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## CRYPTOCURRENCIES IN THE POLISH LEGAL SYSTEM – BASIC PROBLEMS AND CHALLENGES

### KRYPTOWALUTY W POLSKIM SYSTEMIE PRAWNYM – PODSTAWOWE PROBLEMY I WYZWANIA

**Summary:** The article presents a sketch of the most important legal and normative problems and challenges that are directly related to the emergence and development of cryptocurrencies. The case study is Poland, where in the first phase of existence, Bitcoin and other altcoins were considered property rights. Since 2018, under the Act on counteracting money laundering and terrorist financing, thanks to the unification of European Union law, they are classified as virtual currencies. The challenges identified in the course of the analysis that must be addressed include: the problem of creating an effective regulatory framework for the functioning of cryptocurrencies and placing them in the legal system; the problem of regulating relations with state institutions as monopolists in the field of finance and the worldwide trend of abandoning cash in favor of electronic payments and the formation of a cashless society.

**Keywords:** cryptocurrencies, Satoshi Nakamoto, virtual currencies, digital value, registry, blockchain, legal system

**Streszczenie:** Artykuł przedstawia szkic najistotniejszych problemów i wyzwań natury prawno-normatywnej, jakie bezpośrednio związane są z powstaniem i rozwojem kryptowalut. Studium przypadku stanowi Polska, gdzie w pierwszej fazie istnienia bitcoin, jak i inne altcoiny uważane były za prawo majątkowe. Od 2018 roku, na mocy ustawy o przeciwdziałaniu praniu pieniędzy oraz finansowaniu terroryzmu, dzięki unifikacji prawa Unii Europejskiej, zaliczane są do kategorii walut wirtualnych. Do zidentyfikowanych w toku analizy wyzwań, z jakimi należy się mierzyć, zaliczono: problem stworzenia efektywnych ram regulacyjnych dla funkcjonowania kryptowalut i umieszczenia ich w systemie prawnym; problem uregulowania relacji z instytucjami państwa jako monopolistą w dziedzinie finansów oraz obserwowany na świecie trend rezygnacji z pieniądza gotówkowego na rzecz płatności elektronicznych i tworzenia się społeczeństwa bezgotówkowego.

**Słowa kluczowe:** kryptowaluty, Satoshi Nakamoto, waluty wirtualne, cyfrowa wartość, rejestr, blockchain, system prawny

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## INTRODUCTION

The publication of a white paper by Satoshi Nakamoto<sup>1</sup> and the start of Bitcoin began a new era in cyberspace. The emergence and development of cryptocurrencies and blockchain technologies have prompted the transformation of the Internet of information into the Internet of value<sup>2</sup>. The created secure payment system based on cryptographic evidence, eliminating the need for a trusted third party, was a breakthrough in many areas of life. In the realities of the second decade of the twenty-first century, the Internet has become a new techno-socio-economic system that determines the life of modern man. The state institutions must also adapt to the new realities of functioning, as they lose their historical attribute with the dematerialization of the means of exchange of value. Non-cash money, digital in nature, exists only in the form of accounting entries and is not associated with any banknotes or other money symbols. In addition, in the case of cryptocurrencies, there is no need to use any institution as intermediary, because thanks to cryptographic algorithms, the exchange of values takes place directly between users. In view of the dynamics of development on the normative ground, there was a need to adapt the legal provisions to the changing reality. With regard to cryptocurrencies, which are the subject of research, it is all the more difficult because they operate in a network with a peer-to-peer architecture, are decentralized, and therefore it is difficult to assign them any geographical boundaries. This makes it practically impossible to work out common regulations at the level of jurisdiction of individual countries, that is, to create a policy in relation to the fact of the emergence of a new phenomenon. Cryptocurrencies make it possible to transfer capital outside countries without any control.

In the presented study, the author attempts to define the problems and challenges that arose in connection with the need to regulate the legal status of cryptocurrencies in the Polish legal order. At the outset, it should be noted that bitcoin, as well as other altcoins<sup>3</sup> understood individually, constitute an entry in the register, which is blockchain, providing value. The analysis of the literature on the subject shows that cryptocurrencies are most often defined as: virtual currency, digital money, cyber currency, electronic money or internet currency. Some authors<sup>4</sup> treat these terms as synonyms for the term cryptocurrency, which is a simplification of the existing reality and, especially in the field of science, should not take place. When considering the legal aspect, it is necessary to reflect on the essence

<sup>1</sup> Vide: S. Nakamoto, *Bitcoin: A peer-to-peer Electronic Cash System*, <https://bitcoin.org/bitcoin.pdf> [access date: 2.12.2020].

<sup>2</sup> D. Tapscott, A. Tapscott, *Blockchain Revolution: How the Technology Behind Bitcoin is Changing Money, Business and the World*, London 2016, p. 19; W. Szpringer, *Blockchain jako innowacja systemowa: od internetu informacji do internetu wartości: wyzwania dla sektora finansowego*, Warsaw 2019.

<sup>3</sup> The term is an acronym for alternative coin. Altcoins arose and are constantly being created as substitutes or projects that somehow develop the features of the first bitcoin cryptocurrency.

<sup>4</sup> Footnote in: A.I. Piotrowska, *Bitcoin – płatnicze i inwestycyjne zastosowanie kryptowaluty*, Warsaw 2018, p. 14. John Barrdear and Michael Kumhof equate digital currency with any electronic form of money that is characterized by a distributed record and a decentralized payment system. In Polish studies, Judyta Przyłuska-Schmitt, presenting the essence of bitcoin, treats the terms virtual money, electronic money and digital money as synonyms. This position is argued by the fact that in all cases there is a turnover of funds that constitute a specific good in the virtual world. As long as it is not converted into fiat money, we are dealing with virtual money. According to J. Przyłuska-Schmitt, the variety of nomenclature used is only a manifestation of word formation in the area of new technologies, which is specific to modern times. See J. Przyłuska-Schmitt, *Bitcoin – intrygująca innowacja*, „Bank i Kredyt” 47(2), 2016, p. 140.

of individual concepts, as well as to attempt to classify, locate and compare cryptocurrencies in relation to the category of money. The common feature of all the above-mentioned terms is their intangible, digital nature. In order to solve the above research problem, first, the legal status of cryptocurrencies in Poland was presented. An important variable that should be taken into account when considering their normative status in our country are regulations at the level of the European Union, which in 2016 made efforts to standardize the interpretation at the level of individual Member States.

## DIGITAL MONEY IN POLAND – CRYPTOCURRENCIES AS VIRTUAL CURRENCIES

The term “digital money” is the broadest of the above-mentioned terms and is often compared with the category of “electronic money”. The simplest identified definition of digital currency indicates its digital nature. Digital money is created in the language of IT software and therefore functions. Thus, it is a digital stored value that can be either a digital representation of an official tender or a virtual currency<sup>5</sup>. As indicated in the official publication of the Ministry of Digitization, digital money is not electronic money<sup>6</sup>, because it has a legal definition. The official date in Poland was introduced into the Act of 19 August 2011 on Payment Services as a result of its amendment of 12 July 2013. Pursuant to Art. 2 point 21a of the Payment Services Act, electronic money means: money value stored electronically, including magnetically, issued, with the obligation to redeem it, for the purpose of making payment transactions, accepted by entities other than only the electronic money issuer<sup>7</sup>. This definition is consistent with that contained in Directive 2009/110 / EC of the European Parliament and of the Council of 16 September 2009 on the taking up and pursuit of the business of electronic money institutions and on the prudential supervision of their activities, and amending Directives 2005/60 / EC and 2006 / 48 / EC, and repealing Directive 2000/46 / EC<sup>8</sup>. The term electronic money should be equated with the value recorded in a digitized form, which is a digital representation of central bank money. This money is used to electronically transfer value. It has an equivalent commonly used means of payment, has legal tender status and is accepted as a medium of exchange in the issuing country. On the other hand, digital money will be anything that has a digitally recorded value, i.e. electronic money and everything that remains outside this category, but functions in the virtual space and meets the criteria of a medium of value exchange. In the epistemological dimension, it is worth considering what should be identified as digital money other than electronic money? This effort is necessary because this is how cryptocurrencies should be classified. The collective category for this group is the already mentioned concept of virtual currency.

<sup>5</sup> D.L. Kuo Chuen (ed.), *Handbook of Digital Currency Bitcoin, Innovation, Financial Instruments, and Big Data*, b/m 2015, p. 6.

<sup>6</sup> K. Zacharzewski, K. Piech (ed.), *Program „od papierowej do cyfrowej Polski”. Strumień „Blockchain i kryptowaluty” – przegląd polskiego prawa w kontekście zastosowań technologii rozproszonych rejestrów oraz walut cyfrowych*, 19.01.2017, [https://www.gov.pl/documents/31305/52168/przegląd\\_polskiego\\_prawa\\_w\\_kontekście\\_zastosowan\\_tehnologii\\_rozproszonych\\_rejestrow\\_oraz\\_walut\\_cyfrowych.pdf/f6e74ce0-09e5-776d-bd3b-c21fca96cce2](https://www.gov.pl/documents/31305/52168/przegląd_polskiego_prawa_w_kontekście_zastosowan_tehnologii_rozproszonych_rejestrow_oraz_walut_cyfrowych.pdf/f6e74ce0-09e5-776d-bd3b-c21fca96cce2), p. 7 [access date: 15.12.2020].

<sup>7</sup> Uniform text, Dz.U. 2013, poz. 1036.

<sup>8</sup> Dz.U. L 267 z 10.10.2009.

Determining one consistent definition of the term “virtual currency” is problematic and seems difficult also due to the variety of systems based on them and the specific features of each of them. In many cases, the term “virtual” refers to a completely different state of affairs, which is caused by different interpretations of a vague term. The virtual verb itself (Latin *virtualis*) means in dictionary terms – an object that does not exist physically, but through software<sup>9</sup>. In its original Latin meaning, the adjective *virtualis* corresponded to the meaning of today’s “potential”, that is, carrying the possibility of carrying out some action<sup>10</sup>. In the case of money, the lack of a material form means that it is sometimes identified with a virtual creation, hence the literature describes the term “virtual money” as completely different types of non-cash money<sup>11</sup>. The first definitions of virtual money were created for the needs of computer games, which generated the need to create so-called gaming money. At that time, virtual money was understood as: a means of payment not issued by any banking institution, being a unit of exchange between the issuer and the user or a group of users, playing the role of a universal equivalent in a given network, within strictly defined limits and mainly used to purchase virtual items<sup>12</sup>. In this sense, virtual currencies will be used to purchase virtual goods and services in a limited space, because they do not exist outside it. Thus understood virtual currencies cannot be used to finalize transactions involving physical material goods, which limits the users themselves and makes them of little use on a global scale. In addition to gaming money, in the first period of functioning of the concept, the category of virtual currencies included, among others: descriptions of point loyalty programs, air miles and gift cards<sup>13</sup>.

The development of the Internet and the ongoing process of digitization of finances implied the need to clarify the concept of virtual currency due to the fact that the above-mentioned definition excluded their use for the purchase of non-virtual goods outside the boundaries of a given virtual world. In 2012, the European Central Bank (ECB) expressed the position that virtual currency is a type of unregulated digital money, issued and in principle controlled by creators, as well as used and accepted by users of a given community or virtual world<sup>14</sup>. The definition of the term came three years later, when the virtual currencies were defined as: a digitally displayed value that was not issued by a central bank, credit institution or electronic money institution, which in some circumstances could be used as an alternative to money<sup>15</sup>. In the same document, the ECB breaks down virtual currencies into three groups: closed virtual currency schemes, virtual currency schemes with unidirectional flow, and virtual currency schemes with bidirectional flow. From the perspective of considering cryptocurrencies, it is worth paying attention to the last group – virtual

<sup>9</sup> *Uniwersalny słownik język polskiego PWN*, S. Dubisz (ed.), tom 4, Warsaw 2006, p. 452.

<sup>10</sup> Behind. A. Pawłowski, *Wirtualizacja – historia i próba rekonstrukcji pojęcia*, [in:] *Wirtualizacja problemy i wyzwania*, L.W. Zachar (ed.), Warsaw 2013, p. 13.

<sup>11</sup> Behind. J. Ryfa, *Waluty wirtualne – problem zdefiniowania i klasyfikacji nowego środka płatniczego*, „Nauka o finansach – Financial Sciences” 2014, 2(19), p. 140-141.

<sup>12</sup> L. Chen, H. Wu, *The Influence of Virtual Money to Real Currency: A Case-based Study*, *International Symposium on Information Engineer - ing and Electronic Commerce*, Beijing University of Posts and Telecommunications 2009.

<sup>13</sup> pwc, *Virtual currencies: Out of the deep web, into the light*, b/m 2014, p. 2.

<sup>14</sup> European Central Bank, *Virtual Currency Schemes*, Frankfurt am Main 2012, p. 13

<sup>15</sup> European Central Bank, *Virtual Currency Schemes – A further analysis*, Frankfurt am Main 2015, p. 25.

currencies with two-way flow, which can be purchased with real money and exchanged for it. Therefore, they are used to purchase not only virtual, but also real goods and services<sup>16</sup>.

The most extensive attempt to systematize and classify the concept of a virtual currency was made by two entities – the Financial Action Task Force (FATF) and the European Banking Authority (EBA). In 2014, the FATF issued the *Virtual Currencies Key Definitions and Potential AML / CFT Risks* report, which indicates that the intensive development of virtual currencies creates the need to formulate a definition that could be a starting point for national regulations. According to the FATF, a virtual currency is: a digital counterpart of value that can be bought and sold in cyberspace, functions as a medium of exchange and / or a unit of account and / or custody, but is not regulated by law<sup>17</sup>. The proposed classification indicates two possibilities of dividing virtual currencies – convertible (open), corresponding to convertible currencies with twoway flow and nonconvertible (closed), as well as centralized and decentralized. Cryptocurrencies are included in the last one - decentralized currencies<sup>18</sup>. The definition of FATF was extended by the position of the European Banking Authority, which defines a virtual currency as: a digital representation of value that can be transferred using IT technology and used as a medium of exchange, unit of account or storage of value, but does not have the status of an official tender, i.e. the value is not guaranteed by any government or Central Bank, but may be regulated by the state<sup>19</sup>.

The issue of virtual currency was also taken up by the European Union, which is important from the perspective of Poland. The European Parliament, in its resolution of May 26, 2016 on virtual currencies, indicated that these are: digital cash, digital determinants of value that are not issued by a central bank or a public authority, are not linked to a fiat currency and are adopted by natural or legal persons as means of payment. As such, virtual currency can be transferred, stored or sold electronically<sup>20</sup>. In July 2016, the European Commission presented a draft amendment to the Directive of the European Parliament and of the Council of the European Union of May 20, 2015 No. 2015/849 on the prevention of the use of the financial system for money laundering or terrorist financing<sup>21</sup>. In this draft, the Commission proposes extending the catalog of entities obliged to apply certain standards and procedures. In particular, it is about collecting information about transactions made and verifying users involved in these transactions. Intermediaries in cryptocurrency trading, i.e. cryptocurrency exchanges and application providers (cryptocurrency wallets) are to be added to the circle of obliged entities.

Due to the primacy of EU law over national law, in relation to the above directive, which was amended in 2018<sup>22</sup>, the legislator in Poland had to implement the laws and regulations necessary for its implementation. Until the commencement of work at the Community level, each state had autonomy as to the adopted regulations. In Poland, on the basis

<sup>16</sup> Ibidem, p. 13-14.

<sup>17</sup> The Financial Action Task Force, *Virtual Currencies: Key Definitions and Potential AML/CFT Risks*, FATF/OECD, b/m 2014, p. 4.

<sup>18</sup> Ibidem, p. 4-5.

<sup>19</sup> European Banking Authority, *EBA Opinion on virtual currencies*, 2014.

<sup>20</sup> Dz.U. C 76 z 28.02.2018, p. 76-81.

<sup>21</sup> Dz.U. L 141 z 5.06.2015, p. 73-117.

<sup>22</sup> Dz.U. L 156 z 19.06.2018, p. 43-74.

of the Civil Code, cryptocurrencies were perceived as property law, i.e. a measure of value other than money, provided that the parties to the contract stipulated that the amount of the benefit will be determined according to the value measure, which is a specific cryptocurrency<sup>23</sup>. At that time, the dominant view in the doctrine was that cryptocurrencies are a property law due to the fact that: (1) they are related to the economic interest of entities that may show interest in the entity; (2) may be owned to the exclusion of other persons; (3) and can also be traded between individuals<sup>24</sup>.

The change took place in 2018, when, under the Act of March 1, 2018 on counteracting money laundering and financing of terrorism<sup>25</sup>, the term “virtual currency” was introduced into the Polish legal system.

Pursuant to Art. 2 (2) (26) a virtual currency shall be understood as a digital representation of a value that is not:

- a) legal tender issued by NBP, foreign central banks or other public administration bodies,
- b) an international unit of account established by an international organization and accepted by individual countries belonging to this organization or cooperating with it,
- c) electronic money within the meaning of the Act of 19 August 2011 on payment services,
- d) a financial instrument within the meaning of the Act of 29 July 2005 on Trading in Financial Instruments,
- e) by bill or check – and is exchangeable in the course of trade for legal tender and accepted as a medium of exchange, and may be electronically stored or transferred, or be subject to electronic commerce.

## LEGAL PROBLEMS AND CHALLENGES TO THE DEVELOPMENT OF CRYPTOCURRENCIES

The most important challenge that individual countries have to face at the normative level is the virtual nature of cryptocurrencies. Supported by decentralization as well as blockchain technology, the lack of a material form makes it difficult not only to control the cryptocurrency circulation. Hence, both at the legal and practical level, it is reasonable to ask whether it is possible to effectively regulate cryptocurrencies? This question is topical both in relation to the legal system of individual states and in a certain consensus at the supranational level. It is difficult to imagine effective regulations at the level of individual countries with the full polarization of positions, i.e. from a complete ban on owning and trading to full acceptance of cryptocurrencies as a medium of exchange. Of course, on the axiological level, in view of the problem formulated in this way, the question arises, what will effective mean in the case of cryptocurrencies? In broad terms, effectiveness in this individual case will mean situations where the adopted regulations actually function and are enforced, fulfilling their role. A literal notation is therefore not only an empty phrase functioning in legal circulation, but is also used in the practice of everyday life.

<sup>23</sup> S. Bala, T. Kopyściański, W. Srokosz, *Kryptowaluty jako elektroniczne instrumenty płatnicze bez emitenta. Aspekty informatyczne, ekonomiczne i prawne*, Wrocław 2016, p. 113.

<sup>24</sup> J.J. Szczerbowski, *Legalizacja kryptowaluty Bitcoin. Aspekty cywilnoprawne*, „Journal of Modern Science” 2017, t. 4/35, p. 99.

<sup>25</sup> Unit text. Dz.U. 2018, poz. 723.

At the core of the work on Bitcoin: A Peer-to-Peer Electronic Cash System is the crisis of confidence in banking institutions that the world faced at the time of its publication in 2008. The designed value transfer system is a product of years of efforts of specialists in the field of cryptography, security and anonymity enthusiasts. For decades, they have been making efforts to create an e-money project. The extreme libertarian milieu of Cypherpunk or David Chaum's "evacuation of anonymity on the Internet" strove to design an independent Internet money, free from state control. Satoshi Nakamoto, although he designed a pseudonymous system<sup>26</sup>, created a space where, thanks to the use of decentralized infrastructure with peer-to-peer architecture, settlements made remain beyond the control of state institutions. It is only when virtual currencies are exchanged for money, for example on stock exchanges, that state interference related to taxation of transactions is possible. It is the tax issues that seem to be a perfect example of the problem related to the creation of legal regulations that do not translate into reality, and at the same time to the spaces where such normative provisions can be designed. In Poland, until 2018, when cryptocurrencies were considered a property right on each transaction, according to the letter of the law, VAT was payable, and in addition, each Treder was required to pay a tax on civil law transactions (PCC) in the amount of two percent of the transaction amount, buying and selling. In practice, this provision was consistently ignored and difficult to enforce, and as a result has been changed. Currently (December 2020), cryptocurrency profit is taxed with a 19% basis on income after deducting tax-deductible costs and is shown on the annual tax return. Cryptocurrency income cannot be combined with other capital gains.

Periodically, each legal tradition has to face new challenges related to technological and social progress. Today, such is considered the departure of societies from cash. Although the vision of a cashless society remains utopian<sup>27</sup> so far, cryptocurrencies can be a significant stimulus in its formation. Additionally, there is a trend showing a decrease in the use of cash in favor of electronic payments. Therefore, it is not difficult to imagine a cashless society, where the exchange of values takes place only with the use of digital representatives of values. In view of technological progress and the design of a cryptographic proof payment system, which creates a space for exchanging value without a trusted third party, another problem arises - How should the state behave? It is justifiable to reflect on what policy should be developed in relation to the development of an alternative and independent system of value transfer. Initially, as in the case of the Internet, the dominant belief was that the existing legal regulations would be sufficient<sup>28</sup>. The following years have shown, however, that it will be necessary to develop new juristic solutions, and above all, to take a position on whether cryptocurrencies should be accepted or combated by banning them. Individual countries differ from each other, because, for example, Bolivia or Nepal prohibit all activities related to cryptocurrencies, Switzerland has separated an additional category of electronic token, and in Colombia, cryptocurrencies are an electronic currency<sup>29</sup>. Most

<sup>26</sup> See J. Brito, A. Castillo, *Bitcoin: A primer for policymakers*, Arlington 2013, p. 7-10.

<sup>27</sup> *Vide*: N. Fabris, *Cashless Society – The Future of Money or a Utopia?*, „Journal of Central Banking Theory and Practice” 2019, 8(1), p. 53-66.

<sup>28</sup> K. Piech, *Polityka państw wobec kryptowalut*, [in:] R. Bartkowiak, P. Wachowiak (ed.), *Nauki ekonomiczne w XXI wieku. Stan obecny i perspektywy rozwoju*, Warsaw 2014, p. 181-192.

<sup>29</sup> The Law Library of Congress, *Regulation of Cryptocurrency Around the World*, b/d 2018, <https://www.loc.gov/law/help/cryptocurrency/cryptocurrency-world-survey.pdf> [access date: 17.12.2020].

countries such as Poland try to take indirect action, where individual institutions warn against cryptocurrencies and indicate potential threats, but do not directly prohibit possession or trading. There are also growing efforts to use the technology used to create cryptocurrencies in the creation of government money. The Central Bank's digital currencies are currently at the pilot stage, but in China or Sweden, the works are so advanced that they can be an important part of human life.

## SUMMARY

The above outline of problems and challenges shows that technological solutions used in cryptocurrencies are innovative and constitute an increasingly important field of impact on human life. Bitcoin's developers sought to develop a cash-like payment system that would allow transactions to be made without a trusted third party. The use of blockchain technology as the basis of an alternative payment system is the beginning and at the same time a new era in the development of interactions between people and the exchange of values. The ongoing process of unification of EU law meant that, from 2018, cryptocurrencies in Poland are considered a virtual currency. As digital currencies, however, cryptocurrencies are not electronic money within the meaning of the law. They constitute a digital representation of the contractual value of its users, are stored in the register, have no physical form, and thus have no material form.

Cryptocurrencies pose a challenge to any legal culture. Until the publication of the Nakamoto manifesto and the generation of the "Genesis block", they continue to gain importance and change the political, legal and economic reality. After breaking the agreement with Bretton Woods, the only guarantee of certainty of the value of cash was the institution of the state. Traditional currencies are controlled by central banks and are legal, internationally recognized means of payment. At the moment when a value exchange system beyond its control was created, with no central issuer to manage the distribution of new coins, numerous new previously unknown problems arose, the example of which is shown above in Poland. From the perspective of individual state institutions, the tax issue seems to be the most important. A public tribute in Poland, including the sale of cryptocurrencies on the stock exchange, in an exchange office and on the free market. Next, there are political and social challenges related to the transformation of societies.

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