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CHALLENGES FOR CRYPTOCURRENCY AUDIT, ATTITUDES OF PRACTITIONERS IN THE AUDIT IN THE REPUBLIC OF SERBIA

Nemanja I. Jakovljević

University of Belgrade, Faculty of Economics, Kamenička Street 6, 11000 Belgrade, Serbia,
jakovljevic.i.nemanja@gmail.com

ABSTRACT

Cryptocurrencies are a challenge for auditors worldwide because entities required to audit financial statements can do business with cryptocurrencies. Since the accounting coverage of cryptocurrencies is not yet clearly defined, cryptocurrencies have a particular specific risk that arises due to insufficient knowledge of cryptocurrencies, their treatment and uncertainty with their business from the auditor's perspective. The auditor needs to gain a preliminary understanding of the cryptocurrencies within the entity's operations to the extent sufficient to decide whether to accept the audit engagement or refuse to conduct the audit in the cryptocurrency entity. If it agrees to the meeting, the auditor will need to obtain reasonable assurance about the correctness of the accounting coverage, the established IT controls and the degree of security risk, and the potential impacts on business continuity. The research subject is auditors' attitudes in the Republic of Serbia on the challenges for cryptocurrency auditing and the level of awareness and knowledge about cryptocurrencies and related activities that may affect the planning and implementation of audits. This paper will explain the issue of cryptocurrencies from the auditor's point of view through the analysis of client acceptance and continued engagement, the correctness of the accounting coverage, and the impact on business continuity. The main conclusion is that the persons engaged in auditing in the Republic of Serbia, in most cases, have only a basic knowledge of cryptocurrencies and believe that they need additional training to increase their level of knowledge and expertise.

Keywords: audit, accounting, cryptocurrencies, blockchain.

INTRODUCTION

Principles and standards. The subject of this paper is the analysis of challenges and risks that cryptocurrency business has by the entity that is subject to audit and observed from the aspect of the auditor. Auditing refers to developing a curious mind and mastering decision making (Johnson, & Wiley, 2016). An audit of financial statements is an examination of documents, documents, reports and other information to gather sufficient, adequate and reliable evidence to express an opinion as to whether the audited entity's financial statements present an accurate and fair view of its financial position, results of operations and cash flows. In addition to auditing financial statements, there are audits of the regularity of functions, audits of business expediency and audits of information systems, as well as other assurance services (Jakovljević, 2021). Audit refers to gaining public trust. Auditors serve the public's trust by independent of the companies they audit. Cryptocurrencies are digital or virtual money (Čičak, 2019), i.e. decentralized digital money based on blockchain technology. These are intangible digital tokens created through blockchain technology and provide different user rights. Cryptocurrencies are a digital resource that can be subject to ownership and control by the entity that owns it. It is a resource over which ownership and management can be transferred to other entities or other persons. The Association of Professional Accountants of Canada has defined nine events from the business of cryptocurrencies that can result in material misstatements (Audit Considerations Related to Cryptocurrency Assets and Transactions [CPA], 2018). Those are:

- The entity decides to operate on a cryptocurrency exchange that does not have effective control over the transactions it performs on behalf of the entity and which may directly or indirectly affect the balance and amount of funds held in the entity's accounts;
- The entity uses a digital wallet to store cryptocurrencies that are neglected from the aspect of a security risk (the entity keeps all cryptocurrencies in one place);
- The entity loses the private key, after which it can no longer access the deferred cryptocurrencies;
- An unauthorized party acquires the private key of the entity and steals cryptocurrency;
- The entity erroneously represents ownership of the private key and thus of the related cryptocurrencies provided by that key;
- During the transaction with cryptocurrencies, the entity sends the cryptocurrency to the wrong address from which the cryptocurrency cannot be recovered, which means that the transaction was not realized and there is a permanent loss of cryptocurrency;
- The entity arranges and executes transactions in cryptocurrencies with a party that cannot be identified due to the anonymity of the parties in blockchain transactions;
- At the end of the period, there are significant delays in the processing of cryptocurrency transactions;
- It is difficult to determine the value at which cryptocurrencies should be recorded for financial reporting purposes;

Owning a cryptocurrency by an entity provides an opportunity to realize a direct mutual transaction with another entity that owns the cryptocurrency. It is a transaction without intermediaries such as a bank, other financial institution or any other participant (Jakovljević, 2021). It is based on blockchain technology. The research subject is auditors' attitudes in the Republic of Serbia on the challenges for cryptocurrency auditing and the level of awareness and knowledge about cryptocurrencies and related activities that may affect the planning and implementation of audits. This paper will explain the issue of cryptocurrencies from the auditor's point of view through the analysis of client acceptance and continued engagement, the correctness of the accounting coverage, and the impact on business continuity.

LITERACY REVIEW

Blockchain is a digital transaction book with unique features, which is designed in such a way as to create records that are reliable and accessible. Blockchain technology enables the transfer of different asset classes without independent intermediaries (Wunsche, 2016). It is a shared or distributed digital ledger of transactions over the network of participating computers. The need for third-party management is eliminated because it includes built-in peer-to-peer communication between the computers that participate in it. The computers participating in the chain use an automated process to confirm the transaction format included in the next block. At the moment when reconciliation occurs, then the data is recorded in a partnership. The auditing company is responsible for regulating and defining, within its internal acts, policies and procedures for accepting new clients, continuing engagement with existing clients, and controlling and documenting the mentioned procedures.

The internal act should define and prescribe which data should be collected and analyzed before accepting a new or continuing engagement with existing clients and certain other aspects. These policies and procedures should be designed to provide the auditor with a clear and quality basis for obtaining reasonable assurance as to whether or not to accept or continue the engagement. The existence of cryptocurrencies in the entity's business to consider these issues may cause the need to obtain additional information when taking a client or continuing an engagement. It may raise the question with the auditor as to whether he considered all relevant facts before accepting or continuing the engagement (Jakovljević, 2021). If the entity does business with cryptocurrencies and if that business is materially significant from the point of view of financial reporting and has a

risk of conducting an audit and issuing an audit opinion, the auditor should pay extra attention and select an adequate response. The auditor should accept or continue the engagement when (CPA, 2018):

- Examines the integrity of the entity and does not determine anything that violates the integrity of the entity, including the business purpose for which the entity undertakes transactions and operations with cryptocurrencies;
- Meets ethical requirements;
- Has expert knowledge of cryptocurrencies and meets other requirements in terms of time and other resources required to conduct the engagement;

The auditor is likely to include in its inquiries and communication with the entity matters relating to cryptocurrency transactions and transactions to meet these requirements. The critical consideration is whether there are significant transactions with cryptocurrencies in the business of entities outside the scope of regular operations. If any, the auditor should assess whether this causes significant risks (ISA 315, Identifying and Assessing the Risk of Material Misstatements by Understanding the Entity and Its Environment), whether related parties are involved (ISA 550, Related Parties), and whether there is false financial reporting or embezzlement. Business and transactions with cryptocurrencies may include money laundering, terrorist financing or other criminal activities. The use of blockchain technology, which enables direct trade while maintaining anonymity, makes it significantly more challenging to identify illegal activities.

EMPIRICAL DATA AND ANALYSIS

The research was conducted through a questionnaire that contained five questions that were created with the objectives of determining the degree of assessment of how respondents on a scale of 1 to 5 to assess their willingness to take risks, determining the degree of the evaluation of how respondents on a scale of 1 to 5 consider their knowledge of cryptocurrencies, determine whether respondents have ever traded cryptocurrencies, assess the degree of assessment of whether respondents would be willing to attend cryptocurrency training and cryptocurrency audits, and ascertain whether respondents would be willing to accept audit engagement if they learn that a potential client is significantly trading cryptocurrencies. The questionnaire included persons employed in planning and conducting all types of auditing and assurance services and persons engaged in ancillary activities and related activities, both in the private and public sectors. The questionnaire was pre-defined and distributed to respondents through publicly available mechanisms based on social networks (Jakovljević, 2021). The questionnaire was available for completion during March 2021.

A total of 329 responses were received to the distributed questionnaire. The answers to the questionnaire resulting from the conducted research were analyzed using SPSS and Excel. They were explained in detail in the continuation of the paper and presented in the form of graphical and tabular representations. The initial hypothesis from which the research was started is that persons engaged in auditing in the Republic of Serbia. This hypothesis arose from fieldwork and discussions that included exchanging experiences and opinions with persons involved in audit work. Specific differences in attitudes were observed and attitudes towards risk acceptance and cryptocurrencies. The latter has a greater propensity for risk express readiness to learn about cryptocurrencies and to accept audit engagement when they know that a potential client trades cryptocurrencies significantly.

The research conducted as part of this paper contains limitations that have partially influenced the reduction of its scope and the quantitative and qualitative scope of its results (Jakovljević, 2021), which have maintained a satisfactory level of innovation qualitative perception of knowledge. The first limitation concerns the representativeness of the sample. The sample may not have an acceptable level of representativeness because the data collection process took place when the auditors were very busy conducting the final stages of the audit and gathering audit evidence to issue an audit opinion with the entities concerned and probably did not have enough

time to start filling in the answers to the questionnaire with an adequate level of concentration and interest (Jakovljević, & Jakovljević, 2021). The second limitation is the appearance of a limited number of answers in the form of feedback to the questions from the questionnaire, which was distributed to the selected respondents via social networks.

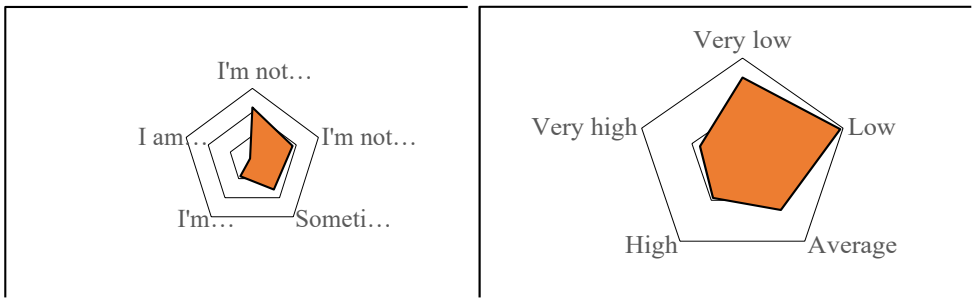
Table 1. Review of research questions.

No.	Text of research question	Aim of the research questions
1	How would you rate your willingness to take risks on a scale of 1 to 5?	Determine how respondents on a scale of 1 to 5 would assess their willingness to take risks.
2	How would you rate your knowledge of cryptocurrencies on a scale of 1 to 5?	Determine how respondents would rate their knowledge of cryptocurrencies on a scale of 1 to 5.
3	Have you ever traded cryptocurrencies?	Determine if respondents have ever traded cryptocurrencies.
4	On a scale of 1 to 5, how would you rate whether you would be willing to attend cryptocurrency training and auditing?	Determine how respondents on a scale of 1 to 5 would rate whether you would be willing to attend training in cryptocurrencies and cryptocurrency auditing
5	How would you rate your willingness to accept an audit engagement on a scale of 1 to 5 if you learned that a potential client was trading cryptocurrencies significantly?	Determine whether they would be willing to accept an audit engagement if they learned that a potential client was trading cryptocurrencies significantly.

A more significant number of answers would provide more excellent support and certainty to the presented conclusions and findings (Jakovljević, 2021). Still, despite this limitation, the given decisions have adequate and appropriate support in the questionnaire results. The third limitation is conditioned by the fact that the respondents may not have been candid when answering the questions from the distributed survey, which can create a distorted picture of the final results and affect the final result. Due to all the above, it is necessary to take the presented data with great caution during their interpretation and official use (Jakovljević, 2021). However, despite the stated limitations, the research that was conducted as a result presented significant findings and conclusions (Jakovljević, 2021) in the field of examining the attitudes of persons engaged in audit work in the Republic of Serbia on cryptocurrencies. The findings presented in this paper can be beneficial and relevant to different stakeholders.

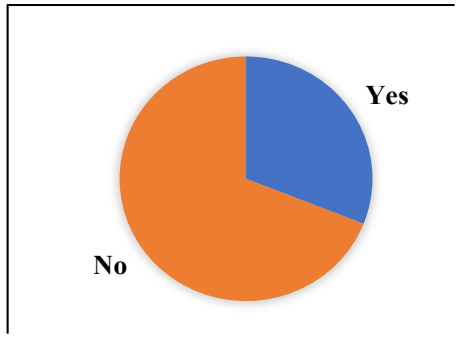
RESULTS AND DISCUSSION

When asked how they would rate their willingness to take risks on a scale from 1 to 5, 110 respondents answered with not ready at all, i.e. 33.43% of the total number, 91 respondents answered with not ready, i.e. 27, 66% of the total number, 79 respondents answered with sometimes I am glad, i.e. 24.01% of the total number, 44 respondents answered with mostly I am ready, i.e. 13.37% of the total number and the remaining five respondents I responded with I am always prepared, i.e. 1.52% of the total number. When asked how they would rate their knowledge of cryptocurrencies on a scale of 1 to 5, 81 respondents answered with very low, i.e. 24.62% of the total number, 97 respondents answered with low, i.e. 29.48% of the total number, 62 respondents answered with an average, i.e. 18.84% of the total number, 47 respondents answered with a high, i.e. 14.29% of the total number and the remaining 42 respondents answered with a very tall, i.e. 12.77% of the total number.



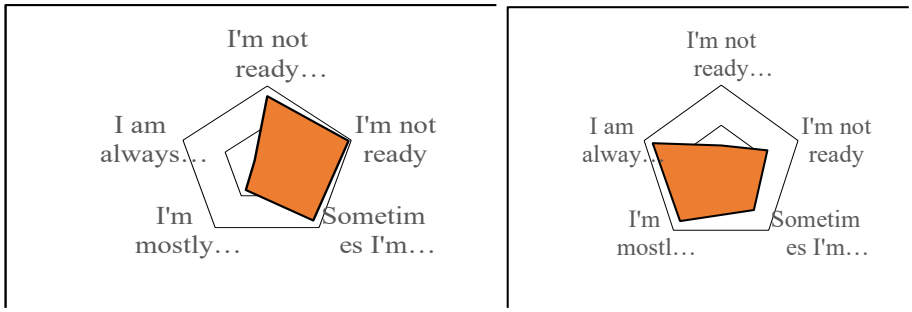
Graph 1. Display of answers to the first and second question.

When asked if you have ever traded cryptocurrencies, 102 respondents answered yes, or 31.00% of the total, and the remaining 227 respondents answered no, or 69.00% of the total.



Graph 2: Display of answers to the third question.

When asked how they would rate on a scale from 1 to 5 whether they would be ready to attend training on cryptocurrencies and cryptocurrency auditing, 87 respondents answered that I was not ready at all, i.e. 26.44% of the total number, 97 respondents responded with I am not prepared, i.e. 29.48% of the total number, 89 respondents answered with sometimes I am ready, i.e. 27.05% of the total number, 41 respondents answered with mostly I am glad, i.e. 12.46% of the total number and the remaining 15 respondents answered with always ready, i.e. 4.56% of the total number. When asked how they would rate their readiness to accept an audit engagement on a scale of 1 to 5 if they found out that a potential client trades in cryptocurrencies to a significant extent, 25 respondents answered that I am not ready at all, i.e. 7.60% of the total, 60 respondents responded with I am not prepared, i.e. 18.24% of the total number, 69 respondents answered with sometimes I am ready, i.e. 20.97% of the total number, 86 respondents answered with mostly I am ready, i.e. 26.14% of the total number and the remaining 89 respondents answered with always ready, i.e. 27.05% of the total number.

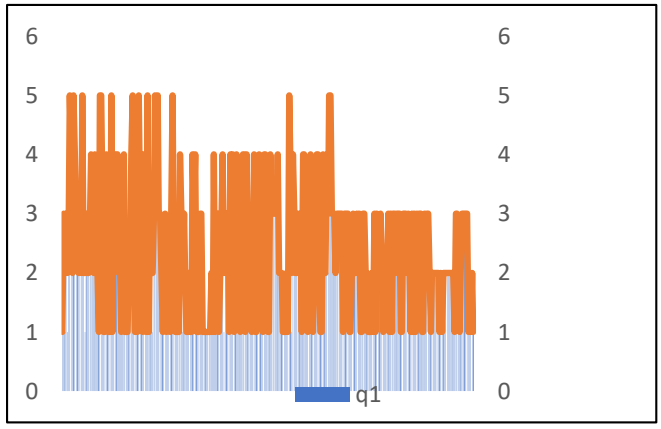


Graph 3. Display of answers to the fourth and fifth question.

CONCLUSIONS

Although cryptocurrency transactions have become commonplace in the global economy (Dmitrović, 2019), there is currently very little content in accounting or auditing standards that can or does refer to cryptocurrencies. Assessing the significance of potential gaps is a challenge, given the nature of the cryptocurrency ecosystem and the associated risks that are evolving rapidly. A forward-looking cryptocurrency tracking approach can help create a basis for identifying potential gaps and areas to prioritize or focus on. Audit techniques Emerging, such as audit data analytics, and new technologies, such as artificial intelligence, robotic process automation, and blockchain, offer challenges and opportunities that will affect the audit of financial and non-financial information in the foreseeable future. Given the rapid evolution of audit evidence available today, it is crucial that auditors have a robust, durable set of tools that allows them to make consistent assessments of the adequacy and appropriateness of the audit evidence obtained. One of the fundamental challenges for regulators and professional organizations is to study the increasing complexity and diversity of audit information, from old paper-based records to blockchain and intangible assets, emphasizing the importance of setting more robust guidelines for evidence-based auditing and verifying information reliability. . Certain information that will be used as evidence in the audit, whether in paper or electronic form, provides proof of the existence of the asset. Other data can only give some proof of the presence of the investment (for example, a record viewed on a blockchain may be subject to consideration of the reliability of the blockchain itself). The inspection of the data related to the claims of existence does not, in any case, have to provide data on the value or ownership of cryptocurrency assets. Likewise, reviewing the documentation confirming the fact of intangible assets does not, in any case, have to provide information on the obligations and rights of the subject about them or the correctness of their stated value in the business books.

The main conclusion is that the persons engaged in auditing in the Republic of Serbia, in most cases, have only a basic knowledge of cryptocurrencies and believe that they need additional training to increase their level of knowledge and expertise.



Graph 4. Display of the main conclusion.

Compared to traditional assets and transactions, audit considerations for cryptocurrencies are not fundamentally different but should be applied in more complex conditions (Demmler, & Dominguez, 2021). This is partly due to the complexity of the IT environment and the lack of any central authority. Additional complexities arise from the anonymity and lack of transparency of transactions, which increases the risk of money laundering and the instability of cryptocurrency values (Albuquerque, & Callado, 2015). There is no central bank or another source for cryptocurrencies. There is no third party you can contact for external verification. It's not like bank accounts, where you could ask the client's bank if the entity has a history with it. There is no central government, so auditors need to rely more on direct inspection. Despite the challenges,

there are sustainable approaches to cryptocurrency revision. A small payment can be made when proving ownership of cryptocurrencies, which is an acceptable way to confirm that the entity is indeed the owner of the cryptocurrency they claim to own. The problem of "fake payment" can be solved by not having wallets connected to actual identity processes. An audit firm could set up its wallet to directly receive a small false payment, which the auditor can send back. The advantage of most cryptocurrencies is that the transactions are public, so it is easy to confirm that the transaction has taken place. Many websites will allow you to see live transactions between different wallet addresses. For most significant cryptocurrencies, there are large enough markets that can provide a satisfactory level of reliability.

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