

Obstacles for Applying Internal Control over Virtual Currencies

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In this paper, the (virtual) digital currencies and the problems faced by the supervisory authorities about the inability to control their own transactions were discussed as officials and representatives of large and international companies have a negative view of digital currencies, believing that digital assets cannot be capitalised similarly to the stock market. There are suspicions that digital currencies were created specifically to meet the needs of the shadow economy and parallel activities. It is a tool used by drug dealers and terrorists. However, this belief is wrong. Given that digital currencies come to serve the shadow economy, although it is used partially in this field, the scope of its capabilities is much broader and is not limited to suspicious internet resources, and this tool cannot be held responsible for the parties that use it or the way it is used. The problem in using it is the inability to reveal the identity of the user. Moreover, all of this raises controversy and fear of using this monetary technology, just as it is not possible to include it within the material verifiable assets, and the fact that financial control requires physical and evidentiary documents and documents that can be referred to. This leads to difficulty in the process of subjecting digital currencies to direct financial control and the difficulty of determining their value at the date of preparation of final accounts and many other requirements, that make the process of financial control over these currencies very difficult or almost impossible, at the present time.

Keywords: *Virtual currencies, suspicions digital, financial control.*

Introduction

The financial and legal position of virtual currencies varies greatly from country to country and is still not specified or variable in many of them. While most countries do not consider the use of virtual currencies illegal, their status as money varies with different regulatory consequences. Furthermore, some countries explicitly allow their use and trade and others prohibit or restrict them. From this point, the research came to highlight the obstacles accompanying the process of controlling virtual currencies.

The Problem

The problem of the study focusses on the lack of virtual currencies to important evidence related to regulatory procedures that ensure the validity of the audit opinion and in this regard, provide confirmatory services.

The Hypothesis

The study is based on a basic hypothesis that the absence and weak control evidence for hypothetical transactions leads to a weak audit opinion.

The Aims

The study aims at:

1. Identifying virtual currencies in terms of the concept and types.
2. Identifying the most important obstacles associated with the audit of virtual currencies.

The Significant

As a result of the huge technological developments in the virtual business world, by passing the border barrier worldwide, virtual currencies emerged. These currencies gained the confidence of many information technology users, whether at the level of companies or individuals. On the one hand, the importance of the research stems from the novelty of the topic of virtual currencies. On the other, is the inability to provide some of the requirements of the control procedures necessary to express a regulatory opinion on the validity.

The Definition of Virtual Currencies

The virtual currency is a numerical representation of a value that can be transferred, stored or traded electronically. It is not issued by the public financial authority represented by the central

bank and is not necessarily attached to a paper currency (dinar, dollars, euros), but it is acceptable to some as a method of payment. There are many advantages that virtual currencies and determinants enjoy, including: (Baron, 2015: 3)

Virtual Currency Features

- Infrastructures with low material costs compared to the limited currencies from government agencies;
- Supporting daily transactions at breakneck speed by engineering networks capable of that communication;
- It has no tangible physical appearance (Hardu, 2018: 6);
- The value of virtual currencies is based on the confidence of its users, without being based on their confidence in the central financial authorities to support this currency;
- The ability to acquire and easily trade virtual currencies worldwide;
- Ensure the anonymity of those dealing with virtual currencies (www.isaca.org).

Virtual Currency Settings

- Virtual currencies do not have an intrinsic value, such as gold and silver;
- It does not have financial support, such as the banknotes that are based on financial leverage in determining its value;
- Ambiguity of the quantities issued in virtual currencies (Hardu, 2018: 17);
- The possibility of electronic violations and their exposure to piracy by electronic gangs;
- Difficulty in obtaining the technological knowledge necessary to develop, spread and maintain virtual currency as an electronic service;
- It does not have financial support, such as the banknotes that are based on financial leverage in determining its value;
- The possibility of electronic violations and their exposure to piracy by electronic gangs.

Types of Virtual Currencies

There are many virtual currencies in the world, including Bitcoin, Litecoin and Dash. In this research we will discuss Bitcoin as a virtual currency (Baron, 2015: 45).

Bitcoin

Bitcoin is a (virtual) digital currency started in 2009 by an unknown person who called himself Satoshi Nakamoto. It is not a traditional currency because it has no central bank, country or is body regulated and supported. The Bitcoin was created through a complex computer operation and was subsequently monitored by a network of computers around the world (Hardu,



2018:21). About 3,600 new bitcoins are being issued daily around the world, and the number has now reached 16.5 million units being traded. This is within the maximum allowed limit of 21 million Bitcoin units. The Bitcoin system depends upon a network called Blockchain, which is a decentralised network where any transfer is stored. It makes the responsibility and control of transfers subject to all network users, not a single central authority, and requires some computing power to work properly (www.ifac.org).

Bitcoin has quickly risen to the status of “the most popular, decentralized form of virtual currency in the world”.⁹ The rise of Bitcoin came along with the ongoing “trend of digitizing transfers of money”, for which many financial technology companies strive.¹⁰ The biggest advantage of Bitcoin is the avoidance of the “double-spending” problem, which is “the risk that a person could concurrently send a single unit of currency to two different sources”.¹¹ Many virtual currencies face the “double-spending” problem because of the ease of duplicating virtual currency that has already been used in other transactions.¹² This can completely undermine the value of the underlying currency.¹³ Bitcoin has a public ledger that records every transaction and every single Bitcoin used, thus making it impossible to double-spend the same Bitcoin.¹⁴ Additionally, the Bitcoin network is a decentralised network, in which no sole individual has complete ownership or control.¹⁵ As such, Bitcoin transactions do not require middlemen services, such as PayPal, eliminating the otherwise time-consuming and costly process of going through a third party to complete a transaction.¹⁶ In addition, Bitcoin has helped to improve access to capital, lower transaction costs for small business, and provide avenues for financial innovation.

Bitcoin markets

There are many ways of buying and selling bitcoins. BTCdirect is one of the most recent methods for instant payments by credit or debit card. Bit2Me has the advantage of selling bitcoins in seconds and in more than 10,000 cash points, throughout all of Spain. Furthermore, it is possible to buy bitcoins online at one’s own bank, in more than 150 banks across six countries. LocalBitcoins.com is a website where sellers and buyers from all over the world can connect directly. It has no commission charges, unlike most websites. It is also possible to purchase online, but with a transaction fee. Bitcoin.de is another way and is very similar to LocalBitcoins.com. Through Coinbase it is also possible to buy and sell bitcoins, although it is addressed to the sellers that are ready to accept payments in BTC and to receive the money paying a commission. Cex.io is a webpage for people interested in the mining side of the Bitcoin. Other money transfers are PayPal, international bank transfers with SEPA, SWIFT, etc. (Brezo, 2012).

Internal Control in Terms of Concept and Goals

Internal control is a set of procedures laid down by the administration. It can also be viewed as a system that consists of a set of elements and components that seek to achieve reasonable assurances to ensure the achievement of the overall goal of economic unity by evaluating and directing the correct guidance (www.fbsa.gov.iq). This was stated in the definition of internal control as a system by the International Federation of Accountants (IFAC) in the International Standard for Auditing No. 400 (risk assessment and internal control) in terms of:

“The internal control system means all the policies and procedures (internal controls) adopted by the management of the economic unit to assist it, in reaching its goal in ensuring unit management and the efficiency of work, which includes adhering to management policies, protecting assets, discovering fraud and error, and limiting it as well as the accuracy and completeness of accounting records and creating reliable financial information in a timely manner, it determine a definition of internal control as: a set of processes that includes policies, procedures, practices and organizational structures, designed to provide reasonable assurance that the objectives of an economic unit will be achieved, and to avoid undesirable events or to discover and correct them” (Boockholdt J. L, 1996: 21).

Internal control was considered as one of the main functions in the economic unit, according to a report called (COSO) Committee on Sponsoring Organization in 1992. It defined the objectives of internal control in achieving efficiency and effectiveness in operation, obtaining reliability in financial reports, and compliance with applicable laws and legislations by focussing on the five components of control environment, risk assessment, control activities, information and communications, and follow-up. From the above, it is noted that the objectives of internal control have not changed, whether in the case of the manual operation of data in economic units or in the case of electronic operation. However, what can be affected is the nature of the policies, and the procedures and skills of people working in the internal control system when the economic unit uses a set of electronic means represented by information technology. This is due to the specificity of these technologies and the need to establish more controls than when the operation of data is manual or less complex than it is using information technologies (Cushing B. A. & Romney M. B, 1994: 34).

Internal control over virtual currencies

Concept and goals of internal control

A virtual currency audit requires the auditor's ability to obtain evidence that supports the validity and integrity of procedures followed in all respects. This means evidence of proof that everything that affects the auditor's judgment and discretion regarding the conformity of the financial information is presented to the economic reality. It is also known as “the information

the auditor obtains to reach conclusions on the basis of which his professional opinion is based”.

The characteristics of the audit tool, can be summarised as follows:

1. **Sufficiency of Evidence:** refers to the amount or size of evidence that must be obtained to support the auditor's opinion. Therefore, the available evidence should be sufficient to provide the reasonable basis for forming the auditor's opinion. That is, what is the sufficient amount of evidence.
2. **Relevant of Evidence:** the evidence must be related to the element to be audited. Therefore, the evidence should be effective and appropriate:
 - **Effective evidence:** the evidence is reliable and can be relied upon to infer a logical opinion, such as the actual viewing process, and inventory or the process of creating the evidence, such as authentication, or it is obtained mathematically as a recalculation of mathematical operations.
 - **The appropriate evidence:** that the evidence is closely related to the objectives of the audit. For example, if the goal is to verify the accounts of debtors, then the ratifications must be used.
 - **The objective evidence:** that the evidence be objective, free of bias, and quantifiable, that is, the possibility of reaching the same result when examining the evidence by more than one auditor.

Proofs in auditing

The term proof is the form or method of the proven truth or on the effect derived from this method, in terms of argument or persuasive power (Ibrahim, 1985: 242). Proof is conclusive by itself. Evidence, on the other hand, is used to obtain proofs. The auditor uses the largest possible number of evidences to obtain conclusive proofs. Most of the auditor's work consists of collecting evidences to obtain neutral technical opinion about the audited data (Abdullah, 2009: 139). The International Auditing Criterion No. 500 has identified many types of proofs and evidences:

1. **Actual physical existence:** this method is used to verify the physical existence of a tangible asset such as machinery and buildings, and the actual inventory is strong evidence of the existence of the original and that it is in the possession of the facility, but it is not considered evidence of ownership of the original.

2. Documents: they are the most common types of proofs and evidences upon which the auditor relies. There are three types of documents (Abdullah, 2009: 140):
 - A. Documents prepared outside the facility and used inside it, such as purchase invoices.
 - B. Documents prepared inside the facility and used outside it, such as sales bills and receipts from others.
 - C. Documents prepared inside the facility and used inside it, such as accounting books of all kinds.
3. Acknowledgements: these are the certificates required by the auditor, whether from inside or outside the facility. In regard to internal declarations, the auditor must take the necessary steps to make ensure the validity of the material being audited. It may be more appropriate to obtain a certificate or an acknowledgment from the officials that the particular process was conducted appropriately. The inventory safety certificate, and the administration's certificate of how much it bears its social responsibility, are among the important types of acknowledgements.
4. Arithmetic accuracy: arithmetic accuracy and correctness in the books and records of the facility is a guide and presumption upon which the auditor relies when examining the books and records and verifying addition, subtraction, and multiplication operations for the books and records.
5. Existence of a sound internal control system: the good and solid internal control system gives the auditor a visualisation of a clear indication of the regularity of registration in books and records and their reliability, and vice versa.
6. Subsequent events of budget preparation: after completing auditing and preparing final reports by the auditor, events that may be evidences or proofs of the correctness of some of the elements included in the financial statements may occur.
7. Experts' opinions: the auditor is not a scientist in all sciences and arts. He or she may be specialised in the areas of accounting and auditing. There are some fields of knowledge that the auditor cannot obtain sufficient and appropriate evidence such as gold, petroleum, diamonds, etc., requiring the opinion of a specialised expert (Jarbou, 2000: 182).
1. Inspecting and testing the processes used by the administration to prepare estimations. Usually, the examination steps include:
 - A. Evaluating the financial statements and understanding the assumptions upon which the estimation is based.

- B. Testing the calculations included in the estimation.
 - C. Comparing the various estimations of previous periods with the real results of these periods.
2. Using an independent estimation to compare the estimation prepared by the administration of the facility.
 3. Examining subsequent events that support the assessment.

Often these estimations are made in circumstances of uncertainty about the results of the events that occurred or are likely to occur, which need to use diligence. As a result, the risk of having material misinformation is greater if the estimations exist.

Procedures for Collecting Evidence

The process of determining the procedures for collecting evidence requires initially identifying the objectives of the audit process. The process of collecting evidence begins first with an examination of the internal control system and the accounting system applied and then checks for administrative policies and basic tests of account balances.

The Axis of Virtual Currency Checking

No.	The axis	Notes
1.	Legal legislation	<ul style="list-style-type: none"> • In regard to dealing with virtual currencies, we note that the auditor cannot obtain sufficient evidence about the legality of dealing under these currencies. • Many suspicious transactions take place according to the virtual currencies related to terrorist operations and/or taboo trade.
2.	Actual inventory	<ul style="list-style-type: none"> • The absence of this quality, since virtual currencies are not predictable in real terms, as they are based on the customer's confidence in them and are not based on the corresponding guarantees of the financial authority. • The inability to sort and count these currencies.

3.	Actual balance	<ul style="list-style-type: none"> • The inability to acknowledge the issuing party of this endorsement if it becomes available due to the anonymity of these cooperating parties. • The inability to obtain endorsement from the dealers due to the confidentiality and anonymity of these systems.
4.	Determine the default currency value	<ul style="list-style-type: none"> • The lack of an internationally recognised financial authority that determines the value of this currency and has been recognised as a service that has a moral value to users.
5.	Internal control procedures	<ul style="list-style-type: none"> • Duplication of powers related to the exchange order; the treasurer being done by one person to ensure the confidentiality of technical codes related to virtual currencies.

Conclusions and Recommendations

Conclusions

- Current innovations in virtual currencies can be seen as a final step that paves the way for players with little knowledge of the online field to access decentralised and flexible online services.
- The idea of mining a currency like Bitcoin, in particular, is currently not the best option for those who think of owning it from ordinary users; the equations required to solve and extract Bitcoin are now very complicated.
- To ensure a reasonable profit in the use of virtual currencies requires a compelling power and tremendous intelligence in dealing with the matter, being highly vulnerable to electronic piracy.
- There are many obstacles in applying control measures to virtual currencies, disclosing them and providing confirmation services in this regard.
- Virtual currencies are still mysterious and unknown at a very small percentage, but the probability of accepting them and using them is very high.

Recommendations

- The necessity of putting actual future plans with the financial authorities to accept virtual currencies to recognise them and keep up with the virtual world.



- On the one hand, the necessity of disseminating a culture related to the return of virtual currencies to the public in order to keep abreast of technical developments. On the other, to limit fraud and electronic piracy.
- Publishing the instructions related to the virtual currency from the financial authorities in the event of recognition and increasing the regulatory awareness regarding them.
- Establishing legislation related to virtual currencies that clearly defines its position and disseminating the culture of virtual currencies.



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