**Possibility of using reversible blockchain transactions in modern economics**

***Семенов А.А.***

*Студент*

*ФГБОУ ВО «Владимирский государственный университет имени Александра Григорьевича и Николая Григорьевича Столетовых»*

*Институт Экономики и Туризма, Владимир, Россия*

*E-mail:* *aleksejsemenov@internet.ru*

During the period of sanctions pressure and restrictions in banking transactions between business entities from unfriendly countries, the possibility of making international payments using blockchain technologies is gaining popularity. The Russian Ministry of Finance announced the possibility of adopting a bill that would allow foreign trade payments to be made in cryptocurrency in the near future [1]. Demand for business transactions in crypto assets could reach 4 trillion rubles in 2024 [2]. Blockchain technologies have great importance in such economic reality, but it still hasn’t got a special legislation to regulate cryptocurrency operations.

One of the main principles of blockchain is irreversibility of transactions, described in the Bitcoin technical document [3, p. 2]. This feature made it possible to avoid the so-called double spending problem, the essence of which was the ability to spend the same funds more than once in one-time interval. However, for this reason, the funds stolen by the attackers will also not be returned to the victim's wallet. Scientists at Stanford University have proposed the concept of reversible tokens that could cope with this problem [4].

The solution of Stanford scientists Kylie Wang, Dan Bonhe and Qingchen Wang helps to neutralize the above problems at the technical level without using a centralized regulation. They developed tokens ERC-20R and ERC-721R on the Ethereum blockchain, which are analogues of ERC-20 and ERC-721. Their distinguishing feature is the possibility of canceling the transaction and returning the funds to the sender's wallet.

Conducted research, depicted some advantages of ERC-721:

* activation of freezing (blocking) funds mechanism after a corresponding request from any of the subjects of the monetary transaction;
* making a verdict on the return of assets to the sender's account using the technology of a decentralized autonomous organization (DAO) throughout the voting of its members;

The comparative analysis, was made, of the usual transactions concept and analogues with a return function showed vulnerabilities of the modern alternative:

* absence of protection of sellers' rights through the impossibility of multiple use of the token was acted in transaction;
* due to the possibility of automatic blocking of funds after each application, many assets can be frozen, which will lead to an abrupt change in the supply of coins and increase the volatility of their rates,

Based on the results of the analysis, in order to solve these problems, was proposed solutions to the problem of increasing prices volatility through set a dynamically variable commission for accepting an application, depending on the value of the token supply on the market and network congestion. Such mechanisms are used on decentralized exchanges.

It is possible to conclude that the reversibility of transactions in the cryptocurrency sphere can reduce the number of funds stolen and sent to erroneous addresses. At this stage of development, the technology requires improvements to solve the problem of asset freezing. The implementation of a well-developed system of reversible transactions will allow users to trust the field of digital assets, which will attract additional investments into it.

**Литература**

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