CHARACTERISTICS AND TERMS OF DIGITAL SECURITIES DEVELOPMENT ON THE GLOBAL AND NATIONAL CAPITAL MARKET

Summary: We are witnessing the transformation of the financial instruments industry and the processes taking place in the capital market, which have initiated a new trend in securities business. The contemporary progress of the global digital securities market is characterized by interactions between rapid technological innovations, changes in investor habits and competition among technology giants. The research subject is supported by the fact that digital securities offering becomes a profitable business model available on blockchain platform, making securities the most interesting financial instruments in the 21st century. The aim of the research is to overview characteristics of digital financial instruments as a consequence of the difference in territorial areas and legislation, as well as how this affects the potential and challenges of development in the capital market. Description method, analysis and synthesis technique, as well as the documents content analysis in the relevant area, were used for the purposes of the research. The result of the research confirms further development of digital securities in a very challenging environment and resources mobilization through alternative funding methods.

Key words: digital securities, capital market, blockchain, alternative funding methods

1. INTRODUCTION

Blockchain technology represents one of the global trends that has a crucial role in reshaping capital market, viewed at the macroeconomic level. Digital securities came as a result of such disruptive technology and represent the latest business model in the 21st century. The digital form enables the mobilization of resources in response to market demands for alternative funding methods. Issuing as well as trading financial instruments on digital platforms provides a whole new climate for investing in assets, commodities or stocks, related to faster and cheaper trading and access to global capital pools.

Digital form of securities requires a special place where the trade will take place, such as blockchain platforms, that support this form of securities, enable their fast, safe and cheap trade, which differs from the previous way of trading with traditional financial instruments.

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Trading on this kind of market makes digital securities extremely liquid, with direct access to markets around the world and digital assets coverage. All the above represents a guarantee to investors stable returns. Among that, a greater transparency of the investment process is emphasized, related to the fact that digital securities issuers data are publicly available on online platforms, and the popularity of these securities is influenced by the fact that trading can take place without intermediaries, directly between the issuer and the investor. Each digital security is covered by some kind of digital asset or it can be used as an asset for financing the small companies and entrepreneurs, mostly start-up companies, canceling the differential treatment between wealthy, authorized investors and ordinary citizens who want to acquire ownership in these companies. All these characteristics uphold the rapid growth of investor interest in digital securities.

The paper is structured in several chapters. At the beginning of the paper there is a short summary, followed by an introduction part, with observations on the topic of digital securities, referencing the subject of research, relevance and methodology. The first part presents the development of digital securities through the formation of supply in the two most important markets – ICO and STO. The next two points deal with differences in the overall treatment of digital securities at the level of the European Union (in further text: EU) and the United States of America (in further text: USA), but also at the group level (example EU). In the last part is performed an analysis of opportunities and challenges in the global market of digital securities, through the perception of trends in the world and then in Serbia. In conclusion, the main observations related to the topic of digital securities were highlighted, with reference to further opportunities for development.

The subject of the paper is analysis of digital securities characteristics with the aim of projecting the potentials and challenges of their development on global and national capital market. Through determining the characteristics and basic postulates of digital securities, their current and future business concept is observed causing revolution of capital markets, both in the world and in the Republic of Serbia (in further text: Serbia). The initial hypotheses are reflected in the following assumptions:

• An increase of digital securities offering is expected, despite the current decline in volume and profit. Establishing a uniform rules among states and unique treatment on the global level, could contribute in faster digital securities development.

• Introduction of Law on Digital Asset in Serbia create an environment for digital securities implementation, primarily bonds. There is justified expectation that digital securities market in Serbia will start to grow in the near future.

The following research questions aim to give guidance throughout the research:

• How did digital securities offer evolve? What are the characteristics of digital securities?

• Why and how digital securities differ among countries?

• What are the potentials and challenges of digital securities development?

The subject of the research is supported by the fact that digital securities trading is becoming a new profitable business model and a source of financing available on online platforms not only for start-ups and small companies but also for large corporations, providing numerous benefits, making them the most interesting financial instrument in the 21st century. This research contributes to the domestic literature such as bringing the topic of digital securities closer to the academics, but also to all interested current and future users of digital securities in Serbia. The reliability of the scientific research was confirmed using
the following methods: sequential analysis, description method, documents content method was used such as visual, direct analysis of domestic and foreign literature.

2. EMERGENCE OF DIGITAL SECURITIES – HISTORICAL OVERVIEW

Prior to digital securities appearance there were several organized offers for participation in company’s capital or for using company’s products and services, within which securities were offered in return. Over time, the offers had such widespread use that can be characterized as markets or emerging economies. Based on that, the two world known markets of digital securities offering appeared – initial coin offering (ICO) and securities token offering (STO) – and they are based on the new concept of trading through a smart contract created on the blockchain.1, 2

The first form of digital securities emerged as the initial token offering (ICO) in USA3, in the form of a blockchain-based mechanism for financing smaller projects involving a smaller number of investors, to take part in 2017 as one of the world’s largest capital raising channels. A research study done by the Organization for Economic Cooperation and Development (OECD)4 testifies in favor of trade through initial token offerings, whose importance grew due to very low trade costs of 3% of total funds raised, as opposed to the concept of initial public offering (IPO), where these costs reached level between 10%–12%, thus advocating the view that the cost factor is one of the drivers for redirecting trade to the ICO. ICO is based on tokens, not only digital securities tokens but also service tokens (with the right to a service) and payment tokens (with payment function – digital money). Unambiguous determination of the type of token that is offered is very important due to the scope of regulations applied in this activity. Over time, hybrid tokens5 and dual token models have emerged in the ICO market6. Miglo (2021) also deals with tokens that simultaneously carry the characteristics of a service token and a token of securities from the aspect of moral hazard. The results of his research show that service tokens are more desirable than securities tokens when the degree of uncertainty is high, and those much more profitable strategies are the one with a hybrid tokens compared to those based on purely service tokens or securities tokens. These variations in the token forms have influenced the emergence of unregistered, namely irregular offers of digital securities on the ICO market, and quickly reached enormous proportions in terms of funds raised in this market, so many characterize it by the term “Wild West”7. This was the motive for promoting the digital securities phenomenon in order to achieve a greater degree of regulation. The Securities and Exchange Commission (SEC) of

the United States has recognized the need for active involvement in the control of the legality of digital securities transactions on the blockchain.

Table 1. The first forms of digital securities in the world

<table>
<thead>
<tr>
<th>Asset class</th>
<th>REAL ESTATE</th>
<th>DIGITAL FUND</th>
<th>DIGITAL BOND</th>
</tr>
</thead>
<tbody>
<tr>
<td>First issuance</td>
<td>St.Regis Aspen Resort A company that owns hotels and resorts</td>
<td>SPICE capital fund (VC) A company that invests in blockchain companies and start-up IT companies</td>
<td>Banco Santander Bank, a member of the multinational banking group Santander Group</td>
</tr>
<tr>
<td>Raised amount of capital</td>
<td>Raised $18 million in October 2018.</td>
<td>Raised $15 million in October 2018.</td>
<td>Bond value- $20 million on September 12, 2019, Banko issued first registered 1-year blockchain end-to-end bond, with quarterly coupons at 1.98%.</td>
</tr>
<tr>
<td>Investment and trading</td>
<td>Investments in partial ownership in real estate, on the private secondary market Templum. Token availability is only for accredited investors.</td>
<td>Investments in limited partnership in a fund. Token availability is only for accredited investors. Net income generated by selling a share in blockchain and IT companies.</td>
<td></td>
</tr>
<tr>
<td>Blockchain network system</td>
<td>Ethereum blockchain system (digital money) on the Templum market, registered at the SEC and FINRA</td>
<td>Ethereum blockchain system (digital money) on the stock exchanges Fusang Exchange (Asia) and OpenFinance Network (America)</td>
<td>Ethereum blockchain system (digital money)</td>
</tr>
<tr>
<td>Regulatory treatment</td>
<td>American Securities Regulations (issued on the basis of Regulation D-506c), applicable only to accredited investors from America</td>
<td>American Securities Regulations, if issued on the OpenFinance Network, in addition to Labuan Law when traded on the Fusang Secondary Exchange</td>
<td>N/A</td>
</tr>
<tr>
<td>Influence/ benefits</td>
<td>Higher liquidity through tokenization of parts of real estate (fractionalization) with a lower input value for investors</td>
<td>Higher liquidity through faster release of funds; invested amounts are traded again on platforms related to blockchain and IT companies</td>
<td>Reduced number of intermediaries due to automations, reduced risk of participants and, greater efficiency</td>
</tr>
</tbody>
</table>

Author, according to Deloitte (2019); OECD (2020) Lynn, & Rosati (2021); ICMA (2021).

Aiming to ensure the development of digital securities that would be in all terms in accordance with the applicable regulations of the country in which they are offered and traded, after 2017 a new form of market is established – security token offerings (STO) – intended exclusively for the offering and trading of digital securities, which separates them from other forms of tokens. STO emerged as a result of numerous irregularities in the trade of tokens at the ICO in order to protect investors and other market participants. The essence of the digital securities token market comes down to offering traditional financial instruments
converted into tokens, such as shares, within which token holders have the right to make a profit in the future. There is a broader definition of STO, where in addition to the possibility of making a profit, STO secures also rights such as share ownership, debt payments, voting rights, etc., guaranteed by a smart contract.

Digital securities can have different forms due to the different class of assets in which they are invested. The following table summarizes the first forms of digital securities characteristics by type of asset class.

### 3. DIGITAL SECURITIES OFFERING PROCESS (STO)

Digital securities offering process require traditional securities such as stocks, bonds or investment fund participation to be converted into tokens in order to be traded on the blockchain platform. But before making a decision on digital securities offering, the issuer should conduct an analysis and consider the circumstances under which it will be carried out. In that sense, SWOT matrix can be used in order to analyze the value of the digital securities offering, which would take into account all the good and bad sides of this process. If the analysis results are positive, issuer prepares and publishes a white paper. This document is mandatory in the process of offering digital securities, regardless of the country or trading platform. It contains information about the issuer of digital assets, digital assets and risks, but also the conditions and obligations, and the time of contract execution. If participants agree on contract, it is automatically executed and thus automatically excludes the need for the participation of a third party.

The process of issuing digital securities depends on investment type and can be generalized into several key stages:

- **Phase 1 – Preparation** – Issuer of digital securities prepares information for the target group of investors, namely the business plan and profit projection, the amount of capital required and the independent assessment of the auditor. Information varies according to the jurisdiction of offering, which could be characterized as an exception.

- **Phase 2 – Designing the offer** – Issuer must design digital securities offer and determine its basic elements – the number of tokens that are issuing, the value of each token, the rights arising from it, as well as the duration of the offer.

- **Phase 3 – Selection of Service Provider, platform and intermediary** – Issuer must select a trading platform and distribute securities to interested investors. The issuer can choose an intermediary, such as specialized broker, who will protect the interests of the participants, ensure a smooth flow of digital securities to the investor and funds to the issuer.

- **Phase 4 – Capital raising** – Issuer and its broker manage to identify the target investor, execute the agreements and distribute the digital securities. A specialized broker organizes fundraising from investors and distributes tokens, which is reflected in a direct capital increase.

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10 Schletz, Nassiry, & Lee. (2020).
• Phase 5 – Public disclosure of securities on trading venues – There are certain rules such as material disclosure standards and due diligence principle, eligibility of trading intermediaries, investor eligibility, annual list of trading fees and minimum token size

In each stage of digital securities offering, the participants play an important role, which is particularly emphasized due to activities that are not characteristic of traditional securities. Such are registered agent and specialized broker. Registered agent on behalf of the issuer creates a digital security on the blockchain network and registers it with the institutions responsible for this type of security. Specialized broker (according to the USA SEC: special purpose brokers) are authorized to hold digital asset securities, ensuring minimal risk for investors and other market participants. There is a guide for brokers describing their responsibilities (analyzes before and immediately after the issuance of digital securities) and obligations (prohibition of simultaneous trading with traditional securities or cryptocurrencies).12

Picture 1. Life cycle of digital security on the blockchain / Participants in the trade

4. DIFFERENT TREATMENT OF DIGITAL SECURITIES ON A GLOBAL LEVEL – A COMPARATIVE REVIEW OF THE EU AND USA

The analysis of digital securities shows that there are two approaches among countries when it comes to their regulation. First, in which countries are trying to regulate digital securities business by incorporating them into existing laws, and the second, in which countries adopt new laws and issue guidelines solely with the intention of regulating this area. A number of authors emphasize the importance of introducing new acts in the legal system adapted to

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digital securities. In this sense, Johnstone (2019)\textsuperscript{13}, Sirikanchana (2020)\textsuperscript{14} and Jovanić (2021)\textsuperscript{15} analyze the establishment of digital assets from a regulatory point of view, emphasizing that history is full of examples where existing regulation is resistant to technological changes, which slows down technology development and digitization. But on the other hand, they point out that the adoption of new regulations is often not in line with the implementation of science in practice, questioning the justification of their introduction. It can be found attitudes that indicate the spillover of the benefits of blockchain on the capital market, which must be accompanied by adequate regulations, adapted to new technologies\textsuperscript{16}. Azgad-Tromer (2018) relativizes this understanding and points out that there is still no accepted opinion on whether the introduction of new regulations reduces misuse and fraud in trading, as well as whether it affects the profitability of investors\textsuperscript{17}. For EU and USA is characteristic that they have incorporated the rules of offering and trading of digital securities into the existing regulatory framework, but also in the previous period started certain projects aimed at the development of digitalization, within which guidelines and regulations are issued in order to provide the highest possible degree of security in business with digital securities.

Through the implementation of the Financial Technologies Action Plan, EU is engaged in harmonization its regulations with the modern technologies requirements. At the end of September 2020, European Commission published several documents part of the Digital Finance Package: Digital Finance Strategy, Proposal for a Regulation on Crypto Assets, Proposal for a Regulation on a Pilot Regime for Market Infrastructure Based on General Ledger Technology, Proposal for a Regulation on Digital Operational Resilience of the Financial Sector, and Communication on EU Retail Payment Strategy\textsuperscript{18}. Each project aims to promote investment, formalize the trading and settlement process, as well as the obligations of market participants, and most importantly the new principle “same activity, same risks, same rules” which confirms the application of existing rules for activities that are by its function identical to existing financial services or products.\textsuperscript{19} From the position of the USA, SEC advocates a targeted approach towards innovative solutions in the field of digital securities, such as the establishment of a national innovation office, the introduction of enforcement proceedings against illegal activities, the establishment of the SEC control function in approving each new digital product, etc.\textsuperscript{20} For example, the idea of having an independent office for innovation (FinHub), which aims to deal with innovation and financial technology, directing and simplifying communication to provide quality information as a basis for investment decisions, was founded in 2018. Already in 2019, meetings were held in many cities and a framework was published to help analyze whether a digital asset is a security.

\textsuperscript{13} Johnstone, S. (2019).
\textsuperscript{14} Sirikanchana, S. (2020).
\textsuperscript{15} Jovanić, T. (2021).
\textsuperscript{16} Kaal, W. A. & Evans, S. (2019).
\textsuperscript{17} Azgad-Tromer, S. (2018).
\textsuperscript{18} Jovanić, T. (2021).
\textsuperscript{19} Ibid.
The following table provides a comparative overview of the governing regulations and rules in the EU and USA, which determine the further treatment of digital securities.

Table 2. Different treatment of digital securities in the EU and USA

<table>
<thead>
<tr>
<th>Criteria</th>
<th>EU</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory body</td>
<td>European Securities and Market Authority</td>
<td>Securities and Exchanges Commission, United Nations Supreme Federal Court</td>
</tr>
<tr>
<td>Transferability</td>
<td>Transferability – handing over the token to another person (transfer of ownership of the security) without requiring a certificate on ownership and existence of the digital token (Deloitte, 2020).</td>
<td>a) Investment in money – the purchase of digital security does not have to be in paper money. For example, digital securities of the DAO organization were purchased through digital money ETHER (Senderowicz, et al. 2018).</td>
</tr>
<tr>
<td>Negotiability</td>
<td>Negotiability- simplicity in the transfer of ownership, i.e. tokens from one person to another (Maume &amp; Fromberger, 2018).</td>
<td>b) Investment in a common entity – Equal treatment of investors (CROSSER, 2018), distribution of profits and risks on a pro-rata basis or the investor’s profit directly depend on the commitment of the entity manager or its profit (Gordon, 2011).</td>
</tr>
<tr>
<td>Principles of token as a security</td>
<td>Standardization – a set of common characteristics that digital securities must have so they can fall under the same “class of securities” (Deloitte, 2020).</td>
<td>c) Reasonable expectation of profit – the investor makes investments in which he consciously expects a return or profit. An investment in a digital token that is made to acquire a certain good, such as buying an apartment, is not considered a digital security (CROSSER, 2018).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d) Profit as a result of third party efforts. In interpreting this principle, Henning cites two examples – (1) Protostarr, whose tokens are not classified as digital security, given that investors directly influenced the value of the token and (2) DAO tokens are classified as investment, even though that investors had a direct impact on project selection, the final decision had the management (Henning, 2018).</td>
</tr>
</tbody>
</table>
5. DIFFERENT TREATMENT OF DIGITAL SECURITIES ON A UNION OF COUNTRIES – EXAMPLE OF THE EU

One digital asset can be classified as a digital security under certain criteria. States define criteria or tests to determine whether a particular transaction has the character of an “investment agreement”, indicating that criteria differ, and that digital asset in one country can be digital security and in another same asset has no characteristics of investment agreement. When it comes to unions of countries, the situation becomes more complicated, because in addition to the national rules, every country must respect the rules at the Union level. Based on the mentioned principles, the problem occurs in the absence of uniform rules at the Union level, which is followed by different rules, different business practices, creating a space for misuse. In this regard, from the investment amount (EUR 8M) and the type of offer (public or private), depends whether the national law or the EU law will be applied to offering and trading\(^\text{21}\). It should not be overlooked that differentiated treatment also exists for hybrid tokens\(^\text{22}\), and it is difficult to determine whether it can be subject to legislation concerning financial instruments.

Considering different national regimes enforcement in digital securities trading, companies and investors cannot apply business experience from one EU member state to

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another, which requires legal advice on the specifics of the legislation in that country.\textsuperscript{23} Differences in regulations carry the risk of different interpretations and definitions of digital securities between countries, bringing a negative impact on the market such as fragmentation and regulatory arbitrage. National regulatory authorities face the problem of difficult management and implementation of actions against token offerings to companies located in foreign countries.\textsuperscript{24} The problem is present globally among countries, most pronounced in the unions of countries where, among unified Union legislation, there is also a national one. For example, European Commission documents state that a market participant could intend to locate its activities in those member states with a more flexible approach regarding types of blockchain in securities trading. On the other hand, fragmentation can lead to high regulatory risk for investors, due to their determination to invest capital in countries with more restrictive blockchain policies, where digital assets are not considered digital securities. Even if digital securities regulations were adopted in all member states, their interpretation would still be different, as would investor protection.\textsuperscript{25}

Aiming to ensure legal certainty for investors and achieve higher taxonomy accuracy level in determining digital tokens, some countries have taken the initiative to prepare guidelines for the implementation of EU regulations. Such guidelines are derived from EU regulations to be adapted to the legal system and specific financial conditions in each country. This confirms a survey conducted by each member state, under the auspices of European Securities and Market Authority (ESMA), which covered six different models of digital tokens in 15 countries surveyed:\textsuperscript{26}

- Tokens with the characteristics of traditional shares – in almost all surveyed countries classified under the MiFID II regulation (considered digital securities);
- Tokens with exclusive ownership profit rights as well as tokens that includes exclusive ownership profit rights, rights to vote and the rights to a payment function – in most surveyed countries classified under MiFID II (considered digital securities) – those countries that do not classify these two groups of tokens, as digital securities, are considered to be other classes of securities outside the scope of MiFID II;
- Tokens with the right to participate in the investment fund as well as tokens with the service or profit right (without payment function) – in a small number of surveyed countries classified under MiFID II regulations (not considered digital securities);
- Service tokens (possibility to purchase unused storage space on the network) – none of the surveyed countries classifies the token as a security (they are not considered digital securities).

\textsuperscript{23} Véron, N. & Wolff, G. B. (2016).
\textsuperscript{24} Maume, P. & Fromberger, M. (2018).
\textsuperscript{26} Mass, T. (2019).
6. ANALYSIS OF POTENTIALS AND CHALLENGES IN THE DEVELOPMENT OF DIGITAL SECURITIES

Analysis of potentials and challenges in development of digital securities on a global level.

Importance of digital securities offering is growing, especially compared to traditional methods of raising capital, as a result of various advantages such as access to global capital, greater transparency, liquidity, efficiency and capacity for change. Many countries, through digital securities, have recognized the opportunity to reduce the financial system's dependence on banks as the main source of funding, while shifting their economies to capital markets\(^{27}\). The dominant funding source for companies in Europe and Japan are bank loans, while companies in USA rely heavily on equity, corporate bond and capital securitization financing. The developed capital market is a stronghold of digital securities, which consequently first appeared in USA and achieved the greatest success.

In this context, the potentials of digital securities development are highlighted, such as a completely new approach to managing the economic environment (Thomason et al. 2018), a sustainable way of financing digital products (Merrill, Schillebeeckx & Blakstad 2019), and the transformation of business systems (Nassiry, 2019)\(^{28}\). The technology is in a continuous process of development and its contribution to the capital market, especially the digital securities market, in the future aims to create new business models, redefine and redesign user needs through the introduction of new products and services, all while ensuring regulatory efficiency. Deloitte's report on the future development of digital securities trading for 2030 states that the expectations from technology are: reduction of manual activities (digitalization of payment activities, etc.), providing data on demand (provide information and data to clients for investment decision-making process and consequently the capital management process efficient), reduced time of various activities (minimum time for maximum volume activities, including regulatory and risk reporting), launch of digital products and services (chat boxes, etc.), access to global capital markets (providing benefits to companies that issue digital securities in terms of avoiding double listing) and better market surveillance (better identification of misuses, market fraud, issues of business compliance with the laws)\(^{29}\). The basis of further development are billions of savings that can be achieved in the trade process. Some estimates suggest that blockchain technology has the ability to reduce calculation and settlement costs of securities by around $11-12 billion (Goldman Sachs) and the ability to reduce cross-border transaction and trading costs by around $15-20 billion (Banco Santander, Oliver Wyman Company, and Anthemis Group 2015.).\(^{30}\) Despite the significant role of blockchain technology in capital market development and the financial sector in general, Priem (2020) indicates that the development and use of blockchain technology will be carried out in stages, gradually, considering that

\(^{27}\) Véron, N. & Wolff, G. B. (2016).
\(^{30}\) Priem, R. (2020).
market participants will first focus on segments with the potential to achieve the highest efficiency (for example: segments in which human intervention is required, segments in which processes are time-consuming and/or segments in which errors often occur) and after that on the entire lifecycle of the trade process.

Insufficient number of offers and trade arrangements indicate lack of security and experience of participants, but the speed with which market conditions change with regulators further complicates the process of defining laws that would respond to all market challenges. There is a lack of unification of regulations and standards on the group of countries (examples such as EU, USA given in this work), which leads to the conclusion that the unification process on the global level is highly complicated process, practically unsustainable at the moment. There is difference between blockchain network systems used in securities trading, which directly complicates the process of trading and compliance in financial markets. As a result, the requirements related to the creation of digital securities tokens, subscription, publication of offers, prospectuses and trading engagement differ between jurisdictions, which slows down its development, by limiting market capacity and investors themselves, opening space for misuse and frauds.

The Deloitte company report highlights some of the challenges such as regulatory alignment, investor training, platform credibility and STO system infrastructure development, while the ESMA report mentions challenges such as the effect of network business, standardization, technology-related issues, state-level issues. In the paper of Johnson (Johnson, 2019) can be found a report of the Greenwich Association in which 63% of respondents expressed opinion on the insufficient legislation clarification level (the report included responses from 114 blockchain participants, out of which 70% were actively involved in digital securities trading across North America, Europe, Asia and the Pacific, the Middle East and Africa). Certainly, the implementation of regulatory policy in one country can have consequences for the economy of another country. Bellavitis et al. (2021) named this phenomenon the Innovative Institutional Theory of Overflow Effects, stating that after the ban on ICO trade in China and Korea, trade in other countries decreased in the short term, but in the long run led to increased investment quality. The significant impact of the COVID 19 pandemic on the financial sector and capital markets is evident, which has led to a reduction in investment and traditional capital resources.

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35 Bertoni, F. et al. (2021).
6. ANALYSIS OF POTENTIALS AND CHALLENGES IN DEVELOPMENT OF DIGITAL SECURITIES IN SERBIA

Serbia has joined a small group of countries in the world and adopted a completely new law in the field of digital assets. In the process of defining national law, the basic principle was to comply with the EU approach, which required establishing a distinction between cryptocurrencies on which the existing regulatory framework applies (primarily the Capital Market Act) compared to other forms of cryptocurrencies for which it is necessary to adopt new normative acts and update the existing ones. Focus on EU regulations stems from many years of work on harmonizing Serbian financial system with EU regulations, as well as adjusting to the implementation of the digital finance strategy in Europe, thus setting a framework to support digital financial development. The new Law on Digital Assets in Serbia entered into force on December 29, 2020, applicable from June 29, 2021.36 Many rulebooks and instructions have been adopted, and some laws have been amended, primarily Property Tax Law, which introduce digital property into the Serbian legal framework for the first time as a taxable category. It is crucial to point out that this law applies only to those digital assets that do not have the characteristics of shares, are not substitutable for shares and the total value of digital assets offered by one issuer over a period of 12 months does not exceed EUR 3,000,000 in dinar equivalent by official middle rate determined by the National Bank of Serbia on the day of offer, i.e. during the primary sale (paragraph 7).37 In other words, Law on Digital Asset does not cover shares, which should facilitate the offering and trading of other financial instruments, primarily tokenized bonds.

Many legal and consulting firms in Serbia positively assess the effects of the Digital Asset Act, considering it would cause positive effects and contribute to more progressive development of the capital market thanks to digitalization, as well as greater legal certainty through reducing the misuse of digital property for criminal purposes. Due to the successful trade in digital assets, primarily digital currencies, in the previous period, Serbia achieved significant success and thus ranked among the ten leading countries in the world in terms of total profit in the ICO market.38 Some positive aspects of digital securities offering in Serbia for issuers would be promoting alternative ways of raising funds in Serbia in relation to traditional types of borrowing (capital, own funds), attracting a wider range of potential investors and tax relief (for individuals an exemption is 50%, while in the case of legal entities is permanent, under the assumption that the funds acquired through the sale of digital assets are reinvested in the company, i.e. the fund).

However, it should be noted that the Law on Digital Asset has already received the first criticism related to the challenge of digital securities development. Authors Hrnjak and Kašćelan (2021) critically look at language formulations, which do not fall within the framework of Serbian laws, pointing to a problem in the law interpretation. According to them, the institute of digital asset owner does not correspond to traditional terms, that the owner requires physical ownership over the object (materiality), which is not the case with

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36 Zakon o digitalnoj imovini, Službeni glasnik Republike Srbije, 153/2020
37 Ibid
digital property as virtual good (immateriality). Deficiencies can also be summarized through areas that have not yet been regulated or where the application of the new law is unclear. For example, a potential increase in the volume of foreign exchange transactions with digital assets may be an obstacle to foreign exchange transfers, inflows and outflows based on investments, because they are not contained in the Act on Foreign Exchange Operations. Uncertainty in Law on Digital Asset application stems from several other aspects, such as origin of digital asset property, how disputes will be processed and resolved, how much digital securities participation costs are, how the law protects participants from misuse. This is supported by the fact that certain competencies regarding the law were given to the owners of the platforms, i.e. the organizers of the trade in digital securities.

Digital securities market in Serbia is at the very beginning of its development. The first step in that direction took place almost a year after the implementation of the Law, in May 2022, when the issuance of the first digital token was approved. The Securities Commission approved factoring token offering to Finspot d.o.o. Belgrade, with nominal value 1,000 dinars, and total value of the initial offer of 35.25 million dinars. In December 2022, a new white paper was approved for the same company for 185.250 tokens, nominal value 1,000 dinars. The theoretical concept of offering digital securities as a form of capital financing in Serbia has not yet shown its practice capabilities, due to various factors. Primarily, the low level of investment culture, both among individuals and legal entities, as a consequence of the underdeveloped capital market. For many years, concepts of financing companies as well as investment activities are focused on standard internal and external sources, namely bank loans and self-financing. A small step forward in this area has been made with the introduction of the Alternative Investment Funds Act, after which different projects and companies funding appeared on the market (equity crowdfunding). Giving support on digital securities trading and the development of this area is possible only with the appropriate infrastructure, which is based on two pillars – adequate regulations and participants in the trade process. In pursuit of the ultimate goal on digital securities offering on the Serbian market, information presented to the public must be more transparent, through various media channels, various trainings and seminars, in order to create general public awareness and change habits for encouraging investments. Law on Digital Asset is certainly the first step on that path.

7. CONCLUSION

Digital securities markets in world are constantly expanding, decentralizing and diversifying. The segment of their diversification is reflected in the ability of investors to receive a financial instrument of a company in the form of tokens, which can be replaced in the short term due to its digital form, making them very liquid. This resulted in a great demand and interest in digital securities, which in 2019 reached its peak in the number of realized offers. The center of their further development is technology that will continue to bring new business models focused on customers and their needs, creating a secure environment

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40 Erić, D. et al. (2012).
that protects users and their financial deposits, and guarantees further prosperity of the modern digital securities market. In the future, a digital securities business model can bring the creation of new alternative sources of income, focus on new products, greater controls, modern architecture (platforms, ecosystems), as well as creating user needs. The development intensity of the digital securities market is already differentiating between countries, which is a consequence of economic and financial prosperity of a country, it’s goals and governing policy. Due to the stable political situation and the developed capital market, the developed countries of the world were, as expected, the first to get involved in the process of offering and trading digital securities. On the other hand, there are a number of reasons why those countries prolong the inclusion of digital securities in their trade ecosystem which can slow down market growth, such as the lack of clearly defined regulations related to digital securities, limitations of existing regulations which are resistant to technological changes or are not adapted to new digital products, as well as investor uncertainty resulting from ignorance of the area and doubts about market integrity. Regardless of all these challenges, the fact is that digital securities can be used as a quality source of capital, and that both developed and developing countries should justifiably give them a “chance”.

Government in Serbia recognized the potential of digital securities offering for economic development, focusing on alternative forms of capital funding, thus giving preference to smaller companies to develop their ideas and business ventures internationally. Access to global capital pools and large investment projects, as well as attracting international investment, represents a chance for economic recovery and an opportunity for as many companies as possible to succeed in the domestic territory. Considering this, in December 2020 a new Law on Digital Assets came into force in Serbia introducing digital securities as an institute. In addition to the recognized potentials, this law was created as engagement on national regulation harmonization with EU regulations, as well as adjustment to the implementation of digital finance strategy in Europe, thus setting a framework to support digital financial development and financial market risks. Additional engagements will be needed in the field of raising the level of investment culture with both individuals and legal entities, in order to have a practical approach to this business model in Serbia. As this type of capital financing is still unknown to many, the focus is on traditional types of financing – bank loans or own funds. Giving support on digital securities trading and the development of this area is possible only with the appropriate infrastructure, which is based on two pillars – adequate regulations and participants in the trade process. It is expected that the first investment ventures will be realized in the next period and that this area will have a growing tendency, in proportion to the financial possibilities of investors.

Although the COVID-19 pandemic caused a significant decline in investors financial power, reduced supply and trade, with lower financial instruments trading income, this is a key period when growth of digitalization and digital literacy occurred, with good precondition for further development of digital securities. In accordance with the above mentioned, it is possible to accept the initial hypothesis that indicates the further development of digital securities in the world, due to their positive impact on the financial and economic system. Additionally, Serbia is experiencing its first effects of implementation, leading to establishment of digital securities market. In both cases, it is necessary to provide a good regulatory economic and financial environment, which are the basis for a successful digital securities system.
LITERATURE


• Zakon o digitalnoj imovini, Službeni glasnik Republike Srbije, 153/2020.
KARAKTERISTIKE I USLOVI RAZVOJA DIGITALNIH HARTIJA OD VREDNOSTI NA GLOBALNOM I NACIONALNOM TRŽIŠTU KAPITALA

Sažetak: Svedoci smo transformacije industrije finansijskih instrumenata i procesa koji se odvijaju na tržištu kapitala, koji su pokrenuli nov trend u poslovanju sa hartijama od vrednosti. Savremeni progres globalnog tržišta digitalnih hartija od vrednosti karakterišu interakcije između brzih tehnoških inovacija, promene u navikama investitora i konkurencija među tehnoškim gigantima. Tranzicija pomenutog tržišta praćena je pristupu globalnim tržištima kapitala, većoj transparentnosti, likvidnosti, efikasnosti i kapacitetu promena. Novi trend omogućava mobilizaciju resursa putem alternativnih metoda prikupljanja kapitala, a izraženo kroz brže, jeftinije i sigurnije poslovanje. Aktuelnost predmeta istraživanja potvrđena je činjenicom da izdavanje digitalnih hartija od vrednosti postaje profitabilan model poslovanja dostupan na blokčejn platformama, pružajući brojne benefite, što ih čini najinteresantnijim finansijskim instrumentima u 21. veku. Cilj istraživanja je sagledavanje karakteristika digitalnih finansijskih instrumenata kao posledica razlika u teritorijalnim oblastima i zakonima, kao i njihov uticaj na potencijal i izazove razvoja tržišta kapitala. Metoda deskripcije, tehnika analize i sinteze, kao i analiza sadržaja dokumenata u relevantnoj oblasti korišćene su za potrebe izrade rada. Rezultat istraživanja potvrđuje dalji razvoj digitalnih hartija od vrednosti u veoma izazovnom okruženju i mobilizaciju resursa putem alternativnih izvora financiranja.

Ključne reči: digitalne hartije od vrednosti, tržište kapitala, blokčejn, alternativni izvori financiranja

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