UDC 657.6+008

JEL classification: M41, M42, D24 DOI: 10.35774/visnyk2024.03.218

Liu CHENGYU,

PhD student, Intermediate accountant, Lecturer, Nanchang Institute of Science and Technology, Nanchang City, Jiangxi Province, China, e-mail:1657426641@qq.com.

ORCID ID: 0000-0002-0572-9322

ACCOUNTING FOR CRYPTOCURRENCIES IN INTERNATIONAL PRACTICE

Liu Chengyu. (2024). Oblik kryptovaliut v mizhnarodnii praktytsi [Accounting for cryptocurrencies in international practice]. *Visnyk ekonomiky – Herald of Economics*, 3, 218-231. DOI: 10.35774/visnyk2024.03.218

Лю Чен'юй. Облік криптовалют в міжнародній практиці. *Вісник економіки*. 2024. № 3. С. 218–231. DOI: 10.35774/visnyk2024.03.218

Abstract

Introduction. With the expansion of the application scope of cryptocurrency, the current enterprise accounting processing and the supervision of relevant departments are facing great challenges: due to the lack of corresponding accounting standards, enterprises holding cryptocurrency rely more on the judgment of enterprise accounting when conducting relevant business processing.

The main purpose of this study is to clarify the specific standards for including cryptocurrency in accounting entity, and provide basic guiding principles for the handling of such assets in accounting records and financial reports. The specific objectives of this research include in-depth analysis of the core characteristics of encrypted assets in financial accounting and determination of their appropriate classification attributes.

Methods. This study strictly follows the scientific and systematic inquiry method, integrates the conventional research techniques such as analysis, synthesis and generalization, and uses statistical tools as an aid. In order to achieve the research goal, this study carefully screened and deeply analyzed the academic literature and publications in related fields, and adopted interpretation and analysis methods. Through careful content analysis, this study not only reveals the similarities and differences in the literature, but also gives clear guidance on how to properly handle cryptocurrency in financial statements. International Financial Reporting Standards (IFRS) and International Accounting Standards (IAS) serve as theoretical references to evaluate the applicability of cryptocurrency accounting, and provide important standards for considering its impact on financial reporting.

Results. Although cryptocurrencies have gradually developed rapidly, the accounting principles still include the International Accounting Standards Board (IASB). The nature of

[©] Liu Chengyu, 2024.

cryptocurrency is complex, and it is difficult to determine how to conduct accounting treatment. This situation may make the omission of corporate accounting information disclosure, and the relevant investors will bear higher risks. It may also lead to related enterprises encountering bottlenecks when seeking listing opportunities, and turn to overseas markets to outflow of opportunities. Therefore, we should set appropriate accounting standards for cryptocurrencies as soon as possible. By combing the current Australia, Britain, the United States, Canada has issued encryption currency accounting guidelines, and the relevant provisions of the international accounting standards and the opinions of large accounting firms, the current encryption currency accounting theory exploration, for accounting entities hold encryption currency accounting recommendations.

Perspectives. A promising direction for further research is to improve the methodology of accounting for the movement of cryptocurrency, taking into account the volatility and dynamism of the market. The procedure for controlling electronic transactions using cryptocurrencies to ensure public trust in them, to confirm the reliability of electronic information and the completeness of the display of generalized indicators in various forms of reporting requires additional scientific and applied developments.

Keywords: cryptocurrencyblockchain, International financial reporting standards (IFRS), immaterial assets, accounting treatment.

Formulas: 0; fig .: 0; tab .: 4; bibl .: 26.

Introduction. In the 21st century, the world has entered the third act of monetary history-an era dominated by the virtual economy. In this era, the nature and function of money have changed fundamentally. The highest form of money, namely electronic money, is gradually giving up its physical sensory form and turning to virtual presentation through technical means. The rapid development of blockchain technology gave birth to the rapid development of cryptocurrency. Today, in many activities, the use of advanced information technology has become a crucial theme, especially in the field of accounting, which constitutes the core of any facility management system. The development of the digital economy gives birth to the modernization of information and telecommunication technology, which brings unprecedented new opportunities to the accounting industry. The application of information technology not only reduces the cost and human error, but also greatly improves work efficiency and strengthens the competitiveness of the organization.

At present, the industry has not yet reached a unified understanding on the definition of «cryptocurrency». «On the one hand, it is regarded as «virtual currency» and widely accepted as a special payment network and a new currency form» [1]. «On the other hand, it is also called a «digital asset», which plays an important role in exchanging other assets» [1]. The price of cryptocurrency is determined by the relationship between supply and demand, showing the characteristics of a free market interest rate. Different from traditional currency, the accounting treatment of cryptocurrency is based on the identity of payment instruments and the participants of the agreement. This method is applicable to short-term transactions with similar parties. When dealing with cryptocurrency in the form of a series of byte information, the electronic payment system will play an intermediary role, and its core task is to ensure that duplicate byte groups are not accepted.

The current accounting and reporting framework has not considered cryptocurrency. The accounting treatment of encrypted assets and its impact on the company's financial report are rarely involved in research. Therefore, the purpose of this study is to analyze and synthesize the existing literature on this subject, and provide an analytical perspective to simplify the existing understanding of accounting treatment and its impact on financial reports, in order to making practical contributions to the encryption of asset literature. The research goal of this paper is to establish and verify the definition of cryptocurrency in financial accounting, evaluate the applicability of the opinions expressed by standard makers under the framework of IFRS, and put forward corresponding accounting treatment methods.

Analysis of research and problem statement. Many studies have been devoted to defining cryptographic assets. Sixt E., and Himmer K. (2019) studied how the rights and interests related to encrypted assets affect its financial accounting, and formulated appropriate business and tax accounting rules for new digital asset category [1]. Supporters of cryptocurrency such as Nakamoto S. (2008), Houben R. and Snyers A. (2018), Lee D. and Deng R. (2018) believe that the main advantage of cryptocurrency is that it has changed the payment method of the traditional monetary system [2-4]. However, Procházka D. (2018) and Kostiantchenko V., Malinovska A. and Mamonova A. (2017) regard cryptocurrency as a new problem in the technological age [5; 6]. Raiborn C. and Sivitanides M. (2015) believe that due to the lack of traditional accessibility, cryptocurrency can not meet the demand for high liquidity: no matter at home or abroad, cryptocurrency can not be traded through ATM or regular banks like traditional currency [7]. At present, many well-known individuals and cooperative entities (such as Amazon, Microsoft, MasterCard, PayPal and other blue-chip companies) are seeking alternatives to the traditional banking system to fulfill their financial obligations [8; 9]. Therefore, if there is no intervention from the central authority to mediate the transaction and ensure its authenticity, the emergence of electronic payment such as cryptocurrency becomes particularly important. Despite this, the central bank and other national authorities still mostly refuse to recognize cryptocurrencies as money.

Since 2016, academic research on cryptocurrency accounting has gradually warmed up. Ukrainian scholar Yatsyk T. proposed building a standard cryptocurrency classification system from the perspective of International Financial Reporting Standards (IFRS) to assist accountants in making accounting plans [10]. Prochazka D. (2018) believes that fair value accounting is the most concerned and practical source of information for users of financial statements when purchasing cryptocurrency as an investment [11]. Foy J. (2019) believes that cryptocurrencies should be regarded as intangible assets and accounted for according to their infinite service life [12]. Pozaritska Ya. (2018) critically evaluated the applicability of IFRS in the field of cryptocurrency accounting, and pointed out that the accounting of cryptocurrency based on IFRS is still full of uncertainty [13]. Brukhanskyi R. and Spilnyk I. (2019) think that the classification of cash, cash equivalents, currency, commodities, stocks, financial investments or intangible assets is not suitable for cryptocurrency, and discuss the necessity of formulating digital economy regulations and adjusting accounting standards to adapt to the digital economy [14]. Tarasova T. et al. (2020) proposed that modern accounting allows the adjustment of existing accounts of specific objects, so new accounts can be created to account for cryptocurrency [15]. Raphael M. (2018) classified

digital currency according to its holding purpose: held for investment purpose should be regarded as intangible assets and can be measured by cost model or fair value model (through other comprehensive income) [16]. «Some people think that the fair value model will provide more effective information for all stakeholders» [16]. «If digital currency is used as a means of payment for goods or services and plans to convert it into cash in a short time, it should be classified as intangible assets» [16]. «Digital currency, which is sold in the normal business scope, shall be regarded as inventory, and shall be measured at fair value minus the cost of sales» [16]. Changes in fair value shall be recognized through profit and loss. Sean Stein Smith and John Jack Castonguy (2020) believe that unless the financial accounting standards board (FASB) issues a new standard, encrypted assets are most similar to intangible assets except goodwill, and therefore should be classified as intangible assets. Although there are many similarities between encrypted assets and inventory, cash and cash equivalents, the factors that overlap with the classification of intangible assets are the most, while other factors are relatively few. They believe that «impairment test (nonprofit confirmation)» can meet the requirements of accounting stability, and according to the current FASB guidelines, this is the most suitable measurement method for encrypted assets [17]. Brukhanskyi R. and Spilnyk I. (2019) studied the possibility of integrating encrypted assets into the financial accounting and reporting system, and emphasized the urgency of generating a separate accounting status for encrypted assets [14].

The purpose of the article is to clarify the specific standards for including cryptocurrency in accounting entity, and provide basic guiding principles for the handling of such assets in accounting records and financial reports. The specific objectives of this research include in-depth analysis of the core characteristics of encrypted assets in financial accounting and determination of their appropriate classification attributes.

Research results. With the rapid development of cryptocurrency, national and regional standard-setting institutions, as well as major professional groups and organizations of accountants, began to pay more attention to the accounting treatment standards of cryptocurrency. Research by Fominan O. et al. (2019) shows that cryptocurrency is not recognized as a payment tool in developed economies, including Japan, China, Bolivia and Switzerland, due to price fluctuation, risk and uncertainty associated with cryptocurrency. «In Ukraine and other countries, the government has established a legal framework for cryptocurrency, and supervised its potential effects» [8]. At the same time, they studied different views on the identification of cryptocurrency in Ukraine, and pointed out that it is necessary to clarify and unify the standards for determining and reporting cryptocurrency operations in national accounting standards [8].

This paper will discuss the classification and measurement of cryptocurrency assets from two dimensions, and investigate many views of the industry on this issue. According to the definition of the International Accounting Standards Board (IASB), assets refer to the resources obtained by an enterprise through past transactions or events and expected to bring economic benefits, which should be owned or controlled by the enterprise. Based on this definition, cryptocurrencies held by enterprises and individuals are usually regarded as assets, which is generally accepted by the global accounting standards board and major accounting organizations. However, due to the complexity of asset classification in the balance sheet and the differences in measurement and accounting treatment of various

assets, there are different opinions on the specific types of cryptocurrency in the industry, which has become the controversial focus of cryptocurrency accounting treatment. «From the point of view of accounting, the attributes of cryptocurrency as a payment tool have not been fully studied» [9]. At present, because cryptocurrencies are not regulated by specific jurisdictions, issuers or responsible organizations can not clearly identify them, and they only exist in virtual Internet space, so there is not enough reason to regard all kinds of cryptocurrencies as standard currencies or assets in accounting. The literature review shows that experts hold different opinions on the applicability of cryptocurrency asset measurement. Some people think this is an investment opportunity, and advocate accounting according to IAS 32. On the contrary, other scholars advocate the use of encrypted assets as financial tools for accounting treatment. Some proponents of encrypted assets classify it as inventory for sale in IAS 2, while for others, it is more in line with the cash category in IAS 7.

A critical look at IFRS 9, IAS 2, IAS 7, IAS 32, IAS 38 reveals is in Table 1.

Table 1
Summaries the Accounting Treatment of Crypto-asset in Financial Reporting

Assets	Explanation					
Cash	At present, cryptocurrency as a means of payment has not been widely accepted.					
	These currencies fluctuates greatly in value, and they are not issued or supported by					
	any government.					
Cash Equivalents	Cryptographic currency has experienced drastic fluctuations in value, which has					
	brought high risks. Compared with liquid assets, cryptocurrencies are not easy					
	to be converted into cash quickly, which increases their liquidity risk. In addition,					
	cryptocurrency is not suitable as a means of saving, because it can not guarantee a					
	stable value like traditional bank deposits. In addition, most ATMs do not support the					
	withdrawal of cryptocurrencies, which further limits the convenience of their use					
Financial	Individuals who hold cryptocurrencies have no contractual right to demand paymen					
instruments	s cash or other financial assets, and they are also not obligated to make such demand					
	In addition, the cryptocurrency derivative market also has some unique problems.					
Inventory	Inventory does not always appear in the form of physical objects, but in typical					
	business activities, inventory is indispensable for sales support. However, because					
	cryptocurrency is not as day trading as physical goods, its trading activities do not					
	form the core of daily business. Only when they meet this condition, bitcoin and other					
	cryptocurrencies can be accurately classified as inventory.					
Intangible Assets	«If digital currencies are not considered as «cash» yet (or «money» in the context of					
	IAS 38) and therefore it would be a non-monetary asset» [18]. «Digital currencies are					
	exactly that digital, they have no physical substance» [18].					

Source: adapted by author.

At present, what kind of assets should be recognized for cryptocurrency in the accounting industry are mainly «cash or cash equivalents», «financial instruments», «inventory» and «intangible assets». This paper will mainly analyze these four kinds of assets.

At present, cryptocurrencies have not been recognized as legal tender by any country in the world. As a means of payment, it lacks universal acceptance and legal basis, so it does not conform to the definition of legal tender, and there is no corresponding legal

and institutional support. In October, 2021, Ernst & Young published a research report entitled «International Financial Reporting Standards for Cryptographic Asset Holders». pointing out that cryptocurrency can not be used as a medium of exchange for goods and services, nor does it belong to cash or cash equivalents [18]. Similarly, in December 2016, the Australian Accounting Standards Board (AASB) confirmed in its article «digital currency – A Case of Standard-setting» that cryptocurrencies do not meet the definition of cash or financial assets in International Financial Reporting Standards (IFRS) [19]. The quide «Accounting Treatment and Auditing of Digital Assets» jointly issued by the American Institute of Certified Public Accountants and the British Institute of Chartered Management Accountants also shows that cryptocurrency has not been recognized by the regulatory authorities, lacks government support, and does not conform to the definition of cash and cash equivalents in financial accounting standards board [20]. The Canadian Institute of Certified Public Accountants also pointed out that without the support of the central bank, the function of cryptocurrency as a «medium of exchange» is limited compared with the traditional legal tender, so it has no definition of «cash equivalent» [21]. According to the regulations of the International Financial Reporting Standards Interpretation Committee, cryptocurrencies can not be regarded as cash because they are not issued by official institutions such as the central bank (Table 2).

Table 2
Reasons for countries and organizations to recognize cryptocurrencies as

«cash or cash equivalents»

	Are recognized		
Countries and organizations	as «cash or cash	Explanation	
	equivalents»		
Salvador	Yes	Flat money	
Ernet & Voung(EV)	No	«Not available as a medium of exchange of goods	
Ernst & Young(EY)		and services» [22].	
Australian Accounting	No	«Does not meet the definition of cash or financial	
Standards Board (AASB)		assets under existing IFRS» [22].	
		If it is not approved by the administrative organ and	
American Institute of	No	supported by the government, the asset does not	
Certified Public Accountants		conform to the definition of FASB cash and cash	
		equivalents.	
Chartered Institute of	No	If it is not approved by the administrative organ and	
		supported by the government, the asset does not	
Chartered Management Accountants	INO	conform to the definition of FASB cash and cash	
Accountants		equivalents.	
	No	Compared with the traditional legal tender, without	
Canadian Institute of		the support of the central bank, the application	
Certified Public Accountants		of cryptocurrency as the «exchange medium» of	
		money is relatively limited.	
The IFRS Interpretation	No	«It is not issued by regulatory authorities such as	
Committee		the central bank» [23].	

Source: systematized by the author.

Therefore, although cryptocurrencies can be converted into legal tender or used to buy goods and services on some trading platforms, their wide acceptance is still limited, which greatly weakens their practicability as a means of payment and makes them unable to be widely used in transactions like cash. In addition, cryptocurrencies are not suitable as a means of value storage because of their extremely violent price fluctuations. At the same time, due to the lack of a widely accepted cryptocurrency as a pricing standard or value comparison, they can not effectively play the role of price yardstick. Therefore, the accounting community generally believes that «cryptocurrencies should not be regarded as cash or cash equivalents».

When a company uses cryptocurrency as the payment method and quickly converts it into local currency on the exchange, it usually does not hold the cryptocurrency for a long time to avoid the risk of price fluctuation. In this case, cryptocurrency actually acts as a trading medium: we only need to confirm income or expenditure according to the exchange rate, just like dealing with traditional foreign currency. Since cryptocurrency is mainly used as a medium for commodity exchange, cryptocurrency held for a short time should be regarded as «cash or cash equivalent». However, if you hold cryptocurrency for a long time, this treatment is not applicable, because you will face greater risk of price fluctuation. According to the rules for dealing with foreign currencies, this may lead to higher exchange gains and losses and have a significant impact on financial statements. This method is suitable to be considered in a short time. In fact, few companies hold cryptocurrencies only for the purpose of trading medium, so in practice, this treatment is usually negligible.

The controversy about whether cryptocurrency belongs to «financial instrument» mainly focuses on whether the holder has established a contractual relationship with other parties. According to the definition of International Accounting Standard No. 32-Financial Instruments (IAS 32), financial instruments refers to contracts between financial assets held by one party and financial liabilities or equity instruments of the other party. Therefore, the holder of cryptocurrency does not necessarily have a contractual relationship with each trading entity on the blockchain. In other words, in the process of payment and exchange of cryptocurrency, the holder has no right to obtain cash or other financial assets from other entities. Obviously, according to this definition, cryptocurrency should not be regarded as financial instruments or financial assets. Nevertheless, cryptocurrency does have some common features of financial instruments, such as its price fluctuates greatly and is usually issued to the public.

According to the accounting standards for financial instruments, the business model of cryptocurrency is mainly aimed at sales, which is inconsistent with the traditional characteristics of contract cash flow, resulting in obvious differences from basic lending arrangements. Therefore, cryptocurrency should be regarded as a financial asset dignified at fair value, and its change in cost is directly included in the profit and loss. When measuring such assets, we should first measure them at fair value, and the transaction-related costs should be offset against the current profits and losses immediately and reflected in the investment income. In the subsequent measurement, any variation in fair value will be add in the current profit and loss, reflecting the change in its value in real time (Table 3).

Table 3
Reasons for countries and organizations to determine whether cryptocurrencies are recognized as «financial instruments»

Countries and	Are recognized as		
organizations	«financial instrument»		
Australian Accounting	No	Do not have the matching one contract rights and	
Standards Board (AASB)	INO	contractual duties.	
The IFRS Interpretation Committee	As appropriate	In general, cryptocurrency is not considered as a traditional financial asset. Nevertheless, other forms of encrypted assets may be defined as financial assets after meeting certain conditions. These conditions include giving the holder the right to get cash under certain circumstances, or	
		being an equity instrument of another enterprise.	
Canadian Institute of Certified Public Accountants	As appropriate	Some future contracts related to buying and selling cryptocurrencies, such as forward and options, and cash settlement based on changes in the value of cryptocurrencies, may be classified as derivatives and governed by the Regulations on Accounting Treatment of Financial Instruments.	
Ernst & Young(EY)	As appropriate	Although the application of blockchain and distributed technology will not immediately establish a contractual relationship between the two parties, if the holder is authorized to buy goods, services and financial instruments from other counterparties, these encrypted assets conform to the definition of «financial instruments. If there is no such purchase behavior, these definitions are not met.	

Source: systematized by the author.

According to the International Accounting Standards No. 38 (IAS 38), «intangible assets are recognizable non-monetary assets owned or controlled by an enterprise» [24]. Only by definition, enterprises can dominate the use of cryptocurrency and get the economic benefits generated by cryptocurrency, cryptocurrency can meet the conditions owned or controlled by the enterprise; the cryptocurrency is essentially computer code, without physical form; and cryptocurrency can be obtained or transferred separately, with the characteristics of separate identifiable; cryptocurrency does not belong to cash and will be collected in fixed or certain amount of currency assets, non-monetary assets, meet the definition of intangible assets. Both Australia and the United States have proposed accounting for cryptocurrencies as intangible assets.

However, companies may also hold cryptocurrencies for the purchase of goods or services, for investment, or as employee incentives, and not just for «production or business purposes. «In addition, intangible assets are measured at cost, and the price of cryptocurrencies fluctuates so much that many companies even buy cryptocurrencies for speculation or for bid-ask spreads. Therefore, cryptocurrencies may not fully meet the

definition of «intangible assets» if you consider the diversity of holding purposes and the applicability of cost measurement.

IAS 38 There are three measurement methods for intangible assets. «For the intangible assets with uncertain service life, the impairment test and impairment provision» [24]. «When the book value is higher than the fair value, the impairment loss shall be withdrawn and included in the current profit and loss» [24]. «If the market price rises later, the impairment loss recognized in the previous period has signs of reversal, and can not be turned back» [24]. The third method is the revaluation model. Under this model, the intangible assets can be revalued on the balance sheet date, and the value increase part is included in the owners equity, and the reduced part is included in the current profit and loss within a certain range. Among the above three methods, cryptocurrency is not an intangible asset with a determined service life, and it is not applicable to method 1. It remains to be discussed which one is more suitable for method 2 and method 3.

According to International Accounting Standard No.2 (IAS 2), inventory refers to goods held for commercial purposes, which are regarded as an asset, mainly used for production or as a supply form of production materials [24]. So, does cryptocurrency conform to the definition of inventory? Through the strict examination of the characteristics of International Accounting Standards No.2, «further understand that intangible assets held for sale in the normal course of business can also be regarded as inventory» [24]. «At the same time, the disclosure requirements indicate that enough information should be provided to understand the phenomenon of economic events» [24]. «Therefore, from the previous analysis, it can be seen that the attribute of encrypted assets does not belong to the scope of intangible assets or inventory, because it lacks physical form» [25]. Valuation methods is also facing challenges. Therefore, according to IAS 2, encrypted assets do not have the property of intangible assets and can not be counted as inventory for sale in the daily business process [25]. From this point of view, the purpose of holding cryptocurrencies is very important. If the enterprise clearly holds cryptocurrency for sale, it can be preliminarily judged that cryptocurrency will be recorded as inventory.

If it is clear that the enterprise holds cryptocurrencies for sale, it can be preliminarily judged that cryptocurrencies will be used as inventory accounting. For active market cryptocurrencies, it is easy to obtain fair value, and their net realizable value can be calculated [26]. «According to the measurement principle of lower the cost of inventory and the net realizable value, when the net realizable value is lower than the cost, it is necessary to withdraw the impairment loss and include in the current loss» [26]. «After the recovery of cryptocurrency prices, it also needs to evaluate the recoverable amount and adjust the current profit and loss, as long as the adjusted profit and loss do not exceed the accumulated impairment loss provisions drawn in the previous period» [26].

The accounting treatment methods of cryptocurrencies in enterprise practice are shown in Table 4.

Table 4
Various accounting methods of cryptocurrency

Classify	Cash or cash equivalents	Inventory	Financial instruments	Intangible Assets
Whether applicable	Not applicable	Suitable for use	May apply	Suitable for use
Initial measurement		Cost measurement	Fair value amount, transaction costs included in the current profit and loss	Cost measurement
Follow-up measurement		The price and the net possible value are measured lower, and the impairment loss can be turned back within the scope of the accumulated impairment provision in the early period	Variations in the fair value are recorded into the profit and loss	As intangible assets with undefined service, annual damage test and impairment provision for impairment situation or revaluation method

Source: systematized by the author.

As it can be found, according to the provisions of the guidelines cryptocurrencies are assets. In addition, for some companies that hold cryptocurrencies for the purpose of production and operation. Cryptocurrencies meet the definition of inventory. However, because the characteristics of cryptocurrencies are very different from the general inventory. Rapidly classifies it as an inventory. Measurement to inventory is not very appropriate. According to the definition specified in the guidelines, the most consistent category of cryptocurrencies may be intangible assets. But is it reasonable to measure cryptocurrencies in the form of intangible assets? This should be analyzed for the specific company business analysis.

Conclusions. Globally, governments and major accounting organizations have not formulated a clear, unified and detailed accounting policy or guiding principle to deal with accounting problems related to cryptocurrencies. With the rise of the cryptocurrency investment boom, its market value fluctuations are becoming more and more obvious. Therefore, the establishment of a reasonable and perfect cryptocurrency accounting system is very important to the financial market. This paper suggests that when constructing the future cryptocurrency accounting system, we should mainly pay attention to three core points: First, distinguish cryptocurrencies with different characteristics according to their holding purposes, and recognize their differences in liquidity and risk. Secondly, we should follow the relevant guiding principles of financial instruments, comprehensively consider how enterprises manage their cryptocurrencies and the characteristics of cash flow that these assets may generate, carefully classify cryptocurrencies, and explain the reasons and basis for classification in detail. Finally, when formulating or updating relevant guidelines,

we must fully consider the high fluctuation of the market price of cryptocurrency and the uncertainty of the intrinsic value of cryptocurrency.

References

- 1. Sixt, E., & Himmer, K. (2019). Accounting and Taxation of Cryptoassets. *Journal of Financial Regulation*, 5(1), 29-63. Retrieved from https://doi.org/10.2139/ssrn.3419691. [in English].
- 2. Nakamoto, S. (2008). Bitcoin: a peer-to-peer electronic cash system Retrieved from https://bitcoin.org/bitcoin.pdf. [in English].
- Houben, R., & Snyers, A. (2018). Cryptocurrencies and blockchain: Legal context and implications for financial crime, money laundering, and tax evasion. Retrieved from https://www.scirp.org/reference/referencespapers?referenceid=3164493. [in English].
- 4. Lee, D., & Deng, R. H. (2018). Handbook of blockchain, digital finance, and inclusion: Cryptocurrency, FinTech, InsurTech, and regulation. Academic Press. 482 p. [in English].
- 5. Procházka, D. (2018). Accounting for Bitcoin and other cryptocurrencies under IFRS: a comparison and assessment of competing models. *The International Journal of Digital Accounting Research*, 18, 161-188. [in English].
- 6. Kostiuchenko, V. M., Malinovska, A. M., & Mamonova, A. V. (2017). Prerequisites for introducing accounting and taxation of cryptocurrency transactions in Ukraine. *Modern Economics*, 6 (82), 94-102. [in English].
- 7. Raiborn C., & Sivitanides M. (2015). Accounting issues related to Bitcoins. *Journal of Corporate Accounting & Finance*, 26(2): 25-34. [in English].
- 8. Fomina, O., Moshkovska, O., Avhustova, O., Romashko, O., & Holovina, D. (2019). Current aspects of the crypto currency recognition in Ukraine. *Banks and Bank Systems*, 14(2), 203-213. [in English].
- Desyatnyuk O., Muravskyi V., Shevchuk O. and Oleksiiv M. (2022). Dual Use of Internet of Things Technology in Accounting Automation and Cybersecurity, 12th International Conference on Advanced Computer Information Technologies (ACIT). Spisska Kapitula, Slovakia. 26-28 September, 360-363. Retrieved from https://doi. org/10.1109/ACIT54803.2022.9913080. [in English].
- Yatsyk, T. (2018). Methodology of financial accounting of cryptocurrencies according to the IFRS. European Journal of Economics and Management, 6, 53-60. [in English].
- 11. Prochazka, D. (2018). Accounting for bitcoin and other cryptocurrencies under IFRS: A comparison and assessment of competing models. *The International Journal of Digital Accounting Research*, 18(24), 161-188. [in English].
- 12. Foy, J. (2019). Financial Accounting Classification of Cryptocurrency. Senior Honors Theses. 858. Retrieved from https://digitalcommons.liberty.edu/honors/858. [in English].
- 13. Pozaritska, Ya. (2018). Identification and recognition of digital financial assets in accounting. *Accounting. Analysis. Audit*, 5 (6). [in English].

- 14. Brukhanskyi, R., & Spilnyk I. (2019). Cryptographic objects in the accounting system. 9th International Conference on Advanced Computer Information Technologies (ACIT). IEEE, 384-387. [in English].
- 15. Tarasova, T., Usatenko O., & Makurin A. (2020). Accounting and features of mathematical modeling of the system to forecast cryptocurrency exchange rate. *Accounting*, 6(3), 357-364. [in English].
- 16. Raphael, Morillo Maldonado. (2019). The development of blockchain encrypted electronic money. *New Finance*, 04. Retrieved from https://github.com/wsmelojr/blockchainDMS/blob/master/referencias102018.bib. [in English].
- 17. Stein Smith, Sean & Castonguay, John. (2020). Blockchain and Accounting Governance: Emerging Issues and Considerations for Accounting and Assurance Professionals. *Journal of Emerging Technologies in Accounting*, 17, 119-131. Retrieved from http://doi.org/10.2308/jeta-52686. [in English].
- 18. Applying IFRS accounting by holders of crypto assets. (2021). Retrieved from https://www.ey.com/en_gl/ifrs-technical-resources/accounting-byholders-of-crypto-assets-updated-october-2021. [in English].
- 19. Venter, H. (2016). Digital currency a case for standard setting activity, *Australian Accounting Standards Board*. Retrieved from www.aasb.gov.au/admin/file/content102/c3/AASB_ASAF_DigitalCurrency.pdf. [in English].
- 20. AICPA. (2020). Accounting for and auditing digital assets. Retrieved from https://us.aicpa.org/content/dam/aicpa/interestareas/informationtechnology/downloadabledocuments/accounting-for-and-auditing-of-digital-assets.pdf. [in English].
- 21. Canada Securities Administrators (CSA). (2019). CSA Comment Letter Response to IFRS Interpretation Committee Tentative Agenda Decision- Holdings of Cryptocurrencies. 2 May 2019. Retrieved from https://www.securitiesadministrators.ca/uploadedFiles/General/pdfs/LECAC_Cryptocurrency_HoldingsTADResponse.pdf. [in English].
- 22. Australian Accounting Standards Board. (2016). Digital currency A case for standard setting activity. *A Perspective by the Australian Accounting Standards Board.* Retrieved from https://www.aasb.gov.au/admin/file/content102/c3/AASB_ASAF_DigitalCurrency.pdf. [in English].
- 23. IFRS: Accounting for crypto-assets (2024). Retrieved from https://eyfinancialservic esthoughtgallery.ie/ifrsaccounting-crypto-assets. [in English].
- 24. Emile Woolf Publishing (2020). International financial reporting 2nd Edition. Retrieved from https://www.emilewoolf.com/. [in English].
- 25. Zadorozhnyi, Z.-M., Sudyn, Y., & Muravskyi, V. (2018). Goodwill Assessment in Enterprise Management: Innovative Approaches Using Computer and Communication Technologies. *Marketing and Management of Innovations*, 4, 43-53. Retrieved from http://doi.org/10.21272/mmi.2018.4-04. [in English].
- 26. Zadorozhnyi, Z.-M., Muravskyi, M., Humenna-Derij, M., & Zarudna, N (2022). Innovative Accounting and Audit of the Metaverse Resources. Marketing and *Management of Innovations*, 4, 10-19. Retrieved from https://doi.org/10.21272/mmi.2022.4-02. [in English].

Лю ЧЕН'ЮЙ.

аспірантка, практикуючий бухгалтер, викладач, Наньчанський науково-технічний інститут, Наньчан, провінція Цзянсі, Китай. Електронна адреса:1657426641@qq.com. ORCID ID: 0000-0002-0572-9322

ОБЛІК КРИПТОВАЛЮТ У МІЖНАРОДНІЙ ПРАКТИЦІ

Вступ. Із розширенням сфери застосування криптовалют поточна методика обробки облікової інформації та контроль відповідними відділами обліку на підприємстві значно ускладнюється через: відсутність відповідних стандартів бухгалтерського обліку операцій з криптовалютами, орієнтацію на професійні судження бухгалтерів, що призводить до зростання суб'єктивності обліку фінансово-господарської діяльності підприємств.

Мета статті полягає у з'ясуванні рекомендацій міжнародних стандартів бухгалтерського обліку в частині визнання криптовалют обліковими об'єктами і наданні пропозицій щодо відображення таких активів на рахунках бухгалтерського обліку та у фінансовій звітності. Завдання цього дослідження охоплюють поглиблений аналіз основних характеристик криптографічних активів та ідентифікацію критеріїв їхньої класифікації у фінансовому обліку.

Методи. Під час дослідження використовується науковий та систематичний метод пізнання дійсності, інтегруються традиційні фундаментальні методи (аналіз, синтез і узагальнення), а також використовуються статистичні інструменти як допоміжний засіб. Для досягнення мети у статті досліджено та проаналізовано наукову літературу та публікації в обліковій сфері, а також застосовано методи інтерпретації й бібліографічного аналізу. Через ретельний контент-аналіз проведене дослідження не лише виявляє подібності та відмінності в науковій літературі, а й надає чіткі рекомендації щодо коректного відображення криптовалют у фінансових звітах. Міжнародні стандарти фінансової звітності (МСФЗ) і Міжнародні стандарти бухгалтерського обліку (МСБО) слугують теоретичними орієнтирами для достовірного обліку криптовалют і надають важливі вказівки щодо їх відображення у фінансовій звітності.

Результати. Хоча криптовалюти швидко розвиваються, методика їх обліку, розроблена Міжнародною радою з бухгалтерських стандартів (IASB), уже застаріла. Економічна природа криптовалют неоднозначна, що ускладнює їх достовірний облік. Така ситуація може призвести до упущення певних аспектів використання криптовалют під час формування корпоративної облікової інформації, що збільшує ризики для зацікавлених інвесторів. Це також може спричинити організаційні перешкоди для підприємств, які шукають можливості для виходу на ринок, і змусити їх переорієнтовуватися на іноземні ринки. З огляду на це доцільно розробити відповідні регламентуючі стандарти для обліку криптовалют. Аналізуючи актуальні нормативно-правові положення Австралії, Великобританії,

США і Канади щодо обліку криптовалют, а також відповідні норми міжнародних облікових стандартів та позиції великих аудиторських фірм, здійснено теоретичне дослідження методики обліку криптоактивів і надано організаційні рекомендації для підприємств, які володіють криптовалютами.

Перспективи. Перспективним напрямком подальших досліджень є удосконалення методики обліку руху криптовалюти із врахуванням волатильності та динамічності ринку. Додаткових науково-прикладних розробок потребує порядок контролю електронних трансакцій з використанням криптовалют для забезпечення суспільної довіри до них, підтвердження достовірності облікової інформації та повноти відображення узагальнених показників у різних формах звітності.

Ключові слова: криптовалюти, блокчейн, міжнародні стандарти фінансової звітності (МСФЗ), нематеріальні активи,облік.

Формул: 0; рис.: 0; табл.: 4; бібл.: 26.

Статтю отримано 1 серпня 2024 р. Article received August 1, 2024.