



#### **Conference Paper**

# ICO as Economic Security Threat. Possible Risks Analysis. Experience of Foreign States

#### Vorobyev A. V.

National Research Nuclear University MEPhI (Moscow Engineering Physics Institute), Kashirskoe shosse 31, Moscow, 115409, Russia

#### **Abstract**

In this paper the definition of ICO as a type of economic activity is given, its advantages and disadvantages, the risks associated with this activity are considered. The experience of foreign countries on this issue is studied.

**Keywords:** ICO, initial coin offering, money laundering, counteraction to money laundering, blockchain.

Corresponding Author: Vorobyev A. V. vorobyev sasha@icloud.com

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#### 1. Introduction

In recent months, the headlines of news Internet publications tell about the next ICO, attracted millions, or even tens of millions of dollars. Interest in this phenomenon is increasing every day. ICO or initial coin offering is a form of attracting investments by selling to investors a fixed number of new units of cryptocurrencies received by a single or accelerated emission [1].

ICO has become one of the most sought-after sources of revenue for projects that work based on blockchain technology. According to Smith + Crow, more than \$ 1 billion was attracted worldwide through the ICO for 2017 [2]. Such high-yielding projects are interesting to investors, so they invest in new projects, buying their tokens (units of the cryptocurrency) issued on the ICO to:

- 1. Get a profit after reselling the tokens at a higher price after a while
- 2. Use the services of this project at a lower price

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3. Provide material support to the project of interest



For example, investors who invested in the Etherium cryptocurrency project during the ICO in 2014 at a price of 0.3-0.4 \$ per token, today have a profitability of this project above 50,000%, because the cost of one token now exceeds \$ 200.

As it is known from economic theory, large incomes are based on high risks. This case is not an exception from this rule. Because of the great excitement and huge cash flows that flow into the various blockchain projects, this sphere has become one of the most popular for earnings among scammers who are speculating on user's enthusiasm for the digital currency ecosystem. Thus, the amount of financial fraud with the cryptocurrency of Etherium reached the level of 225 \$ million. About 30 thousand people became victims. Each of them sent about \$ 7,500 to fraudsters on the pretext of investing in the cryptocurrency. A reasonable question about the state regulation of this activity appears, as it is completely absent today in the Russian Federation. There is a huge risk of laundering of criminal proceeds and the financing of terrorism. In this paper, the influence of the "initial coins offering" on the economic security of the state and the experience of foreign countries will be examined.

#### 2. Material and Theoretical Bases of Research

ICO is the release of a new cryptocurrency that is characterized by pseudo-anonymity, decentralization and encryption, which makes it difficult to track the transaction, as well as to identify the persons involved in its implementation (sender and receiver). Anyone who has a digital wallet and access to the Internet can become a part of this system. This creates a certain threat associated with the risk of money laundering and terrorist financing.

Theoretically, it is possible to track who performed the transaction: every transaction committed on the block-platform transaction is registered in a magazine open to the network participants and each participant of the operation is assigned its unique ID-number, so law enforcement agencies have the opportunity to identify any participant. Nevertheless, the problem is that the transactions in the block-platform are much faster than the traditional banking ones, and due to the lack of government regulation, various cryptocurrencies and exchanges appear and disappear with a high speed, so that law enforcement agencies simply cannot track all the changes.

Nowadays, ICO is a convenient way to launder profits proceeded from crime. There is one of many schemes:

1. Innocent Citizen A buys into an ICO of Token because he hopes it will be appreciated



- 2. Citizen A could either sell his supply of Token on a major exchange (which is spending money to record customers' information to be compliant for regulators), or he could go to a fly-by-night exchange where the prices are better
- 3. The prices are better on that second exchange because would-be money launderers are willing to pay a premium to wash their funds
- 4. Citizen B, who is looking to make his dirty money appear clean, buys token from Citizen A
- 5. Citizen A makes more money than he would have at a more regulator-friendly exchange, and Citizen B now has token that is not tied to a criminal enterprise [3].

ICO is often compared to an IPO (initial public offering). When people buy shares through IPO, the buyer becomes the owner of a certain share of the company, and when purchasing tokens through ICO, buyers do not acquire any corporate rights of the organization, in fact paying money only for promises. Before the IPO, the company must register all issued securities in accordance with the law, disclose information about the beneficiaries, and all information about the company undergo mandatory audit. In addition, investors who participate in trades on IPO must be qualified specialists who have been properly tested for possession or management of "dirty money". These requirements are not met at ICO, which establishes a low entry threshold for this ecosystem for suspicious entities related to generating income from illegal activities or terrorist financing [4].

Thus, there is a need to settle this economic environment. It is necessary to introduce regulatory mechanisms for issuing digital money in order to protect potential investors and reduce the risk of money laundering.

The government should set certain legal boundaries within which issuers can continue their activities. So, for example, each issuer must be officially registered, information about the beneficiaries must be disclosed. This will make the market more transparent, but anonymity (the main advantage of the cryptocurrency market) is lost. Organizers and investors often do not want to disclose their income. In our country, strict legislative regulation can frighten new fintech projects that will decide to register and operate in offshore countries, which will lead to capital outflow. On the other hand, the introduction of reasonable restrictions in the cryptocurrency market will allow clearing the market of incompetent and dishonest issuers reduce the risks of fraudulent schemes, as well as too risky and unreliable projects, which will strengthen the confidence of ordinary citizens as potential participants in the digital money market.



In addition, the introduction of legal mechanisms implies proper verification of clients, which will at the initial stage limit access to financial transactions for suspicious entities whose revenues can be associated with illegal activities. But the market for cryptocurrency is only at an early stage of its development, and taking strict measures to regulate it can be detrimental, it is necessary to let the system develop autonomously, to gain the necessary critical mass, after which the system will independently get rid of weak elements. This can be compared with the emergence of a market economy in our country: at first, the market accepted all comers, but with the emergence of competition, only the strongest players remained, who were able to provide customers with an appropriate level of service and reasonable prices.

We can see a market that allows start-ups, which often have only a website and a very streamlined declaration of intent, to attract millions of dollars for minutes and to bear minimal responsibility for their future destiny has emerged. Not surprisingly, it attracted the attention of regulators around the world [5].

A number of foreign countries have already taken various measures on this issue. The Bank of China decided to suspend all exchanges dealing with cryptocurrency transactions, and stated that the initial placement of coins is an illegal operation. In this regard, all the ICO's should be stopped immediately, the ICO, which has already passed, will be subjected to a thorough check by law enforcement agencies, and issuers will be obliged to return all funds to investors. China's ban in the short term will lead to a redistribution of ICO investors' funds from Chinese to other markets, such as Singapore or new jurisdictions for ICO [6]. Experts believe that in the long term, the regulation of the ICO should and can appear in China; in this case, the investors' interest to the Chinese market will return [7].

Following the Chinese counterparts, the South Korean regulator banned ICO and all types of operations with digital money due to an increased risk of fraud and money laundering through the ICO. The financial regulator (FSC) pointed to the need for strict control over trade operations with cryptocurrencies and warned that penalty sanctions would be applied to all participants in the release of new cryptocurrency [8].

The Securities and Exchange Commission (SEC) issued a warning to market participants in which it indicated that transactions conducted with the help of blockchain technology ("primary coins offering" and "sale of tokens" - ICO) are required to comply with federal securities laws [9, 10]. The SEC took this decision after investigating the hacking of the decentralized fund "The DAO", which occurred in July 2016. Then the attackers stole a part of the tokens for about \$ 50 million.



This means that each issuer will be required to register with the regulatory authorities, as well as register all transactions. In addition, investors will also lose their anonymity and will have to provide information about themselves when registering the transaction, in order to be subjected to regulatory control to protect investors [11].

A similar decision was made by the central bank and the Singapore financial regulator (MAS), which announced their intention to consider certain digital tokens as securities, depending on their basis and the context of their release. MAS noted that the function of digital tokens is not limited to cryptocurrency. For example, they may be a property or security interest in the assets or property of the issuer. Thus, tokens pass into the sphere of regulation of the Securities Commission of Singapore. According to the statement of the Central Bank, if the digital token falls under the definition of a local legislation, issuers are required to apply for registration in MAS before the start of the ICO. Moreover, they need to be licensed, just as traders. Secondary market operators for digital tokens must also obtain permission from MAS. "All issuers of digital tokens, intermediaries who provide assistance or provide advice on the offering of digital tokens and platforms that promote the trade in digital tokens, should receive independent legal advice to comply with the laws. If necessary, they should consult the MAS, "emphasizes MAS [12].

The Russian authorities have not yet submitted an official statement regarding the state's position regarding the ICO, but there are already some data about losses in the Russian economy from ignoring this issue. The Russian Association of Cryptocurrency and Blockchain estimated the losses of the Russian economy from the absence of legislative regulation of the ICO in 18 billion rubles from the beginning of 2017. The data is based on the ICO parameters of Russian residents that were conducted in foreign jurisdictions during January-October. Another 3.5 billion rubles were not received from the beginning of the year in the federal budget as tax revenues, the Russian Association of Cryptocurrency and Blockchain noted [13]. The president instructed the government to develop the necessary provisions for determining the legal status of digital money, to develop regulations for the taxation of "miners", as well as rules on public attraction of money and cryptocurrency through the ICO, similar to the regulation of the initial placement of securities. The target date is July 1, 2018. As we can see, a number of countries with leading rates of economic growth have already taken necessary measures to regulate this sphere by the autumn of 2017 and, possibly, 3 quarters of Russia's backlog will have negative consequences associated with the next losses of capital in the Russian economy, as well as the risk of new fraudulent schemes associated with deception of private investors and money laundering [14].



### 3. Conclusion

The market of cryptocurrency is a rapidly developing industry, and ICO is an important stage in the transition to a new world economy. At the moment, the ICO market in Russia has exceeded the volume of venture investments by 2 times, but unlike a number of foreign countries, the issue of state regulation of this activity remains open until now, which creates a threat to the country's economic security because of the risks associated with the presence of unscrupulous companies-emitters, money laundering and an increasing level of fraud in this area.

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#### References

- [1] «Investopedia» Internet media [Web-source]. URL: http://www.investopedia.com (date of the handling 05.11.2017).
- [2] «Smith + Crown» интернет СМИ [Web-source]. URL: http://www.smithandcrown.com (date of the handling 05.11.2017).
- [3] «CNBC» Internet media [Web-source]. URL: https://www.cnbc.com/2017/08/04/icos-may-be-seen-as-securities-by-u-s-and-singapore-regulators.html (date of the handling 05.11.2017).
- [4] «RBK» Internet media [Web-source]. URL: http://www.rbc.ru/finances/31/07/2017/5978b37d9a7947f318d949be (date of the handling 25.10.2017).
- [5] «Insider» Internet media [Web-source]. URL: https://ru.insider.pro/investment/2017-09-19/ico-v-rossii-tekushaya-situaciya-i-budushee-rynka/ (date of the handling 05.11.2017).
- [6] «RIA» Internet media [Web-source]. URL: https://ria.ru/economy/20170906/ 1501932749.html (date of the handling o5.11.2017).
- [7] «RBK» Internet media [Web-source]. URL: http://www.rbc.ru/money/04/09/2017/59ad1d529a79474e01c39333 (date of the handling o5.11.2017).



- [8] «Reuters» Internet media [Web-source]. URL: http://www.reuters.com/article/us-southkorea-bitcoin/south-korea-bans-raising-money-through-initial-coin-offerings-idUSKCN1C408N (date of the handling 05.11.2017).
- [9] «RBK» Internet media [Web-source]. URL: http://www.rbc.ru/finances/26/07/2017/5978309f9a7947ab4451167d?from=materials\_on\_subject (date of the handling o5.11.2017).
- [10] Website of the US Securities and Exchange Commission [Web-source]. URL: https://www.sec.gov/news/press-release/2017-131 (date of the handling 05.11.2017).
- [11] «RBK» Internet media [Web-source]. URL: http://www.rbc.ru/finances/26/07/2017/5978309f9a7947ab4451167d?from=materials\_on\_subject (date of the handling 05.11.2017).
- [12] «Bits Media» Internet media [Web-source]. URL: https://bits.media/news/tsb-singapura-ico-mozhet-podpadat-pod-zakon-o-tsennykh-bumagakh/ (date of the handling 05.11.2017).
- [13] «RNS» Internet media [Web-source]. URL: https://rns.online/economy/RaKIB-otsenila-poteri-ekonomiki-ot-zarubezhnih-ICO-rossiiskih-kompanii-v-18-mlrd-rublei-2017-11-01/ (date of the handling 25.10.2017).
- [14] «ROEM» Internet media [Web-source]. URL: https://roem.ru/24-10-2017/261993/bitok-posle-vyborov/ (date of the handling 25.10.2017).