

Вестник РУДН. Серия: Экономика

ЭКОНОМИЧЕСКИЕ И СОЦИАЛЬНЫЕ ТРЕНДЫ ECONOMIC AND SOCIAL TRENDS

DOI 10.22363/2313-2329-2021-29-4-689-698 UDC 338

Research article / Научная статья

Challenges and opportunities cryptocurrency in Iran economy & e-businesses

Ismael Rezaeinejad

Abstract. The world's financial markets faced a new cyberspace phenomenon. Cryptocurrencies are non-tracking by any bank or financial institution or even the state. In a digital transactions system, transactions are registered and encrypted in a general ledger book, the blockchains. Cryptocurrencies have features that make them more useful, especially in international exchange, so it is necessary to determine the advantages and challenges of using them. The study of digital currencies in Iran's economy and electronic business is presented. In recent years, the use of cryptocurrencies in Iran has grown. The necessity of public policymaking in facing this emerging phenomenon of economic importance has become more critical due to the transfer, such as decentralized systems, which led to the elimination of intermediate and observer entities. Cryptocurrencies also allow Iranian businesses and governments to direct access the international markets by bypassing sanctions. In this paper, the author first considers the mechanism of cryptocurrencies in the economy and then identifies the Iranian economy's challenges and opportunities. In conclusion, cryptocurrencies can allow Iranian entrepreneurs to enter the international arena and international competition. Therefore, it is vital that the government or public organizations raising awareness about cryptocurrencies will also contribute to the prosperity of businesses and prevent criminals from exploiting the conditions.

Keywords: cryptocurrency, Iran, e-businesses, sanction, e-commerce

Article history: received July 10, 2021; revised August 1, 2021; accepted June 15, 2021.

For citation: Rezaeinejad, I. (2021). Challenges and opportunities cryptocurrency in Iran economy & e-businesses. *RUDN Journal of Economics*, 29(4), 689–698. http://dx.doi.org/10.22363/2313-2329-2021-29-4-689-698

@______

This work is licensed under a Creative Commons Attribution 4.0 International License https://creativecommons.org/licenses/by/4.0/

[©] Rezaeinejad I., 2021

Проблемы и возможности использования криптовалют в экономике и электронном бизнесе Ирана

И. Резаинеджад

Аннотация. Мировые финансовые рынки столкнулись с новым явлением – формированием финансового киберпространства. Криптовалюты не отслеживаются ни банком, ни финансовыми учреждениями, ни даже государством. В системе цифровых отношений транзакции регистрируются и зашифровываются с помощью блокчейн-технологий. Криптовалюты обладают рядом функций, которые делают их незаменимыми, особенно при международном обмене. Исследуется положение криптовалют в экономике и электронном бизнесе Ирана. В последние годы использование криптовалют в Иране выросло, как и необходимость выработки государственной политики в связи с этим явлением. Криптовалюты позволяют иранским предприятиям и правительству иметь прямой доступ на международные рынки в обход санкций. Рассматривается механизм использования криптовалют в экономике, определяются проблемы и возможности их использования в иранской экономике. Выявлено, что криптовалюты могут позволить иранским предпринимателям выйти на международную арену и стать участниками глобальной конкуренции. По этой причине необходимо, чтобы правительство и общественные организации, повышающие осведомленность о криптовалютах, также способствовали процветанию бизнеса.

Ключевые слова: криптовалюта, Иран, электронный бизнес, санкции, электронная коммерция

История статьи: поступила в редакцию 10 июля 2021 г.; проверена 1 августа 2021 г.; принята к публикации 15 июня 2021 г.

Для цитирования: *Rezaeinejad I*. Challenges and opportunities cryptocurrency in Iran economy & e-businesses // Вестник Российского университета дружбы народов. Серия: Экономи-ка. 2021. Т. 29. № 4. С. 689–698. http://dx.doi.org/10.22363/2313-2329-2021-29-4-689-698

Introduction

In the global economy, it is possible to observe that the transaction levels are spread across countries' borders, and global traders are rapidly expanding. The world businessmen must cooperate with various intermediate entities, increasing the number of these mediators to increase their profitability and making it more challenging to become more complex; therefore, the monetary authorities seek solutions to facilitate most global business. In this regard, we now observe that the new technologies in cryptography have created fundamental changes in the global economic structure. One of the most crucial systems may refer to a new phenomenon called cryptocurrencies. The cryptocurrency is a private system for facilitating transactions among individuals without requiring the central entity and the intermediary (Antonopoulos, 2017).

One of the most critical uses of cryptocurrency that is unique to payments, including speed and efficiency concerning payments, especially international payments, eliminates additional operational costs from the intermediary entities. In addition to the proposed advantages, this type of exchange poses risks, which have led governments to have conflicting positions. This can be attributed to the danger of money laundering, terrorist attacks, and tax evasion, all of which are very likely due to the encrypted nature of these currencies (Böhme et al., 2015).

This paper study a comprehensive view of the cryptocurrencies exchange and providing an initial framework with emphasis on the Iranian economy to understand the challenges of cryptocurrencies.

Research method

The present paper is conducted in an analytical-descriptive method. The method of gathering research data is library study, including books, magazines, papers, and electronic resources. This paper explores cryptocurrencies' challenges and opportunities in Iran and uses international knowledge and experience to make a conceptual framework for cryptocurrency in the Iranian economy.

Literature review

Considering that cryptocurrencies have been used in the international economy in the last few years, less research has been done on other areas of economics related to it. However, because of the specific feature of these kinds of currencies, the growth rate of research increases. The first and foremost part of the cryptocurrency study is back to 2008 by Satoshi Nakamoto for the first time, introduces the practical mechanism of bitcoin as the first private cryptocurrency (Nakamoto, 2008).

- P. Ciaian, M. Rajcaniova and D.A. Kancs, in their study with an economic view of variables such as price, cash, fluctuation, and cash flow rates, concluded that in Austrian economics, bitcoin is a more ideal currency than unsupported money and, this alternative is possible (Ciaian et al., 2016).
- T. Moore in his article lists the opportunities and risks of cryptocurrencies. One of the essential advantages of this money is the impossibility of creating money and low operating cost, and low cost for sender and receiver. In contrast, cybercrime and abuse can be named as the risks of this money (Moore, 2013).
- S. Garg, in his academic research, examines the variables involved in cryptocurrencies and the price history. Therefore, it is said that by increasing the knowledge of people in this market, the price and demand will increase (Garg, 2015).
- F. Parino, M.G. Beiró and L. Gauvin, at first, began to wonder whether they would be considered cryptocurrencies as money, and finally, with a look at bitcoin said the vital point is low operating cost, and the weak point is the price fluctuations and security (Parino et al., 2018).
- A. Dibrova has dealt with the risks of cryptocurrencies, including financial crimes and money laundering. At the same time, he believes that such forces will not prevent the further development of cryptocurrencies (Dibrova, 2016).
- D. Atli revealed the risks of cryptocurrency, includes money laundering, tax evasion, cybercrime, and internet crime. The evidence of this study shows that cryptocurrencies would play an essential and influential role in facilitating crimes (Atli, 2017).

Result and discussion

Cryptocurrencies' situation in Iran

Some investors and traders believe that cryptocurrencies positively impact the future of the world economy. However, on the other hand, some analysts and economists believe that more studies should be done because of the unknown and significant gaps in this space. According to the Tokenist institution, in June 2020, 45% percent of 17 countries in the world preferred investment in cryptocurrency more than investing in shares, real estate, or even gold. While in 2013 and a survey of similar conditions, only 13% of the population had voted positively for their investments in this field over other areas.

On the other hand, recent global fluctuations and lack of clear rules in many countries have caused concern among micro investors and many people for investing in this market. According to a report compiled by the National Library of Congress of the United States, governments focused more on this area and tried to legislate for it by becoming popular in the last four years. According to the report, most of the announcements issued by governments on investment challenges were based on the basis that most of these warnings were issued by state banks. The basis of these warnings emphasizes several points; firstly, the high volatility of this market and the lack of supervision over organizations and institutions that facilitate cryptocurrency transactions (Chuen, 2015). Also, most countries warn their citizens that if they enter the market, they should accept the risk of these transactions and do not answer them in case of any loss.

One of the concerns of governments in taxation is the income tax arising from their transactions, and the question is whether the profit obtained from the extraction or sale is considered the profit or income of a company (MacCarthy, 2010). In 2015 the E.U. court of justice announced that the profits made by investment in E.U. countries would not include value-added taxes. Nevertheless, most countries are already developing laws to be exempt from taxes (Szczepański, 2014). Some countries, such as Russia, have also announced that it will be taxed to extract more energy than permitted.

In recent years, cryptocurrency became a new phenomenon in Iran. Fluctuations in exchange markets and gold and the frequent decline in the stock index led some micro investors to enter this market. Government procrastination has puzzled the activists for presenting clear and applicable laws. In January 2018, Iran banned the use of bitcoin and other cryptocurrencies in all of the country's economic and financial centers, which means that all banks and outlets with license fees do not have the right to buy and sell.

After two years, the cabinet of ministers agreed to extract the processing products encrypted as an industrial activity subject to obtaining permission from the ministry of industry, mining, and trade. In March 2020, the first draft law on cryptocurrency and digital currency was published. The draft law says that only the central bank of Iran and its admitted banks can create a cryptocurrency with the support of the riyal. In September of the same year, it announced that it was ordered to shut down the exchange bureaus due to cryptocurrencies activities.

In recent months, the frequent power cuts, which many experts said were the result of the extraction, led Iran's president to withdraw cryptocurrency extraction until the end of August, even for authorized centers. The latest decision on the final policy to deal with cryptocurrencies should be taken so that the players in this field would eventually know their situation and also the country has equal and proper law and instruction for this market.

Iran's opportunities and challenges

The comprehensive study of the advantages and disadvantages of cryptocurrencies is vital for the policy in the first place, recognizing the advantages and threats. In the second place, lawmakers aim to design the laws and preventive measures, and control methods. Furthermore, all the advantages and challenges of cryptocurrency in Iran are extracted comprehensively.

Opportunities of cryptocurrencies

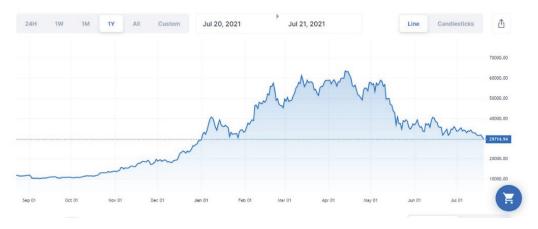
- 1. Freedom in payment and international access. There is no limitation in the cryptocurrencies of payments, such as the high transfer cost and no intermediary in payment. This money can be paid to anyone globally without the intermediate entity's fees and high speed (Halaburda, Sarvary, 2016). This capability can be a unique advantage for a country like Iran because of sanctions and interference from foreign countries on the international level.
- 2. Low transaction cost. The disadvantages of conventional payment systems at the international level are transaction costs received by the intermediary entities, but in cryptocurrencies payment systems such as bitcoin, there are deals without additional payment¹ (Cuthbertson, 2014).
- 3. High speed in international and cross-border transfers: this system accepts individuals and is generally transferred in less than 10 minutes from individual accounts to another person.
- 4. The lack of creating money in the economy and inflation control: given that the creation of money is not feasible according to the mechanism defined in bitcoin, no more than 21 million units, and this type of money is not at the disposal of the central bank, there is no possibility of generating money, thus not increasing cash or inflation. In countries where the Central Bank does not have independence and government financial sovereignty, the volume of money may be increased due to the deficit of state budgets in the economy (Polasik et al., 2015).
- 5. The use of cryptocurrencies in an embargo on Iran: one of the advantages of cryptocurrencies for the Iranian economy is the use of it in terms of bank sanctions, as it is the same as is stated, cryptocurrencies are a kind of private currency, and no entity can intervene in its markets. The sender and receiver in this system are also non identification and international sanctions cannot be readily available at the expense of Iranian financial institutions (Evans, 2015).
- 6. The inability of governments to confiscate and block: in many countries in specific political and economic conditions, governments attempt to confiscate the property and assets of individuals, as well as in the civil status of the United States (freezing of assets). This security in the cryptocurrencies structure is as possible, and individuals' and states' rights are preserved to aggression and interference of others.

¹ Cuthbertson, A. (2014). Cryptocurrency round-up: Bolivian Bitcoin Ban, iOS Apps & Dogecoin at McDonald's. *International Business Times*. Retrieved November 14, 2020, from https://www.ibtimes.co.uk/cryptocurrency-round-bolivian-bitcoin-ban-ios-apps-dogecoin-mcdonalds-1453453

7. The comparative advantage of extraction: due to the low price power of energy in Iran and some countries, it is more economical to extract cryptocurrencies, and it can make the profitability frame for the country (Kelly, 2014).

Challenges and risks of cryptocurrencies. The most critical issue in the policy process for an emerging phenomenon is recognition of its consequences. So, the legislator and policymaker should have complete dominance on all aspects of the cryptocurrencies challenge. In this section, try to identify the challenge of cryptocurrency in Iran's economy.

1. Price fluctuations and instability. The price of the cryptocurrencies, for example, bitcoin, has been faced with many ups and downs so that over a year, from less than ten thousand to over dollar fifty thousand (Figure).



Bitcoin price fluctuations, 2020-2021

Source: compiled by the author based on blockchain.info

- 2. The lack of clear rules and regulations: cryptocurrency, compare to traditional money, does not have transparent laws and regulations, and it can open up to a severe challenge for every state as it opens the way for criminal activity, money laundering (Cheung et al., 2015).
- 3. The economy threat: where real and virtual money is found, virtual money can stimulate demand in the real world. Other contributing factors to monetary policy can also be affected by this way.
- 4. It is not clear that the sender and receiver identity: this money uses the encrypted mechanism to provide security, so there is no transmitter or receiver frame. For instance, the criminal receives the money without being able to follow up. It can be a privilege and opportunity for Iran during the boycott without being identified too.
- 5. Weakening the central bank and intermediary entities: with the prevalence of cryptocurrencies, the central bank in the country's markets become pale, and this could be a severe risk for the monetary and financial system of a country, as there is no room for monetary policy to apply and there will be no monitoring of daily transactions (Narayanan et al., 2016).
- 6. The possibility of tax evasion, money laundering, and development informal economic part: due to the encrypted nature of the money and not identifying the transaction parties, there is an incentive to transfer part of the revenues and maintain income and savings by the system. This tax evasion leads to a decrease

in government power and provides the ground for informal economic development. Moreover, offenders can be permitted to enter the country's financial system through the money laundering process regarding the mechanism of virtual money.

- 7. The occurrence of security problems: in crypto money, if the user lost his account and password, his money will be lost forever. In the current standard banking system, an individual does simple to his bank or decrypt it, and it is easily retrieved from his identity documents to the bank and restores his private key (Vigna, Casey, 2016).
- 8. The inheritance problem: in the existing bank system, if the accounts' owner has died, it will be possible for heirs to have access to the dead person's account through legal procedures. While in the cryptocurrencies system, access to a person's account is only possible with having the money bag address and the password, there is no mechanism to obtain it to their heirs.
- 9. Jurisprudential challenge: one of the critical issues of any new phenomenon in the Iranian economy is sharia, whether it is legitimate or not? It is also would happen to in cryptocurrency. So far, the Shiite clerics have no definite opinion regarding the use of cryptocurrency money, and the ground is to take action as soon as possible. However, some of the other Islamic sects have expressed their views on virtual reality. Some researchers believe that money is more compatible with the prohibition of usury because of the impossibility of creating more money in the banking system (Evans, 2015).
- 10. Uncertainty in cryptocurrency: one of the fundamental challenges of cryptocurrency worldwide is ambiguity in its real nature. Can a cryptocurrency play its role following the definition of what is expected from anything that the general public will use to pay for a purchase? Some cryptocurrency assets are considered money, and they believe that cryptocurrency has three main functions of money. According to some economic experts, only objects can be considered money widely used in communities. Only in these forms can be able to play three main functions of money. As a result, cryptocurrency can be used as money that is widely used in a wide range, and this issue has been exposed to date due to the sharp rise in the prices of cryptocurrency. There is an increasing growth in the use of cryptocurrency, which in the case of continuing this trend can be realized that shortly the use of these currencies will be realized, followed by price inflation (Yermack, 2013).
- 11. Failure to maintain the value. One of the severe problems with maintaining cryptocurrency is that they do not retain their value over time. The minimum waiting for the buyers is that they can spend it in the future and receive that in moderate fluctuations.
- 12. The high energy consumption: the higher the number of bitcoin extractors, the more electricity is needed to confirm the transactions and the mining process, resulting in a waste of energy dissipation at the macro level.

Use of cryptocurrency in e-business

With the warming of the cryptocurrency market and investors' propensity to it, some e-businesses also experience entering this arena. The use of cryptocurrency has attracted the attention of businesspeople. Over the past few years, many economists have investigated the digital revolution's impact on the banking and monetary system and the macroeconomy. Although much electronic banking and

electronic money have contributed to this technology, there is still a vague notion of cryptocurrency. Initially, the value of the cryptocurrency compared to other currencies was insignificant, but now its use and value are significantly increased (Tapscott, Tapscott, 2016).

In the current situation and because of sanctions, the agents of transferring money into the country are complicated; while the Western governments are following the policy of limiting Iran access to the global banking system and currencies such as dollars and euros, cryptocurrency allows easier access to Iranian users to global markets.

Although these countries continue their crackdown on financial matters, the decline of governments' direct access to cryptocurrency has led to the relatively easy purchase of virtual goods and services through cryptocurrencies for Iranians (Rezaeinejad, Chernikov, 2021).

Foreign currencies are bought out of the country by paying real money, but due to the virtual exchange of these currencies and the non – exchange of foreign governments in recognition of the use of foreign currencies. For these Iranian users, they can buy from virtual markets like iTunes and iStore.

With the advent of cryptocurrencies and removing boundaries of money transfer, even Iranian users could sell their products and services to international markets. For example, Iranian designers, graphist, and programmers could get the order from the outside country and get wages from cryptocurrencies.

Designing the conceptual framework for cryptocurrency in the Iranian economy

Despite its pros and cons, cryptocurrency also poses threats to governments and they have to deal with this phenomenon. This is very difficult because the monitoring is not possible by one state body, and that is why some countries have forbidden the use of this money. Due to the nature of the cross-border nature of this kind of funds, the status of international standards could be very much functional.

According to the stated cases in challenges and opportunities, it can be classified into four main pivots. These four axes include Theoretical and knowledge problems, macroeconomic threats, cybercrime, and capital security issues.

- 1. Theoretical and knowledge problems: the first case in this axis is to determine the nature of virtual reality by faculty members and professors as a commodity or money. The operational consequences of this discussion will be found in the codification of tax codes and the extraction of rules. It is also clear that people and the lack of documentation for filing lawsuits are among the other issues of the first axis, which should be considered a solution to these issues.
- 2. Capital security issues: the sense of absence of capital security is a sense of insecurity that the general public does not buy despite the dramatic price growth of digital currencies such as bitcoin. Issues such as hack and forgot passwords, the hacking of the wallet, the trap of fraud exchange bureaus have led to such feelings. In addition, the existing companies that provide the wallet are not highly trustworthy and have been observed in several cases. In the face of these problems, some financial or legal powers of the country could play an essential role in reducing the risk and increase trust.

- 3. Cybercrime: violations and social crimes, tax evasion, and money laundering are among the main challenges globally, including Iran too, so its need to put laws and rules for combating Money Laundering and implementing it can play an influential role in dealing with this issue.
- 4. The threat of the macroeconomic policy: the absence of the ground tool to apply monetary policies, the threat of the real economy by offering cryptocurrency, and the lack of a suitable solution to mobilize resources from the economic capital and allocate them to economic growth, which will threat different entities including the Ministries of Economy and Finance and the Central Bank of Iran. The risk of cryptocurrency investment is numerous. Therefore, it is impossible to cover all these threats in cryptocurrency purchasing, and no institutions will be responsible for it. So, it is possible, Like the Tehran stock exchange, these currencies, by designing a market for these currencies, reduce investors' risk. Also, the outflow of foreign exchange from the country and the loss of energy can be considered threatening factors in the Iranian economy.

Conclusion

Cryptocurrencies have features that make them more useful, especially in international exchange, so it is necessary to determine the advantages and challenges of using them, given the entirely different nature of the money, and legislators can enact some regulations as quickly as possible in response to this money. This is what most developed countries have done, some considered it a severe risk and declared the use of it illegally, and some considered it an asset and imposed a tax code on it. The other group has not shown any official response to cryptocurrencies. Iran has not yet announced an official position on cryptocurrencies. Therefore, the country's financial and legal authorities need to put laws to avoid the risks of buying and selling cryptocurrencies, such as money laundering, tax evasion.

Also, in the current situation of electronic commerce, many people use virtual and cryptocurrencies to carry out their exchanges. Despite the fact that banking restrictions created by the United States, cryptocurrencies and the virtual environment have provided financial markets and businesses access internationally. Cryptocurrencies can provide an opportunity for Iranian entrepreneurs to enter the international arena and international competition. Therefore, it is vital that the government or public organizations raising awareness about cryptocurrencies will also contribute to the prosperity of businesses and prevent criminals from exploiting the conditions.

References

- Antonopoulos, A.M. (2017). *Mastering bitcoin: Programming the open blockchain* (2nd edition). O'Reilly Media.
- Atli, D. (2017). Cybercrimes via virtual currencies in international business. *Cybersecurity Breaches and Issues Surrounding Online Threat Protection* (pp. 121–143). IGI Global.
- Böhme, R., Christin, N., Edelman, B., & Moore, T. (2015). Bitcoin: Economics, technology, and governance. *Journal of Economic Perspectives*, 29(2), 213–238.
- Cheung, A., Roca, E., & Su, J.J. (2015). Crypto-currency bubbles: An application of the Phillips Shi Yu (2013) methodology on Mt. Gox bitcoin prices. *Applied Economics*, 47(23), 2348–2358.

- Chuen, D.L.K. (Ed.). (2015). Handbook of digital currency: Bitcoin, innovation, financial instruments, and big data. Academic Press.
- Ciaian, P., Rajcaniova, M., & Kancs, D.A. (2016). The digital agenda of virtual currencies: Can BitCoin become a global currency? *Information Systems and e-Business Management*, 14(4), 883–919.
- Dibrova, A. (2016). Virtual currency: New step in monetary development. *Procedia-Social and Behavioral Sciences*, 229, 42–49.
- Evans, C.W. (2015). Bitcoin in Islamic banking and finance. *Journal of Islamic Banking and Finance*, 3(1), 1–11.
- Garg, S. (2018, December). Autoregressive integrated moving average model based prediction of bitcoin close price. 2018 International Conference on Smart Systems and Inventive Technology (ICSSIT) (pp. 473–478). IEEE.
- Halaburda, H., & Sarvary, M. (2016). *Beyond bitcoin: The economics of digital currencies*. Springer.
- Kelly, B. (2014). The bitcoin big bang: How alternative currencies are about to change the world. John Wiley & Sons.
- MacCarthy, M. (2010). What payment intermediaries are doing about online liability and why it matters. *Berkeley Technology Law Journal*, 25(2), 1037–1120.
- Moore, T. (2013). The promise and perils of digital currencies. *International Journal of Critical Infrastructure Protection*, *3*(6), 147–149.
- Nakamoto, S. (2008). Bitcoin: A peer-to-peer electronic cash system. *Decentralized Business Review* (pp. 1–9). Satoshi Nakamoto Institute.
- Narayanan, A., Bonneau, J., Felten, E., Miller, A., & Goldfeder, S. (2016). *Bitcoin and cryptocurrency technologies: A comprehensive introduction*. Princeton University Press.
- Parino, F., Beiró, M.G., & Gauvin, L. (2018). Analysis of the bitcoin blockchain: Socioeconomic factors behind the adoption. *EPJ Data Science*, 7(1), 38.
- Polasik, M., Piotrowska, A.I., Wisniewski, T.P., Kotkowski, R., & Lightfoot, G. (2015). Price fluctuations and the use of bitcoin: An empirical inquiry. *International Journal of Electronic Commerce*, 20(1), 9–49.
- Rezaeinejad, I., & Chernikov, S.U. (2021). Impact of COVID-19 on Iran startups at biotech, pharmaceutical, engineering, and other innovative industries. S.H.S. Web of Conferences, 114, 01018.
- Szczepański, M. (2014). Bitcoin: Market, economics, and regulation. *European Parliamentary Research Service*, 11(4), 43–78.
- Tapscott, D., & Tapscott, A. (2016). Blockchain revolution: How the technology behind bitcoin is changing money, business, and the world. Penguin.
- Vigna, P., & Casey, M.J. (2016). The age of cryptocurrency: How bitcoin and the blockchain are challenging the global economic order. Macmillan.
- Yermack, D. (2013). *Is bitcoin a real currency? An economic appraisal*. Working Paper 19747. National Bureau of Economic Research. https://doi.org/10.3386/w19747

Сведения об авторе / Bio note

Резаинеджад Исмаэль, аспирант, кафедра маркетинга, экономический факультет, Российский университет дружбы народов. E-mail: 1032205254@rudn.ru

Ismael Rezaeinejad, PhD student, Department of Marketing, Faculty of Economics, Peoples' Friendship University of Russia (RUDN University). E-mail: 1032205254@rudn.ru