

# The Challenges facing IFRS for Accounting of

# Cryptocurrencies

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#### Abstract:

The study aimed to explain and analyse the challenges of accounting for cryptocurrencies in light of the current accounting framework of the International Financial Reporting Standards (IFRS) and identify appropriate model for accounting of cryptocurrencies. The study sample included the academicians in the accounting department of Palestinian Universities located in Gaza strip. For the purpose of measuring the variables, the study designed questionnaire to achieve this purpose.

The findings of the study concluded that there are deficiencies in the IFRS for accounting of cryptocurrencies compared with traditional IFRS framework. It also concluded that using business models of enterprises, the differences in the usual activity of enterprises and the economic substance, leading to different use for accounting forms of cryptocurrencies compared with traditional IFRS framework.

#### **Keywords:**

Cryptocurrencies, Bitcoin, Blockchain, Intangible assets, IFRS.

### 1. Introduction:

Some crypto assets usually take the form of cryptocurrencies that work as a form of virtual currency to be exchanged for cash or other crypto assets, goods or services. Other forms of crypto assets, like those issued as part of Initial Currency Offerings (ICOs), have the rights to future goods or services or the discounted future goods or services of the entity that performs the ICO [1].

Electronic coin considers as a chain of digital signatures [2], and it differ from traditional concept of money by how security and verifiability is ensured [3].

Bitcoin considers as the most well-known of cryptocurrency on the Internet and it was revealed in a research paper published recently by an unidentified person called Satoshi Nakamoto, or it was created by a group of Irish students who hide by this nickname. Bitcoin has been described as electronic monetary system that depends on completing financial transactions on the principle of peer-to-peer, which is a technical term meaning that there are two parties to the transaction without external intermediary to complete the transaction [2].

Online commerce has become exclusively dependent on financial institutions that act as trusted third parties for processing online payments. however, the system is working sufficiently for most transactions, and still suffers from weaknesses inherent in the model based on trust. [2].

Cryptocurrencies, including Bitcoin, are not issued through central banks as is the case with traditional currencies, but rather it issued through a process called Mining and this is done by Miners, and the mining process is not limited to a specific body or Certain people, but it is available to everyone anywhere in the world, but it requires time and computers with high and fast specifications and allows to download the free mining program, and this program can solve a number of equations and puzzles that metallics get from the network such as the bitcoin network and call them algorithms, etc. Packet is a set of mathematical, logical, and sequence steps necessary to solve a problem. After completing the resolution of the algorithms, the program issues the currency and adds it to the electronic portfolio to those who mining [4].

Historically, all transactions are constantly updated and verified by "miners" who collect batches of new transactions in blocks and link these blocks to the end of "Blockchain". This history forms a ledger of transactions where every Satoshi is tracked from its first owner to the current owner. Having the complete history available registry ensures that the buyer actually owns the number of Bitcoins he wants to spend, preventing fraud [5].

Users could manage their accounts from personal computers by install the open-source cryptocurrencies (bitcoin client). Receivers accept payments by publish a specific address where senders can transfer this currency. Senders encode payment using the recipient's public key, using their own keys to allow money to be translated. Then the recipients decode the payment code with their own keys, thereby depositing the money into their account. Payments encoded with a public key can only be decoded with the corresponding private key. So long as users keep their private keys secure, unauthorized payments cannot be made from their accounts; nor can payments be intercepted by a third party once they have been sent [6].

Although IFRS did not address any specific instruction for accounting for cryptocurrencies, the study believes that there are many accounting models that can applied similarly to cryptocurrencies, and the best model is the model that provides appropriate and useful information that reflects each of the business models the usual activity of enterprises and the economic substance of the transaction regarding dealing in cryptocurrencies. The accounting model is chosen based on the purpose of

the acquisition of cryptocurrencies, whether in terms of use as an exchange medium (money) or for the purpose of investment or as a commodity for sale, whether for organization's benefits or benefits for others.

Otherwise, the current IFRS requirements do not clearly refer to cryptocurrencies [7]. At the International Accounting Standards Board (IASB) meeting in January 2018, Board discussed the possibility of developing a project for accounting for cryptocurrencies, same Board members asked whether there was a diversity in practice to the extent that users made decisions that did not rely on sufficient information, but others indicated that the IASB should consider providing some guidance and assess whether some of the existing standards for cryptocurrency processing can be modified until new standards are established [8].

According to the previous discussion, the problem of the study represents on determining the appropriate accounting model in the light of IFRS and absence of specific standard for accounting for cryptocurrencies.

The study will discuss these issues in the light of the following topics.

# 2. Literature review:

Previous Literature dealt with cryptocurrencies from different aspects, whether from a technical, economic, or accounting point of view. From technical aspect study of [2] consider as the first studies talking about cryptocurrencies, the study suggested an electronic transaction system without depending on trust. It began with the usual frame of coins made with digital signatures, providing high ownership control, but it was suffering from double spending. Therefore, the study suggested to use proof of work called a peer-to-peer network to record a history of transactions that are impractical for the attacker to change them if the honest nodes control most of the CPU power. The study found that messages are transmitted with the best effort, and the network can send and receive the nodes to it at will, and accept the longest chain of proof to act as evidence of what happened during its disappearance.

Study [9] provides insight into how "Blockchains" work. a Blockchain is a ledger of all transactions that have ever been done. It grows constantly by adding blocks to previous blocks in order to form a complete chain. These blocks are added in a linear, chronological order to the blockchain. The study found that a block chain or Blockchain is a distributed database that maintains a continuously growing list of data records that are hardened against tampering and revision, even by operators of the data store's nodes. That finding similar to study of [10] which found that the most effective method to reduce the frauds and errors in recording and verification is by implementing the Blockchain Technology in the organization.

While [11] study aimed to inspect the accounting literature that focuses on Internet technologies which have a potential to significantly change and disrupt the playing field for accountants and accounting researchers in the near future including cloud, big data, blockchain, and artificial intelligence (AI). The results of the study indicate that scientists have not given enough attention to these techniques and how these technologies affect the daily work of accountants.

Otherwise, from economical aspect study of [12] shows the different aspects of cryptocurrencies, starting with its early development, challenges and risks, opportunities, advantages and disadvantages, and its future. Otherwise, the study examined issues related to the functional and technical function of cryptocurrencies. The findings of the study indicate that it is not easy to predict the future of cryptocurrencies, as there is much to do, especially in the aspect of official matters. However, cryptocurrencies should be considered as an alternative to the future financial transactions.

Even study of [13], aimed to describe blockchains and ledgers and explain their potential applications to money and banking. Through analysis the comparing between public and private ledgers and determine the suitability of different types of ledgers for different purposes. moreover, a few historical models of blockchains and ledgers are shown. The study concluded that the Monetary circuits are a natural application for blockchains. Also, the study found that the role of cryptocurrencies in modern society is articulated and different forms of digital cash.

So, (Houben and Snyers, 2018) in [14] studied the worrying of regulators about criminals who are increasingly using cryptocurrencies for illegitimate activities like money laundering, terrorist financing and tax evasion. And it also contains policy recommendations for future EU standards.

In the field of accounting for cryptocurrency study of [15] aimed to determine a conceptual approach for accounting for the Bitcoin, grounded in the theories of neoliberalism and stewardship. The study concluded That the correspondence analysis and interviews reveal an emphasis on cost and fair value proposed by models grounded in stewardship and neoliberalism respectively.

While [3] study aimed to suggest, compare and evaluate potential accounting models according to the international financial reporting standards. Through reviewing evidence from the literature. The findings of the study concluded that the most appropriate model to accounting of information for users of financial statements when cryptocurrencies are obtained for investment purposes is fair value model.

On the other hand [16]. study aimed to develop a design for an accounting information system that will enhance the representational faithfulness of financial reporting information. The study found that faithful representation is enhanced because information from this system can be used by auditors to support their audit opinion or by stakeholders who need credible information about the entity.

# 3. Cryptocurrencies definition and its nature:

Cryptocurrency considered to be a form of digital currency. The first decentralized cryptocurrency was a bitcoin which was created in 2009, and it was one of the best-known cryptocurrencies, and since we have seen many more such as Ethereum, Ripple, Litecoin and IOTA [17].



SAIPA defined cryptocurrency as a digital asset designed to work as a medium of exchange that uses cryptography (which use decentralized control) to secure its transactions, to control the creation of additional units, and to verify the transfer of assets.

On the other hand, it defined as a form of exchange that exists only digitally and it is not tied to any physical currency [18] But it not legal tender and mostly are not issued or backed by any government or state [19]. These currencies are created through software and Mathematical algorithms using certain universal coding techniques that make penetration and manipulation almost impossible (Exchange Panorama, 2018) [20].

From previous definitions the study concludes that cryptocurrency has several characteristics:

- 1. Virtual currency created by computer software.
- It operates under peer to peer system which means there is no external third party to complete the transactions.
- 3. It is difficult to controlled by central bank or authorized party.

Cryptocurrency must be distinguished from electronic money, "electronic money" is monetary value as represented by a claim on the issuer, which is issued on receipt of funds for the purpose of making payment transactions and which is accepted by persons other than the issuer, Although some of these criteria are also met by virtual currencies [21].

In electronic money charts, the link between cryptocurrencies and the form of traditional money is preserved, whereby such currencies stored in the same unit of account is expressed (for example, in US dollars or euros). In virtual currency charts, the unit of account is changed to a virtual unit.

The law does not regulate the relationship between the virtual currency and the currency with legal bid status, which may be a problem or costly when recovering funds, if this is permitted.

The source of the virtual currency is usually a private non-financial company. Conventional financial institutions, including central banks, are not concerned. This means that regulatory regulations and oversight for the financial sector are not applicable.

Cryptocurrencies also differ from digital payment methods such as that provided by PayPal or credit cards, which require the presence of a broker to transfer transactions, and the existence of authorized party for monitoring financial transactions represented in central banks, while cryptocurrencies depend on peer-to-peer interaction networks, which leads to a lack of third party monitoring of financial transactions.

[22] stated several advantages and disadvantages of cryptocurrencies as follow:

### Advantages:

- Cryptocurrency mining open code BTC applies the same algorithms used in Internet banking.
- No inflation coins are limited to maximum 21 million bitcoins. Since there are no political forces or companies able to use another system, there is no possibility to develop inflation in the system.

- 3. Unlimited transaction possibilities
- No boundaries, cancel payments in this system is impossible and coins cannot be faked or duplicated.
- Anonymity. It is completely anonymous and at the same time completely transparent
- 6. Transparency. BTC stores the history of transactions that have ever occurred. It is called a block chain. The block chain keeps track of everything.
- 7. The possibility of investing money in a transparent and profitable resource

# **Disadvantages:**

- 1. Strong volatility almost all of the ups and downs of the bitcoin value depend directly on the declared statements of the governments of different countries
- 2. Large risks of investing in cryptocurrency that should be considered in the medium and long term.

# 4. Accounting issues for cryptocurrencies.

Dealing with cryptocurrencies raises many accounting issues, the reason for this is due to the nature and specific characteristics of those currencies and the diversity of the purpose of their acquisition by the establishments, as well as the absence of an international accounting standard that determines the accounting treatment of those currencies in different cases. Although there is no standard or guidance issued by International Financial Reporting Standards (IFRS) for cryptocurrencies accounting treatments, but IAS 8 clarifies the conditions for accounting treatment of transactions in the absence of an international accounting standard for those transactions.

Paragraph 10 in IAS 8 stated that in the absence of international financial reporting standards management must use personal judgment to develop and implement an accounting policy to a transaction, event or other situation that is:

- A) Related to the economic decision-making needs of users; and
- B) Reliable, in that the financial statements:
  - 1. The financial position truly presented;
  - Transactions, events and other conditions should economically reflect and not just in the legal form
  - 3. Free from bias;
  - 4. Prudential; and
  - 5. Complete in all material respects [23].

Management should consider the applicability of, the following sources in descending order when they make its own judgment:

- A) IFRSs requirements dealing with similar and related issues; and
- B) the definitions, recognition criteria and measurement concepts for assets, liabilities, income and expenses in the Conceptual Framework for Financial Reporting (Conceptual Framework) [23].

In the light of IAS 8, the study found that organizations apply the same accounting treatment contained in standard when dealing with



cryptocurrencies transactions. This make organizations confused what is the reliable accounting treatment for cryptocurrencies? Could we define these currencies as assets?

# 5. Accounting for cryptocurrencies as assets:

Referring to the definition of assets in the conceptual framework issued by the International Accounting Standards Board, assets defined as a present economic resource controlled by the entity as a result of past events. An economic resource is a right that has the potential to produce economic benefits [23].

In discussions of the Financial Reporting and Assurance Standards Canada (FRAS) about accounting for cryptocurrencies, there is different point of views on whether the cryptocurrencies meet the definition of assets or not, as the supporters indicated that the conceptual framework issued by the International Accounting Standards Board, the physical existence of the asset is not required, and although the organization's control over the benefits is often the result of legal rights.

While opponents see that cryptocurrencies are not an asset, supporters of this view look at uncertainty about whether future economic benefits from the cryptocurrency are expected to flow to the facility to be high enough as there is no asset [24].

Having a digital currency will meet the definition of an asset. This is because the entity either buys, "stars", or receives a cryptocurrency unit as payment (i.e. a previous event) and will be able to control the cryptocurrency unit where it will be able to decide when to sell or use it as an exchange (i.e. controlled resources). Finally, if an entity sells or exchanges digital currency in any way for some other good or service, the economic benefits are expected to flow to that entity [18].

The researchers believe that if assets conditions are met in cryptocurrencies, it must be recognized as an asset, and the researchers believe that those currencies meet these conditions, which include three main aspects, namely:

- 1. Current economic resource.
- 2. It is controlled by the organization as a result of previous events.
- 3. It has a right has and ability to achieve economic benefits.

#### 5.1 Accounting for cryptocurrencies as cash/ cash equivalent:

IAS defines cash as comprises cash on hand and demand deposits (IAS 7), while IAS 32 stated that Currency (cash) is a financial asset because it represents the medium of exchange and is therefore the basis on which all transactions are measured and recognized in financial statements.

Some object this definition of cash, Procházka, 2018 [3] stated that treating cash as a legal currency is a technical viewpoint that disagree with the basic principle of economic substance in the legal form. Therefore, it adopts a broader economic vision to define money. In economics, money is usually defined as anything that is generally accepted as a payment for goods and services or for a debt payment [25].

"Cryptocurrency is not accounted for as currency and is not included in cash and cash equivalents. Under the current U.S. accounting framework, cryptocurrency is not cash, currency, or a financial asset. Possible alternatives to fit cryptocurrencies into the accounting model range from treating it as a commodity, inventory, or an intangible asset" [26].

On the other hand, Bitcoin doesn't meet the definition of a currency or even an electronic payment form in Finland, where the central bank has instead decided to categorize the software as a commodity [27]. The Chinese central bank also prohibited lenders from dealing with the cryptocurrency, indicating that it is not a real currency and has no legal status [28].

Several governments such as Norway and South Korea have also taken arguments that Bitcoin is not a currency, as it does not fall under the usual definition of money or currency [29].

#### 5.2 Accounting for cryptocurrencies as an investment.

There is another believe that cryptocurrencies can be accounted as an investment if they are acquired for this purpose, [31] suggested that investors should include Bitcoin in their portfolio as it generates substantial higher risk-adjusted returns.

Although bitcoins are virtual and have no true physical existence, the intangible asset classification is inappropriate for any cryptocurrency. Intangibles specifically exclude financial instruments from inclusion. And while bitcoins cannot be viewed as cash, they cannot be ignored as a financial exchange medium. Given all that they cannot be, the only reasonable asset classification for bitcoins is either a short- or long-term investment. Holding bitcoins as investments would require them to be booked at their value when received [30].

#### 6. Hypotheses development:

Based on the previous discussion, the following hypotheses explain the challenge facing IFRS for accounting of cryptocurrencies, these hypotheses are:

- H1: There are no deficiencies in the IFRS for accounting of cryptocurrencies compared with traditional IFRS framework.
- H2: There are no differences between business models of enterprises, the differences in the usual activity of enterprises and the economic substance, leading to different use for accounting forms of cryptocurrencies compared with traditional IFRS framework.

# 7. Research methodology:

The first part of the study was done using primary research by reviewing literature related to study subject and allocating questionnaire to the academical instructors working on Palestinian Universities which was specially designed for this purpose.



The study relied on obtaining the primary data from field study by using questionnaire list, whether it is distributed through Internet or through personal interviews to identify the views of the study sample regarding to explain of deficiency in the current framework of accounting for cryptocurrencies in the light of IFRS requirements, and to which business models of enterprises, the differences in the usual activity of enterprises and the economic substance of the transaction leading to use different accounting forms of cryptocurrencies compared with traditional IFRS framework.

# 7.1 sample:

The population of the study represented on academic instructors working on accounting department in the Palestinian Universities (Al-Azhar University, Islamic University, Al- Aqsa University, University of Palestine, Quds Open University, Al- Esraa University) located on Gaza strip which were 63 instructors.

The sample of the field study distributed for 50 questionnaires to the different categories of the field study sample, and allocated 36 of questionnaires distributed.

Table 1 shows the number of distributed questionnaires and the number of received questionnaires which was about 72% of total distributed questionnaires.

### Table 1 : Sample distribution

description	Distributed	Allocated
Academics of accounting		
Male	40	32
Female	10	4

#### 7.2 Test the reliability and validity of the questionnaire list:

Table number (2), shows the results of the validity and reliability tests of the study tool (the questionnaire) that is honest in measuring what was set to measure it, and it is also very stable, which qualifies it to be a suitable and effective measuring tool for this study and can be applied with confidence.

Table 2 :	Reliability	and V	alidity	test
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No.	paragraphs	Items	Cronbach alpha
1	deficiencies in the IFRS for accounting of cryptocurrencies compared with traditional IFRS framework	14	0.930
2	business models of enterprises, the differences in the usual activity of enterprises and the economic substance	8	0.893

#### 7.3 Descriptive statistics and test hypotheses:

#### 7.3.1 Descriptive statistics (First hypothesis):

The following table presents the summary of descriptive statistics of opinions for the questionnaire (Part 1) related to the first hypothesis test as follows:

By analyzing the data of table 1, the study concluded that the arithmetic mean of the responses of the first part's ranged between the value of 4.39 and the value of 3.83, which means that the sample categories tend to acknowledge the existence of deficiencies in the current framework of accounting for cryptocurrency in light of the requirements of international financial reporting standards (IFRS).

#### 7.3.2 Test first hypothesis:

To test this hypothesis, the study relied T test was examined, and the following table 4 shows the results of (T) test for this hypothesis:

Based on the data of table 4, the study concluded that there are no statistically significant differences of the study sample regarding the presence of deficiencies in the current framework for accounting for cryptocurrencies in light of the IFRS requirements at the level of significance 5 %, Where the average of answers was 3.88, which is a high value, and the result of the T-test indicates that the significance value of the test was 0.111 and this value means that there is no statistical significance as (the level of significance is greater than 0.05), and therefore, there is homogeneity between opinions of study sample, and accordingly the first hypothesis is accepted.



# Table 3 : T-test, mean and rank (hypothesis 1)

#### Table 4: T-Test for first hypothesis

	Deficiencies in the IFRS for	وبا				
	cryptocurrency accounting	metik San	darc	test	king	
	compared with IFRS framework	arith	Stan devi:	Ţ.	Ran	
1	There is a gap between the current International					
-	Financial Reporting Standards (IFRS)	4.44	0.50	17.2	1	
	cryptocurrency accounting.					
2	In light of the (IFRS) there is no specific definition of an asset element that can be applied				5	
	to the cryptocurrency, which requires a new	4.28	0.82	9.5	5	
3	The current IFRS does not have the consistency					
	(stability) that achieves comparability in accounting for crantocurrency	4.06	1.04	6.1	11	
4	The current IFRS framework suffers from an					
	accounting discrepancy resulting from the difference in the basis of measuring the				12	
	cryptocurrency, which leads to fluctuations in the	4.06	0.92	6.9		
	fair presentation of the economic fact of the entity's activities.					
5	The current IFRS requirements do not provide the				0	
	understandability of the importance of	4.22	0.80	9.2	,	
	cryptocurrencies to the entity's financial position, performance, and cash flows,					
6	The current IFRS requirements do not provide the				2	
	cash flow amounts associated with	4.33	0.76	10.6	3	
	cryptocurrencies, the timing and extent of					
7	The current IFRS requirements do not provide the					
	necessary information to demonstrate the entity's objectives and policy with regard to financial risk	4.28	0.45	16.9	6	
	management and the extent to which those goals					
8	The current IFRS requirements do not provide the					
	necessary information about the enterprise	4 17	0.61	11.5	10	
	cryptocurrency classification is built for	4.17	0.01	11.5		
9	subsequent measurement purposes. The information disclosed in light of the current					
	IFRS framework does not have any impact on				4	
	assessing past, present and future events or by	4.33	0.48	16.7	4	
	confirming or correcting their past assessments on cryptocurrencies.					
10	The information disclosed in light of the current					
	expression of financial transactions and other	1.28	0.57	0.41		
	events regarding cryptocurrencies which is understood to visualize or reasonably expected to	4.20	0.57	7.41	8	
11	express.					
11	ramework of IFRS standards does not provide the					
	users a reasonable level of knowledge and	4.28	0.82	9.41	8	
	and accounting activities about cryptocurrencies.				0	
12	The information disclosed in the light of the current framework of IFRS standards does not					
	enabling users to compare financial statements of					
	determine their impact on performance and	4.39	0.84	9.94	2	
	financial position, as well as enabling users to compare financial statements of cryptocurrencies					
12	for different institutions					
13	The information disclosed in light of the current IFRS framework does not provide users the useful	4.00	0.80	6 70	13	
	information about cryptocurrencies in a propriate	4.00	0.89	0.70		
14	The information disclosed in light of the current					
	framework of the IFRS standards does not provide a high degree of agreement between the				14	
	accountants who measure and who use the same	3.89	0.82	6.50		
	auditors reaching the same result about accounting					
	for cryptocurrencies.					

Hypothesis	arithmetic mean	Standard deviation	T- test
There are no deficiencies in the IFRS for accounting of cryptocurrencies compared with traditional IFRS framework.	3.88	.702	.111

#### 7.3.3 Descriptive statistics (Second hypothesis).

Table 5 presents the summary of descriptive statistics of opinions for the questionnaire list (Part 2) related to the second hypothesis test as follows:

By analyzing the data of table 5, the study concluded that the arithmetic means of the responses of the first part's questions ranged between the value of 4.17 and the value of 3.83. This means that the sample categories tend to determine that business model of enterprises, the differences in the usual activity of enterprises and the economic substance, leading to different use for accounting and disclosure forms of cryptocurrencies.

#### 7.3.4 Test second hypothesis:

To test this hypothesis, the study relied T test was examined, and table 6 shows the results of (T) test for this hypothesis:

Based on the data of table 6, the study concluded that there are no statistically significant differences between the mean of the study sample regarding that the multiplication of business models and the usual activity of enterprises and the economic substance, leading to different use for accounting forms of cryptocurrencies at a significant level of 5%. The arithmetic mean was 4.04, which is a high value, and the result of the T-test indicates that the significance value of the test was 0.284 and this value means that there is no statistical significance as (the level of significance is greater than 0.05), and therefore there is homogeneity opinions of study sample, and accordingly the second hypothesis is accepted.



# Table 5: T-test, mean and rank (hypothesis 2)

r					
	Business models of enterprises, the differences in the usual activity of enterprises and the economic substance, leading to different use for accounting and disclosure forms of cryptocurrencies compared with traditional IFRS framework	arithmetic mea n	Standard deviation	T- test	Ranking
1	The usual activity of the facility is one of the factors affecting the selection of the appropriate form of accounting for the cryptocurrency.	4.17	0.61	11.5	1
2	The business model of the establishment is one of the factors influencing the selection of the appropriate model for accounting for cryptocurrency.	4.11	0.75	8.91	2
3	The economic essence of the transaction is one of the factors that influence the choice of the appropriate form of accounting for the cryptocurrency.	3.94	0.72	7.92	7
4	The usual activity of the establishments with respect to the cryptocurrency differs in the accounting treatment from one facility to another.	4.11	1.01	6.61	3
5	The different business model results in different accounting treatment from one facility to another.	4.06	0.72	8.85	4
6	The difference in the economic substance of the transaction leads to the different accounting treatment from one facility to another.	4.06	0.72	8.85	5
7	Taking into account the difference in normal activity, business models, and the economic essence of transactions when selecting the appropriate form of accounting for cryptocurrency, the following is achieved: 1. Objectives of general-purpose financial reports. 2. The quality of the information published in the financial reports.	3.83	0.70	7.17	8
8	The appropriate model for accounting for cryptocurrencies is the model based on the use of fair value measures in the case of an active market. To trade those currencies and that cost measures are an alternative in the absence of an active market.	4.00	0.76	7.93	6

### Table 6: T-Test for second hypothesis

Hypothesis	arithmetic mean	Standard deviation	T- test
There are no differences between business models of enterprises, the differences in the usual activity of enterprises and the economic substance, leading to different use for accounting forms of cryptocurrencies compared with traditional IFRS framework	4.04	.66	.284

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# 8. Results:

- There is no agreement about a specific accounting model for accounting for cryptocurrencies, different opinions by academics' researchers on the classification of those currencies.
- The result of statistical analysis shows that there are deficiencies in the IFRS for accounting of cryptocurrencies compared with traditional IFRS framework.
- The result also concluded that using business models of enterprises, the differences in the usual activity of enterprises and the economic substance, leading to different use for accounting forms of cryptocurrencies compared with traditional IFRS framework, this result compatible with [16] study which concluded that the correspondence analysis and interviews reveal an emphasis on cost and fair value proposed by models grounded in stewardship and neoliberalism respectively.
- While [3] study aimed to suggesting, comparing, and assessing potential accounting models under IFRS. Based on evidence from literature review, as well as recent time-series data on the price volatility of cryptocurrencies, the study showed that fair value accounting is the most relevant source of useful information for users of financial statements when cryptocurrencies are acquired for investment purposes.
- On the other hand [17] study aimed to develop a design for an accounting information system that will enhance the representational faithfulness of financial reporting information. The study found that faithful representation is enhanced because information from this system can be used by auditors to support their audit opinion or by stakeholders who need credible information about the entity.

# 9. Recommendations:

- The necessity for the International Financial Reporting Standards (IFRS) to issue an accounting standards or guidance that accommodates the accounting treatment of the various problems associated with cryptocurrencies.
- The necessity issuing legal legislations by governments of the countries that do not allow the use of cryptocurrencies in any illegal business.

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