain Technology	
0.832	0.692	The lack of compatibility between blockchain technology and ready-made accounting software	
٠.٨٥٧	٠.٧٣٥	The questionnaire as a whole	

Scale validity: It is found that the degree of the validity coefficient for each of the study items is higher than (0.60). Therefore, the validity coefficients of the questionnaire amounted to (0.857). The results show a high degree of honesty, and this means that the questionnaire list is true to what was developed for it

Descriptive statistics for the results of the field study:
Table No. (2) The arithmetic mean, standard deviation, and the relative importance of the study items:

Rank	Relative importance	Standard deviation	Arithmetic mean		
٢	91.11%	0.593	4.56	There is no specific tax treatment for the ICO activity	١
٩	87.07%	0.66	4.35	The Saudi tax legislation did not include how to report tax on the use of the Blockchain and its applications.	٢
١٠	85.86%	0.674	4.29	Unavailability of evidence for blockchain transactions and applications	٣
١١	85.25%	0.648	4.26	There is no specific tax treatment for cryptocurrency mining revenues	٤
١٨	68.08%	1.177	3.4	Lack of Standards or Guidelines for Audit and Assurance Services under Blockchain Technology	٥
١٧	68.89%	1.189	3.44	The absence of a standard or interpretation governing the accounting treatment of financial transactions using blockchain applications.	٦
١	91.72%	0.515	4.59	The problem of taxing or exempting blockchain applications	٧
٧	87.88%	0.603	4.39	The tax administration's lack of advanced means and software specialized in monitoring blockchain activities	٨
٤	89.09%	0.576	4.45	Reluctance of individuals to report capital gains or losses resulting from dealing in digital assets	٩

۸	87.88%	0.531	4.39	There is no specific tax treatment for the activity of payment for goods and services	۱۰
۱۹	66.46%	1.252	3.32	The emergence of an imbalance in tax justice	۱۱
۲۰	61.82%	1.246	3.09	Difficulty in calculating the cost basis of crypto-digital assets	۱۲
۳	90.10%	0.691	4.51	There is no specific tax treatment for the gains or losses of dealing in cryptocurrencies	۱۳
٦	88.28%	0.685	4.41	No specific tax treatment for the use of smart contracts	۱٤
٥	88.89%	0.557	4.44	There is no specific tax treatment for holding cryptocurrencies	۱٥
۱۲	85.05%	0.541	4.25	The lack of sophisticated tax accounting methods that enable the tax authority to examine and link the tax on transactions conducted via the blockchain network	۱٦
۱٦	69.49%	1.296	3.47	The problem of the difficulty of determining the identity of dealers on the Blockchain network	۱۷
۱٤	77.37%	1.157	3.87	The difficulty of defining the tax community	۱۸
۱۳	78.38%	1.158	3.92	The problem of international double taxation	۱۹
۱٥	74.95%	1.155	3.75	The lack of compatibility between blockchain technology and ready-made accounting software	۲۰

from the previous table it shows:

The highest answers of the sample members came to the paragraph that states that "the problem of taxing or exempting blockchain applications," and the lowest answers of the sample members came to the paragraph that states that "the difficulty of calculating the cost basis of encrypted digital assets."

Study assignment test:

The hypothesis of the study states that:

Blockchain technology and its applications create tax problems.

To test this hypothesis, we performed several tests, as follows:

correlation coefficient:

The following table shows the correlation coefficient between blockchain technology and its applications as an independent variable and tax problems as a dependent variable.

Table No. (3): Correlation coefficient for the hypothesis

tax issues	testing	variable
٠.٣٦٢	correlation coefficient	Blockchain technology and its applications
٠.٠٠٠	morale	

It is clear from the previous table that there is a statistically significant correlation of 36.2% at the level of significance of 0.00 between blockchain technology and its applications and tax problems.

The coefficient of determination:

Table No. (4): Coefficient of determination to force the search

standard error	coefficient of determination, modifier,	coefficient of determination,	The independent variable,
0.3964	0.122	0.131	Blockchain technology and its applications

The previous table shows that the coefficient of determination R^2 = 0.131, which means that blockchain technology and its applications explain the change in tax problems by 13.1%. while the remaining percentage is explained by other variables that were not included in the regression relationship. In addition to random errors resulting from the sampling method, measurement accuracy and others.

ANOVA Test:

Table No. (5): Analysis of variance to hypothesize the research

significant	F	Mean of squares	Degrees of freedom	Sum of squares	Statement F
0.000·	14.647	2.302	1	2.302	regression
		0.157	97	15.245	the rest
			98	17.546	Total

It is clear from the previous table that there is a direct significant correlation between blockchain technology and its applications and tax problems. This is shown through the value of "F", which is a statistical function at the level of significance of 0.00. It indicates the validity and essentiality of the relationship between

the two variables. The quality of the framework and the validity of relying on its results without errors.

regression analysis:

Table No. (6): Analysis of the regression results to hypothesize the research

Significance	T-test	Normative coefficients	Non-normative coefficients		Form	
		beta	standard error	beta		
0.٠٠٠	4.846		0.464	2.25	Constant	
0.000	3.827	0.362	0.105	0.402	Blockchain technology and its applications	1

The previous table shows that the values of the t-test for the variable blockchain technology and its applications is significant at the level of 0.00. This shows the strength of the regressive relationship between blockchain technology and its applications and tax problems.

We conclude from the previous tables that:

The level of significance of each of the Pearson correlation coefficient and the regression coefficient was less than a value of 0.00, which means there is highly statistically significant relationship between blockchain technology and its applications and tax problems.

The sign of the Pearson correlation coefficient was positive, which means that there is a direct, statistically significant

relationship between blockchain technology and its applications and tax problems.

The value of the level of significance for the regression equation test as a whole ANOVA was less than the value of the significance level 0.00, which means that it is possible to rely on the estimated regression model and therefore the possibility of generalizing the results of the sample to the population under study.

Beta coefficient values indicate that blockchain technology and its applications affect tax problems in different proportions, and this explanation cannot be due to chance.

From the previous result we can say that the hypothesis of this search is accepted,

"Blockchain technology and its applications create tax problems".

I. THE PROPOSED FRAMEWORK FOR THE TAX TREATMENT OF BLOCKCHAIN APPLICATION IN THE KIINGDOME OF SAUDI ARABIA.

As a result of the foregoing, we will present a proposed framework for tax transactions for the activities and operations of blockchain technology to contribute to solving tax problems related to its application.

To solve the tax problems facing the activities and operations of the Blockchain. Which emerged from the result of the questionnaire submitted to a sample of tax examiners in a group of Zakat and Income departments throughout the Kingdom. A set of requirements

must be met, including the regulatory, legislative, accounting, as well as administrative, and they are as follow:

1- Regarding the tax legislations in force in the Kingdom:

There are many limitations, as the rules for tax treatment of blockchain activities and operations suffer from a severe deficiency. Which requires those in charge of regulating legislation to issue clear instructions that prevent any confusion and regulate the form of tax treatment of blockchain operations.

2- Regarding the accounting systems applied in the bodies that use the blockchain and its applications:

From our result, it became clear that the accounting systems currently applied need to be developed. To enables agencies to deal with this technology, by trying to develop risk management within these bodies. This is considered one of the most important elements of internal control. To enable it to face the risks of dealing with this technology, and its activities. An attempt to develop the accounting and auditing standards issued by the Saudi authority to provide clear rules for disclosure and measurement, as well as rules regulating the work of auditors in reviewing such activities.

3- As for the tax administration:

Qualifying and training the tax examiner to deal with blockchain activities is one of the most important elements. To support the framework for solving the problems of tax treatment of blockchain operations. As this requirement is specifically

necessary to improve the tax treatment of such activities. They do so by conducting training courses for those in charge of the examination process.

3/1 The proposed framework for the tax treatment of blockchain operations and activities.

We prepared this framework based on some tax transactions for blockchain operations. Which are applied in some countries of the world, and the legislative authorities in the Kingdom can take as an example of application.

The objectives of the proposed framework:

1- Rationalizing the performance of the tax administration

2- Amending or reissuing executive instructions

3- Improving the performance of auditors when preparing tax returns

elements of the proposed framework:

We tried to rely on some tax transactions for blockchain applications in some countries. That had previously issued guidelines for benchmarking in the Kingdom of Saudi Arabia in accordance with the tax system and applications in the Kingdom.

For issues with unidentified tax transactions for blockchain activities We suggest dealing with encrypted digital currencies as intangible property. Therefore, their capital gains and losses should be disclosed. As for digital currency mining, taxes should be collected on the profits of those involved in the mining process. They, also suggest that the tax treatment for payment of digital currencies for goods and services should be disclosed. In the same way as rent

payments, salaries, and the rest of the expenses. As for how encrypted digital assets are subject to value added tax, mining activities for encrypted digital assets can be calculated as a supplier of services. But when they are exchanged for paper currencies, they are not subject to tax. The gains and losses of trading encrypted digital currencies are taxed differently Being short-term or long-term. The short is subject to normal rates, while the long-term is subject to greater rates. As for how to deal with taxation while retaining encrypted digital currencies. We also, suggest that no tax is imposed on any increase in the value of encrypted digital currencies unless they are traded and kept, because these profits are considered Unrealized. They suggest regarding the subordination of contract revenues as for the money collected from the initial coin offering. They also, suggest not to tax it, but the money collected from the transfer of digital tokens, if it is considered a business process, is subject to income tax, and if it is considered a capital operation subject to capital taxes

For the tax administration:

The tax administration in the Kingdom of Saudi Arabia must create a regulation for the tax treatment of digital currencies as assets and the profits of their trading. As well as the profits of the initial presentation, are subject to tax on capital gains, and the qualification of tax examiners to deal with blockchain operations and activities. The Kingdom of Saudi Arabia can also establish a tracking system, The Department of Zakat and Income Tax is

allowed to collect data from transaction brokers such as the paper currency, exchange, and the currency trading platform. Which reduces the possibility of tax evasion, as well as granting some tax exemptions to some blockchain activities to address the problem of individuals' reluctance to report gains or losses from dealing in such activities.

For Saudi tax legislation:

We suggest amending the laws regulating income tax and value added tax to include profits and incomes from blockchain activities or issuing regulatory guidelines for the tax treatment of these operations and clarifying them to taxpayers. As in all types of taxable incomes, as well as introducing a theoretical framework for blockchain-based governance by organizations international professional to set limits for this technology to protect society and achieve tax justice and make the reporting of such activities clear.

II. RESULT OF THE STUDY:

First, the results of the theoretical study

Through the theoretical study, we reached several results:

1- There is a clear confusion in most of the writings between the Blockchain and Bitcoin, although there are differences between them, as Bitcoin is a digital currency, while the Blockchain is the technology that allows the exchange of this digital currency.

 2- The issue of tax treatment of blockchain technology activities and operations has several problems, some of which are related

to the theoretical aspect of the absence of tax concepts and rules that take the characteristics and applications of this technology into account, and others are related to the practical aspect of the difficulty of dropping current tax legislation in the Kingdom of Saudi Arabia on blockchain applications. chin

3- Looking at the existing tax legislation in the Kingdom of Saudi Arabia, it becomes clear that there is no specific tax treatment for blockchain activities. There is no tax treatment for payment for goods and services, and there is no tax treatment for the use of smart contracts.

4- Blockchain technology relies on the abolition of time and place restrictions in its transactions, and this contradicts the concept of tax sovereignty, which depends on the tax being limited to its interest or state borders.

5- Qualifying and training the tax examiner to deal with blockchain activities is one of the most important elements of the supporting framework for solving the problems of tax treatment of blockchain operations, as this requirement is specifically necessary to improve the tax treatment of such activities, and this is done by conducting training courses for those in charge of the examination process.

Second - the results of the field study:

Through the results of the questionnaire, we reached the following:

The nature of the blockchain technology has led to several problems, namely:

1-: problems related to tax legislation:

The problem of taxing or exempting blockchain applications.

The problem of international double taxation.

The emergence of an imbalance in tax justice.

There is no specific tax treatment for cryptocurrency mining revenues.

There is no specific tax treatment for the gains or losses of dealing in cryptocurrencies.

There is no specific tax treatment for holding cryptocurrencies.

 There is no specific tax treatment for the initial job offer activity.

 There is no specific tax treatment for the use of smart contracts.

Reluctance of individuals to report capital gains or losses resulting from dealing in digital assets.

The tax administration's lack of advanced means and software specialized in monitoring blockchain activities.

 The absence of a specific tax treatment for the activity of payment for goods and services

Difficulty calculating the cost basis of crypto-digital assets.

The tax legislation did not include how to report tax use of the Blockchain and its applications.

2-: The problems of control and collection mechanisms:

The difficulty of defining the tax community

Unavailability of evidence for blockchain transactions and applications

The problem of the difficulty of determining the identity of dealers on the Blockchain network

The lack of sophisticated tax accounting methods that enable the Tax Authority to examine and assess the tax on transactions conducted via the Blockchain network.

Third, problems related to tax administration:

The absence of a standard or interpretation governing the accounting treatment of financial transactions using blockchain applications.

Lack of standards or guidelines for auditing and confirmation services under blockchain technology.

The lack of compatibility between blockchain technology and ready-made accounting software.

III. RECOMENDATION:

We recommend a set of recommendations that they believe will have a positive impact on the application of blockchain technology in the Kingdom of Saudi Arabia, namely:

1- Those in charge of legislation regulating the applications of blockchain technology must issue clear instructions that prevent any confusion and regulate the form of tax treatment of blockchain operations.

2- Attempting to develop the accounting and auditing standards issued by the Saudi Commission to provide clear rules for disclosure and measurement, as well as rules regulating the work of auditors in reviewing such activities.

3- The necessity of qualifying and training the tax examiner to deal with blockchain activities, as this is one of the most important elements of the supporting framework to solve the problems of tax treatment of blockchain operations.

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