

Đurić M. Đuro*

<https://orcid.org/0000-0002-8101-5508>

Jovanović M. Vladimir**

<https://orcid.org/0000-0003-1741-9062>

UDC: 004.78:347.739(497.11)

Review article

DOI: 10.5937/ptp2602173D

Received on: October 15, 2025

Approved for publication on:

February 25, 2026

Pages: 173–191

“CATCH ME IF YOU CAN!” – LEGAL STATUS OF DIGITAL ASSETS IN BANKRUPTCY PROCEEDINGS IN THE REPUBLIC OF SERBIA

ABSTRACT: The very emergence of digital assets represents a revolutionary phenomenon in technology, economics, and law. Their regulation introduces into the legal system a new institute of property law, whereby digital assets, alongside things, rights, and legitimate expectations, become objects of property rights. Since digital assets represent a certain, although often fluctuating, asset value, and since the property of every person constitutes security for the settlement of creditors' claims, it is important to ensure adequate protection of creditors' rights and interests within the legal framework. This is particularly important in the context of collective settlement of creditors' claims in bankruptcy proceedings. In 2020, the Republic of Serbia adopted a law regulating digital assets, their subject matter, issuance, trading, and pledging. Holders of rights relating to digital assets may be both natural and legal persons. Bearing in mind that Serbian legislation recognizes bankruptcy proceedings only in relation to legal entities, attention will be focused on the digital assets of legal entities as subjects of bankruptcy proceedings. It is in the interest of their creditors to achieve successful settlement of claims against the

*LLD, Associate Professor, The UNION – Nikola Tesla University, Faculty for Business Studies and Law, Belgrade, Serbia, e-mail: djuro.mdjuric@gmail.com

**LLD, Full Professor, University Business Academy in Novi Sad, Faculty of Law for Commerce and Judiciary in Novi Sad, Novi Sad, Serbia, e-mail: jovanovicvld@gmail.com



© 2026 by the authors. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

debtor's assets. The authors of this paper analyze the reform of Serbian legislation in this high-tech field and point to possible shortcomings in the treatment of digital assets in bankruptcy proceedings and in the protection of creditors' claims. They also recommend further development of the regulatory framework governing digital assets, including the professional training of relevant judicial professions. This paper employs the normative method, comparative law method, and statistical method.

Keywords: *digital assets, bankruptcy proceedings, protection of creditors, settlement of claims, Republic of Serbia.*

1. Introduction

With the development of technology and the realization of people's desire for trade outside the strict framework of state regulation (Bayliss, 2020, p. 107), new values were created that represent the object of property, which as such can be exchanged on the market and with which debts can be settled. In this sense, digital assets represents a completely new category of property law. Initially, the legislative provisions were adopted mainly to prevent money laundering and financing of terrorism, as it was regulated in the EU (EU Directive 2015/849). The Serbian legislator regulated digital assets with a Law from 2020, making him one of the first in the world to do so. Since digital assets are most similar to the other property rights and may reach an extremely high value, it can use it both to secure claims and to settle creditors' claims through executive and bankruptcy proceedings. Ensuring safe access to the debtor's digital assets, their seizure in case of non-payment of claims, and then selling them at the moment of reaching the value, represent the biggest legal challenges for now. However, since digital assets do not have a tangible physical form, they can easily be stored abroad, the bankruptcy administrators may face with a special task to discover it, and then to start the procedure for its seizure. Since entry into force of the Law on Digital Assets in June 2021, the first assessment estimated that approximately 200.000 persons in Serbia own some type of digital assets (Politika, 2021). Some of the biggest cryptocurrency projects, such as Polygon, Celsius, Ethereum developer platform and Tenderly are based in Serbian capital of Belgrade and at least 92 million USD was raised by crypto startups in the region in 2021. Celsius Networks's is funding approximately 750 million USD and Polygon raised 450 million USD from Sequoia, SoftBank and Tiger Global (Majic, 2022). The objective of this paper is to answer the questions on legal nature of digital

assets and their treatment once its business holder becomes insolvent. In the first part of this paper, the authors analyse the legal qualification of digital assets in the new legal framework. It is followed by the treatment of digital assets in bankruptcy estate and the position of secured creditors. Further, in the third part, the way in which bankruptcy administrator takes control over the debtor's digital assets will be discussed. Finally, once the assets are under control of bankruptcy administrator, it is important to give an insight in the realisation of digital assets and settlement of claims.

2. Legal qualification of digital assets in Serbia

The very nature of the digital assets imposes a need for specific legal definition and the way of their treatment (Bayliss, 2020, p. 107). This approach is also recommended by legal expert associations (CERIL, 2023). Any information on their very existence and control rely dominantly on cooperation with owners/holders. In some countries, digital assets are considered as a type of personal property (Inacio, 2018, p. 12–13), but in others they are not recognized as such (Lyadnova, Dorokhova & Whitney, 2018, p. 5). Starting from the Comments on the Tentative Agenda Decision Relating to the Holdings of Cryptocurrencies of the IFRS Foundation digital assets are defined as identifiable, non-monetary and without physical substance (IFRS Foundation, 2022). They are also characterized as authenticated by cryptography, based on a distributed transaction ledger, decentralized and ruled by consensus (OPUS, 2021, p. 3).

For the first time, Serbian legislation recognizes digital assets as a legal category. The Law regulates digital or virtual assets (serb. *digitalna imovina*) as digital records of value that can be exchanged and invested (Art. 2. Para. 1. p. 1, Law on Digital Assets, 2020). It also set rules their issuance, secondary trading and provision of services related to digital assets. Besides that, the legislator regulated the competences of the National Bank of Serbia and the Securities Commission considering digital assets. As an important novelty, the Law acknowledges digital assets as intangible, fungible and enforceable assets and the status of both secured and pledge creditors. This approach of the Serbian legislator is in line with the EU Directive no. 110/2009 on electronic money institutions (Nori & Girolametti, 2023, p. 423). Two main types of digital assets are prescribed. These are virtual currency (serb. *virtuelna valuta*) and digital token (serb. *digitalni token*). They may be used as instrument of payment, source of funding and initial offer as well as for secondary trading.

Consequently, digital assets may be used in the future as a security instrument for creditor claims.

On the one side, virtual currency is considered as a type of digital assets that has not been issued and whose value is not guaranteed by the central bank or other public authority (Art. 2. Para. 1. p. 2. Law on Digital Assets, 2020). That is why in Serbia the legislator still does not recognize them as a legal instrument of payment and they have no legal status of money or currency. This statement was confirmed by the National Bank of Serbia in 2022 (National Bank of Serbia, Statement on Digital Assets, 2022). However virtual currency may be accepted by natural or legal persons as an instrument of exchange and it can be bought, sold, exchanged, transmitted and stored electronically. Virtual currencies tend to be volatile, since they are short-term assets. They are often held for speculative purposes and can be used for exchange for goods and services (IFRS Foundation, 2022).

On the other side, Serbian legislation recognizes digital token as a type of digital assets that represent any intangible property right and that may represent one or more other property rights in digital form, including the right of the user of the digital token to be provided with certain services (Art. 2. Para. 1. p. 3. Law on Digital Assets, 2020). By this provision, Serbian legislation undoubtedly recognized and accepted the digital tokens' character of property right as any other personal property regulated by the law.

In its Explanatory Instruction Serbian Ministry of Finance states that digital assets may be acquired through participation in providing services of electronic validation of transactions related to the digital assets performed by digital asset miners and validators (Ministry of Finance of the Republic of Serbia, Explanatory Instruction, 2021). This provision is in line with the Law on Basics of Ownership and Proprietary Relations (1990) and Law on Business Companies (2011). However, since property rights are mostly regulated as certain number (Maydanyk, 2023, p. 14). This requires future amendment of the provisions of the Law on Basics of Ownership and Proprietary Relations in order to include the digital assets as a proprietary right. Such a legislative action will surely follow the process of the harmonisation of the legislation with the EU regulations (Mihajlović, 2021, p. 598). Since the entry into force of the Law on Financial Securities (Art. 6. Para. 1. p. 2. Law on Financial Securities, 2018) and Law on Digital Assets (2020), the property on digital assets may also be acquired by a receiver of financial security and fiduciary creditor if their claims are not settled upon maturity (Đurić & Jovanović, 2023, pp. 9–10). However, their property rights are pending a suspensive condition.

In order to be identifiable, digital assets have to be detachable and created on the basis of contract or other legal rights transferable/non-transferable and detachable/non-detachable from entity or other rights. Serbian law regulates digital assets (serb. *digitalna imovina*) as the digital value record that can be digitally bought, sold, exchanged or transferred, and that can be used as a medium of exchange or for investment purposes (Art. 2. Para. 1. p. 1. Law on Digital Assets, 2020). This does not include digital currency records that are legal instruments of payment and other financial assets regulated by other laws. Following this definition, digital assets possess two important features of property, its value and its legal basis (*iustus titulus*), the same as prescribed for sale of goods in the Law on Contract and Torts (Art. 454. Law on Contracts and Torts). This implies that Law on Digital Assets recognizes digital assets the legal position of personal property. Similar solutions are prescribed in common law regulations (Remolina, Gurrea-Martínez & Liu, 2024, pp. 6–7).

As personal property, digital assets may also have the characteristics of a financial instrument. In this case, all operations on issuing, secondary trading of digital assets and providing related services have to be conducted in accordance with the Law on Capital Market (Art. 7. Para. 1. Law on Digital Assets, 2020). However even if digital assets have all the characteristics of a financial instrument, capital market regulation does not apply, if certain legally set conditions are met (Art. 7. Para. 2. p. 3. Law on Digital Assets, 2020). As a financial instrument, digital assets may be subject of special financial security agreement and may be held as intangible assets or inventories. When digital assets as financial instruments are issued, a special document called “white paper” is published. In July 2021, the National Bank of Serbia adopted amendments and supplements to the Instructions for the Implementation of the Decision on the Conditions and Manner of Performing International Payment Transactions (National Bank of Serbia, Instructions for the Implementation of the Decision on the Conditions and Manner of Performing International Payment Transactions, 2021).

3. Digital assets as a part of the bankruptcy estate

Both owner and holder of the digital asset may be any person regardless of the business relationship established with the digital asset service provider or transactions made through that provider. Thus it might be a person who acquired digital assets by participating in computer transaction verification services in information systems related to certain digital assets. However, according to the Serbian Bankruptcy Law, only legal persons as owners or

holders may be subjects of bankruptcy proceedings. The bankruptcy estate comprises all assets of the bankruptcy debtor both in Serbia and abroad on the day of opening of bankruptcy proceedings, as well as assets acquired by the bankruptcy debtor during the proceedings (Art. 101. Para. 1. Law on Bankruptcy, 2009). If the crypto assets are considered as debtor's estate, it may be recoverable under bankruptcy law and the bankruptcy administrator has a duty to gain control over those assets in order to increase the value of the bankruptcy estate (Nori & Girolametti, 2023, p. 428).

If assets of a bankruptcy debtor are located abroad, cross-border insolvency provisions of Serbian Law on Bankruptcy apply when such assets are subject to foreign proceedings. Digital assets legally represent a part of bankruptcy estate managed by bankruptcy administrator, whose role is to locate the assets, to apprehend and to sell them in order to provide the most favourable settlement of creditors' claims. In Russian legislation, there is a similar solution (Shishmareva & En'kova, 2024, p. 1084). If maintaining the bankruptcy debtor in business ensures such settlement, creditors may vote for its reorganisation instead of its liquidation. In some common law countries, judicial practice does not recognize a debt denominated in digital assets as a monetary debt capable of forming the subject matter of a statutory demand (Remolina, Gurrea-Martínez & Liu, 2024, p. 9).

Following the Comments of the IFRIC and provisions of the Law on Digital Assets, the Serbian Ministry of Finance issued the Explanatory Instruction, which recognizes digital assets as intangible assets and inventories (Ministry of Finance of the Republic of Serbia, Opinion, 2021). Since their nature is intangible, they have to be stored on secure digital location called wallet. This may be a software wallet, hardware wallet, hot wallet and cold wallet (OPUS, 2021, p. 6). Their digital storing allows the assets to be at disposition of its owner. The wallet may be located in software storage (such as cloud) and hardware storage (external). Digital assets are usually decentralized, until they become a whole by operation of the holder. Any registration by public or licensed private providers of services secures their flow control and protection (CERIL Statement, 2023). Usually, access to digital assets stored online is protected by a password available only to their owner. This is one of the significant privileges of digital assets in case of bankruptcy or enforcement proceedings, but it also makes them susceptible to hacker attacks (Udofia, 2022). Keeping digital assets on hardware storage makes it easier to protect them from hacking, but also easier to be apprehended by bankruptcy administrator or civil enforcement agents.

Serbian Law on Bankruptcy regulates only corporate bankruptcy and thus only a legal person, i.e. company, may be subject of bankruptcy proceedings (Art. 1. Para. 1, art. 14. and art. 55. Para. 5, Law on Bankruptcy, 2009). As for bankruptcy of natural persons and entrepreneurs, their creditors have to rely on civil enforcement proceedings. The objective of the proceedings is to ensure the most favorable collective settlement of bankruptcy creditors by achieving the highest possible value of the bankruptcy debtor or its assets. Comparative examples show that the digital assets may reach a high value, if it is seized properly and cashed accordingly (d'Avoine & Hamacher, 2022, p. 6). Company, as a legal person, may be the holder of digital assets provided that it respects certain restrictions. Namely, virtual currencies cannot be invested as a monetary investment in the capital of a company. However, they can be converted in cash and paid into a company as a cash investment. Digital tokens may be invested as a non-monetary investment in a company but cannot be related to the provision of services or the work performance. This restriction for digital tokens does not apply to a partnership and limited partnership (Art. 14. Para. 3. Law on Digital Assets, 2020). The list of digital tokens that may be invested is determined by the Securities Commission.

Since the ordinary bankruptcy creditor has an unsecured claim against the bankruptcy debtor, it is its interest that all assets of the bankruptcy debtor are overtaken by the bankruptcy administrator. If the insolvency debtor cooperates with bankruptcy administrator or bankruptcy administrator reaches out to apprehend the debtor's digital assets, the bankruptcy creditors may hope to receive the settlement. In the case of secured creditors, the claims are secured with security interest, statutory right of retention or the right to satisfy their claims from assets and rights that are registered in public registries. Therefore, they have the right of priority in settlement from the value of realised assets serving as security. According to the new legal provisions, digital assets may also be stipulated as security of claim by pledge or fiduciary agreement (Art. 98. and 121. Law on Digital Assets, 2020). The creditor, unless otherwise agreed, has the right to use and dispose of, including to alienate the digital assets that are the subject of the fiduciary agreement. A fiduciary debtor can also be a third party that provides security for someone else's debt (warrant). In the case where the owner of digital assets becomes insolvent, the claims of its creditor will be settled by receiving the property right on the transferred digital assets (Art. 122 Law on Digital Assets, 2020). On the contrary, if the fiduciary creditor becomes insolvent, the status of the owner of digital assets, i.e. the debtor, depends on the purpose of the fiduciary agreement. If the fiduciary on digital assets serves as security of claim, the owner has the status

of the secured creditor in bankruptcy proceedings. However, if fiduciary is stipulated for other purposes, the owner of the digital assets has the status of excluding creditor. Finally, excluding creditors have the property right on certain assets in possession of the insolvency debtor and the right to request the assets to be excluded from the bankruptcy estate. If digital assets are the subject of their personal property, it relies only on the capacity of bankruptcy administrator to exclude the assets and to return them to their owner.

4. Seizure of the digital assets

Upon opening of the bankruptcy proceedings, the bankruptcy administrator takes possession over all assets included in the bankruptcy estate and administers them. Bankruptcy proceedings are conducted by the competent commercial court with jurisdiction over the area where the debtor has its registered seat. If debtor's seat is located outside of Serbia, the proceedings are conducted by the court with jurisdiction over the area where the debtor's center of main interest is located. A bankruptcy administrator appointed by the court plays the main role in the proceedings. Once bankruptcy administrator takes over the bankruptcy estate, it prepares the initial bankruptcy balance sheet with list and compares the debtor's assets and liabilities together with the report on economic and financial status of the bankruptcy debtor and an estimate of the possibilities for reorganisation (Art. 36. Para. 3. Law on Bankruptcy, 2009). On the basis of this report the insolvency creditors decide on bankruptcy or reorganisation of the bankruptcy debtor.

Beside the access to the official registers on digital assets, an effective performance of the bankruptcy administrator also requires cooperation with insolvency debtor. Usually, only the debtor has access to the assets. Depending on the manner of storing digital assets, they may be obtained by providing the password to the software wallet or by delivering the hardware wallet. The problem arises if the debtor refuses to provide access or keeps his digital assets hidden. Here a bankruptcy administrator faces an important challenge (Hill, Connelly & Vouglis, 2022, pp. 6–7). If their holder refuses to provide the access, he/she can only be responsible for the criminal act of damaging of creditors (Art. 233. Criminal Code, 2005). In any case, the operation of identifying and apprehending debtor's digital assets relies on capacities and experience of the bankruptcy administrator. This process requires a valuable time that might can be lost (Sarra, Madaus & Mevorach, 2023, p. 259).

Law on Digital Assets prescribes the general duty for all companies in Serbia in capacity of an enforcement debtor to cooperate with the competent

authorities in enforcement proceedings and to provide all information necessary for enforcement settlements on digital assets, including the means by which digital assets are accessed (cryptographic keys) (Art. 14. Para. 6. Law on Digital Assets, 2020). Although this regulation does not mention bankruptcy proceedings, there is no reason not to apply it on bankruptcy debtor. The National Bank of Serbia keeps electronic records of data on holders of virtual currencies. All licensed providers of services related to virtual currencies have duty to submit to the National Bank of Serbia the information on legal entities and entrepreneurs who are users of virtual currencies. Holders of virtual currencies based in Serbia, both legal persons and entrepreneurs, who have not used licensed providers' services related to virtual currencies are required to submit reports to the National Bank of Serbia, and are responsible for the accuracy and completeness of these data. The National Bank of Serbia keeps electronic data records on holders of virtual currencies (Art. 85. Para. 4. Law on Digital Assets, 2020). Any information obtained while providing services related to digital assets and to their user, including user's identity, and on transactions with digital asset service provider must be kept as a business secret. The only exempted information is the one made publicly available (Art. 13. Para. 1-3. Law on Digital Assets, 2020).

During the bankruptcy proceedings, a challenge may be posed not only by the debtor but also by a third party. If in any stage of the proceedings such a party refuses to hand over the debtor's assets held without a legal basis or on the basis of a legal transaction the validity of which has ceased and the assets are a part of the debtor's bankruptcy property, the bankruptcy administrator is authorised to request the bankruptcy judge to urgently order and conduct compulsory enforcement (Art. 105. Para. 2. Law on Bankruptcy, 2009). Along with that, the bankruptcy judge may order compulsory measures against the third party to enable the enforcement. If any party fails to handover the objects that are a part of the bankruptcy estate or to comply with the court order, that party is held liable for the damage caused by such an action. An additional issue may emerge in case of “hacking” of the digital assets of the debtors estate by an unauthorized person (Sarraf, Madaus & Mevorach, 2023, p. 263).

The bankruptcy administrator decides on the manner of their preserving or investing with the consent of the creditors' committee. Serbian Law on Bankruptcy stipulates actions of contesting debtor's legal transactions on behalf of the debtor and the creditors, if the bankruptcy estate would be increased by such contesting. Such transactions and other actions taken before the opening of the bankruptcy proceedings can interfere with equal settlement of bankruptcy creditors, damage the creditors or put some creditors in a

more favorable position over the others (Art. 119-123. Law on Bankruptcy). However, the bankruptcy administrator again faces the risk of price change of digital assets from the moment of contesting to the moment of their return in insolvency estate (Droege & Marlière, 2019, p. 29). Here, the important question is if digital assets of bankruptcy debtor are registered by public or private licensed provider or if digital assets transactions such as purchase, sale, acceptance or transfer or exchange of digital assets for other digital assets are registered. Moreover, if a creditor has a claim secured by the pledge over the digital assets, its settlement is more certain to take place. Therefore, the status of the following types of creditors should be distinguished: bankruptcy (unsecured) creditors, secured creditors, pledge creditors, creditors receivers of the financial security (as special type of secured creditors) and excluding creditors.

The treatment of debtor's assets requires also a professionally experienced bankruptcy administrator. Besides regular duties, a bankruptcy administrator needs to identify debtor's digital assets and to find the way to apprehend and cash it within the time framework of the proceedings set by the law. Future actions of the Serbian legislator should take into consideration recommendations from the comparative practice. They relate to the strict regulation of the access to information, temporarily restraining asset disposition or transfers and recovery and realization of assets (Sarraf, Madaus & Mevorach, 2023, p. 273).

5. Realisation of digital assets

It is in the debtor's interest and of its creditors to ensure the most favorable collective settlement by achieving the highest possible value for the assets. Moreover, if the value of the debtor's assets allows maintaining of business and better creditor settlement, the company may recover through the reorganisation proceedings (INSOL International, 2019). However, the legislation allows the creditors to be paid only in cash. The problem might arise because the conversion of digital assets into cash requires time during which their value may change. In Serbia, the legal form of an insolvent debtor is decisive with regard to the type of claim settlement and the legal office procedures to be conducted. If the owner of digital assets is a natural person or entrepreneur, only individual claim enforcement proceeding is applicable. When an insolvency ground is determined for a debtor legal person, all enforcements on its assets will be conducted in bankruptcy proceedings.

If successful in apprehending the digital assets of the bankruptcy debtor, the bankruptcy administrator strives to achieve the highest possible value to ensure the most favorable collective settlement of bankruptcy creditors. Any debt in digital assets needs to be converted to a monetary debt, in order to obtain a judgment on its liquidation (Remolina, Gurrea-Martínez & Liu, 2024, p. 14). If the majority of creditors vote for the liquidation of debtor, the bankruptcy judge issues the decision on compulsory liquidation. Upon that decision, the bankruptcy administrator conducts the sale of all assets, discrete units or individual assets of the insolvency debtor, including sale of the insolvency debtor as a legal entity (Art. 132. Para. 1, Law on Bankruptcy, 2009). If the bankruptcy administrator proposes the sale of all assets or discrete units of the insolvency debtor, or sale of the bankruptcy debtor as a legal entity, it is obliged to provide an assessment proving this manner of realization as more appropriate than selling individual assets of the insolvency debtor, made by an authorized expert (valuer). However, often the most delicate task for a bankruptcy administrator is the digital assets' significant price volatility that may affect both unsecured and secured creditors. A valuer is either a person licensed to perform the apposite estimation or a person who possesses the relevant knowledge and is registered on a list maintained by the competent authority for carrying out valuation or expertise. Bearing in mind all specificities of digital assets, such knowledge can be offered by licensed providers of services related to the digital assets. The bankruptcy administrator usually relies on their expertise. Given their status of providers of exchange and broker-dealer services, these service providers are expected to have the best insight in prices of all types of digital assets.

The valuation of digital assets is different for digital currency and digital token and depending on whether these are recorded as intangible assets or as inventories. On the one hand, the valuation of digital assets as intangible assets includes initial and subsequent valuation. Initial valuation involves measuring according to the purchase price. It includes the purchase price and directly attributable transaction costs. Two approaches can be used in the subsequent valuation of digital currencies: the cost model and the revaluation model (Ministry of Finance of the Republic of Serbia, Opinion, 2021). The cost model involves subsequent measurement at cost less depreciation and impairment losses. Due to their specific nature, digital currencies have virtually unlimited time of use. However, if such a limitation exists, depreciation should include the residual value. The revaluation model is only applicable when the fair value of digital currencies can be determined in an active market. If the quoted price does not exist on the market, it is necessary to apply the cost

model. On the other hand, the valuation of digital currencies as inventories is performed by measuring at a lower value between the purchase value and the net realizable value, while increases in value over the initial purchase value are not recorded. The cost of inventories includes the purchase price, directly attributable taxes and the cost of acquiring inventories. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and realization of sales. Each business entity that records digital currencies as inventories is required to estimate the net realizable value at each balance sheet date. With regard to digital tokens, they can generally be registered as a non-monetary assets or as a financial instrument – equity, debt, only not as cash. As such, digital tokens are initially and subsequently measured and accounted for as intangible assets or inventories.

Based on the valuation report, the bankruptcy administrator decides on suitable method of sale of digital assets in insolvency estate. However, the creditors' committee, secured creditor and pledge creditor are authorized to file an objection to the assessment, in which case the court, after conscientious and careful assessment, makes a conclusion to determine the suitability of the proposed method of sale and the appropriate part of the sale price on which secured (Art. 132. Para. 3, Law on Bankruptcy, 2009). The general rule on sale of assets or legal entity in bankruptcy proceedings prescribes public auction, public collection of offers and a direct agreement as sale methods. However, these sale methods are more suitable for sale of real estate or movables. For digital assets, sale on commodities market (Shawver, 2021, p. 2047) and securities market for financial instruments appears as more suitable, because they may reach a higher value due to a broad circle of the interested parties and setting the price. This is also in line with the digital transformation in stock exchange and banking business (Neogradi, Anđelković & Kaličanin, 2024, pp. 86–96). Depending on the type of digital assets, the sale may be organized on exchange platforms and over the counter or peer-to-peer sale. The moment of the sale of digital assets in bankruptcy proceedings is one of the most important both for bankruptcy administrator and bankruptcy creditors. Namely, while the Law on Bankruptcy regulates bankruptcy proceedings as urgent, the volatile nature of price change imposes the sale at the best price (Art. 8. Law on Bankruptcy, 2009). In case of drop-off in trading (“crypto winter” or “chilling”) (Greifeld & Hajric, 2022), bankruptcy administrator may not comply with the first objective of proceedings – to ensure the most favorable collective settlement of bankruptcy creditors by achieving the highest possible value for the bankruptcy debtor or its assets. Therefore, the sale of debtor's digital assets

also depends on capacities and experience of the bankruptcy administrator (De Macedo & Coelho, 2021, p. 17).

After the sale is conducted, the bankruptcy administrator notifies the insolvency judge and the creditors' committee, and/or the secured and pledge creditors with the security interest, about the sale, its conditions and the price achieved. If the sold assets were not unencumbered by security interests, the money from the sale enters into the bankruptcy estate and will be distributed to the bankruptcy creditors. Expenses of bankruptcy proceedings are settled from the bankruptcy estate as a matter of priority. Upon settlement of these expenses, the costs of the bankruptcy estate are settled. Bankruptcy creditors are classified into payment ranks, depending on their claims. Digital assets are treated in the same manner if the bankruptcy proceedings continue toward reorganisation of insolvent company. If such assets are not necessary for conducting any measures adopted in reorganisation plan and confirmed by bankruptcy judge, they are sold at the highest possible price in order to ensure the most favorable collective settlement of bankruptcy creditors.

6. Conclusion

Although a relatively new legal institute, digital assets undoubtedly became a part of the personal property in Serbian civil law. By its nature intangible, but fungible, digital assets require specific manner of storing in electronic wallets on software storage accessible by keyword or on hardware storage. One of the main features providing the digital assets with legal qualification of a property right is their value. According to the assessments, the value of digital assets in the world reaches dozens billions of USD. That is the reason why such assets may and have to be the pledge for settlement of claims towards their owners. By regulating digital assets, acquiring, sale and other transactions relating to digital assets, Serbian legislator also set the legal framework for protection of creditors. As any type of personal property, digital assets may be apprehended from their owners along with other assets and sold in bankruptcy proceedings. For the time being, bankruptcy proceedings in Serbia can only be carried out against legal persons. Therefore, creditors of natural persons and entrepreneurs have to rely on civil enforcement proceedings. The purpose of sale of assets in bankruptcy proceedings is the settlement of creditors' claims by achieving the most favourable value of debtor's assets. However, the value of digital assets often faces the important risk of significant changes in price. Bearing this in mind, treatment of digital assets in bankruptcy proceedings requires the appointment of a professionally educated and experienced bankruptcy

administrator. First challenge that the bankruptcy administrator faces is to determine the existence of digital property in the bankruptcy estate with or without the cooperation of the bankruptcy debtor. For this purpose, the bankruptcy administrator may request information from the National Bank of Serbia, public bodies and licensed providers of services related to digital assets. The situation is slightly different if the pledge or fiduciary agreement stipulated by the owner has digital assets as security. In that case, their apprehension is not an obstacle, but achieving their favourable price. Once the digital assets are found and apprehended, they have to be cashed accordingly in a due time framework. Before the sale, the value of digital assets has to be carefully assessed. Establishing the valuation report also requires an experienced expert. Even then, the period between the apprehension and the sale of digital assets remains the most delicate part of bankruptcy proceedings. Hence, this is the second important challenge for bankruptcy administrator. It also imposes a new approach to the sale methods regulation in bankruptcy proceedings. The bankruptcy administrator has a difficult decision to make between respecting the time framework and the principle of urgency of proceedings on the one hand and the moment of selling of the digital assets at the best price on the other. However, the decision on debtor's destiny relies on creditors, who may decide about the future of the insolvency debtor by voting for its liquidation or its reorganisation. In both cases, the financial aspect of its assets remains the most decisive factor. If digital and other assets secure sustainable business, insolvency debtor has his second chance in the reorganisation proceedings. The new regulation on digital assets in Serbia represents only the initial framework that requires further development by adopting by-laws and other regulation. In particular, regulation on professional education of judges, bankruptcy administrators and licensed providers of services related to digital assets and licensed valuation experts should be adopted and implemented. Judicial practice on digital assets is yet to be expected.

Conflict of Interest

The authors declare no conflict of interest.

Author Contributions

Conceptualization, Đ. Đ. and V. J.; methodology, Đ. Đ. and V. J.; resources, Đ. Đ. and V. J.; formal analysis, Đ. Đ. and V. J.; writing – original draft preparation, Đ. Đ.; writing – review and editing, Đ. Đ. All authors have read and agreed to the published version of the manuscript.

Funding

This research received no external funding.

Data availability statement

The original contributions presented in the study are included in the article. Further inquiries may be directed to the corresponding authors.

Informed Consent for Participation in the Study / Institutional Review Board Statement

Not applicable.

Đurić M. Đuro

Univerzitet Union Nikola Tesla, Fakultet za poslovne studije i pravo, Beograd, Srbija

Jovanović M. Vladimir

Univerzitet Privredna akademija u Novom Sadu, Pravni fakultet za privredu i pravosuđe u Novom Sadu, Novi Sad, Srbija

„UHVATI ME AKO MOŽEŠ!“ – PRAVNI POLOŽAJ DIGITALNE IMOVINE U STEČAJNOM POSTUPKU U REPUBLICI SRBIJI

APSTRAKT: Sama pojava digitalne imovine predstavlja revolucionarni fenomen u tehnologiji, privredi i pravu. Njenim uređenjem, u zakonodavstvo uvodi se nov institut stvarnog prava, kojim ona, pored stvari, prava i realnih očekivanja, postaje predmet imovine. Budući da predstavlja određenu, mada često promenljivu vrednost imovine, a imovina svakog lica predstavlja zalogu za namirenje potraživanja svojih poverilaca, važno je obezbediti adekvatnu zaštitu prava i interesa poverilaca u okviru zakona. Ovo je posebno važno kada je u pitanju kolektivno namirenje potraživanja poverilaca u stečajnom postupku. Godine 2020. Republika Srbija usvojila je zakon kojim se uređuje digitalna imovina, njen predmet, izdavanje, promet i zaloga. Subjekti prava na digitalnoj imovini mogu biti i fizička i

pravna lica. Imajući u vidu da srpsko zakonodavstvo poznaje samo stečaj pravnih lica, pažnja će biti posvećena digitalnoj imovini pravnih lica kao subjektima stečajnog postupka. Upravo je u interesu njihovih poverilaca da uspešno namire svoja potraživanja na imovini dužnika. Autori ovog rada analiziraju reformu srpskog zakonodavstva u ovoj visokotehnološkoj temi i ukazuju na moguće slabosti tretmana digitalne imovine u stečajnim postupcima i zaštiti potraživanja poverilaca. Takođe, preporučuju dalji razvoj regulative o digitalnoj imovini, uključujući stručno obrazovanje relevantnih pravosudnih profesija. U ovom radu korišćeni su normativni metod, metod uporednog prava i statistički metod.

Ključne reči: digitalna imovina, stečajni postupak, zaštita poverilaca, namirenje potraživanja, Republika Srbija.

References

1. Bayliss M. (2020). Virtual Assets, Real Insolvency Issues. *Banking & Finance Law Review, Toronto*, 36(1), pp. 107–118
2. CERIL (2023). Statement 2023-3 on Crypto-assets in Restructuring and Insolvency, Reporters: Prof. Paula Moffatt and Prof. Dominik Skauradszun. Downloaded 2025, October 15, from www.ceril.eu/news/ceril-statement-2023-3-on-crypto-assets-in-restructuring-and-insolvency
3. D'Avoine, M., & Hamacher, P. (2022). Kryptowährungen im Insolvenzverfahren: Sicherung, Behandlung, Verwertung und mehr. *ZIP: Zeitschrift für Wirtschaftsrecht*, 43(1), pp. 6–12
4. De Macedo J. S., & Coelho D. F. (2021/2022). Crypto currencies and insolvency in Portugal: What does the future hold? *Eurofenix*, (86), pp. 17–19
5. Directive of the European Parliament and of the Council of 16 September 2009 No. 110/2009 EC on the taking up, pursuit and prudential supervision of the business of electronic money institutions amending Directives 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC, OJ L 267/7 of 10/10/2009
6. Directive (EU) 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, amending Regulation (EU) No 648/2012 of the European Parliament and of the Council, and repealing Directive 2005/60/EC of the European Parliament and of the Council and Commission Directive 2006/70/EC, OJ L 141 of 05/06/2015

7. Droege Gagnier, A., & Marlière, L. (2019). Crypto-currencies in insolvency proceedings in France: Dealing with highly volatile assets. *Eurofenix*, (76), pp. 28–29
8. Đurić Đ., & Jovanović, V. (2023). New Regulation of Digital Assets for Future Business – Case Of Serbia. *AGORA International Journal of Juridical Sciences*, (1) pp. 7–16
9. Greifeld, K., & Hajric, V. (2022). “Crypto Winter” Fears Chill the Battered Bitcoin Faithful, Bloomberg News. Downloaded 2025, October 12, from www.bloomberg.com/news/articles/2022-01-25/-crypto-winter-fears-send-chills-to-battered-bitcoin-faithful
10. Hill, M., Connelly, A., & Vouglis, E. (2022). Digital assets in insolvency- what you need to know. *Australian Restructuring Insolvency & Turnaround Association Journal*, 34(3), pp. 4–11
11. Inacio E. (2018). Digital assets in insolvency and restructuring. *Eurofenix*, (71), pp. 12–13
12. IFRS International Financial Reporting Standards Foundation. *Interpretation Committee Meeting, Holdings of Cryptocurrencies*, Downloaded 2025, October 10, from www.ifrs.org/content/dam/ifrs/meetings/2019/june/ifric/ap12a-comment-letters.pdf
13. INSOL International (2019). *Cryptocurrency and its impact on insolvency and restructuring, Special Report*, Downloaded 2025, October 12, from www.insol.org
14. Krivični zakonik [Criminal Code]. *Službeni glasnik RS*, br. 85/05, 88/05 – ispr., 107/05 – ispr., 72/09, 111/09, 121/12, 104/13, 108/14, 94/16 i 35/19
15. Lyadnova P., Dorokhova E., & Whitney H. (2018). Cryptocurrencies in insolvency: Evasive Reality. *Emerging Markets Restructuring Journal*, (7), Downloaded 2025, October 15, from www.clearygottlieb.com/-/media/files/emrj-materials/issue-7-summer-2018/cryptocurrencies-in-insolvency--evasive-reality-pdf.pdf
16. Majic J. (2022). *Europe’s crypto capital might not be where you expect*, SIFTED, Downloaded 2025, October 14, from www.sifted.eu/articles/crypto-startups-europe-balkans/
17. Maydanyk, R. (2023). General Provisions of Digital Property Law and How to Categorize Digital Assets. *Open J. Legal Stud.*, 6(2), pp. 49–64, DOI: 10.32591/coas.ojls.0602.02049m
18. Mihajlović, B. (2021). Digitalna imovina u pravnom sistemu Srbije: osnovne karakteristike [Digital assets in the Serbian legal system: The main characteristics]. In: Soković, S. (ed.), *Usklađivanje pravnog sistema Srbije sa standardima Evropske unije [Harmonisation of legal system of*

- Serbia with the EU standards*] (pp. 595–609). Kragujevac: Pravni fakultet Univerziteta u Kragujevcu; Institut za pravne i društvene nauke. DOI: 10.46793/UPSSIX.595M.
19. Ministarstvo finansija Republike Srbije. *Objašnjenje u vezi sa računovodstvenim priznavanjem, vrednovanjem i načinom knjiženja digitalne imovine u poslovnim knjigama obveznika*. [Opinion regarding accounting recognition, valuation and manner of recording digital assets in the business books of taxpayers]. br. 401-00-509/2021-16 od 01.02.2021.
 20. Narodna Banka Srbije. *Digitalna imovina* [Statement on Digital Assets]. Downloaded 2025, October 14, from www.nbs.rs/en/ciljevi-i-funkcije/nadzor-nad-finansijskim-institucijama/digital-imo/index.html
 21. Narodna Banka Srbije. Uputstvo za sprovođenje Odluke o uslovima i načinu obavljanja platnog prometa sa inostranstvom [Instructions for the Implementation of the Decision on the Conditions and Manner of Performing International Payment Transactions]. *Službeni glasnik RS*, br. 24/07, 31/07, 41/07, 3/08, 61/08, 120/08, 38/10, 92/11, 62/13, 51/15, 111/15, 82/17, 98/20, 154/20, 66/21, 92/21 i 27/25
 22. Neogradi, S., Anđelković, M., & Kaličanin, M. (2024). Digital Transformation in Stock Exchange and Banking Business. *International Journal of Economics and Law*, 14(41), pp. 86–96
 23. Nori, G. M., & Girolametti, M. (2023). International Insolvency Law and Cryptocurrencies In: Bonomi, A., Lehmann, M., & LalanI, S (eds.), *Blockchain and Private International Law* (pp. 417–455). Leiden/Boston: Brill Nijhoff
 24. OPUS Business Advisory Group (2021). *Cryptocurrency and Insolvency: A guide for insolvency practitioners*. London, September. Downloaded 2025, October 12, from www.franciswilksandjones.co.uk/wp-content/uploads/2021/09/Cryptocurrency-and-insolvency-a-guide-for-insolvency-practitioners-Sept-2021.pdf
 25. *Politika* (2021 December 15). U Srbiji oko 200.000 ljudi poseduje neku kriptovalutu [In Serbia, about 200,000 people own some cryptocurrency]. Downloaded 2025, October 14, from www.politika.rs/sr/clanak/494536/U-Srbiji-oko-200-000-ljudi-poseduje-neku-kriptovalutu
 26. Remolina N., Gurrea-Martínez, A., & Liu, D. (2024). *The Treatment of Digital Assets in Insolvency*. Downloaded 2025, October 14, from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4915592

27. Sarra, J., Madaus, S., & Mevorach, I. (2023). Chasing assets abroad: Ideas for more effective asset tracing and recovery in cross-border insolvency. *International Insolvency Review*, 32(2), pp. 253–288
28. Shawver J. (2021). Commodity or currency: Cryptocurrency valuation in bankruptcy and the trustee's recovery powers. *Boston College Law Review*, 62(6), pp. 2013–2055
29. Shishmareva T. P., & En'kova E. E. (2024). Digital Assets as Objects of the Recovery in the Bankruptcy Proceedings. *Journal of Siberian Federal University. Humanities & Social Sciences* 2024, 17(6), pp. 1078–1087
30. Udofia K. (2022). Treatment of Crypto-Assets in Insolvency: Lessons from different Jurisdictions, Downloaded 2025, October 12, from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4077707
31. Zakon o digitalnoj imovini [Law on Digital Assets]. *Službeni glasnik RS*, br. 153/20
32. Zakon o finansijskom obezbeđenju [Law on Financial Security]. *Službeni glasnik RS*, br. 44/18
33. Zakon o obligacionim odnosima [Law on Contracts and Torts]. *Službeni list SFRJ*, br. 29/78, 39/85, 45/89 – Odluka USJ i 57/89, *Službeni list SRJ*, br. 31/93, *Službeni list Srbije i Crne Gore*, br. 1/2003 – Ustavna povelja i *Službeni glasnik RS*, br. 18/20
34. Zakon o osnovama svojinskopravnih odnosa [Law on Basics of Ownership and Proprietary Relations]. *Službeni list SFRJ*, br. 6/80 i 36/90, *Službeni list SRJ*, br. 29/96 i *Službeni glasnik RS*, br. 115/05 – drugi zakon
35. Zakon o privrednim društvima [Law on Business Entities]. *Službeni glasnik RS*, br. 36/11, 99/11, 83/14 – drugi zakon, 5/15, 44/18, 95/18, 91/19 i 109/21
36. Zakon o stečaju [Law on Bankruptcy]. *Službeni glasnik RS*, br. 104/09, 99/11 – drugi zakon, 71/12 – Odluka USS, 83/14, 113/17, 44/18 i 95/18
37. Zakon o tržištu kapitala [Law on Capital Market]. *Službeni glasnik RS*, br. 31/11, 112/15, 108/2016, 9/20 i 153/20