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Some risks of tokenization and blockchainization of private law

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ABSTRACT

The paper focuses on the analysis of the problems that may be driven by mass tokenization of the objects of civil law, i.e. the creation of a digital representation of such objects in the form of a record in blockchain. This occurs where the value of such objects is transferred subsequently by means of disposal of such tokens, which is a subject of separate rights to it. The paper outlines two core problems, which were inspired by recent legislative activities in Belarus and Russia. The first is a possible displacement of existing legal regimes of objects of civil rights by the legal regime of the token. Secondly, the problem of definition of the nature of rights to tokens arises (in rem versus ad personam) as well as remedies for their violations. Provisions of the Belarus Decree “On the development of digital economy” of 21 December 2017 and drafts of the laws on blockchain and ICO, discussed in Russian Parliament and Government are taken to illustrate these problems.

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1. Introduction

Blockchain has become a buzzword and this technology continues to attract attention from business, government and lawyers. Sometimes, it is referred to as “the cornerstone of trust for the digital society in the future”.¹ The popularization of blockchain technology and ongoing attempts to implement it in various areas of life has resulted in the emergence of new peculiar objects, such as cryptocurrencies, tokens and smart-contracts, which pose substantial challenges to their legal regulation. These questions have already received coverage in multiple legal papers. However, such objects as the “token” deserve extra analysis, due to the recent developments in Belarus and Russian law and its potential impact on the overall structure of civil law. It may not only be relevant for these

countries but for any jurisdictions that decide to reproduce the ideas reflected here. Specifically, special legal regimes that implement this object into the economy have the potential to absorb current legal regimes, such as contractual provisions relating to specific types of contracts, consumer law protection, security laws and other similar regimes. This potential is realised by the essence of this technology: digitalization of existing objects of rights and simplification of the process of contracting with them. The original subject matter of the contract is replaced by its digital manifestation: a “token”. This is designed to facilitate the effectiveness of transactions by minimizing their costs. However, the nature of rights to such objects remains unclear: are tokens “rights in rem” or “rights ad personam”? In other words, is a right to a token a right “erga omnes” (“against the whole world”) or not. Depending on the

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¹ Helen Partz, CEO Of Ant Financial: Blockchain ‘Is The Cornerstone Of Trust For The Digital Society In The Future’, 27 March 2018. URL: <https://cointelgraph.com/news/ceo-of-ant-financial-blockchain-is-the-cornerstone-of-trust-for-the-digital-society-in-the-future>.

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answer to this question, available remedies and other aspects of the legal regime will be defined, e.g. bankruptcy and conflict of laws. These issues are at the core of the analysis in this paper.

2. What is token?

The word “token” is of Germanic origin and is generally defined as “[a] thing serving as a visible or tangible representation of a fact, quality, feeling, etc.”² Black’s law dictionary defines a token quite similarly as a “sign or mark; a tangible evidence of the existence of a fact” and also as “a coin or other legal tender” with a potential to denote also a “bill or other medium of exchange”.³

In certain contexts the term “token” may have a more specialized meaning, attributed to it by a legal act. For example in Article 14 of the UK Consumer Act 1974:

[a] credit-token is a card, check, voucher, coupon, stamp, form, booklet or other document or thing given to an individual by a person carrying on a consumer credit business, who undertakes (a) that on the production of it (whether or not some other action is also required) he will supply cash, goods and services (or any of them) on credit, or (b) that where, on the production of it to a third party (whether or not any other action is also required), the third party supplies cash, goods and services (or any of them), he will pay the third party for them (whether or not deducting any discount or commission), in return for payment to him by the individual.

Thus, the concept of the token, within the context of consumer credit arrangements, serves as evidence of an unconditional right of a consumer to receive a certain performance from the other party.

Recently the term “token” has become a buzzword, frequently used in discussions and publications relating to blockchain and so-called Initial coin offerings (ICO). It serves as an important element of the blockchain ecosystem. However, there is still no generally accepted definition of a token in the blockchain context. To some extent, it is driven by the fact that the technology is still developing, but mostly it is due to the diversity of the various types of tokens. Nevertheless, there is a certain degree of consensus on the classification of tokens.

For example, the Swiss financial regulator FINMA categorises tokens into three types depending on their actual function:

- Payment tokens are synonymous with cryptocurrencies and have no further functions or links to other development projects. Tokens may in some cases only develop the necessary functionality and become accepted as a means of payment over time. The most evident examples of such tokens are Bitcoin and Ether.
- Utility tokens are tokens which are intended to provide digital access to an application or service.

- Asset tokens represent assets, such as participation in physical stock, companies, or earning streams, or an entitlement to dividends or interest payments. In terms of their economic function, these tokens are analogous to equities, bonds or derivatives.

FINMA also notes that hybrid forms are also possible.⁴ For example, Ether is a token used as a fee for smart contracts execution in Ethereum public blockchain as a utility token, but due to its high liquidity is also used as a payment token.

Based on the above it is possible generally to define a token as a kind of a digital asset, which exists in the blockchain ecosystem, and is bundled with the right to use it.

3. Tokenization of objects of civil law

The aforementioned definitions of token and their classification demonstrate that almost any object of a right can be tokenized and registered in the blockchain. As a result, its subsequent disposal will be performed by means of disposal of its digital “alter-ego” (token). This will be in accordance with the rules established by the architecture of the blockchain system at hand and subject to any special legal regimes for tokens established in a particular jurisdiction. Potential benefits of a special approach to passing the title to such objects include a decrease in transaction costs. This occurs by means of automatization of the contracting process by using smart-contracts, increased security of such transactions and their transparency. Clear titles facilitate trade and minimize resource-wasting conflicts. Existing literature on blockchain is full of optimism in this regard. For example, Melanie Swan indicates that blockchain may become a *the seamless embedded economic layer... serving as the technological underlay for payments, decentralized exchange, token earning and spending, digital asset revocation and transfer, and smart contract issuance and execution*.⁵ William Mougayar argues that decentralized networks enable trading of any digital assets, financial instruments or real-world assets, represented in the form of a token.⁶

However, if all these promises come true, it will lead to a number of problems with existing regulation of transfers of such assets. Tokenization may, at some point, absorb such regulation and replace it with a new legal regime applicable to tokens, just as the legal regime of a security replaces the legal regime of a right embodied in it when it comes to transferring such a right. Moreover, governance of tokens consists not only of legal regulation, but mostly of code and contractual terms, formulated in terms of use and other similar contracts for adhesion-type agreements. As Bygrave notes “contracts provide the primary legal rules for governing many of the digital

⁴ FINMA Guidelines for enquiries regarding the regulatory framework for initial coin offerings (ICOs) 16 February 2018. P. 3. URL: <https://www.finma.ch/en/news/2018/02/20180216-mm-ico-wegleitung/>.

⁵ Melanie Swan, *Blockchain: Blueprint for a New Economy*. O’Reilly, 2015. P. vii.

⁶ William Mougayar. *The Business Blockchain: Promise, Practice, and Application of the Next Internet Technology*. Wiley, 2016. P. 90.

² <https://en.oxforddictionaries.com/definition/token>.

³ Black’s Law Dictionary. West, 2011. P. 1625.

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