Issues and Difficulties with Digital Currency in IAS/IFRS Accounting

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Abstract

The purpose of this study is to address the problems and challenges faced by the accounting treatment of digital currencies under the IAS/IFRS standards. The accounting recording of this type of currency has found it very difficult to focus on dealing with it because it is not accounted for despite technological and digital development in accounting. This research paper concluded, inter alia, that there are no accounting standards for accounting for digital currencies, and that States and Governments have not enacted any laws against the illegal practices of digital currencies.

Keywords: Digital currencies, digital currency accounting, Triple-entry accounting, Blochkin.

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Introduction

At present, the world is aware of a major and serious revolution in artificial intelligence and digital transformation in many different areas, notably in the financial and accounting field through attention to digital transactions, which are an accurate indicator of the technological advancement of economic institutions and digital orientation. Enterprises should record such transactions in their financial and accounting statements to disclose all transactions as presented by the IAS/IFRS standards. However, transactions in digital currencies have encountered difficulties in accounting for digital currencies themselves.

Through what has been said, we ask the following question: "What are the problems, challenges and difficulties in the accounting of digital currencies under IAS/IFRS standards?

Chapter I: Conceptual framework for digital currencies

1-What is digital currency?

The usage of the term "currency" in these contexts "is a matter of convention, as it does not refer to an official monetary medium that is legal tender in any country, but rather to a currency in

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the broad sense of the word - a commonly understood medium of exchange in current use." The concept might also be interpreted broadly as a system of trade in certain items.

Figure 1 depicts the distinctions between cryptocurrency, virtual currency, and digital currency. Both bitcoin and virtual money are created and kept on the Internet - in the form of a digital record - and may thus be referred to as digital currencies(Jarosław & Teresa, 2015, p. 163).

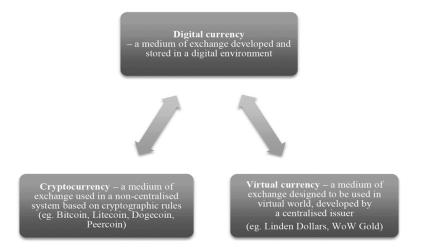


Figure 1. Digital currencies

Source: Jarosław Dziuba and Teresa Orzeszko, DIGITAL CURRENCIES AND THEIR IMPACT, Publishing House of Wrocław University of Economics, journal Finance and Accounting, 2015, 163.

Digital currencies do not have a tangible equivalent like paper money or coins; instead, they only exist digitally. They may be electronically transmitted between parties and are often used for internet transactions. Globally, people and companies are starting to accept digital currencies as they continue to grow in popularity. Two major categories may be used to classify digital currencies: Cryptocurrency and Central Bank Digital Currency (CBDC)(Asraful Haque & Shoaib, 2023, p. 02).

2-Characteristics of digital currencies

The characteristics of digital currencies are as follows (Azeet Abed Taouab, p. 13):

- 2-1-A virtual digital process with no tangible physical entity produced by software
- 2-2-For their labs, there isn't any external third party like banks and banking establishments.
- 2-3-It is not controlled or controlled by an official authority such as a central bank
- 2-4-It is used as an Internet exchange broker based on both encryption and mass chain technology.

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- 3-Forms of digital currencies: Digital transactions can be divided into three main components: virtual, electronic, and legal digital transactions issued by central banks or cash institutions, which can be dealt with as follows (Mohammed Moussa Ali, 2022, pp. 55-56):
- **3-1-Virtual currencies:** The default currency is a numerical representation of the value that is not issued through a bank.

"Variant currencies are a form of digital currency that is usually controlled by its origins and used and circulated among members of a specific virtual society. Many of the encrypted works are functioning as decentralized systems based on a database that does not require a third party trusted, such as a central bank or credit card company, in which case the trading process is facilitated from a theory to a theory through the use of private and public keys

- 3-2-Electronic money: Many definitions of electronic money have emerged from international organizations, central banks or economic experts, and some concepts have been reduced to the general function of electronic money, including those on the very side of the problem, while some have gone on to elaborate on them in order to include all financial transactions involving the use of talking techniques. Electronic cash is therefore a monetary value in a specified currency, issued in electronic form, stored on electronic means, used as a payment and conversion tool for different purposes and widely accepted. The issue of electronic money is to convert the form of money from a conventional image to an electronic image, each legal currency that can be expressed in several monetary images, so that each image symbolizes a particular value of that currency, and this symbol can be on a metal image, a monetary paper or a collection of data stored electronically on an electronic method such as electronic cards and portfolios and other modern technical means
- 3-3-Official digital currencies: One of the types of digital currencies, which has the potential to be issued against a cover representing a principal value, varies from currency to currency, is usually linked to such assets, and some legal currencies, such as the United States dollar or the euro, or are linked to other assets, such as gold or even other encrypted currencies or a basket of currencies, are linked in these currencies. This type is an attempt to overcome the most important challenges associated with private digital currencies in terms of volatility and volatility of their prices.

4-Risks and challenges in the use of encrypted digital currencies: although there are many opportunities and benefits offered by encrypted digital currencies compared with traditional payment methods, there are many.

The risks and challenges can be summarized as follows (Mohammed Moussa Ali, 2022, p. 56):

4-1- Lack of central oversight and oversight authority, drawing up the regulatory environment that controls these transactions, leading to price volatility and manipulation, the absence of any

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entity that includes these assets, and the absence of central authority for arbitration in the case of disputes, theft or loss.

- 4-2-Coded digital currencies affect the capacity of central banks to control cash offers, and hence the implementation of monetary policy and financial and economic stability.
- 4-3-Increased cost of issuance of numerous encrypted currencies and adverse effects of environmental degradation, given the large amount of energy required to operate computer hardware used in the solution of equations and algorithms that are the basis for encryption
- 4-4-Users of encrypted digital currencies face the difficulty of getting out of the market, where noMany platforms are allowed except for specific withdrawals of such currencies.
- 4-5-As an inevitable consequence of the complex and impenetrable encryption processes, the loss of basic data to deal with the circulation of these currencies is a huge financial loss, and in the event that any user of the private key is lost to his account, it cannot be recovered.
- 4-6-They can be used to finance illicit operations and money-laundering operations. Operations conducted by virtual currencies are confidential and direct and do not require special protocols to detect the identity of the users, verify the legality of their transactions or keep records of their business operations.

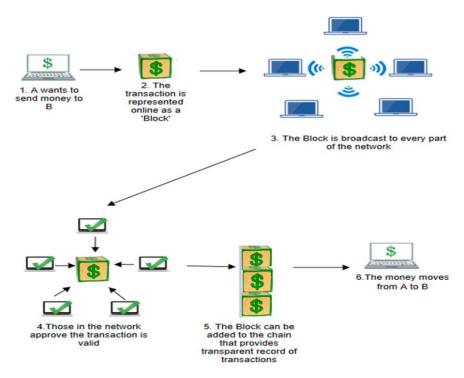


Figure 2. How Blockchain Works?

Source: Noora Alsalmi et all, Accounting for digital currencies, journal Research in International Business and Finance, 2023, p 05.

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Chapter II: Accounting and digital currencies

1-Triple-entry accounting- a paradigm shift in the accounting world

Scholars refer to a novel approach to accounting that builds upon the established double-entry system as "triple-entry accounting." The financial cryptographer Ian Grigg first proposed the triple-entry method in his working paper "Triple-Entry Accounting" published in 2005. Grigg suggested adding a digitally signed receipt as a third input to accounting systems as a way to prevent fraud and transaction mistakes. Although the platform for the third item in Grigg's system was previously unknown, blockchain technology was eventually determined to be the best fit for Grigg's notion due to its decentralized, secure, and unchangeable nature. Researchers refer to a novel accounting technique that is an advancement above the conventional double-entry approach as "triple-entry accounting." Thus, a transaction and an invoice that are added to the blockchain constitute the third item in blockchain accounting. The drawbacks of double-entry accounting, such the potential for fraud and the requirement for outside verification of a company's financial records, are allegedly eliminated by the suggested approach. Having been in use for almost 600 years, double-entry accounting revolutionized accounting techniques and is still regarded as the biggest innovation in business and commerce. An asset list served as the foundation for the single-entry system, with assets being added and removed as they were brought into and taken out of businesses. The system's shortcomings are clear: fraud is readily perpetrated and mistakes are difficult to find. The was able to overcome this, and it is simple to conduct fraud. The double-entry system was able to solve this since each transaction has a trail, assets and liabilities need to be balanced, and parties may obtain credit and debit data independently through their own accounts. Because the double-entry system depends on the evidence or verification of each transaction, its primary drawback is that it is nearly as easy to falsify as the single-entry method. Furthermore, to keep the public's faith, the double-entry system must undergo routine audits. Although this guarantees the long-term quality and consistency of company data, it has a significant labor and time cost.

The triple-entry blockchain system, on the other hand, necessitates that transactions be time-stamped accounting entries and recorded by both parties in three separate ledgers in addition to a common ledger. Every user in the system has a distinct, non-transferable digital signature, and when a transaction is finished, the system immediately generates a receipt utilizing their digital signatures. Hence, under the triple-entry system, transactions may be readily demonstrated by comparing them to the receipts of the other participants, with the receipt's unambiguous evidential backing coming from the cryptographic signature. This approach can improve internal control, decrease fraudulent activity, and bring additional levels of transparency to the accounting system that double entry cannot (Alsalmi, Ullah, & Rafique, 2023, p. 07).

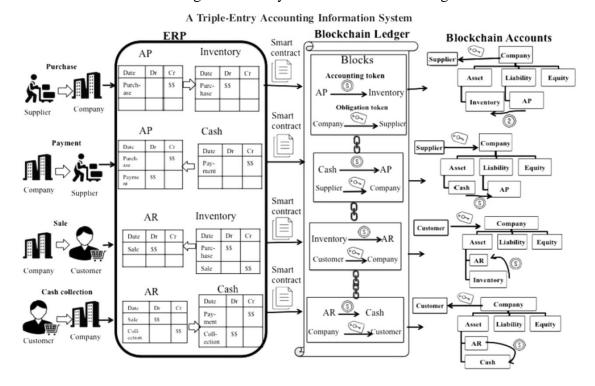


Figure 3. Triple-entry accounting- a paradigm shift in the accounting world

Source:Adapted from – Toward Blockchain-Based Accounting and Assurance Source: Dai, Jun; Vasarhelyi, Miklos (2017).

2. Advantages of the use of encrypted digital currencies in accounting(Morozova and all, 2020, p. 2196):

The most important advantages of using encrypted digital currencies in the area of accounting can be summarized in the following points:

- 2-1-Reduction in the time taken to record, follow up and review financial transactions
- 2-2-The elimination of wasted financial charges in dealing with official papers or communicating with a third party.
- 2-3-Reduce the costs of the books of account and paper used in the documentation process.
- 2-4-Registration of accounting transactions immediately and simultaneously with users.
- 2-5-Promote transparency of accounting transactions and avoid cases of manipulation and forgery.
- 2-6- Reduction and reduction of errors resulting from human intervention in the documentation process.
- 2-7-To keep pace with recent changes in the fields of accounting in a more rapid and flexible manner than traditional methods in archives and documentation.

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- 2-8-Improving the quality and effectiveness of the accounting system and helping to develop the world economy faster and more capable of keeping pace with continuing technological variables.
- 2-9-Resistance to cases of financial fraud, even with the consent of the parties, which are easy to trace and detect.

3-Impact of Digital Currency on Accounting Recognition

Different countries have different accounting methods for digital currency due to its unique nature. Although digital currency is currently acknowledged as an asset in many nations' economic markets, disagreements persist regarding the nature of this asset, primarily centered around the following four perspectives:

3-1- Recognized as cash equivalents

At the same time, the Financial Accounting Standards Committee and the International Accounting Standards No. 7 document define cash equivalents as "currency and short-term, highly liquid investment, and the investment can be converted into a certain amount of cash at any time, and the risk of changes in value due to changes in interest rates on the near maturity date is small." The price of digital money is heavily influenced by macroeconomic factors, and it swings often. There are significant transaction risks, and fundamental stability is difficult to sustain. As a result, many nations treat digital money as a virtual commodity rather than legal monetary counterparts.

3-2- Recognition as financial instruments

Some nations publicly quote in the global market because of the significant price volatility of digital money. The currency is acknowledged as a financial asset for accounting processing after these two factors partially satisfy the criteria for financial instruments. However, based on international financial reporting standards and China's current accounting standards, it is evident that identifying financial instruments necessitates users of financial assets to participate in the formation of one party's financial assets while also causing financial liabilities or related contracts of equity instruments of other parties, which will not form liabilities of the other party. When distributed account books are used in accounting for digital money, It cannot, by default, create a duty or equity between the two parties, nor can it create a contractual connection. As a result, digital currency is not acceptable as a form of payment.

3-3- Recognized as intangible assets

Identifyable non-financial assets that are not material and that a company owns or has control over are referred to as intangible assets. Intangible resources that have the potential to directly benefit economic entities are included in the broad definition of intangible assets. As a result, according to accounting principles, digital money adheres to the appropriate definitions. The issue, however, is that it is challenging to calculate the historical cost of digital currency in

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accounting, which relates to the value of digital currency today and the asset risk concealed in the transaction process. There is also little association between knowledge about the economic market and the market price of money. It is challenging to convey the underlying economic principles through accounting treatment. It doesn't meet the requirements for net realizable value, cannot be categorized as intangible assets and cannot give users of accounting report information financial data that is helpful for business management choices.

3-4- Recognized as an inventory asset

Inventory assets are defined by international accounting standards as completed goods or commodities kept or intended for sale in an organization's regular operations. To some extent, digital money fits the notion of inventory assets. Nonetheless, businesses often use the net realizable cost approach to account for inventories in their day-to-day operations due to the current accounting requirements. It is challenging to recognize digital currency as inventory assets because, if it is, accounting treatment can only reflect the decline in the asset's value rather than the increase, which is inconsistent with the nature of digital currency and makes it difficult to measure later (Chuanwei & Zejiong, 2022, p. 24).

4-Problems of accounting for encrypted digital currencies

The treatment of encrypted digital currencies raises many accounting problems, owing to the nature and qualitative characteristics of those currencies and the variety of their acquisition purposes by enterprises, as well as the absence of an international accounting standard that determines the accounting treatment of such currencies in various cases. Although there is no standard or guidance issued by the International Financial Reporting Standards (IFRS), IAS No. 8 clarifies the accounting treatment requirements for transactions in the absence of an international accounting standard for such transactions.

IAS 8 in paragraph 10 indicated that in the absence of a standard or interpretation that could be specifically applied to a transaction, event or other circumstance, management would have to take whatever it considered to develop and apply an accounting policy leading to information that:

(a) Relevant to the needs of users of financial lists for economic decision-making; (b) reliable as they make financial statements: (i) reliably reflect the financial position, financial performance and cash flows of the enterprise; (ii) reflect the economic essence of other transactions, events and circumstances and the nature of such transactions rather than merely the legal form; (iii) neutral (free of bias); (iv) prudent, cautious and (v) complete in all significant respects.

International Accounting Standard (IAS) No. 8 in paragraph 12 indicated that, in applying its provision as set out in paragraph (10), management may review the most recent issuances by other bodies charged with establishing accounting standards that follow a similar framework and

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do not conflict with the sources listed in paragraph (11) (Azeet Abed Taouab, pp. 21-22).

Summary and conclusion

By studying this research paper, we have reached a number of conclusions, the most important of which are:

- 1. Lack of accounting standards that accommodate the accounting treatment of digital currencies;
- 2. Lack of legislation and necessary legal controls by States and Governments that do not permit the use of digital currencies in illicit acts;
- 3. The lack of strong cyber security protects transactions of this type of currency by banks and financial institutions.

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