International Journal of Finance, Accounting and Economics Studies, 4(3), 2023, 31-43
Print ISSN: 2251-645X Online ISSN: 2383-2517

Islamic Azad University
Science and Research Branch
Faculty of Management and Economics

International Journal of Finance, Accounting and Economics Studies
Journal homepage: https://ijfaes.srbiau.ac.ir

Identifying and Prioritizing the Obstacles of Cryptocurrencies in Iran

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10.30495/IJFAES.2023.22514

Article History
Submission Date: 2 June 2023
Revised Date: 7 July 2023
Accepted Date: 31 August 2023
Available Online: 23 October 2023

JEL Classification:

Keyword:
Cryptocurrency
Barriers to cryptocurrency
Digital currency
Bitcoin
Blockchain

Abstract

Background and purpose: Nowadays, the market of cryptocurrencies has faced significant changes, for this reason, in recent years, identifying the obstacles of cryptocurrencies has become one of the most important challenges of every country.The present research has identified and prioritized the obstacles of cryptocurrencies in Iran.

Research method:The research method is descriptive-survey.The statistical community is experts (experts) and active in the field of investment, and in terms of the type of data, it is mixed (qualitative and quantitative). The statistical community includes all investors in the quantitative part.There are 260 cryptocurrencies in the market, based on Morgan's table,a sample size of 154 people was selected using available sampling method.

In the qualitative part,the research method is thematic analysis and the next step is the Delphi method. In order to check the validity, content validity was used, and also to check the reliability, the Cronbach's alpha coefficient for all variables was greater than 0.7, indicating acceptable reliability. Is.

Findings:According to the results of the qualitative part of the research, the most important obstacles to cryptocurrencies in Iran are volatility, law and tax, criminal activities, jurisprudence and non-Islamic, environmental issues, cryptocurrency literacy, security problems, and newness, respectively, and the results of the analyzes Quantitative also confirms the significance of the factor loadings of all indicators and their confirmation at the 95% confidence level.

Discussion and conclusion: The findings of this research can be used in taking measures regarding the challenges of cryptocurrencies in Iran and improving performance in this area.

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1. Introduction

Cryptocurrencies, which have attracted the attention of traders, analysts and theorists, show significant innovation (Arsi et al., 2022). Since the inception of fiat money, people have been using it for their daily transactions. It has been much easier to trade and deal with. In 2009, the first form of digital currency emerged in the form of Bitcoin. which was first introduced by Nakamoto (Fouzi et al., 2020). Cryptocurrency is actually a new term for buying or selling virtual currency (Miraz et al., 2022). The expansion of financial technologies in the world has led to an increase in the number and growth of digital currencies. Among them, we can mention cryptocurrencies, which have created a revolution in financial services. A cryptocurrency is a digital representation of money designed to work as a medium of exchange that uses strong cryptography to secure financial transactions, control the creation of additional units, and verify the transfer of assets. In the past years, the number of digital currencies has increased, and by 2019 there were more than 2,400 currencies in circulation (Thangalimodzi, 2019). The total market value of digital currencies exceeded 2 trillion dollars in April 2021, which is almost equal to the market value of Apple. It is the largest company in the world (Barna, 2022). Today, due to the fact that the activities of the people of the world, including Iran, in the cryptocurrency market have increased significantly, and due to the complex mechanism of this market, which even for investors in cryptocurrencies and even researchers who are active in this field are difficult and complicated, also due to the profitability of buying and selling cryptocurrencies, the decrease in the value of the rial is one of the possible effects that can cause serious economic crises for the country of Iran. Therefore, a complete and comprehensive understanding of this market can help activists and decision makers in this field to reach a correct understanding of this market. Considering the many advantages that cryptocurrencies have, it is very important to pay attention to this issue that along with these advantages There are a number of disadvantages and challenges in this market, and our main concern in this research is to identify these threats and obstacles. Digital currency is predicted as the future currency that may replace the current paper currency around the world. Although this interest has attracted the attention of users, many of its obstacles and challenges are still unknown. A lot of research has been done in the field of cryptocurrencies, but this research has identified and prioritized the obstacles of cryptocurrencies in Iran. By conducting this research and if this is done, investors and economic activists in the field of cryptocurrencies will be able to fully identify the obstacles and challenges that exist in the cryptocurrency market in Iran, and will be able to make a more informed decision regarding investment. have in this field and know how to stay safe from the threats of this market in Iran.

2. Theoretical literature

2.1. Cryptocurrencies

In 2009, the first decentralized digital currency, Bitcoin, was launched. Bitcoin was created by an unknown programmer or a group of programmers named Satoshi Nakamoto (Gong et al., 2022). Satoshi was the first to explain how Bitcoin works. Since then, there are more than 5 thousand different digital currencies in the market (Rahardja, 2023). According to the way digital currency is distributed, it has grown exponentially in 14 years (Kshetri, 2023). Cryptocurrency research first tries to determine the laws that apply to digital currencies. The first step is to decide on the rules that crypto service providers must follow. There is research outlining the legal and regulatory challenges facing cryptocurrencies that have been removed

from Western countries. It provides important information about cryptocurrencies and compares the laws of Canada, Australia, USA, UK where all countries operate under Anglo-Saxon (English speaking countries). In fact, this research examines the decentralization aspect and its collective power over digital currencies, and also presents the puzzle of rational stakeholders. Due to changes in digital currencies, digital currency service providers must follow the same regulations that apply to banks and other financial institutions. . However, digital currencies do not follow the rules of financial institutions (Zengin & Kocoglu, 2022).

2.2. Volatility challenges

The main obstacle to using digital currency as currency is volatility (Popescu, 2022). In order to use Bitcoin for real-time savings, users must define their expectations about the future value of the currency (Peterson, 2021). While there are studies that discuss regulation of digital currencies, other studies on digital currencies question why digital currencies do not warrant increased government regulation (Gürcan, 2019). Research on crypto asset volatility is influenced by questions about portfolio risk, such as assessing the potential of this new asset class for portfolio diversification or hedging. By analyzing historical price data, those studies often conclude that cryptocurrencies, despite a significant speculative component (Fry & Cheah, 2016), have the potential to diversify portfolios and hedge risk (Platanakis & Urquhart, 2020). This positive view is at least partially challenged by Klein et al. (2018) who claim that Bitcoin "is no safe haven and offers no hedging capability for developed markets" (Klein et al., 2018).

2.3.Tax law challenges

A key current blockchain problem is how tax laws apply to digital currencies (Low & Teo, 2017). Lindqvist's review of cryptocurrencies taxes on German tax regulations, the findings show that by classifying cryptocurrencies as money, private money, taxable coupons or any type of financial instrument, governments can include cryptocurrencies in the laws. Put your current tax. Lindquist offers a limited explanation for the outlook for capital gains and income taxes and sales taxes. However, taxing cryptocurrencies is not so easy and convenient. The biggest debate at the beginning of 2014 was the VAT exemption for cryptocurrencies. In 2015, the Court of Justice of the European Union confirmed that Bitcoin, as a cryptocurrency, is a currency, not a commodity, and transactions involving banknotes, currency and coins are used as legal tender and are exempt from VAT. (The VAT Directive should be interpreted in the sense that the provision of services such as the services discussed in the main proceedings, which involve the exchange of traditional currencies for virtual currency units (Bitcoin) and vice versa, in exchange for the payment of an amount equivalent to the difference between, on the one hand, The price paid by the operator to buy currency and, on the other hand, the price he sells that currency to his customers are VAT-exempt transactions. The research conducted by Ansut and Shakat shows the possibility of using blockchain technology to fight tax fraud. In their research, they discuss whether a blockchain database can be used to track business transactions and combat tax fraud using its trustless nature. However, even this possibility raises many legal questions as to the data protection of these transactions (Ainsworth & Shact, 2016).

2.4. Challenges related to money laundering and crime

Lindquist's study provides a detailed explanation of why cryptocurrencies cannot comply with current regulations given current laws. He chose the most well-known and first digital currency,

Bitcoin, to examine its features and the current legal status of this digital currency. His study examined aspects of Anti-Money Laundering (AML) and the results showed that increased government regulation has a negative impact on Bitcoin and other similar digital currencies, and increased government regulation has a dire impact on the future adoption and development of Bitcoin and as a The new payment alternative of allowing Bitcoin to evolve and flourish creates almost impossible business opportunities around the world (Lindquist, 2014). Transparency in the form of digital currencies in their legal aspects helps policy makers to determine the best way to control digital currencies (Najad et al., 2023). Another legal issue with digital currency is the possibility of using cryptographic transfers for criminal activities. Ante states in his research that the anonymity of digital currencies offers better conditions than conventional payment methods and makes it tempting to use digital currencies for purposes such as money laundering (ML), terrorist financing or tax evasion (McCarthy, 2018). A study by Salemi (2017) also discusses the use of surveillance technology to combat terrorist financing worldwide. Assesses the limitations of the FATF's risk-based approach to combating money laundering and terrorist financing (AML). (CFT) provisions and their impact on digital currency transactions. As you can see, the biggest legal issues related to digital currency are identifying the form of digital currency, knowing the customer, and combating money laundering, taxation, and terrorist financing (Salami, 2018).

2.5. Data privacy challenges in blockchain technology

Blockchain is a technology to store billions of data in its database Recently, blockchain has emerged as a ledger technology as an attractive security and privacy solution in big data systems. For example, blockchain can play an important role in providing high-quality data and ensuring data sharing for industrial applications. A blockchain-based mechanism is proposed to ensure data collection in the network and encourage mobile nodes to collect data effectively. In addition, blockchain is also integrated with computer hardware to improve data quality and perform computationally intensive tasks requested by devices with security guarantees. It also has capacity management capabilities to enable new big data services and applications (Deepa et al., 2022). Blockchain technology has the potential to manage various security attacks, as it can eliminate the need for a central authority to perform various tasks. When databases are distributed, there is a risk of corruption (Yap et al., 2023). Transactions are linked by cryptographic keys and the ledger is immutable, making it difficult for traders to control or delete recorded information (Kaur, 2023). Using these methods strengthens the security framework and ensures data integrity and privacy. Blockchain reduces the risk of a single point of failure and network attacks by using distributed network nodes. Using a decentralized platform reduces fraud and user information is stored in an immutable directory across the network using smart names. Blockchain eliminates manual processes such as linking between multiple separate ledgers and administrative processes, which helps reduce administrative costs. Due to the use of different encryption chains, the speed of transactions and the level of security increase several times (Bordo & Levin, 2017). This means that any data stored in the blockchain database is added there based on the subsequent agreement of each user in the database. Changing any piece of data in a blockchain database requires the same consensus from the database, which means accepting billions of blocks to change it. Due to the nature of the blockchain, the data stored in the

blockchain is completely secure and it is almost impossible to hack and change it. However, in the context of data privacy, there are several rights for data owners that allow them to freely manage their data (Habib et al., 2022). However, any data that It is added to the blockchain and is governed by the consensus of the entire system. In this sense, the blockchain model conflicts with data protection regulations (Agarwal et al., 2022).

2.6. Islamic and Islamic challenges of cryptocurrencies

Today, there is no unanimous opinion of the scholars of the Islamic world about whether activities related to the circulation of digital currencies are forbidden (haram) or permissible (mobah) (Yuniartik, 2023). As a result, in such situations, as a rule, the researchers of this issue turn to the judgment of analogies and try to understand the nature of a phenomenon like cryptography in terms of whether it is permissible or forbidden for pious Muslims. In general, the issue of digital currencies has brought controversial reactions in the Islamic world, but then we can see such a situation in other parts of the world. There is no consensus on this issue and there is still no global fatwa (Sharia solution) that the representatives of the entire Islamic world adhere to. Since cryptocurrency is a new phenomenon for Islamic Shari'a, the decision on whether to allow or prohibit it should be made by modern scholars within the framework of four religious and legal schools (Shovkhalov & Idrisov, 2021).

2.7. Environmental challenges

Today, one Bitcoin transaction has an electrical energy footprint that is roughly equal to the total energy consumed by an American family for two months (De Vries, 2020). In the production of new bitcoins, large amounts of electrical energy are used (Howson & de Vries, 2022). With such a significant and growing footprint, cryptocurrencies, such as Bitcoin, threaten global commitments to reduce carbon emissions (Truby, 2018). Projections suggest that this network could be responsible for the emission of up to 131 million tons of carbon dioxide per year in the medium term (Jiang et al., 2021). Bitcoin's growing energy footprint is strongly tied to its dollar value, but even without projected growth, cryptocurrency mining already has implications for human health and the climate. Research shows that for every $1 of value created by Bitcoin's energy consumption, $0.49 should be spent on mitigating network-related environmental issues and addressing other related public health problems (Goodkind et al., 2020). There is a near consensus in the academic literature that PoW cryptocurrencies pose significant challenges to achieving global sustainable development goals. However, some argue that the technology offers opportunities to help reduce global poverty, enable strong political institutions, provide clear property rights, and combat corruption while promoting entrepreneurship and equal opportunity. Currently, about a third of PoW miners are in countries with a Human Development Index (HDI) below 0.85. Some of the world's poorest and most vulnerable people are likely to be those disproportionately affected by the local social and environmental issues of PoW mining. Along with the most optimistic climate scenarios for the end of the century, the growth and inefficiencies of Bitcoin are likely to play an important role in putting the poorest parts of the world on the brink of disaster (Howson & de Vries, 2022).

2.8. Challenges of financial literacy of cryptocurrencies

At a time of a global pandemic that has isolated stock markets around the world from the economy, another strange event occurred around the world, which was a sudden explosion in investment in digital

currencies. The value of Bitcoin and other new digital currencies quadrupled in a few months as new investors flooded the market (Inman, 2020). This era of digital currencies attracting investor attention raises questions such as whether we are headed for another rift where the wealthy, tech-savvy and financially literate can ride this vehicle of opportunity and those who are poor, remain with insufficient financial knowledge. With the passage of more than a decade since the launch of Bitcoin and the adoption of digital currencies by many countries, the financial literacy of people who invest in them is a major limitation (Panos et al., 2020). According to FINRA's US Financial Capability Study, only 17% of 18-34 year olds can answer basic financial literacy questions and 53% feel concerned about them (Lin et al., 2019). Cryptocurrency investors are divided into two groups, one is called elite or those who have good income, or they are millennial generation or Gen-Z and have high financial literacy (Jha & Awasthi). They are aware of the technology behind cryptocurrencies. And they are aware of the benefits of decentralized currency. The other group, also called the majority, are less affluent, less financially literate, and unaware of the pros and cons of investing in the asset class. The second group approach the crypto market from a gambler's perspective and are attracted to the high risk reward scheme in these markets without delving deeply into any of the financial or technical aspects of this new asset class (Delfabbro et al., 2021). It is clear that maintaining a speculative view and investing in the financial markets creates high volatility in the entire system and hence more mature and educated investors prefer to stay away from such markets where speculation and emotions are supported. Takes. Little fundamental information is the driving force of prices (Brunetti et al., 2016). If we compare it with a stock or a currency that has the backing of fundamental principles or a company and economic factors, we realize that digital currency lacks all these supports and prices are determined solely by the hype around the asset. Markets see heavy buying and selling of cryptocurrencies whenever there is a buzz. Every crypto market boom attracts a new set of investors. This raises the question of whether these people entering the crypto markets understand the level of risk they are exposing themselves to. Also, do these financially illiterate investors know that they are building the future of "money", a loopless game? Sometimes even financially savvy people give in to impulses and emotions, which is a common scene with less financially literate people (Jha & Awasthi).

2.9. The challenge of being new

Cryptocurrencies are virtual digital currencies and are named because cryptographic techniques are at the heart of their implementation (He et al., 2016). Historically, the idea and concept of storing important information using cryptographic techniques is considered older, as the term crypto is derived from an ancient Greek word, kryptos, meaning hidden. The World Bank classified cryptocurrencies as a subset of digital currencies, which it describes as a digital representation of value defined in its unit of account, distinct from electronic money, which is simply a digital payment mechanism. And it turns into fiat money, classifies. Unlike many other policymakers, the World Bank itself has defined cryptocurrencies as digital currencies that rely on cryptographic techniques to achieve consensus. Today, the emergence of cryptocurrencies can be traced back to the emergence of the first cryptocurrency, Bitcoin, in 2009. After the emergence of Bitcoin in 2009, experiments with digital currencies began in 2011 with the release of SolidCoin, iXcoin, Namecoin and Namecoin. Others. As of

August 1, 2018, there are over 1,737 different digital currencies on the market. This amount of digital currency is divided into 819 coins and 918 tokens. According to data from CoinMarketCap, the combined cryptocurrency market is worth $269 billion as of today. Central banks are beginning to consider whether they might issue their own digital currencies. Due to the rise of digital currencies and blockchain technology, central banks of major economies have started thinking and working on their own central bank digital currency (CBDC). A fundamental issue raised by the issuance of the CBDC concerns the appropriate roles – in financial intermediation and the economy as a whole – of private financial market participants, governments and central banks. With CBDCs, there is a greater role for central banks in financial intermediation. As demand for CBDC increases, and if liquid assets do not decrease quickly, central banks may need to purchase additional government claims and, depending on the size, private assets (e.g. mortgages, securities, exchange-traded funds). (or accept as collateral). If demand becomes too high, central banks may need to hold less liquid and riskier securities, thereby affecting the price of these securities and potentially affecting market performance. Central banks may also need to provide maturity, liquidity and significant credit risk changes to banks and markets. Since central banks can play more important roles, they can have more influence on lending and financial conditions (Mosteanu & Faccia, 2020).

3. Research method

The current research, which is of mixed type, research method based on its purpose is practical. We examine the research method based on data collection from two qualitative and quantitative dimensions. In the qualitative part of the research, the research method is theme analysis and the next step is the Delphi method. In the quantitative part of the research, the research method is descriptive-survey.

The statistical population in the qualitative section is experts in the field of finance, professors and faculty members of fields related to finance at the master's and doctorate level, and investors who are active in the Tehran Stock Exchange market and are also active in the cryptocurrency market. The sampling method in the qualitative part of the research is purposive sampling. The sample size in the qualitative part of the research is based on theoretical saturation, and 20 people were selected. The statistical population in the quantitative sector also includes all investors and traders in cryptocurrencies, which we obtained from domestic exchanges, the number of which were available, 260 people in the quantitative sector formed the population, and according to Morgan's table, the sample size is 154 people. They were selected using available sampling method.

4. Collection method and tools

The data collection tool is a questionnaire, which was first used in Delphi questionnaire, and after finalization, the questionnaire was adjusted in the form of a Likert scale, which was distributed in the community. In the qualitative part of the research, in order to ensure verifiability, the researcher tried not to involve his previous assumptions as much as possible in the data collection process. In order to guarantee reliability, experts were supervised in the field of research. In order to increase the ability to generalize and transfer to other situations, help was taken from experts in the field of finance in industry and university. Also, diversifying sampling is another way to provide generalizability in qualitative studies. In the present study, in order to increase the generalizability of the researched society, we limited it. In order to guarantee the

credibility of the research, the researcher tried to increase the validity of the current research by specifying the research plan and also limiting the target population and determining their characteristics. In the qualitative part of this research, Brown and Clark's 6-step method has been used for thematic analysis, and in the quantitative part, data analysis is a multi-step process, during which the data obtained through the use of collection tools in the statistical sample They are summarized, categorized and finally processed to provide the basis for performing various types of analysis and correlation between data in order to test hypotheses. The statistical methods used in this research are descriptive statistics and inferential statistics.

5. Threats of cryptocurrency analysis

According to table 1 and the average value and standard deviation of the indicators of the limitations of cryptocurrency analysis in the second round of Delphi after applying the changes, it shows that the findings in the new round have been approved by the experts and the results of the standard deviation also indicate that. that the level of consensus among Delphi panel members regarding this concept has been improved.

The result of the Kolmogorov-Smirnov test for each of the research variables is shown in Table 2.

According to the table above, because the value of the significance level of the research limitation variable is smaller than the error value of 0.05, we conclude that the distribution of all variables is abnormal. We use SmartPLS software to test causal relationships between research variables.

Table 1. The mean and standard deviation of the indicators of the threats of cryptocurrency analysis

Kendall coefficient	standard deviation	Average	Indicators	Row	Variable
0.741	0.70	4.25	The unknown nature of digital currencies	1	threats
	0.61	4.09	The complete lack of disclosure of the basic characteristics of cryptocurrencies	2	
	0.50	4.18	The emergence of cryptocurrencies	3	
	0.74	4.10	Anonymity of the nature of the transaction in cryptocurrencies	4	
	0.73	3.90	Ambiguity in the nature of cryptocurrencies	5	
	0.69	3.99	Technical complexity and lack of public acceptance	6	
	0.65	4.19	Filtering suspicious sites and informing users about cryptocurrencies in order to prevent crimes from committing criminal acts	7	
	0.68	4.32	The need for sufficient knowledge in trading cryptocurrencies	8	
	0.63	4.09	Failure to design wallets suitable for the level of beginner users	9	
	0.79	4.11	The possibility of eliminating intermediaries in transactions using blockchain technology	10	
	0.84	4.03	Unreliability of blockchain technology due to lack of intermediary and regulatory body	11	
	0.70	4.25	Lack of monitoring of daily transactions	12	
	0.61	4.09	No need for a third party in cryptocurrency transactions	13	
	0.50	4.18	Lack of regulatory standards	14	
	0.74	4.10	Unquantifiable risk in cryptocurrencies	15	
	0.73	3.90	High risk of cryptocurrencies	16	
	0.69	3.99	The extraordinary growth of the cryptocurrency market with extreme fluctuations and bubbles	17	

Kendall coefficient	standard deviation	Average	Indicators	Row	Variable
	0.65	4.19	Failure to preserve the value of cryptocurrencies over time	18	
	0.68	4.32	The lack of stability and the possibility of a drop in the value of virtual currency	19	
	0.63	4.09	Price fluctuation and instability and the risk of falling virtual currency	20	
	0.79	4.11	High volatility in the cryptocurrency market	21	
	0.84	4.03	The presence of hackers in the cryptocurrency market	22	
	0.70	4.25	Emergence of security problems in cryptocurrencies	23	
	0.61	4.09	Irreversibility of payment in case of wrong payment.	24	
	0.50	4.18	The possibility of creating a copy from a cryptocurrency	25	
	0.74	4.10	Permanent loss of money if the user forgets the password	26	
	0.73	3.90	Insecurity and mistrust	27	
	0.69	3.99	Security concerns	28	
	0.65	4.19	Proceeding to enact laws related to money laundering and information disclosure in Iran	29	
	0.68	4.32	Money laundering and tax evasion through internet crimes	30	
	0.63	4.09	Financing terrorist groups	31	
	0.79	4.11	Risk of criminal activity	32	
	0.84	4.03	The low liquidity of cryptocurrencies in Iran's economy	33	
	0.70	4.25	Currency withdrawal from the country	34	

Table 2. Kolmogorov-Smirnov test of research variables

Test result	α (error value)	Sig (significance level)	standard deviation	Average	Variable
abnormal	0.05	0.005	0.37	3.63	Limitations

6. Confirmatory factor analysis of model variables

After ensuring the adequacy of the research data to perform factor analysis, it is necessary to ensure the accuracy of the measurement models of the research variables. Therefore, in the following, the measurement models of these variables are listed in order. This analysis was done by structural equation modeling and using PLS statistical software. Figures 1 and 2 show the research measurement model in standard estimation mode and significant coefficients.

In Table 3, the factor loading and significant coefficients of the research model are shown. The factor loading of all questions is more than 0.5, so no index has been removed from the model.

7. Conclusion

The purpose of this research was to identify the obstacles of cryptocurrencies, after examining the theoretical foundations and based on the opinions of experts during three Delphi stages and theme analysis, the obstacles of cryptocurrencies were identified in order of priority as follows:

In general, the results obtained from this research are consistent with the theoretical foundations and findings of domestic and foreign research in this field. The model presented in this research is more complete

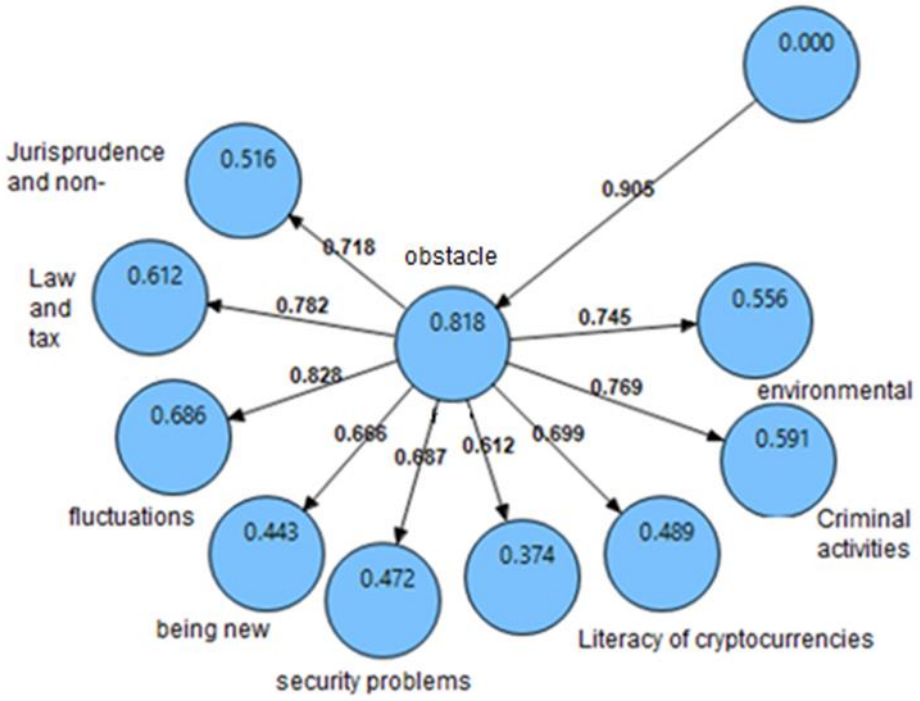

Figure 1: The output of the software about the standard estimation coefficients of the research model

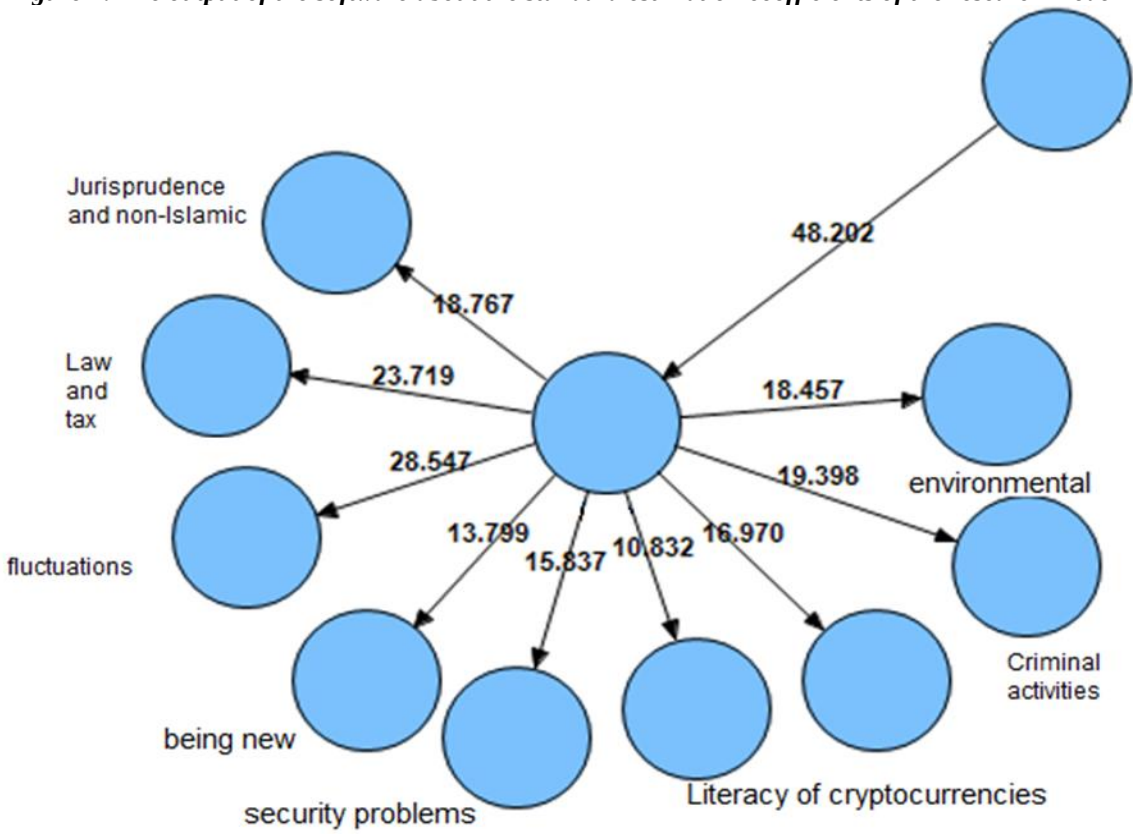

Figure 2: Software output about the significance coefficients of the research model

Table 3. Prioritization of cryptocurrency barriers

Factor loads	Significant coefficients	Challenges	Priority
0.828	28.547	Swing	1
0.782	23.719	Law and tax	2
0.769	19.398	Criminal activities	3
0.718	18.767	Jurisprudence and non-Islamic	4
0.745	18.457	environmental	5
0.699	16.970	Literacy of cryptocurrencies	6
0.687	15.837	security problems	7
0.666	13.799	being new	8

compared to the previous researches because, in addition to examining the theoretical foundations and statistics of the indicators, the analysis model of cryptocurrencies in Iran was developed through the analysis of the themes of the interview texts. During the research, in addition to reviewing and analyzing the texts of the interviews conducted with experts, many researches conducted by other researchers were also examined. The findings of this research can be effective in adopting measures to analyze cryptocurrencies in Iran and subsequently improve the performance of this field. According to the findings of the research, it can be said that paying attention to the identified obstacles and using them correctly in improving the analysis of cryptocurrencies is very smart and paves the way to advance the goals and provides the management with the means of growth, success and improvement.

8. References

[1] Agarwal, U., Rishiwal, V., Tanwar, S., Chaudhary, R., Sharma, G., Bokoro, P. N., & Sharma, R. (2022). Blockchain technology for secure supply chain management: A comprehensive review. IEEE Access.

[2] Ainsworth, R. T., & Shact, A. (2016). Blockchain (distributed ledger technology) solves VAT fraud. Boston Univ. School of Law, Law and Economics Research Paper(16-41).

[3] Bordo, M. D., & Levin, A. T. (2017). Central bank digital currency and the future of monetary policy.

[4] Brunetti, C., Büyükşahin, B., & Harris, J. H. (2016). Speculators, prices, and market volatility. Journal of Financial and Quantitative Analysis, 51(5), 1545-1574.

[5] De Vries, A. (2020). Bitcoin's energy consumption is underestimated: A market dynamics approach. Energy Research & Social Science, 70, 101721.

[6] Deepa, N., Pham, Q.-V., Nguyen, D. C., Bhattacharya, S., Prabadevi, B., Gadekallu, T. R., Maddikunta, P. K. R., Fang, F., & Pathirana, P. N. (2022). A survey on blockchain for big data: approaches, opportunities, and future directions. Future Generation Computer Systems.

[7] Delfabbro, P., King, D., Williams, J., & Georgiou, N. (2021). Cryptocurrency trading, gambling and problem gambling. Addictive Behaviors, 122, 107021.

[8] Fry, J., & Cheah, E.-T. (2016). Negative bubbles and shocks in cryptocurrency markets. International Review of Financial Analysis, 47, 343-352.

[9] Gong, Y., Xie, S., Arunachalam, D., Duan, J., & Luo, J. (2022). Blockchain-based recycling and its impact on recycling performance: A network theory perspective. Business Strategy and the Environment, 31(8), 3717-3741.

[10] Goodkind, A. L., Jones, B. A., & Berrens, R. P. (2020). Cryptodamages: Monetary value estimates of the air pollution and human health impacts of cryptocurrency mining. Energy Research & Social Science, 59, 101281.

[11] Gürcan, B. (2019). Various Dimensions and Aspects of the Legal Problems of the Blockchain Technology. Comparative Law Working Papers, 3(1).

[12] Habib, G., Sharma, S., Ibrahim, S., Ahmad, I., Qureshi, S., & Ishfaq, M.

(2022). Blockchain Technology: Benefits, Challenges, Applications, and Integration of Blockchain Technology with Cloud Computing. Future Internet, 14(11), 341.

[13] He, M. D., Habermeier, M. K. F., Leckow, M. R. B., Haksar, M. V., Almeida, M. Y., Kashima, M. M., Kyriakos-Saad, M. N., Oura, M. H., Sedik, T. S., & Stetsenko, N. (2016). Virtual currencies and beyond: initial considerations. International Monetary Fund.

[14] Howson, P., & de Vries, A. (2022). Preying on the poor? Opportunities and challenges for tackling the social and environmental threats of cryptocurrencies for vulnerable and low-income communities. Energy Research & Social Science, 84, 102394.

[15] Inman, P. (2020). Bitcoin jumps to three-year high as Covid crisis changes investor outlook. Retrieved December, 30, 2021.

[16] Jha, R., & Awasthi, S. Topic: Financial literacy of novice cryptocurrency investors.

[17] Jiang, S., Li, Y., Lu, Q., Hong, Y., Guan, D., Xiong, Y., & Wang, S. (2021). Policy assessments for the carbon emission flows and sustainability of Bitcoin blockchain operation in China. Nature communications, 12(1), 1-10.

[18] Kaur, S. (2023). Basics of blockchain technology for supply chain operations. In Blockchain in a Volatile-Uncertain-Complex-Ambiguous World (pp. 17-27). Elsevier.

[19] Klein, T., Thu, H. P., & Walther, T. (2018). Bitcoin is not the New Gold–A comparison of volatility, correlation, and portfolio performance. International Review of Financial Analysis, 59, 105-116.

[20] Kshetri, N. (2023). The nature and sources of international variation in formal institutions related to initial coin offerings: preliminary findings and a research agenda. Financial Innovation, 9(1), 1-38.

[21] Lin, J., Bumcrot, C., Ulicny, T., Mottola, G., Walsh, G., Ganem, R., Kieffer, C., & Lusardi, A. (2019). The state of US financial capability: The 2018 national financial capability study. FINRA Investor Education Foundation. In.

[22] Lindquist, A. (2014). Funny money: Why Bitcoin does not warrant increased governmental regulation. J. Glob. Just. & Pub. Pol'y, 1, 79.

[23] Low, K. F., & Teo, E. G. (2017). Bitcoins and other cryptocurrencies as property? Law, Innovation and Technology, 9(2), 235-268.

[24] McCARTHY, K. J. (2018). The money laundering market: regulating the criminal economy. Agenda Publishing.

[25] Mosteanu, N. R., & Faccia, A. (2020). Digital systems and new challenges of financial management–FinTech, XBRL, blockchain and cryptocurrencies. Quality-Access to Success Journal, 21(174), 159-166.

[26] Nejad, M., Elah, S. F., Ranjbar, & Mukhtar. (2023). Digital currencies, money laundering and solutions to deal with it in international laws. Iranian Political Sociology Monthly, 5(11), 3766-3774.

[27] Panos, G. A., Karkkainen, T., & Atkinson, A. (2020). Financial literacy and attitudes to cryptocurrencies.

[28] Peterson, T. (2021). To the moon: a history of Bitcoin price manipulation. Journal of Forensic and Investigative Accounting, 13(2).

[29] Platanakis, E., & Urquhart, A. (2020). Should investors include bitcoin in their portfolios? A portfolio theory approach. The British accounting review, 52(4), 100837.

[30] Popescu, M. A. (2022). Cross-border central bank digital currencies, bank runs and capital flows volatility. International Monetary Fund.

[31] Rahardja, U. (2023). The Economic Impact of Cryptocurrencies in Indonesia. ADI Journal on Recent Innovation, 4(2), 194-200.

[32] Salami, I. (2018). Terrorism financing with virtual currencies: can regulatory technology solutions combat this? Studies in Conflict & Terrorism, 41(12), 968-989.

[33] Shovkhalov, S., & Idrisov, H. (2021). Economic and Legal Analysis of Cryptocurrency: Scientific Views from Russia and the Muslim World. Laws, 10 (2), 32. In: s Note: MDPI stays neutral

with regard to jurisdictional claims in published ….

[34] Truby, J. (2018). Decarbonizing Bitcoin: Law and policy choices for reducing the energy consumption of Blockchain technologies and digital currencies. Energy Research & Social Science, 44, 399-410.

[35] Yap, K. Y., Chin, H. H., & Klemeš, J. J. (2023). Blockchain technology for distributed generation: A review of current development, challenges and future prospect. Renewable and Sustainable Energy Reviews, 175, 113170.

[36] Yuniartik, Y. (2023). BITCOIN CRYPTOCURRENCY PRACTICES SHARIA MAQASHID PERSPECTIVE. INTERNATIONAL JOURNAL OF HUMANITIES, SOCIAL SCIENCES AND BUSINESS (INJOSS), 2(1), 1-10.

[37] Zengin, B., & Kocoglu, S. (2022). Cryptocurrency Market and Tax Regulations in Turkey: an Analysis in the European Emerging Economy. Finanse i Prawo Finansowe, 3(35), 83-106.

HOW TO CITE THIS ARTICLE:
Sadigheh Tootian Isfahani, Zohre Hassanpour, Leila Saeidi (2023). Identifying and Prioritizing the Obstacles of Cryptocurrencies in Iran, 4(3): 31-43.*

DOI: 10.30495/IJFAES.2023.22514

Url: https://ijfaes.srbiau.ac.ir/article_16607.html
Journal homepage: https://ijfaes.srbiau.ac.ir