

UNIVERSITY "UNION-NIKOLA TESLA", BELGRADE Faculty of Law, Security and Management "Constantine the Great", Nis

SECURITY CHALLENGES OF MODERN SOCIETY

Dilemmas and implications

Editor Dejan Dašić

UNIVERSITY "UNION-NIKOLA TESLA", BELGRADE Faculty of Law, Security and Management "Constantine the Great", Nis

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Thematic International Monograph

Monograph editor Prof. dr Dejan Dašić

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PREFACE

Today, the word security, in almost all languages and cultures, has come into use in a large number of very different social areas. When reading about world politics, we often encounter the terms "security" or "national security", whether it is about sports, politics, health, computer science, ecology, psychology, economics, finance, or even movies. Baudrillard states that, for example, film is not only used to reconstruct the past, but also plays an active role in anticipating and predestination of the future. In other words, first everything is "enacted" on film, as a preparation for the public, and then the offered construction is replicated in reality itself. Many armed robberies, hijackings, etc., are in some way simulated, in that they are mapped out in advance in the ritual explanations and orchestration of the media, anticipated in their staging and their possible consequences.

It is important to note at the outset that both military and non-military threats pose security problems and hazards in the current global security environment, but that non-military threats pose the majority of them. Due to the strong connections between these security threats and problems, the situation in one sector might have a significant impact on other regions. At the same time, the majority of the hazards and problems that now face one part of the world also affect nearby regions, or maybe even numerous remote locations. This just highlights the complexity of the current situation for international security. The idea of "comprehensive security," which considers the complete spectrum of security concerns and dangers to communities, states, and the international system as a whole, is therefore a leading item.

Geopolitical divisions have continued to grow and deepen, implying an ever-increasing threat to global security. We are often asked if we are in a new cold war. Crises are spreading, conflicts are increasingly internationalized, with the participation of regional and global powers. The situation in Ukraine confirms this, as well as heightened tensions and increased speculation about a military conflict in Europe. Migration is one of the most hotly debated topics at the European level even in 2021, despite the COVID-19 pandemic's reduction in the number of individuals crossing EU borders. In an attempt to slow the spread and impact of the COVID-19 pandemic, nations have limited international, transnational, and domestic travel. This has had an impact on migration and human mobility in the European region.

The COVID-19 pandemic has highlighted the inadequacy and moral bankruptey of our global financial system, which has increased systemic inequality between North and South. Some authors state, one of the key questions regarding COVID-19 vaccines is whether they can reduce viral shedding. It manifests its negative effects in all areas of people's lives and work. Foreign direct investment flows are not exempt from this process either. The decline in foreign direct investment flows was primarily due to political reactions to the COVID-19 pandemic, such as the closure of national borders, which in the interaction of shocks on the supply and demand side led to a pandemic. The COVID-19 pandemic negatively affected production around the world, increased the prices of many products, and significantly increased the price of transportation, i.e., distribution of products to the end customer (consumer).

The most crucial aspect of organizing a sporting event is safety. The sports sector generates enormous revenue, in the hundreds of billions of euros or dollars. Because it does not grow and loses money, the sports industry cannot tolerate any disruptions for reasons of safety or for any other reason. For the successful application of marketing potential at sports events, it is important to emphasize the need to fulfill the first and basic condition, which is safety.

Political actors use media reporting as a tool for influencing public opinion, to boost popular support for political choices and programs, and as a justification for military operations and conflicts. Additionally, political players have a propensity to mold the global media landscape in order to affect foreign public opinion and, perhaps, the foreign policies of other countries.

The concept of security should be considered as part of new forms of social and individual control, that is, it should be shown that for the first time in history, security has become a fundamental economic fact of modern society, that is, that fear and the production of fear, and therefore the need for security, have emerged as an irreplaceable instrument. policies and capital growth. Global events like migration flows, political unrest, and infectious disease pandemics have all disturbed security, but the proliferation of illicit weapons that are unchecked and freely traded on underground black markets continues to have a negative impact on security. Weapons in illicit flows are used to perpetrate the majority of crimes and terrorist attacks worldwide, and they also pose the biggest danger to personal and international security. Every nation state in the world must prioritize arms control, accurate and current arms registration, and citizen weapon monitoring.



In light of the information above, it is feasible to conclude the essay by stating that recent years have unequivocally shown that the nature of security threats and hazards to an international security has changed dramatically. A brand-new security environment has been established as a result of global security concerns including terrorism, organized crime, the spread of weapons of mass destruction, and others. Because of all the above, it was easy to choose the thematic framework for this monograph.

The monograph contains 28 works divided into 5 sections, by authors from 13 countries (Slovakia, Bosnia and Herzegovina, Bulgaria, Belarus, USA, Albania, Croatia, India, Ukraine, Cyprus, UAE, Montenegro end Serbia) by 35 institutions. All papers have passed two independent reviews and an anti-plagiarism check (*Turnitin*). Thanks to all the authors for the submitted papers, I hope we will continue our cooperation, thanks to the reviewers for a job well done, as well as to numerous colleagues, assis-tants and friends who helped this monograph saw the light of day.

In Jagodina 28.09.2022 Dejan Dašić, associate professor



GLOBAL SECURITY MANAGEMENT CHALLENGES



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EFFECTIVE INTERCULTURAL COMMUNICATION WITH THIRD-COUNTRY NATIONALS AS A WAY OF RAISING THE LEVEL OF INFORMATION GATHE-RING IN THE INTEREST OF NATIONAL SECURITY¹

Elena Nikolajová Kupferschmidtová²

Key Words: intercultural communication, police, thirdcountry nationals, funda-mental rights and freedoms, language assitance

Abstract: The present contribution focuses on the provision of effective language assistance provided to the third-country nationals arriving into the territory of the Member States of the EU and being detained in the detention facilities. The author, points out at the challenges in ensuring the professional translation and interpreting services, in particular, in cases of less-spread and indigenous languages that are in most cases mother tongues of the detained nationals. At the same time, the stress is laid on the importance of information gathering from the perspective of national security in the process of interviewing the third-country nationals that are entitled to the language assistance. The obligation to provide language assistance to arriving third-country nationals results from the European Convention on Human Rights as one of the procedural safeguards and needs to be guaranteed as a fundamental human right to everybody. Respect and protection of fundamental human rights also contributes to the elementary sense of safety in all Member States nationals living in the territory of the EU. The present contribution is the output of the project of the Academy of the Police Force in Bratislava under the title: Intercultural Communication with the Third-Country Nationals in Detention Facilities (No. 241)

Introduction



ven the COVID-19 pandemics reduced the numbers of people migrating across the European Union (EU) borders, migration remains one of the most topical issues at the European level even in 2021. "The COVID-19 pandemic has affected migration and

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human mobility in the European region as countries have restricted international, transborder and internal movements to minimize the spread and impact of the pandemic. As of mid-June 2020, 6 per cent of airports, 25 per cent of land border crossing points and 9 per cent of "blue border" (sea, river or lake) crossing points were closed for their entry and exits in the European Economic Area (EEA)" (IOM, 2020). Especially, illegal migration of third-country nationals arriving into the territory of the EU Member States remains an issue that still needs to be addressed as according to the International Organization for Migration (IOM) the total number of illegal migrants and asylum seekers who arrived in Europe in 2020 was 128,536, respectively. With such number of foreigners, the national governments of the individual Member States face the challenges in terms of providing funding to address migration and tackle the need to provide adequate housing, health care, education, legal aid, and also language assistance to the arriving migrants, even they are entering the territory of the EU illegally and consequently are detained in the detention facilities. "The provision of the language assistance along with the cultural mediation for the third-country nationals detained in detention facilities is an area that has received increasing attention in recent years, as it is an issue that directly reflects the level of respect for fundamental human rights in the individual EU Member States towards the third-country nationals" (Nikolajová Kupferschmidtová, 2020). It is also necessary to point out at the fact that the term language assistance means an interpretation service which must be provided by the Member State not only for basic communication in official communication with the competent authorities, but also for daily communication between members of the Police Force and foreigners placed in detention facilities across the Member States.

The main aim of the present contribution is to present the legal framework and current situation regarding the provision of language assistance to the third-country nationals detained in detention facilities within the individual Member States and point out at the European Court of Human Rights Case-Law related to the violation of the right to communicate in the language a detainee understands which is at the same time procedural safeguard guaranteed by the respective authorities at the national, European and international level. The particular stress is laid on the language assistance as a means of communication in migration – security nexus as through the effective communication the information and data gathering is possible. Thanks to the data gained through the interviewing process of third-country nationals, the relevant data is not only gained but also subsequently analyzed and possible threats to national/European/international



security are detected as the notion of migration being a possible threat to national security was already introduced by Weiner in 1993. Not only the national security of receiving state is threatened but also the security of sending country. Nowadays, the threats are mainly related to international crime and terrorism. The cases of religious extremism and organized terrorist groups have been probably the most vivid during the recent periods, and gained the worldwide media attention. Thus, the information gathering on the one hand, is of utmost importance as the collected data may be further analyzed and communicated between the respective countries. On the other hand, it is also important to pay attention to the fundamental human rights and freedoms of arriving third-country nationals and provide them with all necessary information about their rights and obligations within the territories of the EU Member States as they are entitled to the same fundamental human rights and freedoms as the citizens of the respective Member States. Both, information gathering and information provision, are possible only throughout the effective communication that is enabled only with the help of well-educated/trained and experienced interpreters/translators that can provide interpreting/translation services (at least) for the communication between the third-country nationals and the competent authorities. The provision of interpreting/translation services is one of the procedural safeguards guaranteed by the national, European and international legislative frameworks. However, the implementation of the language assistance provision varies greatly among the EU Member States. The approach towards the unification in the area of language assistance provision may be helpful in order to gain more information and data that can be further verified. The European Court on Human Rights may provide a framework for the unification attempts as the judgments in individual cases provide a lead for the EU Member States. At the same time, the effective and efficient language assistance provision can have a significant impact on information gathering in relation to possible security threats. However, it is important to stress that the information gathering is not only threatoriented. All of the above-mentioned processes are analyzed and presented and the current challenges in the areas of language assistance, information gathering, information provision are drawn in an attempt to point at the possibility of unification and consequently more effective prevention and detection of possible criminals, and criminal activities.

Provision of language assistance as a procedural safeguard

The EU efforts to establish a unified approach in the field of immigration and asylum resulted in adoption of Directive 2008/115/EC on an effective removal and repatriation policy based on common standards, for persons to be returned in a humane manner and with full respect for their fundamental rights and dignity. Consequently, Directive 2013/32/EU on common procedures for granting and withdrawing international protection (recast) and Regulation (EU) No 439/2010 establishing a European Asylum Support Office were adopted as the core documents in the field of migration. The above-mentioned documents set the common framework that was transposed into the national legislation of the Member States with the protection of the human rights in mind.

However, even the Member States are prohibited from detaining asylum seeker for the sole reason that he/she has applied for asylum and detention can be ordered only if necessary and on the basis of an individual assessment of each case, detention remains one of the key tools in the response to migration and asylum flows in most of the countries. The grounds for detention are explicitly defined in Article 8(3) of the recast Reception Conditions Directive and in compliance with the Body of Principles for the Protection of All Persons (adopted by the United Nations General Assembly in 1988) it is explicitly stated (Principle 11) that a person shall not be kept in detention without being given an effective opportunity to be heard promptly by a judicial or other authority. A detained person shall have the right to defend himself or to be assisted by counsel as prescribed by law and shall also receive prompt and full communication of any order of detention, together with the reasons therefor (UN Body of Principles for the Protection of All Persons, 1988). Thus, the right to communicate is set as one of the fundamental human rights. Further, the right to communicate in a language a person detained can understand is set also in Convention for the Protection of Human Rights and Fundamental Freedoms (also known as the European Convention on Human Rights (ECHR)) as stated in Article 5 § 2 of the ECHR: "Everyone who is arrested shall be informed promptly, in a language which he understands, of the reasons for his arrest and of any charge against him" (ECHR, 1950). The need to provide the language assistance to a person who does not understands the information forms also an integral part of Principle 14 of the Body of Principles for the Protection of All Persons under Any Form of



Detention or Imprisonment and the assistance of an interpreter is supposed to be provided promptly in a language which a person understands the information and the language assistance is provided free of charge, if related to the legal proceedings subsequent to person's arrest (UN Body of Principles for the Protection of All Persons, 1988). Further, a detained person is entitled to have the assistance of a legal counsel, to be informed of that right and to be provided with facilities for exercising it (UN Body of Principles for the Protection of All Persons, 1988). All of the cited principles were successfully transposed into the secondary legislation of the EU in the form of above-mentioned Directives and the principles also form an integral part of the European Convention on Human Rights. Thus, as part of the secondary legislation and the European Convention on Human Rights, the principles are legally binding for all EU Member States. In addition, the legal basis for the language assistance for the third-country nationals is also set within the Return Directive, in particular, Article 13(3) and (4); Articles 20 and 21 of recast Asylum Procedures Directive 2013/32/EU (replacing Article 15(3) to (6) of Asylum Procedures Directive 2005/85/EC. In accordance with the listed documents the third-country national concerned shall have the possibility to obtain not only legal advice and representation but also the language assistance. For the purposes of the present contribution third-country national is any person who is not a citizen of the European Union within the meaning of Article 17(1) of the Treaty and who is not a person enjoying the right of free movement under European Union law, as defined in Article 2(5) of the Schengen Borders Code. It is hereby also needed to clarify the expression language assistance that will be used for the purposes of the present contribution as covering both translation and also interpreting services provided to someone who does not speak or understand the language of the country he/she is detained in. The distinction between interpretation and translation is not insignificant given that, in the case-law of the European Court on Human Rights the two are largely conflated as Article 6(3)(e) of the ECHR refers only to 'interpretation'.

The language assistance covers both a translation of a decision (this is already covered by Article 12(2)) but also an obligation to make available assistance by interpreters in order to allow the third-country national to exercise the procedural safeguards afforded to him/her under Article 13 (Return Handbook, 2017). However, for the purposes of the European Court of Human Rights Judgments and the purposes of the

present contribution, the distinction between translation and interpretation should be noted. When the reference to 'interpretation' is made, it is understood as an oral interpretation of oral communication. When the reference to 'translation' is made, it is understood as a written translation of written documents. The distinction between translating and interpreting forms also part of Directive 2010/64/EU on the Right to Interpretation and Translation in Criminal Proceedings which was transposed into the national legislations of the EU Member States and governs the detainee's right to interpretation in police interviews, hearings and in meetings with detainee's lawyer and the right to translation of essential documents. The question of language of the detainee is explained in para 22 of the Directive 2010/64/EU as follows: "Interpretation and translation under this Directive should be provided in the native language of the suspected or accused persons or in any other language that they speak or understand in order to allow them fully to exercise their right of defence, and in order to safeguard the fairness of the proceedings".

Therefore, the EU Member States are required to provide an interpreter in order to ensure a standard procedure, i.e. the third-country national can understand and communicate in the interpreted language in all procedural proceedings with the competent authorities. The legal regulation concerning standards and procedures in the field of communication in the framework of official contact with third-country nationals in all EU member states, including Slovakia, is similar, as they are governed by the following common European legislation:

• Directive 2013/32/EU of the European Parliament and of the Council of 26 June 2013 on common procedures for granting and withdrawing international protection;

• Directive 2008/115/EC of the European Parliament and of the Council of 16 December 2008 on common standards and procedures in Member States for returning illegally staying third-country nationals;

• Directive 2010/64/EU of the European Parliament and of the Council of 20 October 2010 on the right to interpretation and translation in criminal proceedings;

• Regulation (EU) No 182/2011 of the European Parliament and of the Council 439/2010 of 19 May 2010 establishing a European Asylum Support Office;

• Regulation (EU) No 182/2011 of the European Parliament and of the Council Regulation (EC) No 640/2013 of 26 June 2013 establishing the



criteria and mechanisms for determining the Member State responsible for examining an application for international protection lodged in one of the Member States by a third-country national or a stateless person;

• Commission Recommendation (EU) 2017/432 of 7 March 2017 on ensuring more effective returns in the implementation of Directive 2008/115/EC;

• Commission Recommendation of 1 October 2015 establishing a common "Handbook on Return" to be used by the competent authorities of the Member States in carrying out return tasks (C (2015) 6250 final).

In practice, however, the legislation in question is implemented with regard to specific conditions in individual countries.

Detention of third-country nationals

Detention remains one of the key tools in responding to migration and asylum flows. As stated in Directive 2008/115/EC, detention is only justified for the purpose of preparing for return or carrying out the expulsion process if the application of less coercive measures would not be sufficient. However, it is necessary to stress that in accordance with paragraph 17 of the above-mentioned Directive, third-country nationals detained in detention facility of a Member State should be treated in a humane and dignified manner with respect for their fundamental rights as is also required by the international, and also national law of the respective Member States of the EU. Detention should, as a general rule, be carried out in specialized detention facilities. The grounds for detention are explicitly defined in Article 8 (1) 3 of the recast of the Reception Conditions Directive. It should be noted that Article 8 of this Directive also requires EU Member States to set out the grounds for detention in their national law as well as possible detention alternatives. In accordance with Article 9 of the International Covenant on Civil and Political Rights (ICCPR), the rights to liberty and security of person are recognized.

The ICCPR prohibits arbitrary arrests and detentions and requires that any deprivation of personal liberty be in accordance with the law and obliges the parties to allow persons deprived of their liberty to challenge their detention through the courts. These provisions apply not only to persons detained in criminal proceedings, but also to persons detained for mental illness, drug addiction or for the purposes of education or immigration. In

the General Comment no. 8 of the Human Rights Committee, it is stated that these provisions apply to all deprivation of liberty by arrest or detention, including the cases in the area of immigration control (for more detailed information see General Comment No. 8 of the Human Rights Committee). On 9 December 1988, the General Assembly of the United Nations (without voting) adopted the Body of Principles for the Protection of All Persons in Any Form of Detention or Execution of Sentences of Imprisonment, which explicitly states (Principle 4) that any form of detention or imprisonment and all measures affecting the human rights of a person in any form of detention or imprisonment shall be ordered by or under the effective control of a judicial or other body (Code of Principles for the Protection of All Persons in Prison or Imprisonment adopted by General Assembly Resolution 43/173). In addition, in accordance with Principle 11, a person must not be detained without being given an effective opportunity to be heard immediately by a judicial or other authority (the Code of Principles for the Protection of All Persons in Prison or Imprisonment adopted by General Assembly Resolution 43/173). The detainee has the right to a defense or assistance under the law, as provided by EU law, and, in addition, shall receive immediate and complete notification of any detention order. The right to communicate is therefore established as one of the fundamental human rights. The right to communicate in a language that the third-country national detained in the detention facility understands is also explicitly enshrined in the European Convention on Human Rights, in Article 5, which governs the right to liberty and security.

Provision of language assistance in detention facilities

Language mediation remains an important and very sensitive matter as on the one hand, it is an integral part of the asylum procedure and has direct and influential impact on the communication between national authorities of the individual EU Member States but on the other hand, the quality and effectiveness of the provided services is at stake in cases of frontline or target/destination countries that are affected by high numbers of asylum seekers and as of the asylum procedure the asylum seekers need to understand each stage of the process so the authorities will be able to properly assess and take into account all details of the applicant's circumstances. The provision of high standards of language assistance in a wide range of languages still remains a challenge for many EU Member States, in particular if the asylum seeker speaks only his/her mother tongue that happens to



be an indigenous language or the less widespread language. There is also a possibility that asylum seekers may speak the language of the country they apply for asylum in, e. g. in case of Colombians or Venezuelans registered in Spain. However, in cases where there is no common language shared, putting interpretation and cultural mediation at the forefront of procedural needs is of particular priority.

The language barrier must never affect the human rights of the thircountry nationals and the decision of national authorities about the stay of the third-country nationals at their territories. The information about the legal remedies should be available in a language a thirdcountry national understands or may reasonably be presumed to understand. Whether the information is provided in a written or oral form is up to a receiving Member State. In most cases, the information is provided in the form of leaflets or reference materials. The possibility of standardised templates would rationalise the work of the administration and contributed to the transparency, and also would considerably limit the costs of interpretation services. It could also partially solve the persistent problem related to the lack of interpreters from and to the less widespread languages. The lack of qualified and competent interpreters is not the subject analysed in the present contribution, however, it deserves particular attention as qualification criteria vary between the Member States usually with transit countries having high qualification criteria and even requiring a university degree and specialised training and *destination countries* being more relaxed in this matter, e. g. Sweden having no rule stipulating that an educated and professional interpreter must be hired before anyone who might "speak two languages in reality becomes a threat to the personal security of the immigrant, who is totally dependent on the interpretation to secure his or her legal or medical rights" (Norström, 2010), and even having volunteers with not specified qualification employed as interpreters for the purposes of asylum interview. In the context of so-called hotspots (Italy and Greece) it is a common practice. However, the quality assurance is critical in terms of protecting access for individuals who are limited in their language proficiency. The ability to effectively convey the meaning, style and frequently also tone of the original source is of high importance as it may influence the results of the asylum seekers interview and consequently also the stay in the country. In some instances, it appears that interpreters may lack the skills required to meet the demands of interpretation or sometimes, they simply translate incorrectly with serious consequences for the asylum seeker. Due to

remaining problem related to the lack of competent and qualified interpreters, many countries started to use audio/video conferences in order to ensure an asylum seeker is able to communicate his/her needs. The use of this form of interpretation has its own peculiarities including lack of privacy, absence of an interpreter at the site of the detention centre thus being a foreigner to a detainee as this aspect has also its psychological background - the interpreter is usually at the official locations of the national authorities instead of being present at the detention facilities and providing the services for the detainees. As the interpreting services are provided for the third-country nationals free of charge and the Member States being responsible for all the costs related to such services, also the choice of interpreter is made by the national authorities. However, the remote interpreting technology is used, in particular in so-called *frontline countries* like Italy, Greece or Bulgaria where the numbers of asylum seekers are overwhelming. Considering the fact that interpreters mostly rely on visual and sound cues to determine the meaning of the speech translated the use of technology which reportedly frequently suffers from poor sound quality or is interrupted during the interview/hearing is inadequate and causes frustration for both, asylum seeker and the representatives of national authority especially when dealing with emotionally charged situations. The higher rate of removal orders in cases where videoconferencing was problematic is not in favour of this method of interpretation.

The Member State is at liberty to choose whether a written translation of the relevant information or oral interpretation is provided as long as the context and content is understandable for the third-country national, and he/she understands his/her current legal situation. The provision in Article 5 of the recast Reception Conditions Directive 2013/33/EU requires Member States to make all reasonable efforts to provide for a translation into a language the person concerned actually understands and the nonavailability of interpreters may only be a valid excuse in cases of extremely rare languages for which there is an objective lack of interpreters. However, the Member States shall make available generalised information sheets or reference books explaining the main elements of the standard form in at least five of those languages which are most frequently used or understood by illegal migrants entering the EU Member States.



Information gathering

In the process of interviewing and processing the third-country nationals asylum applications, not only the information provision, but mainly the information gathering is of particular importance. Language provision is not only the fundamental human right entitled to every third-country national crossing the borders (legaly or illegaly) of the EU Member States but from the perspective of the EU Member States it is also perceived as a mean of gaining relevant information that may facilitate further cooperation between the affected Member States in case the intelligence is derived from the data gained during the interview with the third-country national and may result in possible threat to security of the respective Member State and as such reach the European or international level. The above-mentioned situation may be experienced in case of illegal border crossing by group of third-country nationals having previous criminal records in one of the Member States. In such situation, the alert will be raised and necessary steps will be taken in order to prevent further criminal activity within the territory of the Member States. In relation to terrorist activities as one of the most topical issues of the present days, the analysis of political orientation, cultural background, or socio-economic situation is performed during the asylum procedure.

In particular, the cultural background is nowadays perceived as a threat in most of the receiving societies as in most cases the third-country nationals being granted asylum are not easily incorporated into the society of receiving Member States. For the above-mentioned reason, the public is not perceiving the migration (especially irregular migration) as a beneficial factor contributing to the economic growth of the country. Within the public discourse, illegal migrants pose a threat to national security and throughout the media there are well-documented cases of clashes between citizens of receiving state and third-country nationals. In general, alien third-country nationals – in terms of language and culture, are being stigmatized. Concerning the recent events (worldwide), the perception of third-country nationals as the terrorist bands are widespread around Europe.

Also for the above-mentioned reasons, the EU Member States increasingly acknowledge the need to collect and share information and migration intelligence with different interested parties, which can facilitate regional cooperation in addressing migration and border management issues, and the development and harmonization of common policy (IOM's Immigration and Border Management Division, 2022). Migration intelligence is derived from a systematic analysis of migration data and operational information. (IOM's Immigration and Border Management Division, 2022) However, it is also important to note that not all migration intelligence is threat based. The EU Member States in joint approach participate in systematic collection of migration data, gathering intelligence and developing risk analyses in accordance not only with the European legislative frameworks but also with established national legislation and frameworks while at the same time taking into consideration international standards. By participating in joint activities and tasks, the data collection within the border management process is of particular importance. The data gathering is verified and validated via shared databases and operational systems.

Diagram 1: Management of migration data



Source: IOM's Immigration and Border Management Divison, 2022.

The importance of high quality interpretation/translation services, especially during the interview with the third-country nationals is stressed by the fact that all the information provided by the national to the competent authority of the EU Member state should be precise and accurate as it reflects not only the current needs

of the third-country national but also thanks to the exact information and data the profiling can be managed as regard to the political or religious orientation, family background, ties to particular individuals (living in the country of origin or within the territory of the hosting country) that may be wanted or related with the organized criminal groups, etc. If there are obvious problems with the interpretation/translation services or the quality of provided services is not sufficient, complications may easily occur having significant impact on the life of third-country national and the consequent actions of the competent authority where even expulsion from the hosting country may be the result. The gained data are constantly gathered and analysed, however, if the data are not precise, the results may also be misleading.



Information provision

The protection of the fundamental human rights guaranteed under the ECHR in relation to the language assistance is in practice interpreted on the basis of Member States needs and possibilities. The language-related provisions are drafted in a broader sense, thus giving the way to broader interpretation, e. g. *being 'promptly' informed* can cover the time period from 10 minutes to 24 hours, also the very use of interpreter is also a subject to different approaches as it is not clear if the interpreter should assist the authorities from the moment of arrest or through the next stages of detention (Nikolajová Kupferschmidtová, 2021). And even the common framework of the language assistance is grounded in the ECHR and the EU Directives, the European Court of Human Rights (ECtHR) may help to narrow down various interpretations from the Member States and adopt more unified way throught the language provision as the ECtHR judgments function as a reference to the future court decision-making also at the national level of the respective Member States.

Challenges related to the language issues have been raised in a number of cases – till the beginning of the year 2022 there were 193 apparent violations of Article 5 §2. However, there were only 46 cases marked as the key cases. For the purposes of the present contribution, the violations of Article 5 §2 related particularly to the following issues were analysed:

- a) information in language understood (31);
- b) information on charge (13);
- c) information on reasons for arrest (109);
- d) prompt information (89).

The numbers in the brackets indicate the number of the judgments of the ECtHR directly related to the violation of Article 5 §2. As the number of the judgments was significant, the further selection was performed not only on the basis of violation of Article 5 §2 criterion but further the current Member States of the EU being the parties involved in the cases criterion was also implemented. Furthermore, only the judgments that appear to be crucial in shaping the provision of language assistance were taken into consideration based on the thorough analysis of all 193 cases with 46 cases marked as key cases. The cases form part of ECtHR HUDOC database. The number of cases are indicated as of April 2022. The selected judgments also reappear in the Court's Assessment section in the latter judgments as the respective judgments of key cases were

cited as Principles laid down in the Court's case-law. The following cases/judgments were considered as the core ones having impact on the language provision in terms of fundamental rights and freedoms entitled to third-country nationals arriving into the territory of the EU. The judgments are publicly available through the website of the ECtHR and are part of Case-law section. The following key cases are given along with the reasons of their importance being underlined and subsequently commented on:

- the case of Čonka v. Belgium, Judgment of 5 February 2002, No. 51564/99, the Grand Chamber ruled as follows: "Given that the applicants were not given information on available remedies in their language, there was only one interpreter available for many people and no form of legal assistance at the detention centre, there was no realistic possibility of accessing a remedy". The Court confirmed that one interpreter being available for many people is not sufficient. The case also stipulates that a group of people cannot be taken into account as an entity, therefore, the individual approach is obligatory not only for the purposes of legal assistance but consequently even in regard to language assistance. Thus, granting the language assistance equal status as legal assistance.

- the case of Rusu v. Austria, Judgment of 2 October 2008, No. 34082/02 as the Court reiterated that paragraph 2 of Article 5 contains the elementary safeguard that: "(...) by virtue of paragraph 2 any person arrested must be told, in simple, non-technical language that he can understand, the essential legal and factual grounds for his arrest, so as to be able, if he sees fit, to apply to a court to challenge its lawfulness in accordance with paragraph 4. Whilst this information must be conveyed "promptly" (in French: 'dans le plus court délai'), it need not be related in its entirety by the arresting officer at the very moment of the arrest". As mentioned in connection with the time framework for the provision of information and consequently also for the language assistance required in this matter, it is obvious that the obligation to provide information 'promptly' is understood as being provided as soon as possible and additionally by the arresting officer. This judgment, however, does not take into account the language competence of the arresting officer.

- the case of Husain v. Italy, Judgment of 24 February 2005, No. 18913/03 the Court notes that the right to the free assistance of an interpreter signifies that an accused has the right to "(...) the free assistance of an interpreter for the translation or interpretation of all those documents or statements in the proceedings instituted against him that it is necessary for him to understand in order to have the benefit of a



fair trial (...)'' However, paragraph 3 (e) does not go so far as to require a written translation of all items of written evidence or official documents in the procedure. In that connection, it should be noted that the text of the relevant provisions refers to an "interpreter", not a "translator". This suggests that oral linguistic assistance may satisfy the requirements of the Convention.

- the case of Diallo v. Sweden, Judgment of 5 January 2010, No. 13205/07 - in the third section of the ECtHR judgment, the right to language assistance is built on the level of legal aid and must therefore be granted at the investigation stage, i.e. immediately upon arrest at the police station.

- the case of Vizgirda v. Slovenia, Judgment of 28 August 2018, No. 59868/08 – the Court denied the claim of the applicant that he was not provided with the language assistance in his mother tongue as the proceedings were held in Russian language of which the applicant has a good spoken command even he was not able to write in Russian. The person's own language would in principle be his or her mother tongue but, if the person had a command of another language, the use of the latter could suffice for oral communication in the proceedings. Thus, the right to language assistance does not solely imply that the language assistance has to be provided in the mother tongue of the third-country national.

The rights concerned are obviously intended to represent minimum standards. The language-related assistance is in practice a subject of interpretation from the perspective of the individual countries. Through the case-law of the ECtHR it is shown how the provisions on language assistance can be developed to some extent. Frequently, the language issues are raised together with complaints under Article 5 and 6 and occasionally in conjunction with Article 14 (prohibition of discrimination). Even though the Court has rarely found a violation solely on account of language issues, the above-mentioned cases have given it the opportunity to lay down the basic principles in passages that represent a consolidation of the applicable case-law (Brannan, 2010).

Sense of safety

The EU envisions safe and peaceful society and strenghtens the importance of safety as one of the most important elements of wellbeing of the EU citizens. When it comes to feeling safe, human beings think about their physical self first. Keeping ourselves and our close ones safe

is the most important element of human survival, but it is also vital to our ability to thrive. For those very basic needs, the collective enforcement of certain rights for every EU citizen was established in the form of the Convention for protection of human rights and fundamental freedoms. According to the procedural safeguards, every human being within the territory of the EU Member states is entitled to the rights listed in the Convention as the main aim is to address and reduce vulnerabilities. The same applies to the field of migration where respective secondary legislation Directives address the issues related to third-country nationals stay within the territory of the EU. The legal framework set at the European level provides a platform for the implementation of the measures related to detention, including on alternatives to detention, provision of technical assistance and training for immigration/border officials, police officers and staff at detention facilities on migrant's human rights, provision of culturally sensitive services, and occupational health and safety issues for staff.

The overall shortage of staff, in particular interpreters/translators/mediators significantly affects respect for fundamental human rights and freedoms and the right of third-country nationals to communicate in a language they understand, whether for procedural purposes or in day-today communication in detention centers. Despite this fact, it is admirable that as early as 1950, the Convention on protection of human rights and fundamental freedoms took into account the needs that are extremely relevant at the time of the waves of migration. The migration crisis was not taken into account in the drafting of the Convention, and life outside the legal or procedural acts (for the purposes of the article in the intentions of providing interpretation/translation services). However, respect for the rights enshrined in the Convention must also be ensured in the context of detention centers, especially when regarding the need to communicate and not to achieve diverse solutions within countries, whether taking into account the political, economic or cultural specificities of the EU countries. The Convention provides a general framework which is the starting point applicable to the development of current legislation at both national levels of the Member States and the EU level.

Conclusion

The above-mentioned legislative documents at the international, European level and national level of the respective EU Member States



serves as a tool that's main aim is to reduce inequalities and facilitate safe treatment of all human beings within the territory of the EU. The same applies in regard to migration and mobility of people, including through the implementation of planned and well-managed migration policies.

To facilitate a dialogue between individual EU Member States, exchange of effective practices and promotion of information-sharing among relevant partners as well as among countries is one of the main goals of the EU policy in the field of migration, making the intercultural communication one of the most important tools in achieving this goal. However, the effective communication plays an important role not only at the political level, but also among the ordinary citizens coming into contact and exchanging the information, making the understanding a pivotal element in avoidance of conflict and misleding interpretations.

The right to language assitance belongs to the fundamental rights guaranteed by the ECHR and is also very well grounded within the secondary legislation of the EU, thus being binding to all Member States. Thanks to the ECtHR case-law more light is shed on the provision of such services and the scope of their use is specified for the needs of the future cases. Questions related to the form of services being provided for the purposes of asylum procedure remain in the hands of national authorities of the individual Member States and their preference - oral vs. written form, as long as it can be submitted to the ECtHR as a proof for potential proceedings. However, the relevant information is required to be provided within the scope of 24 hours since the person is detained in the detention facility as the right being informed is also one of the procedural safeguards. The exact time of the information provided for the abovementioned purposes is highly dependant on the language competence of the police officer performing the arrest as from the case-law the preference of providing the information at the moment of arrest is declared. The official language of the country of origin of the third-country national is in most cases taken into account when interpreting into the language a detained person can reasonably understand. The individual approach is favoured and the physical presence of the interpreter is preferable from the asylum seeker perspective, however, hard to achieve from the perspective of the national authorities. The choice of interpreter remains in hands of the national authorities based on the national legislation of the individual Member States. The common framework in regard to quality assurance of interpretation services and the qualification for individual interpreters remain an unanswered question as the qualification criteria

vary across the Member States. In regard to the number of interpreters being available for the group of third-country nationals (indefinite number of people) the limits are not explicitly set. However, based on the judgment of 5 February 2002, No. 51564/99 related to the case Čonka vs. Belgium, one interpreter for many people is not in line with the obligation to assess individually each of the cases. The extent of the information provided should allow the third-country national to understand the legal remedies and his current legal status.

All things considered, detainees located in detention centres face serious challenges to their human and procedural rights that are hindered by difficulties related directly to language access issues. Language (and also cultural) mediation is set as a human right to which institutional compliance is still not satisfactorily responsive and especially in case of frontline countries not very effective as the burden regarding the number of migrants arriving to the frontline countries is enormous and very hard to tackle.

References

- 1. Brannan, J. (2010). *ECHR case-law on the right to language assistance in criminal proceedings and the EU response*. http://ejustice.europa. eu/4_BrannanECHRcaselaw_EU_en%20(1).pdf
- Nikolajová Kupferschmidtová, E. (2020). Guaranteering legal security by providing language assistance to immigrants. Bezpečná společnost 2020 České Budějovice, Czech Republic. *International Conference Reviewed Proceedings: Secure Society 2020* Kavan, Štěpán [eds]. 1st edition. College of European and Regionals Studies, 2020. ISBN 978-80-7556-074-2. ISSN (online) 2533-6223, p. 79-85. DOI 10.36682/ssc_2020
- 3. Nikolajová Kupferschmidtová, E. (2020). Language assistance as a procedural safeguard increasing the legal security in relation to migration *Naukovij visnik Dnipropetrovskogo deržavnogo universitetu vnutrišnich sprav*. Dnipro (Ukraine): Dnipropetrovskij deržavnij universitet vnutrišnich sprav. ISSN 2078-3566. No. 1 (2021), p. 34-41. DOI 10.31733/2078-3566-2021-1-34-41
- 4. Nikolajová Kupferschmidtová, E. (2021). The case-law of the European court of human rights and its impact on the definition of the language assistance as a fundamental right of the third-country nationals. *Archibald Reiss days: thematic conference proceedings of*



international significan-ce/Koropanovski, Nenad [eds] 1st edition. Belgrade (Serbia): University of Criminal Investigation and Police Studies, 2021. ISBN 978-86-7020-470-6, p. 485-492.

- 5. Norström, E. (2010). Community Interpreting in Sweden and its Signifi-cance to guaranteeing legal and medical security. http://sens-public.org/articles/781
- 6. IOM's Immigration and Border Management Division (2022) *Migration Data Management, Intelligence and Risk Analysis.* https:// www.iom.int/sites/g/files/tmzbdl486/files/documents/migration-datamanagement-intelligence-and-risk-analysis.pdf
- Return Handbook. Commission Recommendation (EU) 2017/2338 of 16 November 2017 establishing a common 'Return Handbook' to be used by Member States' competent authorities when carrying out return-related tasks
- 8. United Nations Body of Principles for the Protection of All Persons under Any Form of Detention or Imprisonment (1988). https:// www.un.org/ruleoflaw/blog/document/body-of-principles-for-theprotection-of-all-persons-under-any-form-of-detention-orimprisonment/
- 9. Weiner, M. (1993). *Security, Stability, and International Migration*. International Security 17(3): 91-126.
- 10. Judgments of the ECtHR in alphabetical order:
- 11. Čonka v. Belgium, Judgment of 5 February 2002, No. 51564/99
- 12. Rusu v. Austria, Judgment of 2 October 2008, No. 34082/02
- 13. Husain v. Italy, Judgment of 24 February 2005, No. 18913/03
- 14. Diallo v. Sweden, Judgment of 5 January 2010, No. 13205/07
- 15. Vizgirda v. Slovenia, Judgment of 28 August 2018, No. 59868/08



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MEDIA AS AN INSTRUMENT OF STRATEGIC COMMUNICATION IN ARMED CONFLICTS

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Key Words: strategic communication, media, public opinion, gatekeepers

Abstract: This paper discusses strategic communication in conflicts, through correlations between politics and the media, and on the basis of the activities of strategic communicators. The relations between the media, politics, foreign policy, bearers of strategic communication in the context of armed conflict, more precisely armed interventions, are examined. Strategic communiqués have been identified in the conflicts: political entities, international organizations, non-governmental organizations, social movements, army, and terrorist organizations. Previous studies have shown that even though the impact depends on the phase of the conflict and its duration, the action's most substantial effect is between political structures and military entities. Through the analysis of media content, topics and narratives that were broadcast during the NATO aggression on the FRY in 1999, an analysis of the connections of strategic communicators, the achieved effects and their impact on achieving the goals of the intervention was performed. Special attention was dedicated to the contents of the report and missing topics, in the function of creating public opinion in support of aggression. The conclusion is that administration of USA and NATO had the most substantial influence on the control of information in the "politics-mediapolitics" cycle.

Introduction

he relationship between communication and power is a topic that has been present in the works of philosophers and theorists of social sciences for centuries. Even Aristotle considered rhetoric, along with economics and strategy, to be one of the

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structural factors of political power (Cope & Sandys 2010). Despite the fact that the methods, carriers and contents of communication have changed over the centuries, it can be said that in the broadest sense, communication is basically a struggle for power and position. [Christianson-Galina 2017].

Strategic communication is a term used to denote the highest level of engagement of an organization's communication achievements in advancing its mission [Hallahan et al. 2007]. In the context of conflict, communication has the role of gaining psychological superiority over the adversary, and is part of a modern strategic approach to conflict management and warfare. From the point of view of the level of importance and influence on the realization of the functions of the state within the conflict, communications related to defense and security are viewed as strategic communications. In the context of national defense and security, strategic communication and action of the armed forces of the state that affects the perception and opinion of the population that witnesses it, both in the area where operations are conducted (directly) and to the widest world (indirectly) [Helmus et al. 2007:171].

Strategic communication is one of the expressions of the state's power and represents an instrument in the political and security realization of national interests. In the context of contemporary conflicts, it is an expression of hybrid action that can have an offensive and defensive character. The main goal is to influence public opinion with the aim of changing attitudes towards cultural and political values [Mitrović 2019a]. Basically, the evident forms of strategic communication are systemic propaganda, public diplomacy and strategic advocacy [Mitrović 2019b]. Strategic communication aims to modify the ideas, emotions and behaviors of members of target groups, ie sections of the public [Taillard & Giscoppa 2013]. Strategic communication towards one's own and international, as well as the opposing public is most effectively carried out through modern media [Jungblut 2019], and one of the key preoccupations of mass media is influencing public opinion and creating media narrative and agenda [Perić, Krasulja, Radojević 2011]. "Practically, in the context of the war, the media evolved from a transmitter of information into a subject of strategic communication aimed at achieving dominance" [Mitrović, Perić 2021: 98].



Strategic communicators in armed conflicts

National or state strategic communication in conflicts is realized through the actions of the subjects of strategic communication. According to Jungblut, there are six types of strategic communicators in conflicts: (1) political actors, (2) international organizations, (3) non-governmental organizations, (4) social and civic movements, (5) military organizations, and (6) terrorist organizations. [Jungblut 2019].

Political actors, as strategic communicators, view media reports as an instrument for shaping public opinion, use the media to increase public support for political decisions and policies, and as a basis for justifying military interventions and wars. In addition, there is a tendency of political actors to shape the international media information scene as a means of influencing foreign public opinion, and thus potentially influencing the foreign policy of other nations.

International organizations have less focused goals, primarily due to the often divergent interests of different member states. The most general goals that international organizations communicate through the media are the promotion and maintenance of peace, economic development and international cooperation, and the establishment of dialogue in conflicts. In achieving these goals, the media have the role of emphasizing the necessity of the existence of an international organization and providing funds for their work, although the proclaimed goals do not have to be correlated with the goals that are achieved in practice.

Non-governmental organizations (NGOs) are very heterogeneous, thus their goals are very different. According to conditionally grouped goals, they can be divided into two categories: normative goals (social values, interests and rights of citizens, post-conflict consolidation of society, general security issues in post-conflict and conflict societies) and instrumental goals aimed at providing resources for the organization. By striving for a participatory presence in the media discourse, NGOs are in fact constantly promoting their mission and results, in order to motivate potential and existing donors. [Jungblut 2019:28-30].

Social and civic movements are organizations created around a common set of beliefs on the basis of which they participate in political and / or cultural conflicts [Diani, 1992: 1]. In the context of conflict and media

influence, their exposure is mainly in the domain of anti-war reports, protests and activities. The goal of their access to media reports is self-preservation, because without media visibility, the movement finds it difficult to reach the public, and thus future members.

Military organization is an important and unavoidable strategic communicator to the media within the conflicts. The main goals of military organization are to defend the country and its citizens from (potential and alleged) external threats or (potential and alleged) internal threats, and in certain cases the goal is to protect the population of another country [Kutz 2014].

Maltby distinguishes six forms of military strategic communication, each of which is related to a set of specific organizational goals and directed towards a specific segment of the target public [Maltby 2013]:

1) Striving to convince the political elite that a military operation justifies spending financial costs and possible human losses.

2) It addresses its own national public, with the goal of convincing its own population that a military operation is necessary. In this way, the military organization seeks to ensure the legitimacy and support of the public, especially when it comes to interventions in foreign territory [Hammond 2000].

3) Communication with the population in the conflict zone during the intervention, with the aim of conveying the message that the operation brings peace, stability, economic development and democratic governance.

4) Communication with members of the armed forces, where they motivate their members by explaining to them that the operation is supported by the general public, and that it is morally and socially valuable.

5) Communication with families and other groups closely associated with members of the military, clarifying the necessity of the operation and their participation in supporting members as a significant contribution to the positive outcome of the conflict.

6) Communication towards the opponent, by which he is convinced that the operation is organized and professionally led, enjoys international support, that financial and other resources are provided. Strategic communication with the enemy aims to reduce his morale, readiness to resist and to reduce the support of allies.

Terrorist groups carry out politically motivated activities, and their goals in strategic communications are legitimization, fundraising and gaining of



supporters, justification of violence, visibility in the international arena and gaining support. [Weimann & Winn 1994].

Sublimating the above, strategic communicators can be defined as advocates who address the media in order to convey their message in public discourse. At the same time, they usually do not give an objective presentation of representative facts about current events, but distribute messages that coincide with their view of the conflict, ie goals in conflict. In this case, strategic communication can be defined as the purposeful and deliberate use of convincing communication efforts in achieving the impact of news on the course and outcome of public debate, which leads to the realization of a particular policy [Jungblut 2019:21]. This is possible primarily due to the fact that the public perception of events abroad is mostly indirect, that is, the conflict occurs outside our direct sphere of experience, so the media influences the public perception of the conflict [Baden & Meyer 2018]. According to the essence of the impact, these strategic communications are ultimately focused on political and foreign policy decisions, which raises the question of the interaction of media and politics in conflicts [Habermas 2006].

Strategic communications and media: policy-media-policy cycle

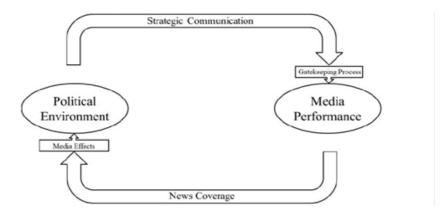
Strategic communication in the context of conflict is expressed through the correlation of media and politics in the function of influencing public opinion, with the aim of gaining support for achieving the goals of strategic communicators. The "policy-media-policy" (PMP) cycle, according to which changes in the political environment lead to a change in media performance, which further leads to a change in the political environment [Wolfsfeld 2013] is the basis for developing a model that includes aspects of gatekeeping.

Namely, PMP is a model of cyclical nature, which emphasizes the efforts of strategic communicators to distribute messages to the media in order to influence them and to achieve their goals. At the same time, reporting alone is not the goal, but the effects that are achieved on the audience. Furthermore, the PMP cycle represents the relationship between the political environment and media discourse, because in a political environment, political power can be transferred to dominance over the news. Applied to the production of news, Gatekeeping Theory deals with the question of which event and information about it is turned into news, while the media allows fictitious events to be promoted to which individuals and social groups react strongly, because these events are intense and real for them [Perić, Krasulja, Radojević 2011].

In his study, which analyzed the correlations between politics and the media from the point of view of strategic communicators in conflicts, Jungblut confirmed the functioning of the developed model of influence "politics-media-politics" (PMP), emphasized media influence on the preparation of political decisions, the complex function of the 'information guardians' and that political organizations and the military have the strongest influence and that the influence of strategic communicators depends on the phase of the conflict and its duration [Jungblut, 2019].

A graphical representation of the general cyclical impact model of policymedia-policy (PMP) developed with the information control function is shown in ϕ urype that follows.

Figure 1. Cycle of interdependent influence of politics and media with developed function of gatekeepers [according to: Jungblut, 2019:89]



Application of the developed PMP model to the case of NATO aggresion on fry 1999

The modified cycle of PMP influence applied in the NATO aggression on the FRY in the spring of 1999 was analyzed. The analysis includes aspects that had a media reference, and in accordance with that, the most influential subjects are listed who created the media environment and achieved an effect on public opinion.



Political strategic communicator. The US Presidential Administration is the leading and most important strategic communicator within the NATO aggression on the FRY in 1999. According to Smith, the strategic communication conducted by the Clinton administration at the time had two main goals: the fight to gain support of the US public opinion regarding the bombing and the fight against anti-American propaganda in Serbia [Smith 2009]. In addition, the aggression was launched imme-diately after the process of reviewing President Clinton's suitability for the post, so the attack on weakened and the war-torn FRY allowed him to present himself to the public as a strong and determined leader [Kutz 2013]. With a strong lobbying approach of Albanian interest groups deeply incorporated into political and economic structures close to the then US presidential administration, as well as individual, personal economic interests of high representatives of this administration - all these are clear motives for a strong media campaign of political strategic communicators [Mitrović 2017]. International organizations. On several occasions before the NATO aggression on the FRY, the United Nations was a testing ground for the debate regarding the situation on the field. However, there was a deep division among the permanent members of the Security Council according to the way the problem should be resolved, which contributed to the UN being actively involved in the conflict only in its mature phase. As a body delegated by the international community, the OSCE established a Verification Mission, which was tasked with monitoring, recording and reporting on conflicts and human rights violations of all parties. After the conflict between the members of the terrorist KLA and the security forces of the FRY in the village of Racak, on January 15, 1999, there was a media escalation of the thesis about the alleged Serbian crimes. Namely, after the end of the conflict and the withdrawal of FRY security forces from the area around the village of Racak, Albanians changed their clothes in civilian clothes and removed their weapons [Krivokapić, 2019: 31-32], thus simulating a crime against civilians. The head of the Verification Mission, American diplomat William Walker, is urgently brought to the alleged scene of the alleged crime, accompanied by a French television crew. In a live broadcast, Walker reported to NATO Commander for Europe, General Wesley Clark, that the scene of the alleged massacre was "the most horrible thing he has ever seen in his life" [Perić 2019: 357]. After visiting the location of the alleged massacre in Racak, before any expert forensic analysis and without consulting anyone in Washington, Walker said at a press conference that it was a massacre and a crime against humanity. The effect of this statement was very strong, and acted as a catalyst for Western public opinion, because it was not difficult for "spin doctors" to carry out their intentions, as Serbs have long existed in the Western public as "on-duty culprits" [Perić, Kajtez 2013]. With the help of the prepared journalists, the news immediately spread over the planet, provoking a wave of condemnation of the Serbian people [Perić 2019:357]. Also, the NGO Human Rights Watch jumps in to help Walker by reconstructing the incident of the brutal crackdown of police forces on the basis of the statements collected from Albanian witnesses, reinforcing impressions by stating that "on many of the 23 bodies there were traces of torture". The German government even increased the crime in Racak in media reports in order to gain the support of the Parliament for participation in the intervention [Smith 2009:11].

Non-governmental organizations. In January 1999, a total of eleven NGOs operated in Kosovo and Metohija, forming the International Council of Kosovo NGOs. During the NATO bombing, from March to June 1999, almost all NGOs moved to the former Yugoslav Republic of Macedonia (FYROM), where they worked together with NGOs from FYROM and Albania to help refugees. With the withdrawal of the YA from the territory of Kosovo and Metohija and the establishment of the UNMIK administration, about 400 NGOs were engaged in the territory at different time intervals and intensity by the end of 1999. Management of the work of a large number of NGOs is enabled by the establishment of the Executive Committee - ExCom, which consisted of six elected representatives of various organizations. American NGOs dominated, while smaller NGOs dropped out of the structure over time [Currion, 2010].

Social movements. As early as the beginning of the 1990s, the media actions of Albanians have been aimed at drawing the attention of world agencies to the alleged selective endangerment of the health of Albanian youth. Such scenes, despite amateur production and grotesquely bad acting, have traveled the world, with the aim of highlighting to the public the alleged threat to Albanian youth by Serbs. In the preparation of the Western society for the realization of the separatist goals of the Albanians from Kosovo and Metohija, the student movement was especially active, after the formation of the Independent Student Union of the Albanian Pristina University (ISUPU) in February 1997. The declared goals of the movement were to win the support of influential Western diplomats, "to intervene in resolving the Kosovo problem through diplomatic means, before the escalation of the Serbian occupiers." [Nika 2018:173].



The army. The strategic communicator in the conflict was represented by NATO. In his address to the nation on the occasion of the launch of Operation of Allied Powers on March 24, 1999, the US President stated that its three main goals were: "proof of the purpose of NATO, preventing further bloodshed in Kosovo and inflicting serious losses on FRY forces in order not to endanger the people of Kosovo" [Smith 2009:16]. Rather, NATO's goals were (1) to dismantle Yugoslavia's competitive socialist economic system, (2) to gain control of valuable mineral resources, and (3) to gain control of the future energy distribution network (Ekemam 2017:4040). The actions of NATO communicators in the first half of the aggression were aimed at eliminating the possibility of indications that the NATO bombing caused an intensified refugee wave, but was primarily aimed aat stopping Serb forces in ethnic cleansing, as well as repairing damage in the public caused by hitting civilian targets and the Chinese embassy in Belgrade. Despite the fact that the performance was not systematized, it was successful according to internal opinion, primarily on the basis of the previously created negative public attitude towards President Miloševćc, which had lasted since the beginning of the conflict in the former SFRY [Smith 2009].

Initially, the NATO Public Relations Center could not adequately respond to the demands of a synchronized political media message, due to the fact that the situation on the ground did not develop in accordance with plans [Lambeth, 2001], but also due to poor organization and staffing of the Center itself. That is why the PR Media Operation Center (MOC) was established with outposts in NATO headquarters in order to provide assistance to the NATO spokesperson (Schreiber et al., 1999: 80). About 30 members worked in the MOC cells on the following tasks: 1) planning and coordination of cells responsible for strategic aspects of public relations, 2) media monitoring and evaluation of media reporting, 3) support to the cell for internal communication within the NATO Strategic Command SHAPE Liaison Cell in order to provide the necessary information for the work of the staff of the Center, 4) Writers and Research Cell responsible for placing stories-reports-testimonies created by ghostwriting [Jertz 2001: 83].

Terrorist organization. According to all the characteristics of its action, the KLA predominantly used terrorist methods and tactics of struggle. Since the beginning of 1998, the KLA had carried out numerous attacks on security forces and civilian targets, killing and abducting large

numbers of police officers and civilians of all nationalities. Due to all the above, the KLA was placed on the list of terrorist organizations by the UN Security Council Resolution [UN 1998]. Initially, the administration also characterized the KLA's activities as terrorist, but since mid-1998, the situation has changed and it began to enjoy its support [Craig 1999].

At the same time, the KLA is intensively carrying out terrorist actions with the aim of provoking the response of the FRY security forces. The goal was to provoke the strongest possible response that would send civilians into exile, which would be a reason for military or "humanitarian" intervention. Critical debates in the Senate and Congress show that the position of political structures in the United States was not uniform in terms of relations with the KLA [Corn 2001]. Nevertheless, the opposition political structures did not have enough influence on the creation of general public opinion, so the KLA was simply left out of the list of topics, and its crimes remained far from known, especially to the US audience, but also to most Western European countries.

Analysis of media reporting on the war in fry – end of april 1999

The analysis of the most influential print and electronic media in the United States, in the last week of April 1999, provides an insight into the environment created to gain public support for the bombing of the FRY [Vincent 2000]. As specially determined topics, terms in the function of variables of strategic communication are treated [Vincent 2000:326-335]: Terrorism: The broadcast message is clear and based on its interpretation in accordance with the ideological and institutional requirement, and reads: "Terrorism is free, it represents the terror of Serbs against Albanians, abuse of neighbors, women and children; the inspirer of terrorism is the dictator Slobodan Milošević, whose actions endanger the whole world and its order, and if he continues, it can develop as an uncontrolled epidemic, so the only way is to stop him and prevent him from further action. The role of "cure" against "terrorism" is played by NATO, which alone can stop this "evil" [Vincent 2000:328]:

Fear: A constant factor in presenting refugees and their stories. The use of terms describing aspects of fear has the potential to reinforce drama and further emphasize atrocities that have taken place in Kosovo.



Rape: Media content used the variable "rape" in the construction of narratives depicting the maximum absence of humanity in the performance of Serbs. This is a stereotype based on an earlier matrix of creating prejudice against Serbs as rapists [Hammond 2000, Perić, 2019].

Guilt: In the context of guilt, all troubles and evil, according to the narrative of the observed media, come from Serbs. It is an interesting case when the report states that the victims of the NATO air strike near Djakovica, Albanian civilians, ever after a clear acquaintance with the fact that the attack on their column was carried out by NATO aviation, loudly and aggressively accuse Serbs of attack [Hammond 2000].

"Evil" Serbs and "dictator" Milošević: Language constructions using "terror", "rape", "guilt", "fear" lead to portraying Serbs as absolutely evil, and their leader is the personification of the dictator. This approach allows the creation of a network of simultaneous reports that quote each other, so the audience is congested and accepts the claims as true. In that situation, for the public, nothing else is a logical solution but to use everything possible against so much evil, more precisely to use the NATO military machinery. In this way, public opinion supports the actions of their armies, recognizing that thus, part of their national identity (army) and thus themselves (but from their living room), are fighting against the evil of the world. The media distributes simple and seemingly logical information to the audience, without the possibility of reviewing the opinion, statement or claim, and without the opportunity of hearing the answer from the other (Serbian) side [Vincent 2000].

Crazy, irresponsible and calculated behavior: In order to realize the construct of irrational behavior of Serbs, the descriptions use synonyms: brutal, barbaric, rude, criminal, devilish, infernal, immoral, ruthless, evil, perverse, painful, relentless, non-Christian, crazy, demonic, etc.

Missing topics. In addition to the strong influence on the control of information, in some cases there were also those that portrayed the situation differently. Namely, it is noticeable that there was avoiding and ignoring of topics that objectify the situation. Thus, the causes of the conflict and the genesis of the problem are not considered at all, as well as the abandonment of negotiations in Rambouillet by the Albanian side. The immediate reason for aggression, the "Racak case" in spite of individual reports of independent journalists remained "invisible". Efforts

were made especially to prevent any negative connotations of Albanians. Thus, despite specific allegations and evidence of links to organized crime and drug trafficking, KLA funding went unnoticed. [Vincent 2000:334]. Ignoring "missing topics" has also proved effective in linking the KLA to terrorism and direct links to al-Qaeda and Osama bin Laden or the forced mobilization of Albanians by the KLA [Vincen 2000:335]. Some reports regarding the negative connotations of the KLA were in the form of interviews, which emphasized the subjectivity of the statements and relativized the "sin" of the KLA. According to objective views, the media in the United States were obsessed with reporting on the crimes of Serbs against Albanians, while the fact that Albanians contributed to raising tensions was completely suppressed [Vincent 2000].

Conclusion

The media have a strong stimulating effect on the creation of public opinion. In the context of wars and security issues, the media are a powerful weapon in creating an image of reality with the public, encouraging fictional, indirect, but powerful experiences, and becoming particularly effective in the event of a state of war [Stauber 2013]. The media is a powerful tool for mobilizing the nation in relation to participating in armed conflict, because "in modern times, societies are highly integrated in terms of communication, through the mass media." [Buschmann 2001: 102]. 'Thus the last conflicts of the previous centrury were characterized by large information-communication-propaganda actitivites in order to provide the support of the public' [Perić 2008: 172].

In the case in question, the media in the USA predominantly strived to simplify the story as 'pro and con', thus creating a strong relations towards that topic, ie creating support for the war against FRY. Since the public can be described as the broadest form of democratic government or the 'ultimate democratic authority' [Schudson 2008:13], it is evident that its power influences political elites in creating political decisions. With this in mind, there exists undoubtable reverse influence of media and politics, with clear and evident position of the 'information controlers' who based on various motives and reasons influence the message and topics in the media. "We are faced with media institutionalization of the victims as the argument of support to war engagement, by creating patterns of victims and heroes thus influencing public opinion to support the military action" [Mitrović, Perić 2021:99].



Strategic communicators are subjects of communication who, through their engagement, strive to achieve their key interests. Strategic communicators have been identified in the conflicts: political entities, international organizations, non-governmental organizations, social movements, the military and terrorist organizations. The administration of President Clinton (political strategic communicator) and NATO (military strategic communicator) had the strongest influence on information control in the politics-media-politics (PMP) cycle. Other subjects had a supporting role and did not visibly, significantly or systematically influence the creation of themes or narratives.

References

- 1. Baden, Christian and Meyer, Christoph (2018). Dissecting media roles in conflict: A transactionist process model of conflict news production, dissemination and influence. In: R. Fröhlich (Ed.), Media in war and armed conflict. The dynamics of conflict news production and dissemi-nation (pp. 23-48). New York: Routledge.
- Buschmann, Nikolaus (2001). Moderne Versimpelung des Krieges. Kriegsberichterstattung und öff entliche Kriegsdeutung an der Schwelle zum Zeitalter der Massenkommunikation (1850–1870)". In Die: Erfahrung des Krieges. Erfahrungsgeschichtliche Perspektiven von der Französischen Revolution bis zum Zweiten Weltkrieg. Buschmann, Nikolaus and Horst Carl (eds), 97-123. Paderborn: Schöningh.
- 3. Christianson-Galina, Antone (2017). Communication & Power. Rerum Causae, Volume IX, 59-85.
- 4. Cope, Edward and Sandys, John (Ed.) (2010). Aristotle:Rhetoric. Cambridge University Press
- Corn, Geoffrey (2001). Clinton, Kosovo, and the Final Destruction of the War Powers Resolution. William & Mary Law Review Vol. 42, Is. 4, No. 1149, Avaliable: https://scholarship.law.wm.edu/wmlr/ vol42/iss4/3>
- Craig, Larry (1999, March 31). The Kosovo Liberation Army: Does Clinton Policy Support Group with Terror, Drug Ties? From 'Terrorists' to 'Partners'. U.S. Senate, Republican Policy Commity. Avaliable<https://fas.org/irp/world/para/docs/fr033199.htm.>Retriev ed 17.05.2020.

- 7. Currion, Paul (2010). Strength in numbers: A Review Of NGO Coordination in the Field-Case Study: Kosovo 1999-2002. International Council of Voluntary Agencies Available https://reliefweb.int/sites/reliefweb.int/files/resources/C5D6669B100BF09385257814007 07DC8-Full_Report.pdf >
- 8. Diani, Mario (1992). The concept of social movement. The sociological review, 40(1), 1-25. doi:10.1111/j.1467-954X.1992.tb02943.x
- 9. Ekemam, Hillary (2017). Propaganda, national interest, and foreign policy: a case study of russoamerican contending dispositions to the conf-lict in Kosovo. International Journal of Information Research and Review Vol. 04, Issue, 04, pp.4037-4042.
- Glas javnosti (12.06.2001). Izveštaj VJ o zločinima tzv. OVK na Kosovu u periodu od 1998. do kraja NATO agresije. Dostupno na: http://arhiva.glas-javnosti.rs/arhiva/2001/06/13/srpski/R01061202. shtml. Pristupljeno: 17.04.2020.
- Habermas, Jürgen (2006). Political communication in media society: Does democracy still enjoy an epistemic dimension? The impact of normative theory on empirical research. Communication theory, 16(4), 411-426. doi:10.1111/j.1468-2885.2006.00280.x
- Hallahan, Kirk; Holtzhausen, Derina; van Ruler, Betteke; Verčič, Dejan and Sriramesh, Krishnamurthy (2007). Defining strategic communication. International Journal of Strategic Communication, 1(1), 3-35. doi:10.1080/15531180701285244
- Hammond, Philip (2000). Reporting "humanitarian" warfare: Propaganda, moralism and NATO's Kosovo war. Journalism Studies, 1(3), 365-386. doi:10.1080/1461670X.2010.10094088
- 14. Helmus, Todd; Christopher Paul; RussellGlenn (2007). Enlisting Madison Avenue: The Marketing Approach to Earning Popular Support in Theaters of Operation. Santa Monica, Calif.: RAND Corporation.
- 15. Jertz, Walter (2001). Krieg der Worte Macht der Bilder. Manipulation oder Wahrheit im Kosovo Konflikt. Bonn: Bernard & Graefe.
- 16. Jungblut, Marc (2019). Strategic Communication and its Role in Conflict News. Wiesbaden: Springer Fachmedien.
- Krivokapić, Boris (2019). The nato bombing of Yugoslavia (1999) 20 years later – the problems of legality, Legitimacy and consequences 19-56. In Vuković Nebojša (Ed.) David vs. Goliath:NATO war against Yugoslavia and its implications. Belgrade: Institute of Interna-



tional Politics and Economics and Faculty of Security Studies at the University of Belgrade

- Kutz, Magnus-Sebastian (2013). Just Wars and Persuasive Communication - Analyzing Public Relations in Military Conflicts (107-133). In Seethaler, Josef; Karmasin, Matthias; Melischek, Gabriele and Wöhlert, Romy (Edit.) Selling War - The Role of the Mass Media in Hostile Conflicts from World War I to the 'War on Terror'. Bristol: Intellect.
- 19. Kutz, Magnus-Sebastian (2014). Öffentlichkeitsarbeit in Kriegen: Legitimation von Kosovo, Afghanistan und Irakkrieg in Deutschland und den USA. Wiesbaden: Springer VS.
- 20. Lambeth, Benjamin (2001). NATO's Air War for Kosovo. A Strategic and Operational Assessment. Santa Monica, CA: RAND.
- 21. Maltby, Sarah (2013). Military media management: Negotiating the 'front' line in mediatized war. London: Routledge.
- 22. Miroslav Mitrović, Nenad Perić (2021). War and Media Connectivity, Conditionality and Evolution of fenomen, National Interest, XVII, vol. 40., 85-104.
- 23. Mitrović, Miroslav (2017). The potential influence of interest groups on US foreign policy: the "Kosovo" case. Matica Srpska Journal for Social Sciences, No. 163, 413-428. https://doi.org/10.2298/ ZMSDN1763413M
- 24. Mitrović, Miroslav (2019a). Strategic communication in the function of national security. Military action, 1/19, str. 41-54, DOI: 10.5937/ vojdelo1901041M.
- 25. Mitrović, Miroslav (2019 b). Determinante strateške komunikacije od značaja za nacionalnu odbranu i bezbednost. Matica Srpska Journal for Social Sciences, No.170, 179–194. https://doi.org/10.2298/ZMSDN1970179M.
- OUN (31.03.1998). Security Council Resolution No. 1160. https://undocs.org/S/RES/1160(1998). Pristup: 14.05.2020.
- 26. (2019). Media war: "artillery support" for NATO aggression on the FRY 1999 (350-364) In Vuković Nebojša (Ed.) David vs. Goliath: NATO war against Yugoslavia and its implications. Belgrade: Institute of International Politics and Economics and Faculty of Security Studies at the University of Belgrade.

- 27. Perić, Nenad; Kajtez, Ilija (2013). Ideology and propaganda as a massive means of geopolitics and their influence in the Balkans, National Interest, IX vol. 17, 173-189.
- 28. Perić, Nenad; Krasulja, Nevena; Gujanica (2011). Ivana, Media, PR and Brand Tendencies, second, modified and supplemented edition, Synopsis and Cigoja press: Belgrade.
- 29. Perić, Nenad. 2008. Media policy, public information, mass communication and propaganda as means of international politics and ideology. National Interest, IV vol. 4: 169-182.
- 30. Politics (14.10.2019.). They have experience with false poisonings, available on: http://www.politika.rs/scc/clanak/439776/Imaju-iskustva-sa-laznim-trovanjima https://youtu.be/ah-FPi34cTo Access: 19.0 3.2022.
- 31. Schreiber, Sylvia, Alexander Szandar and Thomas Tuma (17.05.1999). Dr. Jekyll und Mister Hyde. Der Spiegel.
- 32. Schudson, Michael (2008). Why democracies need an unlovable press? Camebridge, UK: Polity.
- 33. Smith, Mark (2009). Kosovo Conflict: U.S. Public Diplomacy and Western Public Opinion. Los Angeles: Figueroa Press.
- 33. Stauber, Reinhard. 2013. European Examples from the Seven Years' War to the World War I". In: Selling War - The Role of the Mass Media in Hostile Conflicts from World War I to the 'War on Terror'. Seethaler, Josef., Karmasin, Matthias., Melischek, Gabriele. and Wöhlert, Romy. (eds), 19-35. Bristol: Intellect.
- 34. Taillard, Michael; Giscoppa, Holly (2013). Psychology and Modern Warfare. New York: Palgrave Macmillan.
- 35. Weimann, Gabriel and Winn, Conrad (1994). The theater of terror: Mass media and international terrorism. New York: Longman.
- Wolfsfeld, Gadi (2013). The Politics-Media-Politics Principle: Towards a More Comprehensive Approach to Political Communication (2013). APSA 2013 Annual Meeting Paper, Available at https://srn.com/abstract=2301135>



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POLITICAL RISK AS A TREATH FACTOR OF GLOBAL ORDER SECURITY

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Key Words: political risk, global order, multinational companies

Abstract: The authors analyze a specific type of risk, political risk, which has a multidisciplinary character. The philosophy of political risk is the focus of interest, above all, in economic, political and legal sciences, although other sciences also deal with this issue. For this reason, defining the term "political risk" is not at all simple. The global (economic-political) order is burdened with numerous challenges. Political relations are a crucial factor in the global order. However, the oscillations in the financial and energy markets at the global level are increasingly determining the global order. In addition to these, the security of the global order is affected by other social phenomena and activities - terrorism, corruption, but also plebiscite decisions. Multinational companies, as companies operating on a global level, are particularly sensitive to political risk and are therefore very careful when entering new, primarily markets in transition countries. The paper aims to point out the main factors that lead to the emergence of political risk, but also to enable the perception of the same in the process of building a stable and sustainable global order. Having in mind the set goal of the paper, the method of content analysis indicates and defines the essential elements of the concept and the importance of extensive consideration of the same. Using the statistical method, the authors present the quantitative aspects of political risk.

Introductory consideriation on political risk

ue to the large number of factors that affect the entire social system of a country and that affect the position of the national economy in the regional and global context, it is not easy to define the term political risk. Depending on the field and purpose of the research, the philosophy of political risk can be approached

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from several perspectives. Namely, political risk can be viewed as: "1) pure political or non-economic risk; 2) the possibility or probability of interrupting the operations of foreign companies in the host country due to a change in the political constellation of power; 3) unwanted influence and interference of the national government in the process of functioning of economic entities; 4) discontinuity in the business environ-ment resulting from political changes, which have an impact on profits and goals of both domestic and foreign companies; 5) instability of the national economy and society in general, as a consequence of radical political changes in a particular country" (Sottilotta 2013, p. 3-4).

One of the largest scientific and educational databases, Investopedia, presented its view of political risk in the following definition: "The risk of non-return on investment due to political changes or political instability is the political risk" (Chen, 2020). The instabilities that have an impact on investment projects, in terms of their reduction or collapse, result from changes in government, legislatures, as well as from foreign policy, fore-ign economic and the changes in the military and security spheres. For that reason, political risk in modern international economic relations is also referred to as geopolitical risk.

In researching the issue of political risk, Christoph Weber used the definition that had been used by Pricewaterhouse Coopers - PwC in their projections, according to which political risk implies any "political change that changes the expected outcome and the value of a particular economic project, which results in a change in the probability of achieving business goals in the lower sense" (p. 7). At the same time, Weber introduces the classification and typification of political risk into 1) external and 2) internal political risks. External political risks include all unforeseen circumstances concerning the wider (external) business environment of the company, regardless of whether it is the influence of the market itself, a part or society as a whole, or they are of a political nature. Weber classified external risks into two groups: geopolitical risks and risks arising from international agreements. Internal risks are a consequence of the company's internal environment, ie they are an integral part of the business process. These are mainly the risks based on information and communication technology, human resources, but also individual parts of production. Weber saw internal risks from the perspective of the European Union, so he classified them into the following categories: the first is legislative (and regulatory) risk; democratic and plebiscite risk is



the second group, while the third group of internal risks includes legal and administrative risks (Weber 2010: 7-9).

Dealing with the issue of political risk, Stojković and Raičević, based on numerous research papers, view political risk as "the probability of loss due to political instability in the buyer's country, which may cause the cancellation of contracted transactions or otherwise affect the buyer's ability to perform their obligations" (p. 167).

Having in mind the presented definitions, ways of perceiving and the approach to the concept of political risk, it is clear that it can be viewed in a narrower and broader context, from political, but also economic and / or legal aspect, which indicates the multidisciplinarity of the concept. In an extensive context, Agmon Tamir has formulated one of the most acceptable definitions. According to him, "political risk means all unforeseen changes in political factors that affect relative prices in trade in factors of production, goods and services, which are caused by actions and reactions of government and other political factors in trade between two or more countries" (p. 7). In an intensive context, political risk implies the changes that have occurred exclusively through the activities of political actors, but which do not have significant influences in other social spheres.

In the domicile conditions, great attention was not paid to political risk until the actualization of European integration processes. Thus, Ostojić sees political risk as "any activity of the state that results in a decrease in the value and capital of the company" (p. 15). On the other hand, Dašić and Karić point out that political risk is one of the biggest obstacles to the free movement of capital, but also that there are investors who are willing to take risks and do business in uncertain business and social environments. Such investors and capital are guided by the logic of making high profits with high risk, and in theory and practice it is known as speculative or usurious capital. (Dašić i Karić 2009, str. 193). In an extensive sense, Pušara devoted more detailed attention and analysis to political risk. Namely, this author pointed out the importance and impact of political risk in international economic relations and the consequences it has on the domicile state and economic entities and their position in the global and national market (Pušara 2001, str. 614-647). In addition to these, the work of Stakić and Barać provides a good basis for political risk analysis. These two domestic theorists approached the philosophy of political risk from the angle of macro risk of the state, ie in a broader

context, and presented it as part of the overall risk of one country (country risk). Like the previously mentioned Pušara, these two point to the impact of this type of risk on the financial sphere of society and the overall economic policy of the state, but also on the potential of creating financial crises (Stakić i Barać 2010).

Dimensions and elements of political risk

The analysis of definitions leads to the classification of factors which condition the occurrence of political risk and/or affect the increase of the general level of the same. Thus, all the factors can be classified into two large groups: 1) factors related to the state and 2) factors related to economic entities.

All factors related to the state can be grouped into the following categories: 1) economic, 2) social, and 3) geographical.

Economic variables that have a significant impact on the level of political risk are: fiscal discipline, exchange rate, resource base, as well as the capacity of the state to respond to foreign economic shocks. Fiscal deficit is a basic indicator of fiscal discipline. It is most often expressed through gross domestic product. The general trend, after the global economic crisis (2007-2009) in all countries of the world is controlled public spending. Public finances must be spent on profitable and propulsive projects and industries, and the costs incurred by the public sector must be properly projected. The conduct of exchange rate policy is a key macroeconomic issue. The choice of the type of exchange rate largely determines the state of the economy of a given country. When it comes to the resource base of the state, it should be noted that naturally rich countries generally do not have problems with economic instability - and therefore the political risk is lower. The best example of the use of natural resources in the function of growth and development of the national economy is certainly the United Arab Emirates. Although they are situated in the traditionally crisis-prone Middle East region of the UAE, they have used their oil wealth in the right way. They used the revenues from the sale of oil to improve their technological, financial and human resources. Today, the Emirates are at the very top of the world's tourism, technology and financial power. Gross domestic product per capita in 2021 was over 43,500 US dollars (IMF, october 2021). Unlike most Middle Eastern countries, the UAE is characterized by multiculturalism and they can be proud of the fact that



almost all the world's religions successfully exist in their climate. The state's capacity to respond to foreign economic shocks (crises) is increasingly being expressed in conditions of global interdependence and conditionality. If the available resources of the state are large and at the same time properly distributed, crises from the external environment will not affect the state. However, if a country behaves as Cuba, Iraq or North Korea do, regardless of available resources, it will be marked as an area of high political risk. Isolation in economic and/or political terms cannot improve the macro performance of the state in international relations.

Social factors refer to religious, linguistic and ethnic diversity and the security sphere. In addition, they include political dogmatism. There are few countries in the world where religious or ethnic differences do not cause conflicts and tensions. On the other hand, the list of countries that are possible arenas for religious conflicts is long. Serbia and its general external environment are an example of that. Religious diversity has created social tensions between Serbs and Albanians in the southern Serbian province. The culmination of the religious conflict on the territory of Kosovo and Metohija reached its peak in 1999. Political dogmatism can also produce social unrest in a society, whether it is multiethnic or not. In addition to these, one of the very important social factors that can significantly affect political risk is corruption.

Geographical factors very often coincide with social ones. Namely, a hostile macro environment can increase the degree of political risk. Border disputes imply the presence of political risk, and it increases significantly if the state is prone to international incidents.

Risks concerning companies can also affect the political and business climate of the country. The risks related to the company can include: the character of the industry, the level of technical and technological development and investment in research and development, the degree of competition, the form of ownership and the nationality of management.

The state can mark certain economic branches as strategic for the economy and society development. In such situations, favoring one or several of them in relation to other economic branches, results in a boycott of unprivileged branches or companies from that activity. Competition, management and the prices of products or services of favored industries are under the direct control of the state, which can have a great impact on both the population

and potential investors. On the other hand, these same favored branches or companies are subject to numerous state regulations.. For example, any investor needs a longer period to enter the Serbian mining sector than entering the electronics industry. The mining sector requires first preliminary (scientific) research, then experimental (trial) production, and only after consultations with political and economic authorities regular production is approved, more specifically excavation and exploitation. The success of a certain economic entity depends on the achieved level of technical-technological development as well as on the investment in new research. Despite the availability of adequate resources, if the technical level of a particular business entity is at a low level, development opportunities are limited. What is even more disastrous in this situation is the poor quality of the product or service. Otherwise, high-tech and sophisticated companies do not have problems with the quality of their products, which provides them with stability in the market. The level of competition is another factor that is related to economic entities. Oligopolistic and monopolistic market structures can discourage private capital from investing in certain industries, so that companies do not have a chance to survive in such conditions. The ownership structure of a company can sometimes be a major obstacle to the functioning of economic life. When the company is owned by the local population or capital, there is a greater possibility for joint investments with the local population rather than abroad. This is the situation in economies with predictable circumstances. In a situation where the company's management is purely foreign, there is a risk of capital being sucked out. This can directly affect entire economic sectors if the company is in a monopoly position.

All the above indicates that political risk can be viewed from the micro and macro aspects. From the micro aspect, it is observed from the level of companies, while the macro aspect requires an overall analysis of risks that may affect the international position of the state and its companies. The general characteristic of risks from both groups is that they are in a cause-and-effect relationship. Every micro risk has a reflection on the macro, and vice versa.

In the global conditions of life and work, each category, in addition to its micro and macro aspect, gains one more dimension – global. Thus, in the case of political risk, one can speak of global political risk. This dimension is becoming increasingly important, because global market players (nation states, institutions, multinational and any other form of enterprise, individuals and groups of individuals) are so interconnected and interdependent today that, for example, the US mortgage crisis has



very quickly and easily been reflected on the financial markets in Europe, Asia, Africa and / or South America and in some countries grew into a general social crisis. Also, the crisis in Ukraine may again introduce bipolar division in the world and produce far greater negative consequences for security and society in general, not only in the region of Eastern Europe, but in the whole world. The Ukrainian crisis is an example of how the national problem, due to the cultural-civilizational, identity and political aspect, first gained a bilateral character, and with the inclusion of the countries of Western Europe and the United States of America, a global character. Ukraine has become a testing ground for the demonstration of geostrategic interests of the world's leading powers – Russia, the United States and Western Europe (Talović & Milosavljević).

Global risks that encourage the emergence and development of political risk are: terrorism, wars, civil unrest, cybercrime, economic crises of regional and global proportions, high levels of poverty of the total population (pauperization) in developing countries, anti-globalization movements, environmental problems and more.

The practice of modern international relations has not fully confirmed the neoliberal idea guided by its main idea that free trade will make the world richer and more peaceful. In addition to the idea of creating a single world space, the world continues to face expresseed tendencies – polarizations, social and political tensions, religious and ethnic conflicts. Risk is present everywhere. (Стојковић, 2022.) Uncertainty and risk are the main characteristics of the modern world, which is why the world is increasingly called a risk society.

Economic crises represent the legitimacy of the capitalist system. The global economy, based on deregulation, is prone to periodic crises whose consequences are devastating for humanity (Stojković, 2011). The constant widening of a gap between the rich and poor, and the increasing escalation and legalization of violence, war and interventions, is making the planet a common place of risk. The concept of neoliberalism, which is based on profit and interest, cannot ensure lasting peace and security on Earth. The Third World countries were automatically the center of crises and conflicts. The continued existence of the division into Third World countries in international relations can be treated as a risk.

The above indicates that political risk can be viewed from an economic, political and social point of view. The following factors can be generalized as key factors influencing the country's level of political risk in international economic relations: "government stability, socio-economic conditions, investment and investment profile, internal conflicts, external conflicts, corruption, military influence in politics, religious tensions, respect for the constitution and the law, ethnic tensions, democratic accountability and the quality of bureaucracy and administration" (Ostojić, 2010, p. 19-20).

Political risk assessment

Political risk assessment is one of the most important moments in the process of a company entering a foreign market. All actors of international relations in the process of strategic planning assess the political risk of a particular geopolitical environment.

There are different approaches and methods that include different techniques, theories and ways of drawing conclusions about a particular geopolitical environment. The importance of the geopolitical environment can be illustrated by the latest example and the crisis of the "Ukrainian state that has become very relevant in the last quarter of a century due to global changes on the international scene and the new vacuum in the post-Soviet space" (Milosavljević et al., 2017. p. 36). Political risk assessment techniques can be divided into subjective and objective.

The subjective assessment of political risk is performed by various experts and experts from several areas of social life. These are economists, lawyers, business psychologists, political scientists, diplomats and the like. Grand tours, Old hands and Delphi are the basic ways (techniques) of subjective assessment of political risk. A common feature of subjective methods is that information about the market and the state is collected from a wide range of sources, through various channels and social actions.

Proponents of objective methods are of the opinion that the quantification of their analysis cannot be compared with the subjective feelings of individuals or groups because the emotional component of a person can cause errors that are not easy to correct later. Objective methods are based on strict adherence to methodology and models, as well as the accuracy of statistical data. The methodologies of world-renowned organizations do not differ much. The most common variables that determine political risk



concern the domicile political and governmental system, relations with political organizations within the national framework, then crucial economic indicators are included, as well as the process of integration into the world system and ethical and religious stability of the observed country. The most important organizations that deal with political risk assessment at the global level are the United States Political Risk Assessment Agency, the World Economic Forum (WEF) and Marsh McLennan. From the WEF perspective, the variables that are crucial for summarizing a country's political risk are: "contractual agreement repudation, country economic risk, currency inconvertibility and transfer risk, expropriation risk, legal and regulatory risk, sovereign credit risk, risks from strikes, riots and civil commotion, the risk of terrorism and the risk of war and civil war" (Marsh, 2022.) The scores for each of the mentioned variables range from 0.1 to 10, where a score of 10 represents the absolute presence of risk and the inevitable worst case scenario, while a score of 0.1 is the absolute absence (non-existence) of risk of a particular variable. The cumulative value of all variables is classified into one of five categories: 1) very low political risk (< 2.1); 2) low political risk (2.1 - 4.0); 3) medium level of political risk (4.1 - 6.0); 4) high political risk (6.1 - 6.0); (8.0) 5) very high political risk (8.1 - 10).

The following tables and graphs present the variables that affect the level of political risk in the countries mentioned in some way in the paper. These are Serbia, Ukraine and the United Arab Emirates.

When it comes to Serbia, the intensity of political risk in the first half of 2021 is uniform. Comparing the values of the variables from the beginning and the middle of 2021, it can be noticed that there are no expressed risks that can increase the overall value of political risk. Taking into account the parameters from the previous classification, it can be noticed that Serbia is in the category of a country with a medium level of exposure to political risk. The total value of political risk measured by this method is 4.13, which means that Serbia is on the verge of countries with low and medium political risk.

Variables	February 2021	July 2021	
Strikes, Riots & Civil Commotion	5,1	5,0	↓.
Terrorism	2,4	2,4	=
War & Civil War	3,2	3,1	\downarrow
Country Economic Risk	4,6	4,2	\downarrow
Currency Inconvertibility & Transfer Risk	3,8	3,7	\downarrow
Sovereign Credit Risk	5,2	5,0	↓
Expropriation	4,4	4,4	=
Contractual Agreement Repudiation	4,6	4,6	=
Legal & Regulatory Risk	4,8	4,8	=

Source: Marsh, 2022.

From a security perspective, the basics of variables that affect the increase in the overall level of political risk are at the low risk level.. This is primarily about terrorism and potential war events. The third component of security that affects the increase of political risk are strikes, riots and civil unrest, the coefficient of which has a medium level of risk. This variable is high for several reasons. The first and basic is the dissatisfaction of the population with running the country in pandemic conditions. Great resistance was offered to the process of compulsory vaccination against Covid 19. This situation is characteristic of most countries in the world that have expressed the intention to introduce mandatory vaccination and protection during the pandemic. The variable "strikes, riots and civil commotion" in Serbia is rapidly gaining in value due to certain decisions of the authorities, such as a permit for preliminary research and exploitation of newly discovered ore - jadarite. Civil unrest caused by the presence of global corporations from the mining sector has encouraged environmental organizations to social disobedience.

However, the legal sphere has the greatest influence on the cumulative value of political risk in Serbia. The medium level of risk of the variables "expropriation, contractual agreement repudiation and legal and regulatory risk" shows the passivity of the authorities in the context of changing the legal system. These variables have had constant values for several years and represent the highest risk in terms of the total value of political risk in Serbia.



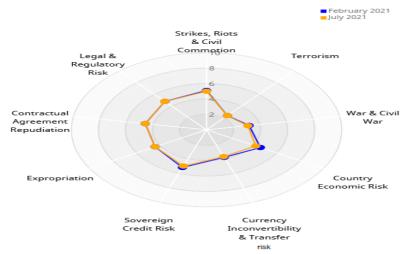


Figure 1: Graphic representation of political risk variables in Serbia

Source: Marsh, 2022.

When it comes to Ukraine, it should be emphasized that for the whole decade, this country has been the scene of great geopolitical, geostrategic and military-security pretensions of the former sides of the bipolar world (Milosavljević 2014, 2017). On the one hand, Russia is trying to regain key geostrategic territories that have been Russian territory from a historical perspective, and remained part of Ukraine after the collapse of the Soviet Union.

Table 2: The value of political risk variables in Ukraine

Variables	February 2021	July 2021	
Strikes, Riots & Civil Commotion	5.4	5.5	1
Terrorism	4.7	4.6	\downarrow
War & Civil War	6.5.	6.5	=
Country Economic Risk	6.1	5.7	↓
Currency Inconvertibility & Transfer Risk	5.8	5.8	=
Sovereign Credit Risk	7.0	6.9	\downarrow
Expropriation	5.3	5.3	=
Contractual Agreement Repudiation	6.2	6.2	=
Legal & Regulatory Risk	5.7	5.7	=
16 1 2022			

Source: Marsh, 2022.

The West, on the other hand, embodied through the partnership of the United States and Western European countries in the NATO alliance, seeks to curb the further development and influence of Russia on the entire territory of Europe with its economic and political influence in Ukraine. The clash of interests of the former poles of the world has led to the situation that the total coefficient of political risk in Ukraine is 5.8 and it is classified as a medium-risk country with a tendency to grow. The situation is aggravated by high risk factors for war and an increased risk of strikes, riots and civil unrest. The culmination reached its peak with the military intervention of the Russian security forces, which began at the end of February 2022. Since then, the variables of political risk in Ukraine have been "in the red" and are considered an insecure state.

Due to the active involvement and aspiration of Ukraine towards membership in the EU and NATO, the Alliance and the EU support Ukraine in the economic and legal-political context. Security support in terms of engaging NATO resources in the fight against the Russian armed forces is lacking. Since the outbreak of the crisis in Ukraine and the annexation of Crimea to the Russian Federation, the relations between the West and Russia have deteriorated significantly. In the first half of March 2022, with the help of instruments of hard power with economic characteristics, the West tried to prevent Russia from making plans. Economic relations that have been shaken due to the political and situation a-round Crimea have almost been terminated. In the diplomatic context, cooperation is almost non-existent. Namely, the UN Security Council rejected the resolution condemning Russia's invasion of Ukraine, because it is logical that Russia vetoed it. An attempt at such a resolution within the United Nations is again creating the division of the world into poles, but this time several poles have been crystallized. Thus, the world today is divided into supporters of the West, then allies of Russia, politically and economically neutral states and a very important fourth pole of a politically neutral state with the aspiration to continue economic cooperation with Russia. The diplomatic conflict between Russia and the West has been going on since 2014, when the G7 members agreed to disband the G8, that is, to expel Russia from this world form. This dispute between the two sides will continue until the positions are harmonized and a joint solution is reached on Ukraine.



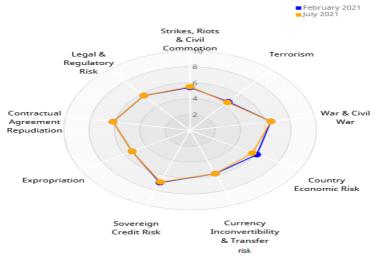


Figure 2: Graphic representation of political risk variables in Ukraine

The United Arab Emirates is an example of good governance. Geographically, the UAE is in a traditional crisis area. Several decades ago, the neighboring emirates have been exposed to very serious political and security threats and problems. Although energetically significant, OPEC members from the Middle East region have been exposed to significant political, economic and military interventions. Despite that, the Emirates managed to build a system that will not confront the most important centers (political and military).

In the next, table 3 the determinants of the overall political risk of the United Arab Emirates are shown. The total coefficient of political risk of the Emirates is 3, which means that the UAE is ranked among the countries with low political risk. The risk of potential rejection of contractual obligations is at the level of medium values. However, this should be taken with a grain of salt because the legal system of the Emirates is very complex and is based on the dualism of the national and federal systems. The United Arab Emirates is one of the few countries that has remained immune to the numerous economic and political crises that have gripped the world in the last few decades. They base their development and foreign policy on natural resources and economic cooperation with all countries in the region and the world. The dual legal-political system has created the diametralism of politics and economics, but in international relations, priority is given to economics, politics of neutrality and non-

Source: Marsh, 2022.

alignment. Having this in mind, as well as the fact that domestic policy is conducted by combining sharia instruments, where sharia does not have the status of law, and Anglo-Saxon legal norms, it has led to the creation of a strong and stable economic and political situation at regional and global level.

Variables	February 2021	July 2021	
Strikes, Riots & Civil Commotion	2.8	2.8	=
Terrorism	3.2	3.1	↓
War & Civil War	2.9	2.9	=
Country Economic Risk	3.3	2.9	↓
Currency Inconvertibility & Transfer Risk	2.2	2.2	=
Sovereign Credit Risk	2.4	2.2	↓
Expropriation	2.4	2.4	=
Contractual Agreement Repudiation	5.5	5.5	=
Legal & Regulatory Risk	3.3	3.4	1

Table 3: The value of political risk variables in the UAE

Source: Marsh, 2022.

Figure 3: Graphical representation of political risk variables in the UAE



Source: Marsh, 2022.

Political risk and multinational companies

From the perspective of multinational companies, any decision of a political nature made by the host country, which may have negative business



connotations, is considered a political risk. Political decisions can affect the business of multinational companies in different ways. All of them can be divided into several categories: very harmful political decisions that affect the complete withdrawal from a particular market, harmful decisions that are reflected in the adoption of legislation restricting, controlling and/or directing business activities, and less harmful decisions concerning the impact on certain areas of business.

When it comes to very harmful political decisions, multinational companies are most afraid of the outbreak of revolutions, civil war and the process of nationalization of property. The group of harmful political decisions includes decisions on banning the movement of capital, limiting the value of real estate, increasing income taxes, the participation of state bodies in the work of top management and the like. As less harmful decisions we can identify aspirations or negligence of the state towards transport infrastructure (which is one of the preconditions for successful business of multinational companies), the insufficient development or lack of financial market, but also the decisions of local governments regarding increasing utility taxes.

In general, when multinational companies plan to expand into new foreign markets, they look at political risk from a micro and macro angle. From a macro perspective, the actions or decisions of holders of political functions that may increase political risk affect the business of all foreign and domestic companies. When, due to the implementation of certain political decisions, intentional or unintentional damage is inflicted on certain economic sectors, more specifically on industrial branches, it is a matter of micro-political risk. Political risk in the micro context affects and is directed only at individual companies and is a matter of protectionist measures.

Some of the most devastating decisions of a macro nature are expropriation and internal conflicts. On the other hand, micro-political risk can be caused by corruption in certain parts of the economic sector or individual actions against foreign companies. All these risks, regardless of character, can lead to significant tangible and intangible losses.

The case of Cuba can serve as an example of political risk in a macro context. Namely, Fidel Castro took over the power in this island state in 1959. Guided by communist ideas, he carried out general nationalization and expropriation in the agricultural and industrial sectors. The companies at the time were mostly owned by wealthy Americans and Englishmen. The Cuban government took over large plantations of sugar cane, tobacco and lemons under its jurisdiction. A small number of companies were insured against this type of risk, so the entire business was left to the Cuban political leadership. To date, none of the companies has received compensation, and foreign relations between the two countries were terminated in the same year, only to be re-established in 2015.

The key question that arises is whether there is protection against political risk? Namely, it cannot be eradicated, but it can be minimized. Multinational companies have created several ways in the process of protecting their business and capital. These are classic researches of state risk, then direct negotiations with the holders of political power of the host country and the purchase of insurance against political risk as one of the most modern ways of protecting foreign business.

Concluded considerations

Political risk is an unavoidable factor in modern international (economic) relations. The multidisciplinarity of the concept stems from its intense and extensive nature, and therefore, in addition to the original, political, it also has an economic and social sphere. In general, political risk is any politically motivated act by the authorities that results in a disruption of the business and/or social climate.

In modern circumstances, the global order is burdened with numerous challenges. The beginning of the 21st century was marked by security, economic and energy crises. Political risk (generally and as a summary category) has become increasingly important in the multipolar division of the world.

The situation in Ukraine shows the importance of political risk from a global perspective. The bilateral crisis of geostrategically and geoeconomically important countries easily leads to the creation of global security and social crises. On the other hand, following the practice of the United Arab Emirates and relying on the geoeconomic concept of conducting national policy, many countries can greatly improve their international position and contribute to the establishment of a safer global order.



Assessing the political risk within the national borders with the variables that determine it, one tries to point out the problems that the countries are facing, but to maintain the security of the global order as well.

Reference

- 1. Chen, J., Political Risc, https://www.investopedia.com/terms/p/ politicalrisk.asp (20. December 2021)
- 2. Dašić, D., Karić, D. (2009). Međunarodna ekonomija sa osnovama diplomatija, Delta press, Beograd
- 3. Milosavljević, S., Mladenović, M., Ljubisavljević, N. (2017). Krim "povratak u budućnost": geopolitički, bezbednosni i vojnostrategijski aspekti ukrajinske krize, Akademska misao i Inovacioni centar Fakulteta bezbednosti Univerziteta u Beogradu, Beograd
- 4. Milosavljević, S. (2014). RUSIJA I "MIR": Strategija bezbednosti Ruske Federacije: geopolitički, energetski i vojni aspekt, Akademska misao & Inovacioni centar Fakulteta bezbednosti Univerziteta u Beogradu, Beograd
- 5. Ostojić, S. (2010). Upravljanje političkim rizicima, Škola biznisa, br. 2/2010, 15-24.
- 6. Pušara, K. (2001). Međunarodne finansije, finansijski menadžment, Verzal press, Beograd
- 7. Sottilotta, C. E. (2013). Political risk: concepts, definitions, challenges, Luis School of government, Rome
- 8. Stakić, B., Barać, S. (2010). Međunarodne finansije, Poslovni fakultet, Beograd
- 9. Stojković, R., Raičević, M. (2010). Politički rizik i međunarodno poslovanje, Ekonomika, Vol. 56, No. 3, 165-174.
- 10. Стојковић, Р. (2022). Глобализација 4.0 и нови светски економски поредак (у штампи), Факултет за инжењерски менаџмент, Београд
- S toйkovič, R. (2011). Gosudarstvennыe intervencii kak sposob borьbы s sovremennыm эkonomičeskim krizisom, sb. dokl., (ред. колл. Рудычев, А. А.) Aktualьnыe problemы эkonomičeskogo razvitiя:– Belgorod: Izd-vo BGTU im. V.G.Šuhova, 2011. – Č.3. – 347-353. c.138-143.
- 12. Talović, V., Milosavljević, S. (2017). Moguća rešenja ukrajinske krize, Srpska politička misao, Vol. 56, br. 2/2017, 169-191.

- 13.Tamir, A. (1985). Political Economy and Risk in World financial Markets, Lexington Books, Michigan
- 14.Weber, C. (2010). Quantification of political risk in energy foresight a methods overview, Essen, University of Duisburg-Essen
- 15. International Monetary Fund, United Arab Emirates, country data, https://www.imf.org/en/Countries/ARE#countrydata (10 March 2022).
- Marsh, Marsh Specialty's Political Risk Map 2021, Pandemic Recovery Complicates Risks file:///C:/Users/CSS/AppData/Local/ Temp/Marsh_Political_Risk_Map_2021_Report_update-2.pdf , (18.03.2022.)



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CHALLENGES OF ENERGY RISK DIVERSIFICATION AND GAS CRISIS IN EU

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Key Words: gas crisis, import dependence on gas, construction of the gas pipeline, energy supply

Abstract: The relationship between the distribution of fossil fuels in recent decades has greatly influenced the geopolitical situation in the world. We are witnessing numerous revolutions, sanctions, and wars in crisis areas of countries rich in oil and gas reserves, which resulted in the radical devastation of some countries' economies and enormous emigration from war-torn areas. On the other hand, the struggle for supremacy in the energy market between the West and the East is intensifying, especially because many countries importing fossil fuels have turned to the diversification of procurement risks, primarily gas, and then oil. Many countries Turkey, Iran, Ukraine, Venezuela, Germany, and Bulgaria have faced various pressures and challenges imposed by the West. In the case of Iraq, Libva and Syria, wars were inevitable. A review of the past period and the growth of political tensions in Ukraine in recent years, and especially the months, indicate that a new war on European soil is imminent. This time, the interests of the great powers from the West and the East are more obvious, and there are more reasons for the conflict, in the sense of diplomacy or war.

Introduction

s is well known, all economic activities require energy consumption. Today, in addition to the scientific and technological process, the share of oil and gas consumption as fossil fuels has the largest share in almost all countries. Of course, in addition to oil and gas, nuclear energy, coal, and renewable energy sources are also used. Several economies base their economic dynamics mainly on nuclear energy, but this number is significantly small. However, most economies around the world base their economic

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activity on fossil fuels, primarily oil and gas. Therefore, it is quite logical that both oil and gas represent the "bloodstream" of every economy, especially the economies of the European Union, (hereinafter abbreviated the EU).

What is typical for EU countries is that almost all of its members are import-dependent on gas, some to a lesser and some to a greater extent. In this paper, the authors present their views on the risk of import dependence and the challenges of diversification of gas import risks that EU member states face during the war crisis in Ukraine. In this regard, and for a multifaceted projection of a very complex problem, the paper contains several titles, interrelated, and historically related to the current topic and events in Ukraine. After an introductory review of the literature, the chronology and structure of gas import dependence of EU leading countries are presented. With this approach at the very beginning, the authors want to point out the necessity of gas imports, the implications of gas import, as well as the importance and severity of the problems faced by the EU energy sector. The authors try to present how complex and difficult it is to solve the problems of import dependence and challenges in diversifying the risks of gas import by presenting a series of arguments regarding the EU's economic and military-political dependence on the United States (hereinafter abbreviated the US), but also from Russia. The current cross-section of the EU's unenviable position on the geopolitical scene represents a concrete outcome of the long-term strategic processes that are constantly taking place in the political, economic, and military spheres between the US, on the one hand, and Russia, on the other. Whether the EU is on its knees in terms of gas imports, and whether the unity within the EU is geopolitically sustainable, is discussed in the final part, where the authors present their views through discussion and provide optional outcomes.

The necessity of importing fossil fuels into the EU – literature review

The recession in 2008, which has spread from the US to other economies in the world, maybe worse than the Great Recession of the 1930s. According to many experts, "in 2008, the US economy entered a recession because it recorded a real decline in economic activity in two consecutive periods", (Siljkovic, 2010). Many countries are making some strategic decisions to emerge from the crisis and reduce its consequences. When it comes to energy sources on which economic activity is based, the beginning of the 21st century was marked by a sharp jump in the average price of oil on the



international market, (Tverberg, 2012). In addition, the price of oil is accompanied by the price of gas. As attention has been paid to the policy of using alternative energy sources in the last three decades since the onset of the economic and energy crisis in 2008, savings and alternative energy sources have become increasingly important, (Mirkovic et al., 2018)

At the EU level, primary energy production in the EU was 17.7% lower in 2020 than in 2010. The general downward development of primary energy production in the EU can be attributed, at least in part, to efforts to decarbonize the energy system and improve energy efficiency. In 2020, the pandemic especially affected primary energy production (OPEC, Annual Report).

But what is the basic structure of primary energy production in the EU? Primary energy production in the EU in 2020 was distributed to several different energy sources, of which the most important are renewable energy sources, with more than one-third (40.8%), followed by nuclear energy with 30.5%, 14.6% of coal and lignite, natural gas with 7.2%, and oil with 3.3%, (Organization of Petroleum Exporting Countries, hereinafter OPEC, Annual Report). It is obvious that fossil fuels with a share of over 25% in the production of primary energy in the EU cannot be easily and quickly excluded, and their import in the future is implied, (OPEC, Annual Report). Gradually, crude oil is abandoned and replaced by other energy sources. The use of nuclear energy and energy from renewable sources requires a highly skilled workforce and profession, enormous investments, and a lot of time. Although renewable energy sources are conducive to environmental pollution and the greenhouse effect causing drastic changes in weather around the world, their benefits can only partially solve the problem of import dependence on fossil fuels, so far. Finally, the participation of natural gas in primary energy production is in line with EU energy policy, and it was initiated by accepting the Kyoto Protocol commitments, all to reach the target level of decarbonization, environmental protection, and gaining time through transition and renewables energy, (Veselinovic, 2015). Additionally, natural gas contributes to heating and transportation in the EU economy, and the amount of domestic gas production can't meet the increasing demand level in the EU. The amounts of the largest EU natural gas importers and analysis are represented below, (table 1).

The positions of the largest gas producers and consumers within the EU are the most important for the sustainability of the EU energy policy, in

the first place the companies in the German economy. Regarding this it involves enabling a path for a long-term supply involves a distributers determination and selection, all this based on a well-defined marketing strategy and decision-making units in the EU, (Dvornik, 2018). According to Veselinovic "One of the main functions within a company is the marketing area, and it is of the utmost importance and relevance of having an already established and well-functioning department of marketing within the company, which would implement proper, just-in-time, and a step ahead of competitive marketing strategies", (Veselinovic, 2020). As the carrier of the EU economy and the positions of other members, decision-making units impact long-term energy sustainability and marketing strategies among the EU.

Import dependence on natural gas of the leading countries of the EU

Decades ago, the import of natural gas into the EU was over ³/₄. Some countries have been chronic, for many years, dependent on imports of this energy source. The extent to which EU members are generally dependent on gas import can be seen below, in table 1 and graph 1. Table 1, shows the four decades of gas imports from the largest importers within the EU, in mil. standard m³. We can see that during the period 1980 - 2020, the imported quantities of all large importers increased, primarily in Spain, Italy, Austria, and the Netherlands. The German economy, as bound by the entire EU economy, and vice-versa, also recorded an increase in imports of over 65% for the observed period. Oscillations in gas imports were observed for the taken period only in the United Kingdom (hereinafter UK) and Belgium, but the outcome is similar as in other countries.

Country/Year	1980	1990	2000	2010	2020
Germany	51.650	57.450	76.200	88.884	155.493
Italy	14.370	30.930	57.630	75.348	66.227
Netherlands	3.200	2.270	12.600	16.970	53.255
France	20.900	29.310	42.320	46.199	46.140
UK	10.800	7.330	2.200	53.850	43.933
Belgium	11.920	9.630	15.950	31.330	42.696
Spain	1.870	4.440	16.730	36.270	32.838
Austria	3.010	5.220	6.120	7.530	13.250

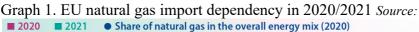
Table 1. Largest natural gas EU importers and largest world exporters, for 1980 - 2020, (m standard m³)



Total world import	198.950	308.920	639.860	990.009	1.244.401
Russia	48.489	97.545	186.620	209.760	199.928
United States	1.270	2.440	6.820	32.187	149.538
Qatar	0	0	14.040	107.437	143.700
Norway	25.750	25.180	48.910	100.544	112.951
Australia	0	5.210	10.200	24.698	102.562
Total world export	203.800	317.220	630.743	1.002.557	1.243.784

Source: OPEC - Annual Report of World Gas Importers and Exporters, available at https://asb.opec.org/data/ASB_Data.php, accessed on 24.4.2022

In recent decades, the share of natural gas imports in the EU has been over 80%. Graph 1. shows the percentage of natural gas imports to the EU, as well as the percentage of natural gas imports of all EU members individually (2021). This clearly shows how dependent the EU, as well as its members, are on gas imports. Currently, the EU imports 83% of natural gas, while the proportion of imports of this energy source in the EU members varies concerning the overall percentage of gas imports into the EU.





EUROSTAT, available https://ec.europa.eu/eurostat/documents /4187653/13722723/ Natural+gas+import+dependency+2021.jpg/fb005f80-3902-5cac-f74a-2b5a59118e37?t=1650362833932

Despite to relatively low percentage of contribution (7,2%) in primary energy production, natural gas is a very demanded energy good in many EU members. Highly import-dependent EU countries are Malta (100%), Sweden (100), Latvia (100%), Spain (100%), Portugal (100%), Estonia (100%), Belgium (100%), Slovenia (100%), Greece (100%), Luxembourg (100%), Finland (100%), Bulgaria (98%), France (97%), Italy (97%), Czech Republic (96%), Germany (94%) %), Poland (86%), Croatia (74%), Ireland (71%), Slovakia (71%), Hungary (69%) and Lithuania (68%). The EU countries that are half or partially dependent on natural gas imports are Austria (51%), the Netherlands (35%), Denmark (25%), and Romania (20%), while Cyprus (1%) ranks last in this series.

Graph 1. also shows the share of natural gas in the total energy consumption of each EU member state for 2020 and 2021, which further indicates the importance and role that this energy source has in each EU member individually. In this regard, we single out Italy (43%), Hungary (41%), the Netherlands (40%), Germany (27%), Austria (27%), and France (20%).

This means that natural gas is of special importance for the abovementioned countries because it occupies a significant place in the total energy consumption, i.e. one-third of the total energy consumed. Taking into account that this share at the EU level (24%) is about one quarter, the above-mentioned values of the mentioned countries are mostly above the EU average. In France, this value is slightly below the EU average thanks to a large number of nuclear power plants (54), which greatly contribute to the total energy consumption of this country. However, natural gas with its participation is not negligible.

Concerning this, what problem is? Out of 100% of imported gas, 25% falls on gas imported from Russia. At first glance, 25% of imports from Russia at the general level may not indicate the seriousness of the problem, but if we look at the levels of participation in EU countries, as well as the fact that imports of natural gas are largely related to international diplomacy and various geopolitical interests, it will be seen how complex this problem is. Table 2. gives an overview of percentages of gas imports from Russia by the most affected EU economies in 2020, and proportions did not change for many years.

Natural gas arrives in the EU via several routes, the most important of which is through the distribution network of gas pipelines through Ukraine and Belarus, where natural gas is distributed from Russia throughout the EU.

In addition to this option of gas supply, the EU can be supplied with alternative gas pipelines from other countries, through seaports, also



major gas exporters, primarily the US and Norway, but also Australia, Algeria, etc (see table 1). EU does so, by importing certain amounts of gas from Norway (21 %) and the USA (6%), and Algeria (12%). However, the long-term arrangements of these gas exporters with other countries are more complicated and risky. In addition, quantitatively limited transport by sea, as well as higher gas prices, do not provide an optimistic answer to the question of whether the supply of gas to the growing needs of the EU on these routes is reliable, sufficient, and economically viable.

EU member Gas import from Russia, in %		EU member	Gas import from Russia, in %	
Finland	100%	Austria	60%	
Estonia	100%	Poland	50%	
Latvia	100%	Germany	45%	
Bulgaria	100%	Romania	30%	
Slovakia	100%	Italy	28%	
Czech Rep.	80%	Holand	24%	
Greece	75%	Belgium	24%	
Lithuania	70%	France	24%	
Hungary	65%	Denmark	< 75% *	

Table 2. Gas importers of EU members from Russia in 2020

* Imported from Germany

Source: Source: OPEC - Annual Report of World Gas Importers and Exporters, available at https://asb.opec.org/data/ASB Data.php, accessed on 24.4.2022

Since the establishment of the European Economic Community, as a forerunner of the EU, all members have had a positive trend of economic growth, and the need for gas and oil has increased. According to the IEA (IEA - International Energy Association Builten), domestic product growth of 10% in energy-dependent countries over 60%, results in a 5% increase in energy dependence, if energy efficiency does not change (OPEC, annual report). The EU's import dependence on natural gas is mainly determined by the import dependence of individual members, to which we pay special attention. It is reflected through the link between the unequal import dependence of EU member states, the unequal contribution of EU members to the EU's economic and political potentials, and the fact that energy-exporting countries use their superior position to pursue their interests that puts the EU in a complex geopolitical situation. In this regard, it is clear the EU's geopolitical position depends on itself, but also Russia and the US. Many EU members, some of very important for the EU, are import-dependent on Russia, while many EU members depend on the US economically and military-politically, and in some cases on the US and Russia as well.

Implications of diversification of gas imports into the EU

Different geopolitical factors impact different decisions on choosing suppliers. Therefore, the policy of diversification of energy supply risk doesn't only imply the purchase of fossil fuel from imports by several suppliers, but also the direct and coordinated substitution of energy sources, that would be imported, to other energy sources that are produced, such as nuclear energy, (Umbach, 2010). As in all other branches "In a realistic environment of supplier selection and evaluation, a decision-maker must take into account different uncertain factors", (Paunovic et al., 2017).

Many EU members have sought to diversify oil and gas imports in previous decades, but the most common choice of procurement has been Russia, due to its huge reserves of these energy sources, reliable infrastructure, and convincingly lower, and therefore competitive, prices. In such circumstances, EU members had not many choices in procuring essential energy sources. However, gas positions are not only strengthened by Russia. Other producer countries are doing the same, from the Persian Gulf to the rest of the world, in Africa, North and South America, and Australia. In today's circumstances, the international market, in addition to Russia, is dominated by the US and Norway, as well as OPEC member countries. In the meantime, the strengthening of Russia and other countries (China, Brazil, India, Turkey) recently, as well as their taking on active roles in the world economy, politics, military moves, diplomacy, and the politicization of energy relations, became inevitable. The entire course of these changes took place at a time when the EU was facing the consequences of the economic, financial, and political crisis, which resulted in the UK leaving the EU. New circumstances put EU policy in a situation where it has to react to new geopolitical circumstances. The dominance of Western transnational companies has been replaced by partnerships and dominance of national companies of energy countries, (Djukić, 2014).

It is important to point out that there are big differences between the members in the field of contribution to EU policy. For example, the GDP contribution of each EU member is not the same. Furthermore, the



participation of each member in the functioning of the EU Parliament, as an influence in taking the EU's position in international diplomacy, is not equal, either. Energy imports can be complicated and are an unavoidable part of international diplomacy. Namely, the logistics and supply chain of gas and oil has been developed so that it passes through countries that are marked as friendly countries to gas and oil exporters/importers, and thus represent partners in international diplomacy. Also, countries that are import-dependent on gas and oil, often can't find themselves in a position to defend their economic, military, and political interests. There are many examples where energy-exporting countries with their gas position condition importing countries with "voluntary" barter deals, promoting its industry, especially dedicated ones.

The United States and Russia's impact on the EU's strategic problem in diversifying the risk of gas imports

Although the geopolitical situation regarding the relations between the US and the EU, the EU and Russia, as well as between Russia and the US, is very complex and dates back for many decades. In the 20th century, especially before, during, and after World War II, relations among Western countries became stronger. After the Japanese attack on Pearl Harbor in 1941, the US decided to go to war and defeat Germany together with allied countries. At the same time, proposals to establish supranational institutions in finance, trade, and politic at the global level were on the table even before the start of World War II. Two proposals dominated, pro-European and pro-American. World War II stopped everything. After the war, supranational institutions were established on the territory of the US, and Europe, but also on other continents. A number of these supranational institutions, as time will show, will be very influential on the governments of many countries. Through dialogues and the adoption of the format and content of the statutes of supranational institutions, the basics of decision-making protocols were defined. All are based on the capital role of the founding countries, and not on the population that each country would represent, thus contributing to democratic decision-making. The first proposal was in favor of countries for which capital is not a problem, i.e. the US, but also countries that are in the shadow of US politics and economy. The second proposal was in favor of the countries of Europe, later the countries of the European Economic Community i.e. EU. If we take into account that all foreign

exchange and gold reserves, as well as other valuable assets during the war were transferred to the UK and then to the US, it can hardly be said that European countries had choices and influence in negotiations on the statute and functioning of future international and supranational institutions. After the war, the United Nations (hereinafter UN), the International Monetary Fund, the World Bank for Reconstruction and Development, and the General Agreement on Tariffs and Trade (hereinafter GATT) were founded. GATT was temporary until the negotiating countries agreed on a consensus. GATT, as the forerunner of the World Trade Organization, lasted from 1947 until the end of 1994. Namely, although of a temporary character, one bloc of countries led by the US did not want to give up on the negotiations on the statute and the manner of making decisions for the future World Trade Organization. In the end, the persistence of the US paid off, and in 1995 the World Trade Organization was founded.

Within all supranational institutions, the US has had a huge and decisive influence on functioning and decision-making, primarily based on invested capital, which gave them a crucial right to vote through the statute. Also, many member countries of these institutions, but also partners and allies of the West, followed both their own and US interests. By contributing to the functioning of all international institutions mentioned above, except the UN (due to the UNSC, Russia, and China being permanent members), they took the benefit on Western countries, especially the US and UK.

Later, other international and regional financial institutions were formed, such as the European Investment Bank, the European Bank for Reconstruction and Development, the European Central Bank, the Paris and London Clubs, the Inter-American Development Bank, the African Development Bank, the Asian Development Bank, the African Development Bank, etc. All these financial institutions, both global and regional, are organized on similar principles, and decisions on membership, lending, sponsorship, and providing any support in the economic, monetary, political, and even military-security fields can hardly be made without consent. US representatives are present in the governing and/or monitoring bodies of these institutions. The EU leading countries have also seen their interest in this, and through cooperation with the US, directly or bypassing, they are participating in, so to speak, protocol activities, led by the US representatives. In this way, the US has, over time, built a very complex and efficient mechanism that works in a



direction that only the US and its friendly countries are suited to. It should be noted that the US has close and partnership cooperation with OPEC member countries, which are very influential in the oil industry, for example, Qatar. Through cooperation with Qatar and other OPEC members, the US is in a position to influence the decisions made within the OPEC association, which directly and often decisively affect the changes in oil prices on the international market. As time has shown, in this way, the US and its allies have provided an effective system through which the US has managed to install countless additional institutional instruments in each country of interest. All this influences various decisions, and thus often influences sovereignty and independence decision-making by weaker countries.

On the military-security level, immediately after World War II, military alliances, the NATO (NATO – North Atlantic Treaty Organization, 1949) and the Warsaw Pact (1955) were formed. With the collapse of the USSR, the Warsaw Pact disintegrated (1991), and many former members of the Warsaw Pact joined the NATO, which over time influenced the growth of tensions between Western and Eastern countries, primarily Russia. In the meantime, the US has built military bases throughout Europe, and under the NATO doctrine and allegedly defense policy, primarily installed nuclear missiles in Germany, Italy, and Belgium, but also started the construction of the so-called defense missile shield across the Baltic countries. It sounds ironic, but the NATO statute states that this alliance is defensive. Russia has complained countless times after the accession of the Baltic countries to the NATO pact, especially after the beginning of the construction of the missile shield, and then it was Ukraine's turn to join NATO. The situation boiled over, and Russia reacted. To preserve the security distance, as well as its strategic position on the gas and oil market, it is making a strategic move and attacking Ukraine.

Decision-making in the field of energy should be a sovereign right of any country. Many countries, especially those rich in oil and gas reserves, and militarily weaker or without strong allies have faced a series of obstructions, stops, and sanctions by international financial institutions. If these measures did not yield results, the Western countries used radical measures by launching NATO mechanisms, to realize their interests in the field of economy and energy. Iraq, Iran, Syria, and Libya have faced these challenges in the past.

The previous review can only elementary explain the relations between East and West, but that does not diminish the obviousness of the current situation on the geopolitical scene. To this, we remain the fact that 80% of natural gas from Russia to the EU was distributed through installed capacities in Ukraine and Belarus, from 1973 until 2022. In recent years, new Nord Stream 1 gas pipelines were built by Russian and EU companies, followed by Nord Stream 2, but also Turkish Stream 1 and Turkish Stream 2, which will supply EU countries, Turkey, and the Balkans, independently of Ukraine, (Djukic, 2014). With its new gas infrastructure, Russia sought to bypass Ukraine, a candidate for NATO membership. Thus strengthening its position as a sovereign gas distributor for the EU, and indirectly its security position.

Today's circumstances in Ukraine and Europe indicate that these relations are very disturbed and reached their peak, such as have not been seen since World War II. The current events in Ukraine represent only the consequences of the relationship between the great powers and the economies, which are fighting for their interests, each in its way, violating international law and the conventions of war. For example, one of the official arguments why Russia carried out aggression against Ukraine is because Ukraine didn't indicate that it wanted to fulfill the obligations from the agreement signed in Minsk, after the war in 2014. It is generally known that the US in public, also secretly encouraged and helped the authorities in Ukraine, otherwise pro-Western, not to implement the Minsk agreement. In this way, the US consciously influenced Ukraine to be attacked by Russia. It is interesting that the US authorities, earlier during the elections, publicly supported the pro-Western government in Ukraine, which won the elections.

Western countries, led by the US, UK, and the EU, need access to fossil energy, to maintain regional and global dominance in the economic and security field. After all, whoever has access to and control over the production and distribution of oil and gas has a great influence on the outcome of negotiations on any topic. Hence, Western countries have long had an enviable negotiating position on the geopolitical scene, which they have been building for decades through the aforementioned alliances and supranational institutions, while their access to and control of essential energy sources in the world is partial and debatable. On the other hand, lying on its entire surface in gas and oil fields, Russia has long felt threatened by these circumstances, especially because the principles of international law have not been respected for several decades (Kovac and



Popovic, 2013). The struggle for supremacy in the energy market between the US and Russia as gas exporters, primarily for buyers of the EU market, is more than obvious. The US dislike EU countries or their allies depending on Russian gas, (Siddi, 2017). While gas was delivered through infrastructure in Ukraine, it was acceptable for the US. As the Nord Stream 1 and 2 projects came to an end, pressures on Ukraine and Germany intensified synchronously. Pressure on Germany from the US intensified. The Trump administration has put tremendous pressure on the German government, but also on the governments of other EU member states, to allocate significant savings and assets for NATO membership. Before that, during the Barack Obama administration, an affair broke out with the wiretapping of German Chancellor Angela Merkel, at a time when Germany was deciding to approve the construction of an additional gas pipeline Nord Stream 2. The moment when the Nord Stream 1 and 2 projects were brought to an end, pressure on Germany intensified. Germany relented, and may not have had a choice at the time, and there was a deliberate delay in the field of bureaucracy on the German side. As a consequence of this, the Nord Stream 2 gas pipeline did not necessarily receive a license and consent from the Germany commission.

It is also important to note that Germany has historically had strong ties with Russia, but it has been severely affected since the Second World War, especially since the fall of the Berlin Wall. This does not mean that the strategic-partnership relations between Germany and Russia cannot be renewed. These relationships have experienced both ups and downs. There is no doubt that the strong economies of the West, above all the US and UK, are worried about the possible renewal of partnership ties between Germany and Russia. For that reason, it is not illogical why the US and UK are very cautious towards Germany.

The crisis and the war in Ukraine put the relations of the Western countries, the US, and the EU to the test. At the very beginning, this unity seemed strong. Although strong, when the decision to ban the import of gas and other energy sources from Russia came on the agenda in a series of sanctions imposed on Russia, Germany was among the first countries to protest, and Hungary immediately supported it. These two countries have signed a long-term contract with Russia for gas delivery. Courage, but also awareness of the importance of energy diversification for survival, but also economic growth, some countries have not lost.

On the other hand, Russia, aware of its potential, positions, and built infrastructure, does not hesitate to use gas as a political weapon to achieve

its goals. Russia's gas infrastructure, in addition to gas pipelines across Europe, has been expanding in Eastern Eurasia, Turkey, China, and other Asian countries for years, so geopoliticians in Russia have thought of diversifying distribution channels if one or more countries decide to give up the supply of Russian gas. Russia permeates security goals but also strives to enable itself to have a long-term impact on EU economies, which are import-dependent on gas, primarily Germany. This is proved by the disrespect of the principle of reciprocity on the part of Russia. The principle implies mutual investments between companies from the EU and other countries. Namely, if economic entities of non-EU countries want to invest and operate in the EU common market, it is necessary that the countries they come from also integrate the principle of reciprocity into their legislation, and enable EU companies to run their business based on reciprocating. In practice, this principle has only been partially realized. When it comes to Nord Stream 1, with a capacity of 55 billion cubic meters (m3) per year, and put into operation in 2012, the principle of reciprocity was partially respected by participants. This project was created based on mutual cooperation between Russia and the EU. Gazprom, Witterstal, E.ON, Gasuin, and GDF companies formed Nord Stream AG, with Gazprom owning 51% of ownership. Over time, Gazprom expanded its capacities by appropriating the German Vingas, i.e. gas storage facilities in Germany and Austria. Across the Baltic Sea, the diversification of gas distribution routes from Russia to Germany has been diversified, and it can be said that relations between Russia and Germany have moved in a positive direction. Respect for the principle of reciprocity, as much as possible, has borne fruit. There was deeper cooperation between Russian Gazprom and German Wintershall and E.ON. Just as Russian Gazprom was allowed to take over a 50% stake in Vingas, so Wintershall was allowed to gain gas and oil fields in Siberia through a stake in partner companies. However, Lithuania, Latvia, Estonia, and Poland, which are strongly influenced by the US, have begun to protest, demanding higher fees for gas transit. Among other things, Lithuania and Poland have already built liquefied natural gas terminals that they plan to import from the US, at the same time reducing gas import dependence on Russia. In some instances, there has been a reduction and even interruption of gas supplies from Russia to Germany and other EU countries. It should be reminded that Germany is reexporting imported gas from Russia to other EU members (for example, Denmark), and such moves by Russia are reflected in other countries as well. Further, the realization of the Nord Stream 2 project, doubles the capacity of gas distribution from Russia to Germany, France, the



Netherlands, and other EU countries, up to 110 billion cubic meters per year. Crossing the territorial waters of Russia, Finland, Sweden, Germany, and Denmark, with this project, but also with the new war events, Ukraine has financially and security-wise distanced itself from regional economic and energy flows in the long run. Thus, the maneuvers made by Russia, but also by some EU countries, indicate that Russia can use the gas network as an instrument for exerting influence in favor of defending its interests. Another example goes in favor of this statement. After Russia's aggression against Ukraine, Western countries began to impose a series of sanctions, from banning trade with Russia to blocking the accounts of Russian companies and banks, to banning trade in Russian rubles. In this way, the space for the economic activities of the Russian economy narrowed significantly, and the demand for the Russian currency dropped significantly. To protect its economy from the imposed sanctions, Russia decides that the importing countries have to pay in rubles if they want to order and buy its natural gas. Thus, Russia wants to ensure certain stability of its currency on the international financial market and reduce the risk of depreciation of its growth domestic product, which has begun to suffer the consequences of the imposed sanctions. Thus, the moment when Bulgaria and Poland refused to pay Russia for gas in rubles, Russia immediately stopped delivering gas to these countries. In this challenge regarding the supply of gas in the newly created geopolitical circumstances, Poland stood out with its strong position. With its long-term arrangements with the US regarding the supply of LNG, as well as the installed terminals for the reception and storage of LNG, Poland has managed to reduce the risk of gas imports from Russia. Also, Poland has managed timely to find a solution to overcome the challenge, through the Yamal gas pipeline. Supporting rejections, the EU only intensified the further growth of gas prices on the international market. The price of gas increased by 20% within 24 hours. Therefore, the unity inside the EU energy policy doesn't exist. This increase in price impact other EU gas importers from Russia. That there is no unity within the EU among members on the implementation of a unified policy in the field of energy and international diplomacy, indicates that some EU members (Hungary and Slovakia) do not plan to suspend gas supplies from Russia, paying in Russian rubles, violating adopted sanctions packages introduced to Russia by the EU. It turns out that gas as a political weapon of Russia gives results, at least in the short term.

Possible outcomes

The facts are that Russia uses gas, but oil as a political weapon, primarily through its national companies and infrastructure for energy distribution. As special support to this, Russia has at its disposal a very powerful army that will be used to provide the above-mentioned mechanism. On the other hand, Western countries have a much wider range of instruments through which they can, directly and indirectly, achieve their economic, energy, military, security, and other geopolitical strategic goals. In addition to the NATO and other bilateral and multilateral partnerships, and as previously described, there are global and regional supranational institutions in the different spheres. Western countries support each other, and in return receive support from major powers in the economic, security, and political spheres. Partial or complete abandonment of such cooperation would mean actions in the form of retaliation for the disturbed cooperation, such as the example of Turkey. The South Stream gas pipeline, which was supposed to double the capacity of the already built Blue Stream gas pipeline, was stopped due to US pressure, primarily on Bulgaria, but on Turkey as well. After the failed coup in Turkey, which had the unofficial support of some people from the US, Turkey corrected its geopolitical position about the US, and in the field of energy and security policy partially turned to cooperation with Russia. Instead of South Stream, in cooperation with Russia, the Turkish Stream gas pipeline was built. Also, Turkey bought serious weapons systems from Russia. Immediately afterward, the US stopped the delivery of the most modern planes, based on contracts signed by the US and Turkey, and Turkey had paid. Even, membership in NATO can not secure pure security. Therefore, the US treat unreliable partners just based on their interests.

Given the long-term and complex processes in EU-US relations, but in the relations of developed EU countries with Russia, the question arises whether the EU is sustainable in the long run in terms of unique energy policy? Is the EU on its knees? Is any reliable path? Obviously, in front of the EU are twice? The first is to maintain and strengthen relations with its strategic partners in all spheres of its survival and development strategy. Especially in the sphere of energy policy and diversification of energy imports. However, by partnering with the US and UK, the EU puts itself on the front line ahead of a very determined Russia, which does not hesitate to defend its political, economic, security and energy interests by all means. On that path, the EU faces the challenge of how to maintain



unity between developed, import-dependent, and older EU members, and new ones, which depend to a considerable and even greater extent on the US. The second path provides the EU with a secure supply of gas and other fossil fuels but puts it at a disadvantage when it comes to deteriorating relations with the US, but and newly admitted members who are heavily influenced by the US militarily and financially. We add to this that the relations between the EU on the one hand, and the US and UK, on the other hand, are in the shadow of leaving the EU by the UK, as well as a series of above-mentioned problems and scandals between the EU and the US. Also, the fact remains that the EU countries have a land border with Russia, while the US is at a relatively safer distance. It remains to be seen what the outcomes of strategic relations will be, and what decisions will be made on the geopolitical scene in the near time, especially about resolving the current gas crisis. All this, with the hope that the current tectonic events on the geopolitical level do not represent an introduction to the Third World War.

References

- 1. Djukic, S. (2014). Ruski gas u Evropi od detanta do Južnog toka. *Službeni glasnik.* ISBN 978-86-519-0909-5;
- EUROSTAT Annual Report of economy, finance, and energy, https://ec.europa.eu/eurostat/documents/4187653/13722723/Natural +gas+import+dependency+2021.jpg/fb005f80-3902-5cac-f74a-2b5a59118e37?t=1650362833932, accessed on 2.3.2022;
- 3. Speight, J. (2019). *Natural gas*. Gulf Professional Publishing. ISBN: 9780128095706;
- 4. Kovač, M. and Popović M. (2013). Evropska energetska bezbednost i Ruska Federacija. *Vojno delo* 65 (4): 22-46;
- 5. Parezanović, M. (2014). Energetska bezbednost. Nova srpska politička misao, Beograd. ISBN: 9788684321215;
- Mirković, I. O., Vasić, B. and Radovanović, M. (2018) Ensuring global energy security – the role of Russian energy policy. In: Radovanović, M (Ed.) Energy;
- 7. OPEC Annual Report of World Gas Importers and Exporters, available at https://asb.opec.org/data/ASB_Data.php, accessed on 24.4.2022;
- 8. Radovanovic, T. M. (2019). *Energetska bezbednost*. Univerzitet Educons, Sremska Kamenica. ISBN: 978-86-87785-95-3;

- 9. Siddi, M. (2017). Role of Power in EU–Russia Energy Relations: The Interplay between Markets and Geopolitics. *Europe-Asia Studies* 70: 1552-1571;
- Song, L., Fu, Y., Zhou, P. and Lai, K.K. (2017). Measuring national energy performance via Energy Trilemma Index: A Stochastic Multicriteria Acceptability Analysis. *Energy Economics* 66: 313 – 319;
- 11. Dvornik, S. and Dvornik, I. (2018). Energetska sigurnost novi izazovi europske vanjske politike. Jesenski i Turk, Zagreb. ISBN: 9789532227871;
- 12. Tverberg, G.E. (2012). Oil supply limits and the continuing financial crisis. *Energy* 37 (1): 27-34;
- 13. Umbach, F. (2010). Global energy security and the implications for the EU, *Energy Policy*, 38 (3): 1229 1240;
- 14. International Energy Agency, https://www.iea.org/articles/frequently-asked-questions-on-energy-security, IEA accessed on 10.3.2022;
- 15. Paunovic, M. (2011). Mathematical Modeling and Statistical Analysis in Post COVID 19 Tourism Recovery. Tourism International Scientific Conference Vrnjacka Banja *TISC*. 6,1. DOI: https://doi.org/10.52370/TISC21334MP 334 349,
- Paunovic, M, Ralevic, M. N, Gajovic, Mladenovic-Vijinovic, B. and Milutinovic, O. (2018). Two-Stage Fuzzy Logic Model for Cloud Service Supplier Selection and Evaluation. Mathematical Problems in Engineering. MATH PROBL ENG, ISSN> 1024-123X. Hindawi Publishing Corporation, https://doi.org/10.1155/2018/7283127 (IF 2017: 1.145),
- 17. Siljkovic, B. and Jokic, B. (2010). Financial and Economic Crisis in the USA. *Ekonomski signali*, vol. 5, nb. 2, p.35–59
- Veselinovic, M. (2020). AquaSana Company: Marketing Mix Concept. From Theory to Practice - Problem Based Approach. The Book of Case Studies T2P/CTPCIE, Co-founded by ERASMUS+, Pristina, ISBN: 978-9951-693-92-9, CASE #46, p. 126;
- 19. Veselinovic, M. and Djordjevic, D. (2015). Politic of Exploitation of Renewable Energy Sources in the Function of Environment Protection in EU. *Economic Themes*. The University of Nis. Vol.53, p. 349.



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ENTRY OF THE WESTERN BALKANS INTO THE EUROPEAN UNION, CERTAINITY OR MISCONCEPTION (STICK WITHOUT CARROT)

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Key Words: EU, Western Balkans, reforms, integration Abstract: Thesis of this paper is the actual moment in the EU accession process for Western Balkans. Methods used in the paper are comparative method, content analysis, induction and deduction and case study method. Decades of EU accession praxis for candidate states has been analyzed and especially criteria change for Western Balkans. Western Balkan countries are positioned on the process matrix, which was developed and changed over time by the EU, historical analysis of all enlargements was made and through that lens mission impossible for meeting the criteria faced upon them is reviewed. The paper includes additional research concerning security issues this raises. The end includes not only final thoughts, suggestions and recommendations, but also prognosis of future problem development. The aim of this scientific paper is to point at many obstacles Western Balkans need to cross in the accession process and that

Western Balkans need to cross in the accession process and that the declared will and candidate status, as a consequence have, for the EU making additional pressure and asking for new conditions to be met, and for the Western Balkans going down the road with no end destination in sight.

Introduction

he countries of the Western Balkans are a group of countries that were offered the opportunity to join the European Union more than two decades ago. All the time, these countries are going through processes of various forms of transition and gradual fulfillment of conditions on the way to the European Union. Despite all the efforts, the road is not easy at all, nor without delays. The causes of this situation are numerous, partly as a consequence of the inter-

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nal policies of the candidate countries, and they are significantly helped by the inconsistent policy of the European Union and its member states towards this region. Declaratively, the accession process supports democratic reforms in candidate and potential candidate countries, but due to its unwillingness to deal with the process of substantial reforms in candidate countries in the midst of an internal crisis, the European Union is shifting its focus to stability. At the moment, there are no indications that all member states have a common vision of the speed and desirability of further enlargement of the Union, especially in the Western Balkans.

Today, the EU is facing numerous internal crises, so the circumstances in which it needs to expand, compared to previous enlargements, are burdened with numerous problems. Nominally, the Copenhagen criteria are formal criteria for membership that should be met by any country that intends to become a member of the European Union. They are defined as political, economic and administrative / institutional: 1) stable institutions that guarantee democracy, rule of law, human rights and respect for and protection of minorities; 2) a functioning market economy capable of coping with competition and market pressures in the European Union; and 3) the ability to take on the obligations of membership, including a commitment to the goals of political, economic and monetary union. (Downloaded: "Conclusions of the Presidency", European Council, Copenhagen, 21–22 June 1993, https://www.consilium.europa.eu/media/ 21225/72921.pdf, 12/03/2022, p. 13.).

In practice, in relation to the mentioned Copenhagen ones, the countries that want to join the Union are faced with far more complex requirements, there are more chapters and reference points, a balance clause has been introduced and criteria are constantly being changed. The process is further burdened by a multi-year moratorium on enlargement and the marginalization of the issue on the EU's agenda, the Union's lesser focus on the Western Balkans, all with declining support for further enlargement and growing Euroscepticism in member states. At the same time, the EU accession process in the Western Balkans is threatened by modest economic growth and growing poverty, as well as institutional inefficiencies in the implementation of European standards and values, followed by declining support for EU accession and accession-related reforms. How to encourage European integration processes and deal with the influences that undermine these efforts in these circumstances is a question that the countries of the Western Balkans must inevitably address.



The enlargement procedure itself is designed to complicate the countries' faster progress in the process of approaching the Union. As the progress of the candidate countries on the progress of the member states is unanimous, every further step of that progress is subject to blocking any of those states. Member States that way often seek to resolve bilateral tensions in their favor through conditionality. In this way, the space for arbitrary behavior of the member states of the European Union is large, having in mind the fragmentation of the accession (and join in) process and thus the numerous opportunities for conditioning.

Apart from the mentioned problems and already known difficulties in uniform observance of rules and norms in all areas of the Union's action and all member states, the accession process is additionally burdened by the fact that the European Union today is not the same community as it was thirty years ago. The number and diversity of members has drastically increased, and at the same time the scope of the European Union's activities has dramatically expanded. Discussions have become commonplace about the justification and sustainability of continuing integration according to the current model of mandatory involvement of all member states in all areas of European Union action. More specifically, European Union officials, in contacts with candidate countries, speak in support of accession, but do not make decisions in the Union's institutions that would undoubtedly support it. In this way, the enlargement process is there, but for the candidate countries it is practically difficult to achieve. It can be unequivocally concluded that the enlargement processes so far have been simpler, shorter in time and with far fewer conditions, and thus the possibility of blocking (with rare exceptions) candidate countries from member states (according to: Keserović, 2012).

Enlargement policy from the perspective of key actors a cross-section of the situation

The leaders of the EU and the Western Balkans have repeatedly discussed the future membership of Serbia, Bosnia and Herzegovina, Montenegro, Albania, Kosovo and Northern Macedonia (according to: "Comparative security sistems of neighbouring countries: similarities, differences end cooperative" 2018). EU member states have issued a declaration reaffirming "unanimous support for the European perspective of the Western Balkans", as well as support for an "enlargement process" based on "credible partner reforms". During the six decades of its existence, the European Union (or formerly the European Community) has been at a crossroads several times, but never before has it been the target of so many different crises (financial, euro crisis, migrant, Brexit, identity crisis, war in Ukraine) endanger its foundations. Member states are considering different scenarios for the future of the European Union, but what is important for the countries of the Western Balkans is where the issue of enlargement in the transformed European Union lies. Although assurances come from Brussels that enlargement will not be abandoned, it is obvious that this issue is not on the Union's list of priorities at the moment. This further leads to the rise of Euroscepticism, which has fertile ground in the Western Balkans region.

The achievements so far in terms of Euro-Atlantic integration of the region, and in the opinion of the member states, are modest, which leaves room for new conditions, requirements, and even pressure on the candidate countries. At the same time, there are real dangers (Kosovo and Metohija, dysfunctional B&H, slow transfer of power in Montenegro, new conditions that Bulgaria imposes on Northern Macedonia...) that could shake the security support for the stability of the Western Balkans.

European Union. The European Union is the only actor in the Western Balkans region, where it has applied a wide range of foreign policy instruments since the early 1990s: diplomatic and trade measures, financial assistance, civilian and military missions, and enlargement policy, which is its most successful foreign policy tool. It is an indisputable success that the policy of enlargement of the European Union has had an impact on the transition process of the countries of Central and Eastern Europe. The great crisis of the European Union is more than a decadelong process conditioned exclusively by internal reasons. The main driver of the crisis is the difference between the high goals of integration projects and inadequate institutional, legal and political capabilities to achieve these goals (Samardzic, 2018). In practice, this difference is reflected in the dysfunction of recent integration interventions (monetary union, common foreign and security policy, judicial and police cooperation), which as a rule leads to the dysfunction of many areas of previously achieved degree of integration. Today, Union officials say almost uniformly that enlargement will continue after the Union itself is reformed. It is an unknown long period. In the meantime, the basic function, as well as the content, of the enlargement policy has changed. It has no purpose to expand the Union's integration process to other European countries, because the process itself is uncertain, but to ensure that those countries



remain in the sphere of Western influence and domination in the new security and geopolitical constellation. For the candidate countries, the question remains open, otherwise politically unsettled: why not revise the stabilization and association process that should prepare the country for full membership, in the direction of better general adaptation to changing circumstances.

The accession process, it turned out, contains numerous shortcomings whose roots lie in the very structure of enlargement policy, and in the nature of mutual relations between the European Union and its member states, on the one hand, and candidate countries, on the other (Radić Milosavljević, 2017). The Stabilization and Association Process, created for the countries of the Western Balkans two decades ago, has from the beginning left room for the European Union to unilaterally, according to its own discretion and needs, define the conditions for admission. The obvious arbitrariness in the policy of conditionality, the over-ambitious idea of stabilization and democratic consolidation, the tutoring and hegemonic attitude of the Union towards the candidate countries, as well as the now clear prolongation of the process, have led to loss of credibility and fatigue on both sides.

The new enlargement strategy of the European Union from 2018 defined the issues of rule of law and civil liberties, infrastructural connections, digitalization, strengthening common security in relation to the issue of mass refugee waves, pandemic COVID 19, war in Ukraine, as dominant in meeting formal conditions for accession to the Union. In this way, the enlargement process is becoming politically more uncertain, and the Western Balkans is increasingly defined as an area of security concern, rather than an area that is desirable and useful to integrate into the EU. Thus, the EU strengthens the negative perspective of this area to remain the periphery, waiting room, outpost, and the field of geopolitical game of great and powerful actors (forces).

Great Britain and the Western Balkans. With the exit from the European Union, Great Britain is in the process of reconstructing its foreign policy, which has so far relied on three pillars of "satellite relations" with the United States, the predominant influence on Commonwealth countries and membership in the European Union. Exit from the EU raises the question: what will be the new British approach not only to the European Union, but to Europe as a whole. Immediately after the Brexit referendum, Britain began to emphasize that the terms Europe and the EU are

not synonymous, and that it wants to pursue a policy of presence in Europe, but not as an EU member. By changing the nature of relations between London and Brussels, it is possible that the emphasis on somewhat different priorities in the process of these integrations will change.

SAD and Western Balcans. Transatlantic relations are in the process of deep reconfiguration, they are fundamentally changing, but their complete collapse is not to be expected. This process affects the position of Southeast Europe as a whole, and the Western Balkans in particular, as a politically very unstable part. On one hand, the adoption of a new (major) strategy that would significantly limit action in regions that are not of key security priority (e.g. the Western Balkans) could mean that the United States leaves this area to the security coverage of the European Union and its most powerful members which, faced with their own internal problems, would then more or less successfully compete for influence with other regional and global actors such as Russia, Turkey or China. The fact that US President Joseph Biden, in a conversation with European Commission President Ursula von der Layen, expressed strong support for the continuation of the Western Balkans' accession to the European Union, confirms that the United States will continue to be present in the Western Balkans.

France and the Western Balkans. French President Emanuel Macron called on the countries of the Western Balkans to have a clear perspective on joining the European Union, advocating a "strong and independent Europe" and a new "security order" for Europe with NATO in relation to Russia. "We need to get a clear perspective on joining the Union within a reasonable time," Macron said in a speech at the European Parliament in Strasbourg. "We need a strong Europe that can respond to climate, technological, digital challenges, we need an independent Europe that will decide its own future and not depend on other forces," he said. presenting France's priorities during its six-month presidency of the Council of the European Union.

Russia and the Western Balkans. With its foreign policy, Russia seeks to ensure the strengthening of the country's position as one of the three most influential actors in modern international relations in the changed geopolitical picture of the world, along with the United States and China. Russia's main proclaimed goal is the promotion of trade and economic interests and the protection of national security. Russia is also acting in the Western Balkans in terms of economic cooperation, but also in terms



of military-technical cooperation. The most favorable outcome for Russia would be the creation of a group of military neutral countries in the Balkans, which are the former Yugoslav republics with Serbia in the first place. Russia sees Serbia as a country with a state-building tradition and integration potential, which would be a relatively solid stronghold for Russia to defend its interests in Europe with its cultural and historical closeness, public support, unresolved Kosovo and Metohija issue and uncertain European future and "frozen" the conflict in Southeast Europe, the resolution of which could, to a large extent, depend on relations between the United States and China. For Russia, the Balkans are still a zone of geostrategic, political and economic, that is national interest.

Turkey and the Western Balkans. Current Turkish foreign policy pays great attention to the Western Balkans. For Turkey, the increased influence in this region is a support for a stronger rooting of its presence in Europe. Turkey's Balkan activities are focused on countries with a predominantly Muslim population and countries with a significant minority belonging to this religion (Bosnia and Herzegovina, Albania, Macedonia and Serbia).

China and the Western Balkans. Throughout its turbulent history, the Balkans have attracted the attention of global powers. The People's Republic of China joined the traditionally interested forces by strengthening its political and economic position at the beginning of the 21st century. Viewed from this angle, China's growing role should not pose a threat to integration processes. However, some European leaders have expressed fears that China's presence will jeopardize the European Union's efforts to democratize the region.

NATO and the Western Balkans. NATO Headquarters in Brussels continuously emphasizes that this is a region of strategic importance, and that this organization remains fully committed to the stability and security of the region by continuing to support the Euro-Atlantic aspirations of countries outside the Union, especially by maintaining a presence in Kosovo and Metohija and strengthening relations with Serbia. The United States intends to seriously respond to the danger of a spiral of risk in certain parts of the region, which can easily turn with the coming anti-Western influence of Russia, China and Turkey.

The countries of the Western Balkans on their way to the EU without a certain end

The European integration of the Western Balkan countries is still "pending". Three dominant developments in the Western Balkans are the focus of EU institutions. These are constant oscillations in the process of normalization of relations between Belgrade and Pristina, the end of the almost three-decade-long dispute between Macedonia and Greece (ended with the signing of the Prespa Agreement on June 17, 2018). The third event in focus is the elections in Bosnia and Herzegovina. Numerous factors have contributed to the slow Europeanization of the Western Balkans: post-conflict societies, weak states characterized by a lack of the rule of law, developed organized crime and corruption, illegitimate institutions, weak governance capacities, and statehood challenges. We will consider what this looks like on the example of individual candidate and potential candidate countries.

Serbia and Kosovo. We also tie Kosovo to Serbia, because there is no generally accepted position on the status of the southern Serbian province, as seen by Serbia and some EU member states on one hand, and independent states as seen by the United States and most EU member states on the other. When it comes to the dialogue between Belgrade and Pristina, the head of the EU Delegation to Serbia, Emanuel Joffre, said that it was important to resolve all open issues, and that Belgrade and Pristina should use the opportunity to reach an agreement on normalization of relations (Joffre, 2022). Therefore, reaching a mutually acceptable solution for Kosovo is crucial for Serbia's EU perspective. Therefore, EU officials insist on making progress in the dialogue. Numerous problems stand in the way of progress, and the most significant are the non-implementation of all agreements reached so far, especially the Brussels Agreement. At the top of the pyramid is the formation of the Union of Serbian Municipalities, which Serbia insists on, but also mutual recognition, which the provisional authorities of Kosovo insist on. Minority rights, freedom of movement, church property, missing persons and economic development complete this list of priorities. The world crisis due to the Ukrainian-Russian conflict has further complicated Serbia's position on the road to the EU. Serbia voted for a UN resolution condemning the Russian invasion. For that, it received only courteous recognitions in the form that the Union welcomes this vote, that Serbia continues to be an important partner of the EU. But, as a candidate country for EU membership and a government for which EU accession is



a priority, Serbia would have to progressively fully harmonize its foreign policy with the European Union. We want Serbia to be with us, even in these difficult times, and to comply with EU statements and measures to counter Russia's obvious aggression, and we welcome all steps in that direction. So, they insist on sanctions against Russia, which is unacceptable for Serbia. Analyzing the achievements so far, we conclude that Serbia, and with it Kosovo, remain far from joining the Union in the future, although technically, negotiations are underway, Serbia periodically opens new chapters and fulfills what is possible and acceptable to it (http://www.Euractiv.rs/srbija-i-eu/13328,11/12/2018).

Bosnia and Herzegovina. The event that is currently in focus and that the EU and the USA are working on is the elections in Bosnia and Herzegovina, which will certainly only confirm the negative trends and tendencies within the country so far. Reform of electoral legislation has been buried in unrealistic demands by ethnic leaders, with no indication that any changes are taking place. That is why the perspective of Bosnia and Herzegovina's membership in the European Union will continue to be overshadowed by the evident strengthening of the influence of certain actors, such as the Russian Federation and Turkey. The latest BiH Progress Report lists a number of problems with the country's institutions and non-compliance with laws and regulations.

Twenty-seven years after the war, Bosnia and Herzegovina is increasingly an object rather than a subject of international relations, primarily due to the inconsistencies of the present international actors with and without mandates. Since the only serious attempt at constitutional reform that failed in April 2006, Bosnia and Herzegovina has been permanently facing internal daily political blockades justified by strongholds within the BiH General Framework Peace Agreement. As a country that has expressed its determination to become a member of the European Union in the first years after the tragic conflict, Bosnia and Herzegovina has been suffering for more than two decades from inadequate, inefficient and often biased actions of the established governing structures of the international community (EUFOR, NATO), which seriously jeopardizes both the integration process and the prospect of membership in the Union. With the international protectorate established now, albeit unofficially, that is not possible. The very course of the implementation of the Dayton Agreement, as well as the social and political relations it generates, indicate that it is increasingly clear that there is no practical starting point in a functioning democracy, but that it is, on the contrary, a generator of systemic anomalies. In essence, the European Union itself is slowing down integration processes, increasing Euroscepticism and undermining its credibility, and pushing Bosnia and Herzegovina away from accession. Montenegro. When it comes to Montenegro, the country that most often qualifies as a leader in the process of integration of the Western Balkans, with a deep polarization of society, all these problems are expressed (Weber, 2019). In Montenegro, for almost thirty years, the same people have been both the bearers of reforms and the main causes of the state's captivity. The only success that Montenegro can boast of in more than fifteen years of negotiations on full EU membership is the opening of negotiation chapters and fulfillment of technical preconditions for integration, which at the same time do not mean institution building and strengthening the rule of law.

Northern Macedonia. Northern Macedonia was the first country in the region to sign the Stabilization and Association Agreement in 2001, and in 2009 Skopje officially received positive recommendations for starting accession negotiations. The European Commission has put Northern Macedonia on the list of the 20 greatest achievements of the EU in recent years. Northern Macedonia has completed reforms in 12 months, thoroughly implemented agreements with Greece and Bulgaria, and is now an example of co-operation and friendship in the region. In previous years, the country has moved to a new negotiation methodology, but still faces new unprincipled problems and bureaucratic positions that are becoming a stumbling block for the prosperity of Northern Macedonia on its path to EU membership. Today, 20 years later, Northern Macedonia is still waiting in the European Union.

Forecasts of problem development in the future

Two decades after the creation of the Union's new approach to the countries of Southeast Europe, the Stabilization and Association Process, the process itself, which provided a membership perspective and EU enlargement policy, has lost credibility. Apart from the general idea that the Western Balkans should be pacified through the stabilization of the political and security situation within and among the countries that belong here, at the time of creating the process, it was not clear what exactly it would mean. In particular, political conditions have arisen, such as demands for the return of refugees, full co-operation with the International Criminal Tribunal for the former Yugoslavia, respect for internati-



onal agreements, regional co-operation, normalization of relations with Pristina. Policies in the freedom, security and justice sectors are particularly important for the accession of the Western Balkan countries to the EU because of the region's image as a source of instability, as well as the lessons learned by the European Union after enlargement to Bulgaria and Romania and later Croatia.

From the very beginning, the relationship between the European Union and the countries of the Western Balkans has been established as a relati-onship of superior and subordinate instead of a relationship between equal partners. The described maintenance of the candidate countries in a semiindependent position from the European Union is probably one of the biggest negative consequences of the accession process. The process of joining, therefore, contains numerous shortcomings. Their roots lie in the very structure of enlargement policy, as well as in the nature of mutual relations between the European Union and its member states, on the one hand, and candidate countries, on the other. The reason for that lies in the pronounced dominance of the European Union, which has the opportunity to establish or terminate such a relationship at its own discretion, with the arbitrary creation and change of conditions and rules. Therefore, the problem in the relations between the European Union and the associated states, i.e. non-member states that are in contractual relations with the Union, lies in the undemocratic nature of this relationship with significant limitation of autonomy and influence on the constitutional order of the state.

When it comes to the countries of the Western Balkans, this problem is at its peak. In addition to the Community law regulations that are subject to harmonization in the associated countries, a number of different, often unacceptable, conditions have been developed for the countries of the Western Balkans. The Stabilization and Association Process, created for the countries of the Western Balkans two decades ago, has from the beginning left room for the European Union to unilaterally, at its own discretion and needs, define the conditions for accession and accession. Obvious arbitrariness in the policy of conditionality, over-ambitious idea of stabilization and democratic transition and consolidation, tutoring and hegemonic attitude of the Union towards candidate countries, as well as the now clear prolongation of the process have led to loss of credibility and fatigue on both sides (Radić Milosavljević, 2016). The attitude, better to say the slogan, that the European Union has no alternative was used in the domestic political space by domestic political leaders, but occasionally also by EU representatives, in order to predominantly emphasize the importance of European integration. An alternative to full membership in the European Union and the severance of all relations with it, would lead to the exposure of the candidate country to the influence of other global actors, especially Russia and China.

It is clear today that the policy of conditionality as a key instrument in the European Union's relations with the countries of the Western Balkans has not yielded adequate results. More importantly, due to the way it was organized with absolute favoring of political stability, with the asymmetric nature of mutual relations, together with the objective circumstances in which Europe found itself, it began to produce negative effects in support of undemocratic practices and authoritarian regimes and fatigue from enlargement and accession (Eriksen and Fossum, 2015). Predictions about the possible date of the next enlargement are not optimistic, but in its attempt to give optimism to the otherwise obviously blocked enlargement process, the European Commission determined 2025 as a possible year of the next accession. Even if the next enlargement takes place this year, it will be a consequence of the calculation of the member states of the European Union that the costs of enlargement for the Union are less than the benefits it would achieve (Communication from the Commission to the European Parliament, 2018). An equally bad scenario as early accession would be one in which enlargement would be further delayed pending the actual readiness of candidates for membership. This would mean that candidate and potential candidate countries remain non-members with the obligation to continuously accept and apply the rules and norms of the European Union without participating in their adoption. In that way, they would continue the arduous process with an uncertain end and unpredictable difficulties. Non-member status has its serious shortcomings, but full membership, which involves participating in policies in which candidate countries have no interest or higher costs, is not the best solution. This is supported by the examples of numerous exceptions that the current member states of the European Union have made in terms of participation in certain policies, of which the economic and monetary union and the Schengen visa regime are the most obvious.

Despite all the shortcomings of the process, for now, giving up membership is an unlikely scenario. The Union still manages to convince the countries of the Western Balkans that the "European path" is the only right one, implying full membership, but without guarantees in terms of deadlines. There is no doubt that the countries of the Western Balkans have economic and political interests in participating in certain policies of



the European Union, but not an interest in being "forever" in the waiting room, without any indications of the completion of the accession process. For now, there is a "stick for disciplining" the candidate countries, and there are no "carrots" or only traces of them.

Conclusion

The countries of the Western Balkans are, each in their own way, on the path to the EU. One European politician said "either Europe will lend a hand or someone else will do it" (referring to China, Russia). EU leaders, with the consent of Western Balkan leaders, adopted a declaration at the EU-Western Balkans summit unequivocally supporting the Western Balkans' European perspective and reaffirming their commitment to the enlargement process based on "credible partner reforms", stressing the importance of strengthening integration and Member State "by the European Union itself. "The EU reaffirms its commitment to the enlargement process and the decisions taken on the basis of credible partner reforms, fair and strict conditions and the principle of its own merits. "We will further strengthen our joint engagement in order to initiate political, economic and social changes in the region, while recognizing the progress that the Western Balkans have made," the declaration said. The European Union has proposed strengthening the security and defense of the Western Balkans so that the region can join the bloc strongly. This is the moment to "revive the process of EU enlargement" and for the formal negotiations for joining the bloc to begin as soon as possible, said Joseph Borelj (Tanjug, March 14, 2022). Although everyone agreed that the countries of the Western Balkans belong to Europe, the call of some members to give an indicative, if not a fixed date, to the countries of the Western Balkans for their accession to the Union was not supported. The biggest opponents of speeding up the process are France and the Netherlands.

The new methodology, adopted in February 2020, stipulates that no chapter can be closed until the transitional benchmarks are met. The countries of the Western Balkans have opted for a new methodology for joining the European Union. Until recently, the Stabilization and Association Process and enlargement policy in general were perceived as the most successful foreign policy of the European Union, so it is not realistic to expect the European Union to give it up or reduce it in any way. A faster way out of the long-standing and unfavorable status of non-members would mean for the candidate countries to limit the possibilities of arbitrary and hegemo-

nic relations in which they participate as a subordinate party. An approach that would allow candidate countries (and potential candidates) to choose the areas in which they would participate in integration would increase their degree of autonomy, which has been seriously undermined by the current regime of the accession process. If this would eliminate or reduce the possibility of conditionality in political areas, not only would unlock progress in technical chapters, but it would make the candidate countries aware that they are responsible for their own democratic reforms (Radić Milosavljević, 2017). The accession of states to the European Union depends on meeting strict "legal, political and economic" criteria, said David McAllister, president of the European Parliament's Foreign Affairs Committee. The new strategy of the European Union for the Western Balkans emphasizes that the strategic goals are "strengthening the reform will in the six countries of the Western Balkans and renewing the political engagement of EU members" in the Western Balkans. "The specific date of accession for the new members of the European Union will depend exclusively on when each country fully meets the strict legal, political and economic preconditions." These countries will join the European Union "only if they implement comprehensive reforms". Six Balkan countries are expected to "strengthen the rule of law, fight corruption and organized crime and guarantee media freedom". In addition, "bilateral conflicts in the region must end as soon as possible." These are just some of the repeatedly emphasized demands of Brussels towards the countries of the Western Balkans, and their final list has no end in sight.

In the process of joining, the issue of differentiated integration in general is mentioned more and more often, even the one that would start in the phase of joining, i.e. accession (https://ec.europa.Eu/commission/sites /beta-political files/white paper on the futur_of_europe en.pdf). Such an integration model would limit in advance a number of policy areas and the countries involved in them (Leruth and Lord, 2015). It is not good for the methodology for joining the European Union to change when the country is already deep in negotiations, said the member of the European Parliament, Tanja Fajon. According to Fajon (2022), "if the methodology were to change, it would not be good, because the European Union has lost a lot of credibility because of it. The European Union will remain fully focused on the integration of the Western Balkans, following the goals of the Enlargement Strategy, and will focus on further strengthening the Union and intensifying its enlargement policy.



Insight into the diversity, advantages and disadvantages of the model of relations with the European Union (More in Sieglinde Gstöhl, "Models of external differentiation in the EU neighborhood: An expanding economic community?", Journal of European Public Policy, Vol. 22, No. 6, 2015, pp. 854–870.), it is possible to open opportunities to accept the fact that it is possible to build successful and mutually beneficial relations with the Union without membership as it was conceived so far, i.e. through membership in some other form.

The new geopolitical situation caused by the war in Ukraine may bring perspective, but not the accelerated path of the Eastern Partnership countries to the European Union. And the countries of the Western Balkans should not expect shortcuts "because of the situation". A new political debate within the European Union on enlargement is taking place in the light of the war in Ukraine and warnings about the possible "overflow" of Russia's undermining influence on Ukraine's neighbors and the Western Balkans. "The war will increase the pressure to improve the process of joining the Balkans and to make those ideas relevant for Ukraine, Moldova and Georgia, as well as for the six countries of the Western Balkans." In Brussels, they also say that they are aware that the member states, advocates of joining the Western Balkans, will certainly "take advantage of the new situation" and demand faster accession of the Western Balkan six. "This may bring new impetus to the accession of the Western Balkans, but member states that insist on meeting the criteria for joining the EU will continue to do so, regardless of the new geopolitical reality," Brussels concluded.

The Prime Ministers of Slovenia, Janez Jansa, and Poland, Mateusz Morawiecki, called on EU leaders to draw up a plan according to which Ukraine, Georgia and Moldova, as well as the countries of the Western Balkans, would join the European Union by 2030. The European Commission, which has an executive role in the enlargement process, says that nothing has changed in the Union's approach so far, but also notes that the political will of member states can change the path to EU membership - to speed it up and slow it down. Also, the messages that can be heard from Brussels are that there will be no enlargement of the European Union for at least the next five years, because no country in the Western Balkans is ready for membership.

In conclusion, the European Union, and especially the member states, do not have harmonized positions regarding enlargement. Individually, some

of the institutions of the European Union and some of the officials, often emphasize the perspective and commitment to admission, but persistently insist on the list of revised and added conditions. The countries of the Western Balkans are committed to accession, but are deeply buried in the process itself, which is gaining new demands day by day. All their achievements are not seen by giving recognition in the form of shortening the European path, but it is even prolonging. Brussels is persistently asked that the candidate countries consistently follow the European Union in every situation, regardless of their individual state interest (e.g. the request for Serbia to impose sanctions on Russia). For now, apart from declarative support, there are no visible indications about the end of the process that will lead to membership, conditions are multiplying, demands are becoming stricter, behavior under scrutiny has been subjected to very often unfounded criticism. Survival on the path to accession is the ultimate goal for the countries of the Western Balkans, but for now, its end is not in sight. Take it or leave it, the decision is up to them.

References

- 1. European Council: "Conclusions of the Presidency", European Council, Copenhagen, 21–22 June 1993, https://www.consilium.europa.eu/media/ 21225/72921.pdf, 12/03/2019, p. 13.
- 2. European Commission, "White Paper on the Future of Europe: Reflections and Scenarios for the EU27 by 2025",COM(2017)2025, 1 March 2017, https: //ec.europa.eu/commission /sites /beta-political/ files/white paper on the futur_of_europe en.pdf).
- 3. Eriksen O.E. Fossum, J.E., (2015): "Introduction: Asymmetry and the Problemof Dominance", in: ErikO. Eriksen and John Erik Fossum(eds), The European Union's NonMembers: Independence Under Hegemony, Routledge, London and New York, p. 3.
- Parliament, (6 February 2018): ("Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A credible enlargement perspective for and enhanced EU engagement with the Western Balkans", European Commission, COM (2018) 65 final, Strasbourg, , p. 2).
- 5. Euractiv, "EU compromise solution Serbia opens two chapters", http://www. euractiv. rs/srbija i -eu/13328- EU compromise solution Serbia opens two chapters, 11/12/2018.



- Dostanić, S., Keserović, D. (2018) Comparative view of the security sistem of bordeers between Bosnia and Herzegovina and the republic of Serbia. In: International Monograph of Scientific-research Interdisciplinary Project: Forca, B., "Comparative security systems of neighbouring countries: similarities, differences and cooperative", 325-358. No. ΦΠ ДХ/БЕЗ/0917-0318/2017-2018, ISBN 978-86-81088-01-2
- 7. Keserović, D.(2012): "Sistem bezbjednosti EU", textbook, FBZBL, NUBL, Banja Luka
- 8. Lađevac, I., Jovic-Lazic, A. (2014): "Protection of human rights a prerequisite for EU membership" in: Challenges and perspectives of EU membership, Institute for International. Politics and Economics, Belgrade, p.255–269.
- 9. Leruth, B.and Lord, C. (2015): Differentiated integration in the European Union: a concept, a process, a system or a theory, Journal of European Public Policy, Vol.22, No.6 pp.754–763.
- 10. Radić Milosavljević, I. (2017): "Problems of relations between the European Union and candidate countries and flexible accession as a possible way to revive enlargement policy", Faculty of Political Science, University of Belgrade, Belgrade.
- 11. Radić Milosavljević, I. (2017): "Conflict of Stability and Democracy in the Process of European Integration of the Republic of Serbia", in: Marko Simendić, editor (s). Democratic resistance to the normalization of authoritarianism in Europe, Association for Political Science of Serbia and the Faculty of Political Science, University of Belgrade, Belgrade, p. 257–271.
- Radić Milosavljević, I. (2016): "The Impact of the Crisis on the Politicization of the Enlargement of the European Union", in: Samardzic, S. and Radic Milosavljevic, I., (eds), European Union: New and Old Dimensions of the Crisis, Faculty of Political Science, University of Belgrade, Belgrade, p. 93–102.
- Samardžić, S. (2018). The great crisis of the European Union has changed the function and content of the enlargement policy. In: Balović, S. (comp.), Scientific Conference: "Western Balkans as the" rest "of a united Europe: everyone's and no one's country?", Belgrade, December 6, 2018 (editor Srđan T.
- 14. Sieglinde Gstöhl, (2015):"Models of external differentiation in the EU's neighbourhood: An expanding economic community", Journal of European PublicPolicy, Vol.22, No.6, pp.854–870.
- 15. Schimmelfennig, F., Leuffen, D. & Rittberger, B., (2015): "The European Union as a System of Differentiated Integration:

Interdepen-dence, Politicization and Differentiation", Journal of European Public Policy, Vol. 22, No. 6, p.2. end pp.764–782.

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- 17. Veber, R., (2019): "Montenegro in the process of European integration what can we learn and apply from the experience of the German economy?", Lecture, Mediterranean University.



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IDENTITIES AS ABUSED CATEGORY IN BALKAN CONFLICTS

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Key Words: *identities, religion, ethnicity, the Balkans, conflicts* Abstract: Various types of identity differences, such as religion, ethnicity, language, and a range of other cultural particularities, have often served as a support to conflicts in the context of insurmountable differences. Conflicts in the former Yugoslavia (SFRY) are just one of the most obvious examples of how similarities are neglected or put in the background in conflict circumstances, with differences emphasized and presented as insurmountable. The politics of intolerance and intangible ethnic and religious identities also contributed to the outbreak of civil war in the 1990s and to maintaining of misconception about its inevitability. With recognition of the fact that key identity differences in the former SFRY countries are those related to religious and ethnonationalist narratives, the paper primarily deals with their determination, characteristics and degree of success of the extremization of Balkan societies. Insights gained through comparison of their inflences from the 1990s are included within the cognitive system of their influence at this moment. Based on the formed beliefs and behavior stereotypes of different actors who use identity specifics as a "provider" for achieving political goals, the paper draws the following conclusions. Manipulation of identity specificities in the Balkans is continued three decades after the beginning of the conflict in the former SFRY countries. Areas most intensively affected by this type of manipulation are exactly those that repre-sent the most security-intensive regions, such as Bosnia and Herzegovina and the area of Kosovo and Metohija. Based on what we know about variability and development, and about different degree of success of the abuse of these identity characteristics, the paper offers some of the models for overcoming the problem.

Introduction

The subjective content of our own experience is constantly changing, but a certain core of our personality which is hard to describe, remains the same despite all the changes to which we are

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exposed externally or which we create ourselves. In psychology, this sameness is called personal identity and it is extended to communication with others to signify recognizing oneself in another person, and later in the collectivity as well. Consciously or not, we simultaneously feel the inner life of the other as our own. Philosophers also use the phrase "identity" for sameness, but only through the answer to the question: Am I the same, that is, am I "me – me" in various states? In philosophy, this notion of identity always refers to a person, not to the ego or self. Even when the term "personal" is used, it refers to a person's identity (Mirić, 2001:52).

Generally, we define ourselves by referring to one aspect of our identity that seems the most important to us, while neglecting or often not acknowledging other aspects. Our identity thus "expresses the part of us that we like the most and that we rely on in order to build ourselves" (De Benoist, 2011). Which part of us is the one that best defines us in our own eyes is the question we seek answers to when we ask ourselves about our identity.

The sociological approach recognizes the collective identity as a feeling of belonging to a certain social group. In other words, the identity seen this way is a sociological category that serves to study the emergence, development, and dynamics of social groups and movements. In one way, it is a constant process of constructing symbolic peculiarities by which the social group is characterized and legitimized. On the other hand, collective identity is a "scientific category" that serves to better understand the totality of social groups and movements, the various connecting factors that hold them together, and the sense of interactivity and solidarity that flow from them.

Since the identity of a group insists on gathering "the same" on the basis of uniqueness and differences, it easily becomes the prey of those who will assume that uniqueness to someone else's uniqueness and confront it. This is especially clear in the transfer of identity: from the identity of the individual to the identity of the collectivity. The differences that collectivities insist on - racial, religious, national, ethnic and similar, provide significant opportunities for articulating and expressing conflict towards others and different. The basis of the conflict between identities and a person's (non)acceptance of identity classification is best described by professor Jerotić: "The amount of free aggression resulting from lifelong conflicts between the need for dependence and acceptance, whether belonging to parents or their substitutes - group, tribe, idea, leader, or God - and the need to be independent, free and on its own - will remain a permanent human problem" (Jerotić, 2007:27). Bugarski also introduces



conflict unequivocally into the field of identity when he says that identity is "what all of us humans feel we own, what fulfills us, what determines us, what governs our lives, that we are often inclined to stand up for it, sometimes to fight for it, and even to wage wars", and then adds: "how little we know about what identity really is, how it works, what its structural elements are and how much it belongs to ourselves, how much we are able to grasp it and manage it" (Bugarski, 2010:11).

In traditional societies, no one asks about their identity because it is taken for granted and considered obvious. But when the identity of an individual or a community is threatened, then the question of identity arises. This is exactly the case of the contemporary ambience of Balkan societies, and therefore the issue of identity is a hot political and ideological issue. Our own identity combines parts that are inherited and those that we choose ourselves. That is why we have national/ethnic and religious/confessional identity (which will be the focus of this paper), racial identity, linguistic identity, political identity, cultural identity, gender identity, professional identity, etc.³ There are multiple traps we, as individuals and as collectives, fall into when trying to understand the role of different identities in the architecture of modern human relations and collectivities. Some of those are: neglect or overemphasis on identity, a simplified approach to the problem, as well as common (especially in the regional - Balkan context) and extreme communitarian model⁴ of identity understanding.

National and Ethnic Identity

For a long time, the issue of national identity did not play an important role in political systems of Western Europe. However, because of increased immigration and other demographic factors, the ethnic and religious heterogeneity of Western European societies has increased, while the issue of national identity has come to the forefront of political debates. That caused the conflict over the criteria of belonging to a nation.

³ Identity can also be viewed through the prism of collective respect, where the key question is "whether collective perceptions of oneself are positive or not (Self/Other)" (Lipovac & Dimitrijević, 2015:91).

⁴ The communitarian model of understanding identity emphasizes the advantage of community identity over the individual and thus opens the door to irreconcilability between "identity-antipodal" collectivities.

The rough division of theoretical understandings of national identity can be summarized in the following two opposing meanings: primordialism which is based on the principle that national identity is permanent, solid and basic human category given by birth and colored by irrational feelings, and instrumentalism, according to which national identity is changeable, fluid, and brings benefits (Milošević-Đorđević, 2007). By the way, some modernists see primordialism as a "Trojan horse of nationalism in the academic sphere, whose relationship with nationalism is reflected primarily in claims about the ancient origin and longevity of national identity" (Katunarić, 2007:24). The understanding of national identity is predominantly primordialistic in societies that are late in national consolidation. Within these societies, "the understanding of national identity by which state symbols and civic interest would take precedence over origin and feeling was not redefined" (Milošević-Đorđević, 2007:396).

In order to acquire a national identity, an individual must identify with a nation, and that identification of people with those of the same nationality affects both the shaping and maintaining their sense of national belon-ging. Still, the consciousness of the people about themselves, together with the built national identity, is still not nationalism. Only when "national consciousness grows into national ideology, then we are dealing with nationalism" (Šušnjić, 2009:150). According to Šušnjić (2009), the transition from a man to an ideologist is almost imperceptible. "It glorifies its people and their glorious past, which leads to contempt for all other peoples and their history, and there is no future ideology that could eradicate or deeply suppress the ancient tribal instincts that express through nationalism" (p. 152), Šušnjić says, and continues: "major conflicts erupt over small differences, preceded by organized hours of hatred" (p. 152).⁵

French philosopher and cultural critic Julien Benda (Benda, 1996), rela-ting to nations as a particularly sensitive and offensive organisms, points out that "nations have become sensitive as if they were persons - mothers, fathers" (p. 25). In that manner, it is obvious that only in symbiosis with

⁵ The term "permanent hatred" could be considered a novelty in conflict analysis, explained by the fact that hatred is extremely intensely and consciously nurtured in the public opinion of the conflicting parties. Šušnjić (2009) gives an example of Rome which "conquered the Greek miracle militarily, but not spiritually - a deep respect for Greek culture remained" (p. 152).



national(istic) ideology does nationalism gain meaning and becomes a viable category.

Nationalism and related terms in a symbolic and witty way were described by Savater (Fernando Fernández-Savater Martín) in "Three Short Reflections on Nationalism and Terrorism" (Savater, 2002:203). Analyzing "isms" he says that they indicate "not at all obvious emphasis on something that is really obvious, just as words that end in 'itis' indicate inflammation, and not the fact that someone has an organ". In the same manner, a person can belong to a certain nation without being a nationalist, just as "he can have bronchi without suffering from bronchitis" (Asurmendi, 2002:207).

In the same way in which the national ideology crucially forms nationalism, the beforementioned ethnonationalist ideology which can be viewed as "narrow identity", limits the coordinate system of ethnonationalists. We observe ethno-nationalist ideology through its main characteristics, of which the following are the most exposed: simplification (of otherwise complex social reality), dichotomization ("those who are not with us are against us"), rigidity (interpreted by ethnonationalists as consistency, principles), demarcations (to know how far ours goes, and where "theirs" starts), uniformity (uniformity enhances cohesion), degradation of the rational (emotions before reason), populism (populism thrives best in a society that is cohesive and uniform), anti-individualism (negation of the individual right to diversity), moralism (morally is only what supports group-national goals), traditionalism (closedness and turning to the past), longing for immortality (good deeds for ethnos as a path to eternal life open flirtation with religion), biologism (so-called purity of ethnic groups and nations, increase of the birth rate as a duty), extremism - radical demands accompanied by "all and now" - an essential characteristic and in a way, the content of many of the previously mentioned characteristics⁶ (Kecmanović, 2014:118-133).

Also, through analysis of the characteristics that represent the "doctrine documents" of the ideologues of ethno-nationalism, many of them show closeness to religious identity characteristics. Indeed, if we moved ethno-

 $^{^{\}rm 6}$ Characteristics (Kecmanović) – descriptions of the above mentioned characteristics (authors).

nationalism to the ground of the youngest monotheism for easier understanding of the phenomenon, we could compare it with fundamentalist branch of Sunni Islam - Wahhabism, because in their "guilds", both identities inherit the so-called original or integral variety. Baring in mind that ethno-nationalism forms the backbone of all secessionist movements, "ethnonationalist ideology is necessary to convince members of its target group that their home country is not legitimate" (Pavković & Radan, 2008:266).

In general, persistence on the national identity (of ethnic character) of the Balkan peoples has led to a broader cohesive identification of the hitherto key unifying factor – religion. Processes of ethno-national homogenization that accompanied them were mostly motivated by the need to "create simple and unambiguous identities in the population" (Subotić & Mitrović, 2018:25), and to "erase the elements of the mixture, 'pollution' and any uncertainty that would threaten the newly created nation-states" (Dejzings, 2005:54).

Religious and Confessional Identity

Religion is not only important for establishing an identity that would be viewed exclusively as religious. It also has a capillary effect on other individual and collective identities that arise and exist within a certain social ambience. Because of that there is a similarity and a significant connection between religious and national identity, especially because they have a common content - patriarchy. Religion has an important role in preserving patriarchy, and "deified patriarchal ideology" (Subotić, 2017:202) is one of key transmitters towards a regressive understanding of religious and national identities. Identities based on the values of religion and nation therefore often overlap and mutually strengthen, and have a potential to, individually or mutually, mobilize, sustain and strengthen national/religious communities.

Interactive relationship between nation and religion, i.e. researching the degree of influence of religion on the establishment of national identity in modern societies is a complex issue, which is especially clear in areas permeated by unfinished relations between different ethnic and religious/ confessional characteristics. That is the case with Serbia, and with the entire Balkans region. Perhaps that is why the religious affiliation of the peoples in the Balkans, more than anywhere else in Europe, is the most dominant part of their identity. Since different religions and denomina-



tions exist in the region, the history of Balkans countries shows that religion was essentially the main factor in differentiation of many national communities, and also the most important factor in the establishment of nations/ethnicities on Balkan soil. Although this can be debated, "many analysts point out that religions, and their pervasive civilizations, have stronger potential for conflict than those of nation-states in the recent past" (Subotić, 2019:480).

The issue of religious/confessional identity, i.e. the increase in religiosity in the last thirty years on the example of Serbia, but also other countries of the former Yugoslavia, is best seen through the citizens' answers on censuses that included the issue of religion. The question related to religious affiliation was included in only four censuses after World War II, in 1953, 1991, 2002 and 2011. The religiosity of the population in these censuses was examined only through confessional identification, while the assessment of one's own religiosity, frequency and intensity of religious practice (which is considered a significant indicator of religiosity) was not analyzed (Raduški, 2018).

According to the 1953 census, almost three quarters of the total population of Serbia professes the Orthodox faith (71.7%), followed by Catholicism (9.8%), Islam (2.5%) and Protestantism (1.8%), while other religions were represented individually with less than 1%. A large number of citizens declared themselves as atheists (13.4%), but the objectivity of these data can be taken conditionally. At that time the atheistic ideology was one of the fundamental values of the state system and because "even the most innocent piety towards religious customs was condemned, it can be rightly assumed that people were hesitant and afraid to express their religious feelings publicly" (Prokić, 1990:39).

Using the recommendation of the UN Conference of European Statisticians, according to which religious affiliation belongs to the group of additional and not basic identity characteristics, the communist authorities avoided delegating religious expression in censuses until 1991, right before the collapse of the Yugoslav state. The results of that census are significantly different from the one conducted almost four decades earlier. According to data related to Serbia, the Orthodox faith in 1991 was professed by 81.8%, Catholic by 6.4%, Islam by 2.9% and Protestant by 1.1% of the population, while the share of other religions was significantly lower. The biggest change occurred among atheists, whose share fell by more than six times - from 13.4% to 2.1% (Raduški, 2018). The culmination of global social events in the early 1990s (the collapse of one political system and the emergence of another, the disintegration of the state and heavy economic and social crisis), caused significant changes in the religious consciousness of Serbian citizens. The trend of growing religiosity continued through the following decade. The 2002 census shows that 91.7% of the population belongs to the Christian and 3.2% to the Islamic faith, with the Christians being mostly Orthodox (85.0%), followed by Catholics (5.5%) and Protestants (1.1%). The least atheists (about 40,000 or 0.5%) were recorded, primarily due to political events in the co-untry, and significantly less due to real religious beliefs (Raduški, 2018).

The results of the 2011 census showed the already established high religiosity of the population of Serbia, with first citizens who declared themselves as agnostics (0.1%), and a significant number of undeclared (3.1%) were registered, which clearly reflects the social and political climate in the country (Raduški, 2016:268).

According to these results, the increase of religiosity and its stopping at high percentages from the last decade are a fact that we must count on. However, as the data on the number of atheists from 1953 can be taken conditionally due to the synecouristic calculation of the respondents at the time, the same can be said about the "explosion of religiosity" from the last three censuses precisely because being religious became part of main-stream culture. That is why it is perhaps most correct to conclude that from "declarative non-believers" we came to "declarative believers". Also, in the context of religious identities as antagonizing categories, it is important to point out that it is not the religion. As the French academic Amin Maalouf (Maluf, 2016) noted in his book "Deadly Identities" (Les Identités Meurtrières), "I am not dreaming about the world where religion would no longer have its place, but about the world in which the need for spirituality would be separated from the need for belonging" (p. 103).

Therefore, in this context we can talk about the Balkan form of ethnic privatization of religion, which resulted from its politicization. It is difficult to draw a clear line between the abuse and use of religion for purposes far beyond itself. However, given its already known and emphasized conflict potential, it is not difficult to push it into this dishonorable and violent context of interest conflicts. As Despotović points out, religious organizations united with local levels of government often had two



forms of expressing conflict potential. "One is the more obvious – manifest form and the other less visible - latent form. The first is reflected primarily in the visible connection of religiosity itself as a manifestation of the connection of cognitive and emotional relationship to the Supreme Being - God, while the second was expressed as a less visible connection that provides a kind of exclusive guarantee for defending national and cultural identity" (Despotović, 2017:124).

National/Ethnic and Religious/Confessional Identities in the 1990s Wars

In the broader understanding of the Balkan conflicts of the 1990s, there are narratives according to which these conflicts are seen as religious wars between the two denominations of Christianity and the Sunni branch of the Hanafi madhhab under the youngest monotheism. However, if we were guided by the premise that religious wars are exclusively those that are fought over religious disputes and issues, then it could be rightly concluded that the mentioned conflicts were not religious (or at least not in a narrow, primary sense), because they were not guided by irreconcilable religious differences and the problems generated by that. That is the reason they differ from some religious wars in the past. For instance, religious wars in Europe during the 17th century would not have been possible without the Protestant Reformation which was de facto a religious reform and transformation. Moreover, if we accept that "the importance of the religious dimension of a conflict increases in proportion to the extent to which religious structures coincide with power structures in a state" (Stobe, 1999:36), then it is clear that antagonisms in which the former SFRY broke down are not the supporting example for that claim.

Until the end of the 1980s, the region was characterized by clear secularization of the communist type, so the increase in religiosity at the end of the same decade mostly coincided with the transition from a quasi-religious system (communism) to a system of nationalist ideology. Therefore, "both communism and nationalism are often seen as religion, because they represent certain symbolic systems to which any functional or symbolic definition of religion could be applied" (Vukomanović, 2004:129).

It seems that the main dilemma in determining the level of religious participation in recent conflicts is the question of how we view modern religion, and whether we can separate faith/belief and religious and define this presence more clearly. In other words, how exactly to distinguish religious from other forms of belief, because, by its nature, faith can be religious, but also non-religious. If beliefs, rites and rituals are the main elements of any religion, then it could rightly be argued that quasi-religious systems, such as communism and nationalism, contain these elements as essential and often central parts of their ideologies. As far as rituals are concerned, we can already see the parallels between religious and political rituals at the level of semantics, that is, recognizable ritual patterns: "the rite of glorification of a religious, i.e. military and political leader in his earthly, but also posthumous existence" (Vukomanović, 2004:129). This is certainly one of the answers to the question of how the military leadership of the former SFRY 'converted' from the communist to the nationalist quasi-religious matrix in such a simple way.

However, despite the many similarities between religious and quasi-religious systems, it is difficult to characterize the conflicts in the SFRY unreservedly as religious or interreligious. Resolving this dilemma leads us to the background of contemporary conflicts that have taken place and are taking place around the world and the fact that most conflicts in the world, in which religion is a factor, are not about religious issues. It is primarily a matter of broader identity conflicts, in which religion can indeed serve as a suitable differentia specifica which sometimes makes it easier to articulate much more complex reasons for conflict, even an armed one.

Enzo Pace (Pace, 2009) also stands on this line of interpretation of the problem when he says that "in the lap of all the world's great religions the individuals and movements are created, that use a 'religious compass' to draw cognitive maps to move the 'mental mechanism of war', and that is the war that creates the Enemy to be fought and, let's be honest, to be destroyed" (p. 56). That is why, Pace continues, "political leaders, whenever they lack convincing motives for waging war, reach for the sacred values inherited by all members of given nation" (p. 55). In such an environment of religion, using their apparatus of rituals and symbols, they create a kind of theatrical play, in which, as Pace further points out, "the drama of identity is shown, the drama of one's own people endangered from the Enemy" (Pace, 2009:56).

In this way, religions engage in war events in the role of an effective social means of communication which, in the depths of human feelings, convincingly claims that resorting to violence is justified, sometimes even fateful,



and inevitable. In these efforts aimed at defending the endangered identity, conflicts with the enemy are presented as the struggle of Good against (united) forces of Evil, thus gaining eschatological features. This model was, without exception, replicated in Balkan wars of the 1990s. The quasi-secularized society in which the atheist ideology of the communist type left its recognizable mark on the political, national, cultural and religious spheres, in the late eighties and early nineties, had to face mass ethnic mobilization through forced identification of both religious and national.

Also, this was a confrontation with one's own religious "semi-literacy" in almost all religions and denominations in the region, in which the propensity for religious philetism and populism found its significant place. Due to these complicated connections, and after the long-lasting politicization of the religious (first in the communist and then in the nationalist version), there was a subsequent imposition of religion to the conflict. However, war in former Yugoslavia 1991-1995 was more the result of political and interethnic conflict. Religion appears in this war as an important element of ethnicity, so both because of oversight and ignorance, in given context it was perceived as an inter-religious conflict.

That the religious element, although woven into all the conflicts of the 1990s, was not so important (especially not crucial) is evident in the fact that this aspect is not emphasized in either the Dayton Accords (1995) or in the Stability Pact for Southeastern Europe documents. As Vukomanović (2004) notices, "in the Dayton Accords religion is mentioned (in a very general sense) only in the Constitution and the Annex on Human Rights, while in the Stability Pact religions and churches are not mentioned at all" (p. 132).

Where the phyletic potential of religion in the Balkans is clearly seen is the understanding of war as a territorial issue. This was especially clear in those cases where the territorial organization is inherent to the church organization itself, as it was the case with the Serbian Orthodox Church. Namely, in the war conditions holiness was more and more connected to the territory, and much less to the spirituality and relations between people, even when they were the same ethnicity and inhabited the same area.

The politicization of religion has obviously contributed to the religious factor being present in many conflicts in the Balkans since the end of the 20th and the beginning of the 21st century. Although often cited as the

main reason, religious conflicts were most often a combination of complex and covert interests of religious organizations, abused by major geopolitical factors and instrumentalized by ambitious local political leaders. Whether it is philetic tendencies in Christian denominations or political Islam, as a combination of nation and the teachings of the youngest monotheism, the embrace of religious and ethnonationalist is the best description of abused identities in the Balkan frictions of the 1990s.

Unfortunately, recurrences of conflict are still clear today, entering the fourth decade since the start of the wars in the former Yugoslavia. News about the new Balkan identity conflicts does not come from an independent source, but is published by "conflicted parties", limiting them-selves to the conflicts in which they participate. There is no doubt that these conflicts are interconnected, that they flow into each other and that they are better understood when viewed together. Then it can be noticed that the main cause of these conflicts and the main source of hatred that accompanies them are not the famous Balkan differences from the ethnic, cultural or religious corpus, but rather "universal" understanding of national identity by Balkan elites and its use to achieve the same goals. The "inwards" policy of the Balkan countries is reduced to the so-called identity policy, which reduces culture to the level of instrument of such a policy based on national identities. As noted by social anthropologist Stef Jansen (2020), while researching the lives of people in contemporary Bosnia and Herzegovina, "by emphasizing (ethno)national 'culture', citizens of Bosnia and Herzegovina are primarily, if not exclusively, portrayed in an identity register that is obviously primarily relevant criterion for understanding life" (p. 24).

The matrix model according to which every nation that aspires to have the status of a nation must, above all, have an autonomous and homogeneous culture, sacrifice itself for it, fight and suffer for it in the face of those who threaten its uniform identity. The fact that this task is mostly unrealistic and unachievable does not worry many Balkan political and cultural elites, because this continuous "struggle" is enough to satisfy their aspirations and to provide them with power and privileges. Also, the fact that insisting on irreconcilability between different identities which seems receptive to "different informal groups operating from the position of violent non-state actors" (Milenković & Subotić 2017:55), also does not attract attention and appropriate reaction from the authorities.

When these identity "battles" are compared in different countries of the former Yugoslavia, we basically see the same strategy. It does not focus



on the identity successes and victories of its collective, but deals with "hostile" attacks on "our" identity and its sufferings. As he brilliantly noted (Čolović, 2020), "victimization in this case has an advantage over heroization, and even if there are heroes in these battles, then they are the ones who, patrolling the identity borders, tirelessly report on enemy attacks and incursions." Thirty years after the disintegration of the former state and the beginning of conflicts and wars, the national identities of the newly formed Balkan states exist mostly in the sphere of endangerment, suffering and cultural-political mobilization.

Instead of Conclusion – A Problem without the Solution?

Religious/confessional identity is, besides the national, the most important part and an indicator of collective identity. Theoretically, it is possible for this identity to be independent and not directly related to ethnic or national affiliation. However, this independence is much more complex and ambiguous in practice. Given that religious classification strongly corresponds to ethnic/national classification, it is difficult to avoid a situation in which the religiosity of the individual inevitably has a certain meaning in ethnic and national discourse. With respect of the modern approach to the emergence of the nation, it is clear that religious identity is much older than national, and as such, in certain historical epochs, was the most important and only possible collective identity. Although the world is changing, and science and technology continue to push the boundaries, identities such as national and religious continue to be the companions of modern people, and there is really nothing controversial about that.

What is disputable are persistent conflicts at national, regional and even global level, that are justified by the irreconcilability between different collective identities. Religious and national identities are undoubtedly among those most often associated with conflicts "in the name of diversity." Without any dilemma, the Balkans are recognized as a region where bloody conflicts were fought in the name of "insurmountable" identity differences, and the rhetoric of local officials and mass media is still full of rhetoric that points to the dangers to "our identity" by "their identity".

The desired results in the field of reconciliation between identity-marked conflicts in the Balkans region are lacking, not only due to non-confrontation with the past, but also due to the "regional pragmatism" of political

actors. It is based on persistence in conflict rhetoric, which, aided by appropriate manipulative media techniques, is an excellent marketing move in election campaigns. The problem is complicated by the fact that "the countries of the Western Balkans are in a kind of permanent pre-election activities, which are recognized by the local political elites as an ideal opportunity to establish power through populism" (Subotić & Dimitrijević, 2018:81). Populist mantras with the range of manipulative identity tools, distance Balkans' societies from building a tolerant framework capable of "nurturing different religious and ethnic identities, but also the right of individuals or groups not to belong to any of them" (Subotić, 2015:309).

Finally, if there is no clear will (external and internal) to promote bridges between many "overly antagonizing identities", these spaces will continue to be condemned solely to ethnoculturalism or clerical culture as a means of manipulating the specific goals of individual groups. Further, this causes that different ethnic, religious and wider - political identities, in such an environment do not manifest themselves as connecting values. By tolerating the narrative of confronted identities, and often inciting differences between them, the local political establishments make the dissolute potential of Balkan societies, which is based on identity differences, persist into the fourth decade since the beginning of the conflict. The nations, peoples, and ethnicities that inhabit the Balkans in their eternal and recursive exchanges of intolerance "persistently refuse to go beyond the ideologized and politicized space of symbolization which is marked as excessive in creation and stingy in processing, in other words - in vain and incompetent" (Blagoni, 2018:107).

Awareness of the need for communication between different identities at all levels of society is imposed as a condition of regional stability. Without it, there is no strengthening of trust and cooperation, nor the restoration of trust in democracy and the institutions of the system. By the way, the regional context (which some easily perceive as something that will not have consequences for the rest of the world) can easily become a problem that will "knock on some other door". After all, doesn't the latest example of a new war on European soil, which was created by Russian interventionism "in defense of the identity characteristics of Russians who inhabit the east and south of this former Soviet republic", tell us exactly that? This is another example of a conflict promoted by "insurmountable identity differences" or unwillingness to accept that "others" come out of the identity matrix to which we belong.



References

- 1. Asurmendi, M. (2002). Identitet i nasilje, XX vek, Beograd.
- 2. Benda, Ž. (1996). Izdaja intelektualaca, Socijalna misao, Beograd.
- 3. Blagoni, R. (2018). Requiem za identitet i naciju, In: Nacionalni identitet i etnički odnosi, Tematski zbornik knjiga 6. Nada Raduški (ur), Beograd: Institut za političke studije, 95-110.
- 4. Bugarski, R. (2010). Jezik i identitet, Biblioteka XX vek, Beograd.
- 5. Čolović, I. (2020). Novi balkanski identitetski obračuni, Peščanik, 1. jul 2020.
- 6. De Benoist, A. (2011). Mi i Drugi Što je to identitet?, Predavanje u Matici hrvatskoj na temu budućnosti identiteta.
- 7. Dejzings, G. (2005). Religija i identitet na Kosovu, Biblioteka XX vek, Beograd.
- 8. Despotović, Lj. (2017) Globalizacija i geopolitka identiteta, Kairos, Sremski Karlovci.
- 9. Garver, R. (September 18, 2019), The Strip Mining of the US News Industry. Available at: https://www.voanews.com/a/usa_strip-mining-us-news-industry/6176045.html (Accessed on March 11, 2022).
- Jansen, S. (2020). Čežnja u međuvremenu. "Normalan život" i država u jednom sarajevskom naselju, Prevela s engleskog Aleksandra Bajazetov, Biblioteka XX vek, Beograd.
- 11. Jerotić, V. (2007). Čovek i njegov identitet, Ars Libri, Beograd.
- 12. Katunarić, V. (2007), Od povijesnog rascjepa ka miroljubivom pluralizmu: noviji teorijski pristupi nacionalizmu i etničkim sukobima, Revija za sociologiju, Vol. 2, No. 1-2, 23-39.
- Kecmanović, D. (2014). Etnonacionalizam, Izabrana dela; 1-4; tom 2, Clio, Beograd.
- 14. Lipovac, M., Dimitrijević, R.I. (2015). Nacionalni interes kao analitički koncept: mogućnosti za analizu nacionalnog interesa, Srpska politička misao, Vol. 50, No. 4, 87-108.
- 15. Maluf, A. (2016). Ubilački identiteti, Laguna, Beograd.
- 16. Milenković M., Subotić, M. (2017). Nasilni nedržavni akteri i pozicija Srbije, Srpska politička misao, Vol. 57, No. 3, 55-70.
- 17. Milošević-Đorđević, J. (2007). Primordijalističko značenje nacionalnog identiteta u Srbiji, Psihologija, Vol. 40, No. 3, 385-397.
- Mirić, J. (2001). O pojmu identiteta u psihologiji, Psihologija, Vol. 31, No. 1-2, 49-60.
- 19. Pace, E. (2009). Zašto religije ulaze u rat?, Golden marketing Tehnička knjiga, Zagreb.

- 20. Pavković, A., Radan, P. (2008). Stvaranje novih država, teorija i praksa otcepljenja, Službeni glasnik, Beograd.
- 21. Prokić, M. (1990). O veroispovesti, Republički zavod za statistiku, Beograd.
- 22. Raduški, N. (2016). Religijska pripadnost stanovništva Srbije po popisu iz 2011. godine, In: Thematic collection of articles Faith and reason - International scientific meeting almanac (ur.) Milošević, A, et. al, FOREL - Institute of Social Sciences, Philosophical commune, Belgrade, 261-279.
- 23. Raduški, N. (2018). Jezička i religijska komponenta nacionalnog identiteta građana Srbije, In: Nacionalni identitet i etnički odnosi, Tematski zbornik knjiga 6. Nada Raduški (ur), Beograd: Institut za političke studije, 28-32.
- 24. Savater, F. (2002). Tri kratka ogleda o nacionalizmu i terorizmu, In: Asurmendi M. Identitet i nasilje, XX vek, Beograd, 203-208.
- 25. Subotić M., Mitrović, M. (2018). Hybrid Nature of Extremism: Cohesive Characteristics of Ethno-Nacionalism and Religious Extremism as Generators of Balkan Unsecurity, Vojno delo, International Edition, 1/2018, 22-33.
- 26. Subotić, M. (2015). Ekstremizam pod okriljem religije, Medija centar Odbrana i Institut za strategijska istraživanja, Beograd.
- 27. Subotić, M. (2017). Religion and Gender-Based Violence", Gender Equality in Defence System Accomplishments and Trends, Thematic collection of articles, Strategic Research Institute and Media Center "Odbrana", Belgrade, 196-213.
- 28. Subotić, M. (2019). Religija i rat povratak otpisanog, Međunarodni problemi, Vol. 49, No. 4, 476-497.
- 29. Subotić, M., Dimitrijević, I. (2018). Ekstremizam na Zapadnom Balkanu kao prepreka proklamovanoj politici EU o pomirenju i dobrosusedskim odnosima", In: Tematski zbornik Srbija i svet u 2017. godini, (ur.) D. Proroković, V. Trapara, Institut za međunarodnu politiku i privredu, Beograd, 67-88.
- 30. Štobe, Hajnc G. (1999). Religijske implikacije sukoba u Centralnoj i Istočnoj Evropi, In: Hrišćanstvo, društvo, politika, JUNIR, Niš.
- 31. Šušnjić, Đ. (2009). Religija II, značenja, teorije, preplitanja, susreti, Čigoja štampa, Beograd.
- Vukomanović, M. (2004). Uloga religije u jugoslovenskim sukobima, In: Nasilno rasturanje Jugoslavije – uzroci, dinamika, posledice, Centar za civilno-vojne odnose, Beograd.



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WEAPONS TRADE AS A SECURITY CHALLENGE OF MODERN SOCIETY

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Key Words: weapons, trade, crime, security.

Abstract: Security problems nowadays are mainly refered to security challenges related to certain social, political and criminological phenomena. Security has been disrupted globally by many events such as migrant processes, political crises, pandemics of infectious diseases, but disrupted security is constantly badly affected by the large number of illegal weapons that are uncontrolled in free circulation on black illegal markets. Weapons circulating in illegal flows commit the largest number of crimes in the world, commit terrorist acts and such weapons pose the greatest threat to the security, both of individuals and global level. Arms control, proper and up-to-date arms registration and monitoring of citizens' weapons must be imperative for every national state in the world. Each copy of the weapon must be registered with the competent authority, as well as information on the owners of the weapon. Thanks to these up-to-date databases, it is easier to find potential perpetrators of crimes, although most committed criminal acts worldwide are carried out with weapons from illegal sources.

Introduction

ccording to the provisions of the Law on Weapons and Ammunition³, a weapon is defined as a hand-held device made or adapted so that under the pressure of air, gunpowder or other gases or other propellants it can eject grain, shot or other projectiles, or disperse gas or liquid and other devices intended for selfdefense, attack, hunting and sports. The legislator does not consider weapons for the humane killing of animals, tools and imitations of weapons that do not use ammunition. According to the provisions of the Law,

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³ "Official Gazette of RS" No. 20/2015, 10/2019 and 20/2020.

firearms are weapons that, under the pressure of gunpowder gases, eject a projectile from a barrel. Firearms include machine gun, submachine gun, automatic rifle, submachine gun, pistol, revolver, shotgun rifle (single-shot, repeating and semi-automatic), smoothbore rifle (single-shot, double-shot, repeating and semi-automatic), and combined rifle uncoated barrels), pistols, rifles and revolvers with edge firing (small arms).

The legislator determines the existence of weapons with a short barrel, which does not exceed 30 cm, and the total length does not exceed 60 cm. The long pipe exceeds 30 cm, and the total length exceeds 60 cm. According to the legal definition, an automatic firearm is a weapon that is automatically loaded after a bullet is fired, and one press of the trigger fires at least two projectiles one after the other without reloading manually. A semi-automatic weapon is a weapon that automatically reloads after each bullet fired, and only one projectile is fired by pressing the trigger. A rehearsing firearm is a weapon in which, after firing a projectile by hand, a bullet from the magazine must be inserted into the barrel by rehearsing. Single-shot and double-barreled weapons have no ammunition depots or frames.

Air weapons are characterized by the firing of projectiles by compression under air pressure. Tendon weapons include crossbows, bows, slingshots, underwater rifles and similar weapons. The firing of the projectile is due to the pressure of the tendon or spring. Convertible weapons are weapons that only look like firearms and which, according to their construction and the material from which they are made, can be used with a modification for firing live ammunition.

The legislator also includes electric shockers and stun guns, which he defines as hand-held devices that temporarily disable with the help of high voltage. Gas sprays also have the character of weapons that disperse irritating chemical compounds in acceptable units according to international standards.

The legislator include boxers, daggers, sabers, daggers, bayonets and other means whose purpose is to serve during an attack. Weapons of personal security include pistols, revolvers, gas sprays and stun guns. Sports weapons include firearms, air weapons, cold steel weapons, stringed weapons and are used for shooting and martial arts. An incapacitated weapon is a weapon that has been permanently modified so that a projectile cannot be fired from it.



Illegal arms trade

The arms trade, which does not take place according to the mentioned principles of legality, is considered illegal trade. Weapons are mostly procured from illegal sources if some illegal action is to be performed on them, because weapons from illegal sources do not have a registration number, so it is difficult to trace them. When weapons are procured outside legal procedures, a criminal offense is committed under Article 348 of the Criminal Code of Serbia "Official Gazette of the RS" No. 85/2005, 88/2005, 107/2005, 72/2009, 111/2009, 121/2009, 121/2012, 104/2013, 108/2014, 94/2016 and 35/2019), for which a prison sentence of six months to five years is threatened for the basic form of a criminal offense. The act is created during the unauthorized production, modification, sale, acquisition, exchange of firearms, convertible and disabled weapons, their parts and explosive devices.

A more serious form of this criminal offense occurs during the manufacture, processing, sale, purchase and exchange of weapons from the "A" category of firearms. For this form of crime, imprisonment ranging from one to eight years is threatened, alternatively with a fine. The more serious form referred to in paragraph three of this Article of the Criminal Code arises if the subject of the criminal offense is a larger quantity of weapons and a prison sentence ranging from two to twelve years is envisaged for it. The same punishment will be imposed on a person who carries a weapon without authorization (Manolov, 2019). Weapons or parts of weapons will be confiscated from the person with whom they are found without authorization.

The illicit trade in weapons and explosives is widespread in the Balkans. The reason for this fact should be sought in the frequent acts of war, which were present in this region, as well as the high crime rate and the activities of organized criminal groups. On the other hand, the love of the Balkan people for weapons is a special cult, which is associated with the turbulent past of the people in the area and the need for weapons. When we talk about gray arms markets, we do not mean only firearms, but also parts of firearms, explosives and these means that were illegally procured, made, sold or held. Also, ammunition is traded in these markets, which is also procured, held and sold without authorization (Spalević, 2013, p. 147).

In the consistent fight against organized crime and terrorism, there is a need for effective and coordinated measures and activities to combat illegal production, procurement, possession, trade and smuggling of small arms and light weapons and ammunition, as well as all other abuses and negative phenomena. It is a very complex process that requires continuous cooperation of all ministries and other state administration bodies and civil society in order to achieve maximum performance, as well as cooperation at the international level. In order to minimize the illegal trade in weapons, it is necessary to identify, prevent, prosecute and punish illicit possession, misuse and trafficking of weapons, as well as ammunition and explosive devices (Mazinjanin, 2016, pp. 22-24).

Gathering accurate, up-to-date and comprehensive information on all aspects of arms control is already a priority for all developed countries fighting the illegal trade in firearms. The regional survey on small arms and light weapons conducted in 2018 found that the practice of data collection in institutions is inconsistent and standardized, and that it is often not possible to obtain the required level of detail, especially when it comes to classifying data by age gender and semi-firearm holders. In many cases, coordination of institutions has not been established, which prevents the development of a sectoral review and adequate evidencebased policies. Achieving the sub-goals within this goal will enable the development of fact-based policies that provide a valid basis for an effective and efficient response to the danger of small arms and light weapons, ie firearms.

In addition, better data collection, sharing and analysis will allow relevant assessment analyzes to be overflew into knowledge (Antonović, Marčetić, 2022). It will also provide risk management in combating the illicit trade and misuse of firearms, which will contribute to intelligence-based policing. In order to create gender-responsive policies, special attention will be paid to collecting data disaggregated by gender and age.

The exchange of operational and strategic criminal intelligence data will contribute to the systematic prevention and mitigation of threats posed by firearms at the national, regional and international levels. Systematic data collection and analysis to identify potential threats, risks, new issues and opportunities will lead to new preparation and integration of measures to mitigate and use relevant data and information in the policy-making process.



The arms trade is especially represented over the Internet. According to the data of the Ministry of Internal Affairs of the Republic of Srpska, during 2021, 5,696 pieces of illegal weapons were seized: 306 long barrels, 293 short barrels, 728 mines and explosives and 11,114 pieces of ammunition 179. Recently, the so-called street sales of weapons are increasingly being replaced by internet sales, sales through advertisements, where weapons of dubious origin are openly offered for relatively small sums of money.

Observed from the aspect of the connection between the phenomenon of illegal trade in firearms, parts of firearms, ammunition and explosive devices with the crime of money laundering, their connection should be sought in illegal property gain, which occurs only in trade in firearms, ammunition and explosive devices. According to the available information, the illegal income from this form of illicit trade is extremely high, and the persons who organize it or participate in it in any way, collect a large income. Given the nature of the income generated in this way, it has the character of illegal property gain, because it was acquired through incriminated actions. What poses a special risk in this form of the gray economy is the blatant connection between the arms trade and money laundering with terrorism and the financing of terrorist activities (Antonović, 2021, pp. 116-119).

Proceedings with illegal weapons

In the Republic of Serbia, the Strategy for the Control of Small Arms and Light Weapons in the Republic of Serbia for the period 2010-2015 was adopted in 2010. year ("Official Gazette of RS" No. 36/2010). According to the provisions of this Strategy, small arms and light weapons are considered to be any hand-held deadly weapon that ejects, launches, is designed to eject or launch, or can be modified to eject or launch missiles, under the pressure of explosives, except old weapons. In a broader sense, small arms are intended for personal use and include, but are not limited to, pistols, revolvers, rifles, submachine guns, and light machine guns. Light weapons are those, as a rule, used by teams of 2-3 people, and include, among other things, heavy machine guns, hand-held rocket launchers, anti-aircraft systems and mortars up to 100 mm caliber. The mentioned Strategy states the indisputable fact that illegal production, possession, traffic and trade in weapons actually accelerate related phenomena, such as organized crime, violent behavior and terrorism, which all have the ultimate consequence of creating insecurity for citizens, disrupting sustainable economic development, creating a breeding ground for abuse, developing crime, illicit use of weapons and endangering the lives and bodies of others.

Weapons are supplied from illegal sources to forces that provoke internal conflicts and the collapse of states. They restrict access to natural resources to certain groups and control the most important black market - the narcotics market. Conflicts arising on these grounds are on the thin line between conflicts between armed groups without military discipline and criminal activities (Kotarlić et al. 2015, p. 252). That is, they are more reminiscent of the conflicts of informal bearers of power of underground illegal channels of trafficking in illicit drugs, for personal dominance in illicit black markets.

In the Republic of Serbia, there was a sudden accumulation of weapons during the period of the disintegration of Yugoslavia and the war on the territory of today's Croatia and Bosnia and Herzegovina. Given that there has been a reduction in the amount of military equipment and weapons, they have found their way into the citizenry, through legal and illegal offers on the market.

According to the Strategy from 2010, and according to the performed analyzes, in 2008 there were 1,172,468 weapons in the possession of citizens in the Republic of Serbia. In the period from 2005 to 2009, 6,191 criminal offenses were committed with the use of firearms. In the same period, 6,284 pieces of illegal weapons were confiscated from citizens, and 50,541 pieces of state-owned weapons were destroyed.

When it comes to combating the illegal trade in weapons, it is necessary to refer to international acts, which have served as a legal substratum for our country. The European Union has adopted a number of instruments and strategies, such as the Joint EU Contribution to Combating the Illicit Collection and Trafficking of Small Arms and Light Weapons and Ammunition, adopted in 1998; 2004 EU Common Position on Arms Mediation; The 2005 EU Strategy to Combat the Illicit Collection and Illicit Trade in Small Arms and Light Weapons and Ammunition and the European Commission's 2005



Plan to Support the Control of the Collec-tion and Trafficking of Small Arms and Light Weapons and Ammunition in the Western Balkans.

The implementation of the EU Code has proven to be an advanced and effective regime for the control of the collection and trade of small arms and light weapons. The European Union proclaimed the EU Code and demanded from the members, but also from the countries that join the European Union, to apply it in practice. This is especially important for the countries of Eastern and Southeastern Europe, where there were conflicts in the previous period, and they have significant quantities of small arms and light weapons, so control of arms collection and trafficking is very important from a security point of view (Kotarlić et al. 2015, p. 252).

The basic postulates in the legislation of the Republic of Serbia in the field of dealing with and trade in illegal weapons are promoted by the 2010 Strategy. They are defined as goals of a specific nature. There are a total of eight: 1) Creating conditions for effective implementation of national legislation related to production, trade, marking and stamping, control of exports and imports, fulfillment of conditions for possession and registration procedures of weapons; 2) Informing the public about the negative consequences of abuse and educating citizens and legal entities on the risks of weapons, as well as the legal regulations on the possession and domestic and foreign trade of weapons; 3) Creating conditions for safe storage of small arms and light weapons; 4) Planning and implementation of longterm and regular actions of control of small arms and light weapons for the purpose of their collection (legalization and handover) or deprivation and destruction; 5) Identification of surplus stocks of small arms and light weapons in the possession of the state and creation of material and financial conditions for its safe disposal; 6) Strengthening cooperation at the national and international level, in accordance with existing international documents; 7) Engaging civil society in support of the Strategy for the Control of Small Arms and Light Weapons; and 8) Ensuring compliance with and application of accepted or confirmed international documents related to small arms and light weapons and harmonization of domestic regulations with international and UN, OSCE and EU documents.

In 2020, the European Union adopted the EU Action Plan for Combating Illicit Trafficking in Firearms for the period 2020-2025. The adoption of this act was preceded by an extensive action by Europol and the French and Dutch police in the summer of 2020, which cut off the work of a

Dutch criminal group that traded in illegal weapons. Also, the riots that took place in the summer of 2020 in France, pointed out to the police a large number of weapons of non-origin that were in the hands of the protesters. At the same time, in a police operation in Spain, a large network of firearms dealers was disbanded, and on that occasion, 730 weapons were seized throughout Spain and 21 people were arrested. These are all examples of the real danger posed by illegal firearms. Extreme activists are increasingly in the spotlight due to the accumulation of weapons. This shows how firearms can increase the risk of serious and organized crime, including terrorism. It is estimated that in the EU in 2017, 35 million illegal firearms (56% of the estimated total number of firearms) were owned by civilians. According to these estimates, the number of illegal firearms exceeds the amount of legally owned firearms in twelve EU member states.

The EU Action Plan is based on Europol's 2017 Threat Assessment of Serious Organized Crime, which cites the availability of firearms in many EU member states as one of the serious security risks. "Changes in the way, routes and geographical areas affected by some criminal activities may indicate some longer-term events and changes that affect crime." The illicit trafficking, distribution and use of firearms "remains a major threat". In particular, "the sale of disabled, re-trained and refurbished firearms has increased," according to Europol estimates. Also, the already mentioned problem of selling weapons over the Internet is pointed out, as well as individualization in that criminal activity, in the sense that the arms trade is no longer a specialty of organized criminal groups, but also individuals.

According to Europol data, in the period 2009-2018, 23 incidents were identified in which there was a mass shooting in a public space in Europe, where 341 people were killed. During 2015, Europol recorded 57 terrorist incidents involving the use of firearms. During 2017, firearms were used in 41% of all terrorist attacks, which was a slight increase compared to 2016 (38%). Recent Eurojust cases confirm that illegal firearms have been used on several occasions in terrorist attacks and that networks of traffickers have interacted with individual terrorists or terrorist organizations. Coordination of cross-border investigations by Eurojust in several cases led to the seizure of illegal firearms.

The Western Balkans have been identified as the area with the largest number of illegal weapons in the EU, and it is therefore necessary to raise the flow of information and intelligence between the EU and the Western



Balkans to a higher level. Weapons originating from the Western Balkans are most often used in terrorist acts committed in Europe. Mostly small arms and assault rifles arrive on the European market through the Western Balkans, and their prices are drastically lower than the price of weapons coming from other illegal sources.

In order to combat the phenomenon of illegal arms trade, it is necessary to raise the level of communication between EU member states. The different national concepts of the countries dealing with the illegal arms trade must not be an obstacle to dealing with this problem, but on the contrary, we should work on their synchronization and harmonization and mutual convergent. On July 24, 2019, the European Commission sent twenty reasoned opinions to the member states that did not provide reports on the full transposition of the Directive on the control of the acquisition of weapons into national legislation. In addition, in December 2017, the Commission published an evaluation of the implementation of Regulation (EU) no. 258/2012 on the import, export and transit of firearms for civilian use, which identified gaps due to uneven application. In April 2018, a recommendation was adopted calling for the strengthening of EU rules in order to increase the traceability and security of procedures for controlling the export and import of firearms and cooperation between the authorities in the fight against illicit trafficking in firearms.

Unfortunately, despite all efforts at the international and national levels, the intelligence image remains uneven due to the lack of comprehensive and comparable data on firearms seizures from across the continent (Mladenović et al. 2022). The exchange of information for intelligence and profiling purposes is hampered by restrictions imposed by national law on the exchange of information outside of specific investigations. The problem is also fueled by the lack of communication and coordination between different institutions, within countries and internationally.

Twenty EU member states and four partners from the Western Balkans have a kind of hotspot for firearms. However, hotspots are often not given adequate responsibilities (for administrative control, data collection from law enforcement, database access, monitoring, international cooperation and forensics), as well as staff recommending best practice guidelines developed by national experts. firearm experts. Also, as relevant, there is the problem of unequal incrimination of acts related to illegal weapons. This fact almost always leads to non-enforcement of laws and sanctions. This also limits the confiscation of property acquired through the crime of illicit trafficking in firearms. Different national approaches make joint cross-border actions, such as controlled deliveries, impossible.

The countries of Southeast Europe still have a pronounced problem of synchronizing acts with the highest standards and ensuring effective control of firearms. Synchronization involves the creation of national databases, ballistic capabilities to provide conditions for stockpiles and campaigns for the voluntary surrender of weapons. For these reasons, as well as for the prevalence of many different and conflicting opinions, which shifts from the domain of law to the domain of politics, cooperation between the EU and the countries of Southeast Europe is not at an enviable level (Životić et al. 2020, p. 131).

However, the problem is not only with the countries of Southeast Europe, which have a problem with legal synchronization and the existence of political will to solve the problem of illegal weapons. This problem is also faced by EU member states, as well as countries from the immediate vicinity of the union. In these countries, the illegal modification of maneuvering and gas weapons, the conversion of intimidating weapons into firearms, is becoming more common, and new and more efficient patterns of concealing such weapons are being developed. Thanks to the application of modern technologies, much easier production of firearms has been made possible in these countries, and at the same time new and simpler mechanisms for transporting firearms and weapon parts via modern "express mail" and courier services are being developed. Which above all led to the transition from the export of traditional weapons of conflict from the Western Balkans to the import of new weapons from Western Europe to the Balkans or unmarked basic parts from the United States. Armed conflicts in the EU's eastern neighborhood could also become new sources of illicit arms exports to the EU.

Annual results of work in the fight against illegal weapons

In order to obtain the exact number of illegal weapons in civilians clothes, it is necessary to consult the data related to the number of incidents with weapons that occurred in the review year. These incidents should include armed robberiesand murders, and the number of weapons seized from criminal organizations should be taken as an important parameter.



The data related to the seizure of weapons are not so accessible to the public, but the Ministry of Internal Affairs announces them only after a certain period of time has passed. After the assassination of the Prime Minister, Zoran Djindjic, in March 2003, the police undertook a comprehensive action to find illegal weapons in the citizens. Voluntary surrender of weapons was started first, without any sanctions for possession of illegal weapons.

In this procedure, handing over weapons from the citizens to the police gave different results by regions in Serbia, while we were left shy about the data concerning western Serbia and Kosovo and Metohija. The effectiveness of this action was conditioned by the political moment, the degree of trust of citizens in state institutions and the police, national homogeneity or heterogeneity of the environment, the approach of the police during this action, as well as the structure of the population who fled the war-torn area in the 1990s. Therefore, it should not be surprising that there was such a large number of illegal weapons in Vojvodina, because the area of Vojvodina was mostly inhabited by immigrants from the areas where the war whirlwind raged.

The police then conducted a survey among citizens with the question "How widespread are weapons in your area?" And the results of the survey were as follows.

Seventy percent of the respondents answered that everyone they know has at least one weapon. These results were registered in eastern Serbia, and Table two clearly shows that the region surrendered the least number of weapons (only 428), which indicates that the data on the number of surrendered weapons does not show a realistic picture, and that the most armed areas are least accepted to take part in this police action.

Another question from the police survey was "Do you or a member of your family own a weapon?" Respondents from eastern Serbia again prevailed on this question, where thirty percent of them gave an affirmative answer. Also, the inhabitants of eastern Serbia expressed the lowest level of trust in the police and the action of removing illegal weapons from the possession of citizens without imposing any criminal sanctions (so-called amnesty). Regarding the estimates related to the number of illegal weapons in the citizens of Serbia, a significant and close source should be mentioned about suicides committed with the use of firearms. Also important are the data concerning the committed crimes that included the use of weapons. All indicators clearly state that there is a positive correlation between the number of suicides and serious crimes with the number of illegal weapons in the citizenry (Kilias et. al. 2001, pp. 439-440). In climates where there is a high suicide rate with the use of firearms, there is at least one piece of firearm in almost every family.

The Republic of Serbia has a high rate of legal weapons and we are among the most armed countries in the world. In percentage terms, Serbia has registered weapons in 42 percent of households, which puts us at the very top of Europe. The high rate of armaments is more characteristic of the United States, where there is a very liberal regime for the purchase and registration of weapons. The strictest regime for the acquisition and registration of weapons is in Great Britain, so it is not surprising that only five percent of Britons legally dispose of weapons.

Solving the problem of illegal weapons in the EU

Only in 2020, the European Union adopted the Action Plan to Combat Illicit Trafficking in Firearms for the period 2020-2025, which contained indicators for assessing and monitoring the effectiveness of the action plan to combat illicit trafficking in firearms, with systematic collection of data on crime and criminal law data from all law enforcement services, such as police, customs, prosecutors and courts. These indicators confirm compliance with legal solutions at the EU level and indicate the total number of seizures, crimes committed, the number of initiated criminal proceedings, convictions, the number of hotspots related to firearms, the number of seized weapons, the total number of legalized weapons, the number of disabled and destroyed weapons.

The main priority of the EU is the consistent integration of the Firearms Directive into the legislation of the member states, as well as the corresponding delegated and implemented acts. The aim is to integrate the Directive into the legislation of the EU partner countries in Southeast Eu-rope. The EU's priority is to positively influence some new security thre-ats, which arise from the illegal trade, possession and use of weapons, as well as illegal production. Also, strict control of the import and export of wea-



pons intended for civilian use must be introduced. This is done by checking whether the import or export violates the provisions on bans on the import or export of weapons from or to certain countries, then whether the import and export procedure is carried out in accordance with EU re-gulations, then control of gas and weapons imports for intimidation, which can easily be turned into a firearm and the like. As one of the most important measures to combat the illegal arms trade, the EU is working intensively to introduce whistleblowers in dedicated industries, which would duly report any attempted abuse or illegal actions related to weapons.

Second EU priority is to enter information into the Schengen Information System about lost, stolen weapons, as well as sold weapons that are believed to fall into the category of refurbished weapons. Also, every copy of the seized weapon must be recorded in the Schengen Information System. The EU supports initiatives that allow national authorities to search or enter data into both the Schengen Information System and Interpol's iARMS, and calls on member states to respond to Interpol's call for volunteers to test new features. The main goal is that all security-relevant information is automatically merged into a single database that will be available to those authorities to whom that information is important.

The EU will also take steps to initiate systematic and harmonized data collection on firearms seizures and publish annual statistics, as it does in drug seizure analysis. This would provide law enforcement agencies with useful information, which will, above all, help them identify new trends in illicit trafficking and form clearer risk profiles. Firearms can also be traded on dark internet markets. The Commission will, at the suggestion of the European Parliament, carry out a preparatory action for the continuous monitoring of the dark internet.

The third priority is to increase the pressure on criminal markets, which would practically complete the already identified hotspots for firearms with complete and trained personnel. The focal points should be linked to the UN Small Arms and Light Weapons Program and international monitoring instruments. For better coordination, the EU Commission will publish a reference list of focal points with clearly identified data and competencies.

In order to effectively implement this priority, it is necessary for all EU member states to ratify the UN Firearms Protocol, in order to facilitate their mutual cooperation and to prevent and suppress the illicit trade in

and traffic in firearms. All member states must work to establish criminal law standards on the illicit trafficking of firearms, as well as their illicit production. The Commission calls on Member States and Southeast European partners to improve co-operation between law enforcement (customs, police and border control officers), but also co-operation with prosecutors and forensic experts, in order to tackle the main sources and routes of illegal firearms.

Within this priority is the control of the so-called. the dark internet and offers to sell and buy weapons. In the process of monitoring illicit strata of the Internet, the EU asked Europol for support, as well as all countries, not only members, but also the countries of Southeast Europe to "patrol" the Internet and combat illicit phenomena.

The fourth priority of the EU is to strengthen relations with countries that are not members of the EU, but also those that are not territorial on the continent of Europe. This especially refers to the countries of North Africa and the Middle East, namely Tunisia, Lebanon and Jordan, with which we need to upgrade relations in the field of arms tracking and arms control. Special attention should be paid to Turkey, because it is one of the most important countries engaged in the production of gas weapons and intimidation weapons that can be easily converted into firearms.

Given the high risk of illicit firearms trafficking in Southeast Europe (considered an area involving non-EU partners from the Western Balkans, Ukraine and Moldova), the specifics of the region's geopolitical circumstances a large number and the types of national and international actors involved, and the current instability in Eastern Europe, the 2015-2019 Action Plan Evaluation Report highlighted the need for a new action plan. This was recommended by the delegates of all partners who attended the third meeting of the Joint Committee of Firearms Experts of the European Union and Southeast Europe, held in Brussels on September 24, 2018. The evaluation report also stressed the need to include Ukraine and Moldova in a broader harmonized framework of cooperation against common threats posed by illicit trafficking in firearms throughout the region. This is also a response to the Council's call for Ukraine to be involved in the relevant operational action plans of the EU's cycle of organized and serious international crime. As regards Ukraine, the Action Plan will take into account EU support for Ukraine's efforts to combat arms trafficking, ammunition and explosives, in co-operation with the OSCE and SEESAC. The EUfunded Commission supports activities in the frame-work of integrated border management and the fight against trafficking, which also goes



through the European Border Mission to help Moldova and Ukraine. Council Decision (CFSP) 2017/2283 supports the ongoing work of Conflict Armament Research in Ukraine (Ristić et al. 2020, p. 59).

Regarding the Western Balkans, France and Germany supported the work on the 2018 Regional Map, which was the result of the participatory approach of the EU's Balkan partners. On that basis, the EU proposed a number of concrete measures from the mentioned roadmap, which especially concern the part of their financing. These actions, which specifically refer to Southeast Europe, were defined by the authorities of the Western Balkans through the development and adoption of a regional roadmap attached to Council Decision (CFSP) 1788/2018. Leading towards the main goal of the Action Plan - combating illicit trafficking in firearms and ammunition, it keeps three main directions in focus and provides greater clarity and better structure than the Action Plan for the period 2015-2019, especially in resolving remaining legal gaps and inconsistencies in the control of firearms that hinder police and judicial cooperation: 1) Harmonization and modernization of the administrative structure; 2) Reducing inventories and increasing the rate of its security; 3) Raising the efficiency of the bodies responsible for law enforcement while enabling maximum operational cooperation and exchange of information.

Conclusion

The paper deals with the very current issue of trafficking in illegal weapons, and the topic itself is viewed both from the aspect of law and from the aspect of security. The moment of drawing material funds from the arms trade and redirecting those funds for financing crime and terrorism is highlighted. Thus, the starting point in the paper is the handling of weapons, their treatment and use, while creating a clear distinction between legal and illegal weapons. Also, as an important moment in the paper is to point out the degree of social danger and harmfulness of the existence of large quantities of illegal weapons in the citizenry and gives an overview of the correlation between high arms and crime rates in a given climate.

The paper presents the legislative regulation of the issue of weapons, issues of how the law treats the procedure of legalization of weapons, which weapons can and cannot be subject to legalization and which weapons can and which citizens cannot and have. A much more important aspect of the work is illegal weapons, which are an aggregate for illegal funds, which are then further merged into illegal criminal funds intended for crime and terrorism. In that part, the author uses the application method, which shows the concrete results of normative acts through their implementation and gives concrete results of the work of the police in the process of reducing the number of illegal weapons in the Republic of Serbia.

In addition to the applied method, a comparative method was used in the paper where a comparative overview of the regulation of illegal weapons is given, and countries such as the USA, the Republic of Serbia, countries in the region, Great Britain and other countries with significantly different approaches for solving this problem are used as comparative parameters. It starts from the most liberal regime in the United States, and goes to the most restrictive regime in Great Britain, which serves as an example of strict traffic control and arms registration.

At the level of the European Union, a great effort has been made to put the issue of illegal weapons within the legally and legitimate acceptable framework. The paper presents the legal acts of the EU that should serve as a substrate in the legislation of member states, as well as countries that aspire to become an integral part of the EU. EU acts not only deal with the issue of weapons, but also deal with all related concepts, which in cohesion form a complex intertwining of organized criminal networks in the world. Therefore, convergent and harmonization of legal mechanisms enables a quality and consistent response to the challenges posed by the illegal arms trade, and the end result should be a lower crime rate at the global level.

In this regard, the EU has adopted an Action Plan to combat illicit trafficking in firearms for the period 2020-2025, which promoted an action plan for the next five years, with very concrete measures to combat this harmful phenomenon. The paper itself gives an overview of these measures, with statements on how these measures could be applied in order to achieve the best effect. Also, with this document, the EU has promoted the basic principles and priorities with the obligation to apply them as consistently as possible in practice.

The Republic of Serbia is actively fighting the problem of illegal weapons. What gave the author some difficulties in summarizing the results of the work of the Serbian police in this area are the scarce and outdated information on the number of confiscated weapons and the closure of these bodies to provide newer and more up-to-date information. Thus, the available data from 2003 were used, when a large-scale action of finding



and confiscating illegal weapons from citizens was initiated without bearing any legal consequences. The condition was voluntary surrender of weapons and voluntary renunciation of them. The action was called an amnesty for those who possessed weapons without legal cover. The paper gives a tabular presentation of how many weapons were seized on that occasion by regions in Serbia. Although these are high numbers, it is believed that not even the tenth percent of the total illegal weapons found in Serbian civilians were given on that occasion, and it was evident that in some parts of Serbia this action was openly boycotted. The most cooperative were the inhabitants of Vojvodina, where most weapons were handed over, followed by Belgrade and central Serbia. Data on Kosovo and Metohija and western Serbia were not available, which indicates that this action was not carried out in those areas.

The conclusion of the paper is that the evasion of the provisions on the legalization and registration of weapons occurs in cases when the weapon was procured from illegal sources and when it is planned to commit a crime. So, there are clear reasons why someone does not want to report a weapon, and these acts are mostly done intentionally. Also, the conclusion is that there must be a way to the diffusion of illegal weapons at the global level, which means that measures against illegal weapons must be adopted at the global level by international institutions. Only the authority of these institutions can guarantee the implementation of measures and can contribute to solving the problem of illegal weapons.

References

- 1. Action plan for the fight against illicit trafficking in firearms for the period 2020 2025.
- 2. Antonović, R. (2021) Pranje novca u kontekstu prevare u savremenim uslovima poslovanja, Internacionalni Univerzitet Goražde, Fakultet društvenih nauka, Goražde.
- 3. Antonović R., Marčetić A., (2022) Bezbednosni aspekti telekomunikacionog i poštanskog saobraćaja u Republici Srbiji. Horizonti menadžmenta. II(1), 183-201.
- 4. Estimating Global Civilian-held Firearms Numbers, http:// www. smallarmssurvey.org/fileadmin/docs/Weapons_and_Markets/Tools/Fir earms_holdings/SAS-BPCivilian-held-firearms-annexe.pdf (02.02.2022.)

- 5. Killias, M; Kesteren, J; Rindlisbacher, M. (2001) Guns, violent crime and suicide in 21 countries, Canadian Journal of Criminology Volume 43 (4), 429-448.
- 6. Kotarlić, D; Joksimović, S. (2015) Usklađivanje zakonske regulative Republike Srbije sa strategijom EU za borbu protiv nedozvoljenog sakupljanja i prometa lakog i streljačkog naoružanja i municije – stepen usklađenosti i neophodne mere, Vojno delo broj 3, Beograd, 251-270.
- 7. Manolov, G. (2019) The political elite. Theory, History, Leadership. LAP LAMBERT Academic Publishing, Berlin, Germany
- 8. Mazinjanin, B. (2016) Ilegalna trgovina oružjem kao veza između organizovanog kriminala i terorizma, Fakultet bezbednosti Univerziteta u Beogradu.
- 9. Mladenović G., Radović T., Milovanović I. (2022) Intelligence and criminal operativ line form of operational activity, Horizonti menadžmenta, II (1), 165-181
- 10. Ristić, K; Marjanović, N; Životić, I; Petričević, B. (2020) Globalizam, regionalizam, Evropska unija i Srbija, Institut za finansije i makroekonomsku politiku, International police organization, Poslovni i pravni fakultet, Univerzitet MB Beograd, 55-69.
- 11. Spalević, Ž; Bjelajac, Ž; Dimitrijević, D. (2013) Trgovina oružjem kao globalni međunarodni problem, MP 2, Beograd, 139-159.
- 12. Životić, I; Antonović, R; Duljević, B. (2020) Safety Management of State Institutions in Crisis Events in the Balkans, U: Georgiev L. (ur), Yearbook of Department Administration and management, New Bulgarian University, Sofia, 128-157.



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RIGHT TO JOINTLY FORM GROUPS AND COLLEGIAL BODIES IN BELARUSIAN AND POLISH PARLIAMENTS

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Key Words: parliament's right to jointly form groups and collegial bodies deputy right; Parliament; Belarus; Poland; comparative legal analysis.

Abstract: Goal - to analyze the key points of concepts of Belarusian and polish members of parliament's right to jointly form groups and collegial bodies in comparative feature. Research methodology - The basis of the work is the comparative-legal method of research, as well as other methods of scientific knowledge Score - in European legal science an essential right of MPs (Members of Parliament) is to jointly form groups, coalitions, clubs, coalitions and collegial bodies as mutually agreed within their respective Parliaments. MPs perform their functions in the framework of parliamentary commissions of both Polish Parliament and Belarusian legislative (representative) authority at the same time carrying out their mandatory duties. A number of progressive characteristics of the jointly form groups parliamentary commissions and other collegial bodies are stated. Originality/value - A new conclusion has been reached that it is preferable to further improve the regulatory framework that promotes the establishment of the right of Parliament to jointly form groups and collegiate bodies, which should be based both in Poland and in Belarus on the study and mutual implementation of the accumulated positive legislative experience of these states in this area.

Introduction



very modern state vests a number of considerable powers in its Members of Parliament. This is due to the fact that "both direct and indirect elections in the Republic of Belarus are based on the principles of the universality, equality, freedom and secret

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ballot, which demonstrates the democracy and the rule of law in the country" (Chmyha, 2019a). The Parliament of Poland is no exception to this rule too. Members of Parliaments of these neighboring states exercise their rights and perform their duties both individually and collegially within the national legislations of the said states.

Certainly as an essential right of MPs (Members of Parliament) can describe is to jointly form groups, coalitions, clubs, coalitions and collegial bodies as mutually agreed within their respective Parliaments.

As a rule, Members of Parliament set up their groups under a "territorial, professional or functional principle, while their political views serve as the basis for jointly formed parliamentary parties (fractions)"(Avtonomov et all., 2003).

The Members of Parliament's right to team up by virtue of a common feature is fixed in the procedures of Polish and Belarusian Parliaments. These procedures provide for an opportunity to set up both political and non-political coalitions of the said elected officials within the chambers. Alongside with that, considering the Members of Parliament's right to form coalitions, note that the above right is not intrinsically imperative, as each Parliament session in both states usually also involves MPs who stay away from any political coalition within the supreme legislative body. For example, you can meet members of the Polish Senate (less often those of the Sejm) who do not belong to any parliamentary club or a group (Skrzydło, 2008). According to Professor Krzysztof Grajewski, this phenomenon is marginal in itself, as, firstly, we have to remember that Members of Parliament and Senators obtain their mandates to a large extent due to the assistance of the political party they stand for and secondly, outside parliamentary clubs or groups the said elected officials exert less influence upon the Parliament activities (Grajewski, 2006). Besides, "in practice, a parliamentarian's party affiliation exerts a considerable influence on the stand taken by him in the Polish Parliament" (Chmyha, 2019b).

The Main Part

Talking about the role of political parties in today's Parliament, we cannot but mention their significant influence on the activities of the parliamentary groups formed under the party principle and, consequently, the independence of their members' mind. A British researcher Harold



Laski commented the situation as follows: "Parties tend to love reliable people only" (Laski, 1938). Therefore, a party, as a rule, "recommends and supports deputies not for their personal qualifications, but first and foremost for their loyalty and submission to the party", notes a Belgian author Walter Ganshof van der Meersch (Meersch, 1957).

Meanwhile, a famous French political scientist Maurice Duverger states that "democracy requires members of Parliament to be above the leaders, elected officials - above party members as they represent the electorate, which constitutes a larger group than the party they belong to. In fact, it is often just the opposite: many party leaders tend to control the MPs through the activists. A party's dominance over its elected members constitutes a special kind of oligarchy, the so-called outside oligarchy - with respect to the oligarchical role the leaders play within the party community " (Duverger, 2007). The said author also singles out three evolutionary stages of party development: MPs dominating over the party, relative balance between the MPs and the party leaders, and, finally, the party dominating over the MPs. Each of the above stages corresponds to a certain type of the party (Duverger, 2007). To avoid the emergence of this special kind of party's oligarchy within either Polish or Belarusian Parliaments as well as the latter of the above party types, we consider it necessary for MPs belonging to a party-based deputy group to perform their professional duties with maximum independence and fidelity to their own (and, consequently, that of their electorate) position, instead of acting for the party leaders' convenience. Therefore, "although deputies "bear the burden" imposed on them by the political parties' programmes, they are to perform their powers not only on behalf of the parties present in representative authorities, but also on behalf of the electorate" (Karasev, 2009). Moreover "it seems necessary to supplement the normative list of restrictions on the activities of Belarusian parliamentarians by imposing on them the obligation to comply with the ban on receiving royalties for speeches and publications, the conduct and preparation of which are related to the implementation of their mandate" (Chmyha, 2021).

In view of the above, it should also be noted that "modern regulations tend to specify the minimum fraction headcount to avoid splitting the chamber into unduly small groups and encouraging the ambitions of weak leaders that risk hindering the daily operations of the chamber. For example, a fraction of the French *Assemblée nationale* gains its status if includes at least twenty deputies, the same minimum headcount is fixed for the Italian *Camera dei Deputati*, while the Senate has to have no fewer than ten Senators" (Strashun et all., 2000). The Republic of Belarus follows the same optimum rule with the minimum deputy group headcount numbering ten deputies to the House of Representatives.

Deputies to and Senators of the Polish Sejm and Senate are also entitled to set up deputy clubs or groups within the headcount fixed by the chamber regulations. It should be noted that the actual headcount of Polish MPs' clubs or groups may vary greatly, which, surely, has direct influence on their political capital in the Parliament (of course, this is true for inherently political parliamentary coalitions). Thus, the lower house regulations of the Polish Parliament set the minimum number of a Sejm club members to fifteen deputies (about 3.2% of the total chamber headcount), while a deputy group must include at least three deputies. Setting up a club in the Senate requires the initiative of at least seven members of the corresponding chamber, while a group requires at least three. Note that both senators and deputies are allowed to participate in one club or one group only.

A remarkable fact is the presence of fairly large political coalitions in the modern Polish parliamentary system (for example, "during the 3rd session the AWS and SLD clubs included over 150 deputies each; the SLD club started the 4th session with nearly 200 deputies; the PiS club entered the 5th session with 155 deputies, while the PO club consisted of 209 deputies at the beginning of the 6th session") (Garlicki , 2011).

It is worth noting that the vast majority of the above coalitions formed in the Polish Parliament are based on the shared political feature, i.e. belonging to the same political party, or similar political beliefs. The main "function of clubs and groups is to create political preconditions for the chamber's activities" (Garlicki, 2011). These political parliamentary coalitions have their own political programmes and enjoy the rights conferred to them by the chambers' regulations. Alongside with that, notwithstanding the above rule, Polish MPs with different (sometimes opposite) political views may jointly form parliamentary groups or even clubs in order to achieve a common goal. It should be noted that the first coalition of the kind in the contemporary Polish history was formed in the National Assembly in the year 1989 and included all deputies and senators recommended for election by the *Solidarność* trade union. This coalition gained global fame as *Obywatelski Klub Parlamentarny*.



Describing the scope of deputies' and senators' rights in the framework of the political coalitions in question and their implementation procedure, we cannot but mention a peculiar feature of the Polish national legislation and its practical implementation in the said area. The thing is that the Parliament chambers' regulations proclaim formal political equality of all deputies' (senators') clubs or groups, stating, for example, that the said coalitions may use mutual agreements for the purpose of common representation in Rada Starszych. The actual implementation of the said legal norms in the Parliament, unlike their legal goal setting, tends to follow the path of political predominance (both quantitative and conceptual) of the rights vested in political clubs set up by deputies or senators. Thus, the Regulation requires every club to be represented in Rada Starszych, while parliamentary customs provide for club members to be included in chamber panels and permanent commissions. However, representatives of deputies' or senators' groups may or may not form a part of Rada Starszych and (as there are so few of them) cannot sit on every permanent commission.

Regardless of the political criterion that served as the basis for setting up a political coalition, MPs who belong to a parliamentary club or a group within the Polish National Assembly follow their own regulations (statute) passed to the Marshal of the corresponding chamber together with the information about the leaders and members of the coalition. As a rule, the most numerous political parliamentary coalitions are headed by the club panels, while smaller parliamentary coalitions perform their functions as resolved by the general meetings.

All members of both clubs and groups follow the party discipline requirements. Thus, a club takes formal resolutions on certain crucial issues (mainly draft legislation) that force its members to vote a certain way (Garlicki, 2011). However, "such resolutions are not legally binding as this would run contrary to the essence of a free mandate" (Garlicki, 2011). Alongside with that, violation of the club discipline may entail various sanctions. Non-support at the next parliamentary elections may be the most severe long-term sanction for a misbehaving politician (Garlicki, 2011).

In view of the above, we appreciate the opinion given in legal research literature, which states that a fraction is entitled to enjoy a deputy's rights (the right to legal initiative, the casting vote right, the right to debate etc.) through its deputy members. This reveals interaction (to be more exact, intersection) of deputy coalition powers and deputy's rights.

We believe that the aforementioned interrelation between a deputy coalition and a member of Parliament is manifested most vividly through the MP's exercising their right to debate, which, pursuant to a smart definition given by L. Diamond, is a "regulated contest" in itself (Diamond, 1996). As we see it, the said right is of, first and foremost, great political importance as its exercise in the countries in question secures the democratic and legal nature of the activity performed by Each Member of Parliament and the legislative body as a whole.

Sejm sessions, in particular, cover the following issues:

- 1) electing the Marshal, vice-Marshals, Sejm secretaries and commissions;
- 2) appointment and withdrawal of the Supreme Chamber of Control (*Naj-wyższa Izba Kontroli*) President, Civil Rights Officer, The President of the National Bank of Poland, as well as the Inspector General for Personal Data Protection;
- electing Constitutional tribunal judges, members and the chairperson of the State tribunal, members of the Monetary Policy Council, members of the Polish Radio and TV Broadcasting Council as well as deputies to the Polish Council of Justice;
- 4) President's messages;
- 5) draft laws and resolutions of the Sejm;
- 6) Senate resolutions on amending or rejecting the bill passed by the Sejm;
- 7) President's proposals on reconsideration of a passed law;
- 8) draft legislation on state budget and other financial plans of the state, as well as reports on their implementation and proposals on approving the Government activity;
- 9) a report presented by the President of the Council of Ministers together with the proposal on a vote of confidence to the Government;
- 10) electing the Council of Ministers in the situations provided for by the Constitution;
- 11) proposals on the censure vote to the Council of Ministers or certain ministers;
- 12) remarks made by the Supreme Chamber of Control (*Najwyższa Izba Kontroli*) on the Council of Ministers' reports on performing the social and economic tasks, budget implementation analysis and the Supreme Chamber of Control's report on its activity;



- 13) the reports made by the Constitutional tribunal on the significant problems related to its activity and litigation practice;
- 14) annual reports and remarks made by the Civil Rights Officer on exercising civil rights and freedoms;
- 15) annual reports on the Polish Radio and TV Broadcasting Council's activity;
- 16) issues related to implementation and execution of laws and regulations;
- 17) current information and issues;
- 18) other issues introduced or passed by the President, Council of Ministers, Sejm Panel, Sejm Commissions or deputies.

Thus, both Polish and Belarusian parliaments hold debate to "shape public opinion and build consensus"(Karasev, 2009). Alongside with that, we believe that the significance of the parliamentary debate outcome depends on the MP's speech conforming to a number of requirements. Thus, current research (Avakjan, 2000) justly demonstrates that a high-quality MP's speech should be measured by two criteria. Firstly, it is the emotional impact on the public – deputies and other individuals in the session hall. Secondly, the efficiency should be estimated by the speech results, which include the situations when:

- 1) the deputy's ideas and proposals were included in the draft resolution of the representative body;
- 2) the head of the state (local) authority spoke on the issues raised by the deputy and provided substantial information to the deputies' satisfaction;
- 3) a commission (working group) with the task to look into the problem and present their ideas to the representative authority at one of the meetings was set up to implement the deputy's proposals;
- 4) the representative authority delegates a permanent committee (commission), an executive or another accountable body to do the above and report at the session;
- 5) the deputy's proposal is passed to an executive body to be considered to all intents and purposes – preferably, in the presence of the deputy concerned – with the results reported to all the deputies at the next session of the legislative (representative) authority;
- 6) the statements made by the deputy at the session of the legislative (representative) authority served as the grounds for an inspection carried out by the executive body to investigate the situation and establish the extent of the leaders' liability (Avakjan, 2000).

Thus, as it was justly noted by a famous Russian pre-revolutionary researcher S. A. Kotliarevsky, the Parliament of any developed state "completes the struggle between the parties by the chamber's vote... The wishes and opinions of single parties are no more than constitutive elements for the people's will. It is made up by the majority that express the will of the people, represented by the Parliament. Such a vote is rarely produced by one party. It always results from a compromise, an agreement between several parties, even principled enemies" (Kotlyarevskij, 1905).

Apart from the aforementioned mandatory collegial forms that allow MPs to execute their right to team up, both Belarusian and Polish members of Parliament also perform their activity as part of collegial bodies within the legislative authority. First and foremost, they exercise their right to team up by entering parliamentary commissions – the most numerous and at the same time varied collegial bodies of the Parliament.

Note that permanent commissions are formed within the Polish Parliament for the chamber's term of office and listed in the regulations of the Sejm and the Senate (e. g., Article 18 of the Sejm Regulations specifies 25 types of permanent commissions for the said chamber, while the Senate has 14 commissions) (Skrzydło, 2008). It also bears noting, that supplements to the Regulations of each of the Polish Parliament chambers describe in detail the powers of each permanent commission. We believe that this measure aims at avoiding clashes between these bodies arising from boundary delimitation of their activities.

It should also be borne in mind that Polish MPs cannot enter more than two permanent commissions. This said, a deputy who performs the minister's or state-secretary's functions cannot join a commission. Thus, permanent commissions are formed by the Sejm deputies and Senators respectively. The actual structure of each committee is approved by the resolution passed by the chamber as proposed by its panel and consulted with Rada Starszych.

Unlike the permanent commissions of the Polish Parliament, its ad hoc commissions are set up by the respective chamber for a definite, strictly formulated purpose and perform their functions within a limited period. To achieve the said purpose the Sejm or the Senate sets the goal, principles and the procedure for the said ad hoc commission, which performs its function and is dissolved. In fact, ad hoc commissions are usually formed to draft or discuss bills of special importance (e. g., an ad hoc commission of the 3rd



session was formed to discuss amendments to a number of codes, the eight ad hoc commissions created at the 4th session of the Sejm prepared certain bills) (Garlicki, 2011). Besides, Article 111 of the Polish Constitution and the Polish Law of 21 January 1999 "On the Investigatory Commission of the Sejm" allow the Sejm to set up examination commissions as a subtype of ad hoc commissions to examine a certain case.

To perform the tasks imposed on the parliamentary commissions, both Sejm commissions and those of the Senate carry out their duties in the form of sessions headed by the chairperson or, if the latter is absent, one of the vice-chairpersons (a peculiar feature of any parliamentary commission is that "a commission may request its panel structure to be changed at any time, and there has been a lot of such cases in its practice)" (Garlicki, 2011). Note that the activities of the permanent commissions formed at upper and the lower chambers of the Polish National Assembly have a lot in common.

For example, the Sejm commission members perform the following tasks at its sessions:

- 1) consider draft laws and resolutions;
- consider the regulations received from the Senate and aimed at amending or rejecting a bill passed by the Sejm as well as the President's proposal for the Sejm to review the bill;
- 3) consider and assess the main provisions of draft laws and resolutions;
- consider the reports and statements made by ministers and higher state administration authorities, as well as the senior officials of other state bodies and organisations;
- 5) analyse the activities of certain sectors of the state administration and economy;
- 6) consider the issues of implementing and executing laws and resolutions passed by the Sejm as well as carrying out its requirements;
- 7) give opinion on the proposals made by the Marshal of the Sejm in relation to the election and appointment of certain individuals to certain public positions by the Sejm or their recall.

As for the procedure followed by the Polish MPs in performing their duties as part of parliamentary commissions, it should be mentioned that their sessions, including the closed ones, may involve not only permanent members, but also those deputies who do not belong to the respective commission. These deputies may take the floor in debates and make proposals without the right to vote. Besides, the panel or the chairperson of any commission may invite any representatives of professional or social agencies, commission experts or bureau officers of the deputy clubs, reporters from the mass media, radio or television to take part in its session.

Summarizing the results of their activity, Sejm or Senate commissions adopt requirements, conclusions, reports or draft rulings, resolutions, addresses, statements or declarations made by the Sejm. Besides, a Polish parliamentary commission may resolve on taking into account the information or position presented.

All said above allows us to draw a conclusion that parliamentary commissions perform the functions of ancillary bodies to the Sejm and the Senate, without the right to make final decisions, e. g. concerning a certain bill, but just prepare a draft resolution then passed on to the plenary session of the chamber. However, in fact most chamber resolutions take into account and match the opinions given by the commissions. Therefore, commissions play a key role in the Parliament.

All Belarusian MPs (except for the Presidents and Vice-Presidents of the chambers), like the Sejm deputies or Senators in Poland, have to form permanent commissions, which are set up and perform their functions to complete the tasks of the Belarusian legislative authority as its constituent parts during the entire period of its power. Unlike Polish MPs, the said people's representatives may enter only one permanent commission. The significance of this duty is emphasised by N. M. Kondratovich, who describes the functions of Belarusian Parliament, justly paying special attention to the fact that "the continuity and efficiency of its performance is to a great extent due to the permanent commissions" (Kondratovich, 1995).

"Permanent commissions perform quite a broad scope of duties" (Golovko, 1979) in the National Assembly of the Republic of Belarus. It should be noted that the main functions of permanent commissions include drafting bills, preliminary examination and preparation of the issues that fall within the parliamentary chambers' jurisdiction. Current legislation entitles the commissions to employ experts, call for independent expert examination of draft bills, set up volunteer research, advisory and other boards to look into the issues within the respective commission's scope of duties. It goes without saying that "massive involvement of professionals and activists in the commission activities facilitates profound



understanding of the issues discussed and making the best possible decisions" (Golovko, 1979).

More specifically, permanent commissions of the National assembly chambers:

- 1) prepare draft laws to be considered by the chambers of the National assembly;
- 2) pre-examine and prepare issues that fall within the National assembly chambers' jurisdiction;
- 3) prepare resolutions on draft bills and other legal acts as well as other issues within the National assembly chambers' scope of duties;
- 4) draft bills and other legislative acts as instructed by the Presidents of the National assembly chambers and on their own initiative;
- 5) examine written requests received from individuals and legal entities with proposals on improving the legislation of the Republic of Belarus;
- 6) arrange parliamentary hearings;
- 7) set up working groups involving the permanent commission members, other deputies to the House of Representatives, members of the Council of the Republic as well as representatives of the governmental authorities and other state bodies, non-governmental associations and research organizations;
- 8) employ experts and professionals, call for independent expert examination of draft bills, set up volunteer research, advisory and other boards to look into the issues within the respective commission's scope of duties;
- 9) request official documents, information and other materials they need to perform their duties from governmental authorities, other state bodies and officials;
- 10) invite representatives of the governmental authorities and other organisations to take part in preliminary examinations of draft bills and other issues that fall within the National assembly chambers' jurisdiction;
- 11) perform other duties provided for by the regulations of the National assembly chambers and other legislative acts of the Republic of Belarus.

Note that to secure proper implementation of the resolutions passed by the permanent parliamentary commissions Belarusian governmental authorities and other state bodies and officials are to present the documents and materials requested by the permanent commissions of the Belarusian National assembly chambers within their jurisdiction and mandate within a month or another agreed period. An exception to this rule is disclosure of state or other legally protected secrets in accordance with the procedure prescribed by the legislation of the Republic of Belarus.

Apart from permanent commissions, Belarusian National Assembly chambers, like the Polish Sejm or the Senate, may form ad hoc commissions as needed. Their creation procedure, tasks and activities are set by the resolutions passed by the corresponding Parliament chambers of the Republic of Belarus. As a rule, ad hoc commissions are formed to address a certain issue (a list of issues) that arises in the course of the activity performed by the House of Representatives or the Council of the Republic.

It should be noted that the elected President and members of such ad hoc commissions are deputies to the House of Representatives and members of the Council of the Republic of the National Assembly of the Republic of Belarus. These elected officials bear the main burden of securing the efficient performance of the commission. Alongside with that, to ensure the proper functioning of the said bodies, the newly-formed ad hoc commissions may employ experts and professionals who are not MPs. Note that by joining an ad hoc commission neither deputies to a House of Representative nor members of the Council of the Republic cease their membership in the permanent commission.

To carry out their activities, ad hoc commissions of Belarusian Parliament may request documents, information and other materials necessary to perform their functions as well as exercise other powers vested in them in accordance with the procedure set by the National Assembly chambers and other legislative acts of Belarus. Besides, members of ad hoc parliamentary commissions may request documents and materials they are entitled to from Belarusian government authorities, other state bodies and officials, who are to provide them within a month or another agreed period.

Having performed their function or earlier as ruled by the chambers of the National assembly ad hoc commissions and, consequently, their MPs cease their activity. Note that Belarusian members of Parliament who take part in ad hoc commissions are responsible and accountable to the respective chambers of the supreme legislative body of the Republic of Belarus.

Thus, MPs perform their functions in the framework of parliamentary commissions of both Polish Parliament and Belarusian legislative (repre-



sentative) authority at the same time carrying out their mandatory duties. These duties may include the following powers:

- 1) put forward issues to be discussed at the commission meetings;
- 2) take part in discussing the issues considered, make remarks and proposals on the said issues;
- 3) have a casting vote on the issues discussed;
- 4) put forward proposals concerning inspections of the respective bodies and non-governmental organisations, take part in such inspections and discuss their results at the commission meetings;
- 5) take part in discussing candidates appointed, elected or approved by the representative authorities;
- 6) propose the representative authority to put draft legal acts to public discussion etc. (Karasev, 2009).

Apart from the parliamentary commissions, who perform their duties according to the industry criterion, the strategic function in securing the efficient performance of the respective Parliaments in both countries is performed by the Presidiums of the Sejm and the Senate in Poland and the Council of the House of Representatives and the Presidium of the Council of the Republic in the Republic of Belarus – they play a major role.

Special attention should also be paid to the fact that both the Sejm's and the Senate's Presidiums in Poland have mostly identical formation procedures, structure and powers. In particular, pursuant to Article 11 of the Sejm's Rules of Procedure, the Sejm's Presidium, as a permanent collegial body of the said chamber, comprises the Marshal and Vice-Marshals. It also bears noting that the Basic Law of the Republic of Poland does not prescribe the positions taken by its members. However, parliamentary traditions of other states sometimes provide for completely different Presidium structures than that set by the Polish chamber Regulations. For example, the Finnish Presidium includes heads of commissions, the Presidiums of Austria, Italy, Norway and Switzerland – heads of parliamentary groups (Skrzydło, 2008). The analysis of the Chamber Presidium structure and formation procedure in Poland makes us turn to the Polish parliamentary history, when the 1st convocation Senate's Presidium included, apart from the Marshal and Vice-Marshals, senators - Presidium members (Skrzydło, 2008).

The Sejm's Presidium exercises the following powers:

- 1) approving the work schedule for the Sejm on advice of the Council of the Seniors (Rada Starszych);
- 2) approving the weekly work plans for the sessions at least three months before the start of the session weeks;
- 2) arranging cooperation of the Sejm's commissions and coordinating their activities;
- 3) evaluating draft laws for their correspondence to the current legislation;
- 4) taking disciplinary action towards Members of Parliament;
- 5) determining the payments due to the Sejm's deputies under the current legislation;
- 6) interpreting the Rules of Procedure for the lower chamber of the Polish Parliament, as well as a number of other important powers.

The performance of this Parliamentary body is regulated by the head of the chamber, who sets the agenda and the date for each Chamber Presidium session. All the resolutions taken by the Presidium are passed by a majority vote. Note also that in the event of a tie, the Marshal of the respective Parliamentary chamber shall always be entitled to a casting vote, which, we believe, indicates the significance of the said elected official for the functioning of the Chamber Presidium. Analysing the implementation procedure for MPs' duties in the framework of the Chamber Presidium, we cannot but mention the fact that "in many cases the powers of the Presidium overlap with those of the chamber's Marshal"(Garlicki, 2011), which is not always beneficial for the exercise of the seat powers by the said elected politicians.

As for the Republic of Belarus, as it was said above, the main permanent collegial bodies of its Parliamentary chambers are the Council of the House of Representatives and the Presidium of the Council of the Republic. Their powers and formation procedures are for the most part identical.

In particular, the Council of the House of Representatives includes the Chairperson of the House of Representatives, his/her deputy, as well as the chairpersons of permanent commissions. The Council of the House of Representatives is headed by the Chairperson of the House of Representatives.

To arrange the functioning of the House of Representatives and its bodies, the Council of the House of Representatives:



- 1) manages the session preparation activities for the House of Representatives;
- decides on introducing a draft agenda for the session of the House of Representatives, as well as draft resolutions on its amending and (or) supplementing, to the House of Representatives;
- 3) ensures the presence of the deputies to the House of Representatives at its sessions;
- 4) resolves issues related to convening and holding sessions of the House of Representatives;
- 5) hears reports on the performance of permanent commissions and other bodies of the House of Representatives;
- 6) instructs the Secretariat of the House of Representatives on issues related to convening and holding sessions of the House of Representatives, law making and other issues within its powers;
- puts forwards proposals on the establishment, reorganisation or liquidation of permanent and ad hoc commissions of the House of Representatives as needed;
- 8) ensures organisational, legal, methodological and informational support for the activities of permanent commissions and other bodies of the House of Representatives;
- 9) establishes ad hoc working groups of deputies to the House of Representatives, professionals and researchers to prepare and revise draft laws and other acts in the Council of the House of Representatives;
- 10) instructs permanent commissions and other bodies of the House of Representatives on the issues in their power;
- 11) establishes an ad hoc commission for preliminary consideration of a draft law and its preparation for the House of Representatives as needed;
- 12) informs deputies to the House of Representatives about resolutions passed by the Council of the House of Representatives;
- applies to the President of the Republic of Belarus for conferring deputies to the House of Representatives and the Secretariat officials of the House of Representatives with national awards of the Republic of Belarus;
- 14) decides on awarding the Honorary Certificate of the National Assembly of the Republic of Belarus;
- 15) approves directives on the Commendation of the Chairperson of the House of Representatives of the National Assembly of the Republic of Belarus and the Commendatory Letter of the Chairperson of the House of Representatives of the National Assembly of the Republic of Belarus;

- 16) appoints the plenipotentiary representative of the House of Representatives in the Constitutional Court of the Republic of Belarus;
- 17) supervises the timely consideration of inquiries, proposals and remarks made by deputies to the House of Representatives;
- 18) decides on international business trips of parliamentary delegations, their accompanying officials, advance groups of parliamentary delegations, deputies to the House of Representatives and Secretariat officials of the House of Representatives, and approves the reports made by the deputies to the House of Representatives on the results of international business trips related to their deputy powers;
- 19) approves an international parliamentary cooperation plan for the House of Representatives and the parliaments of foreign states, international parliamentary agencies and other international organisations;20) exercises other powers provided for by the legislative acts of the
- 20) exercises other powers provided for by the legislative acts of the Republic of Belarus.

Discussing the permanent collegial bodies of the Polish Parliament, we cannot but mention the Council of the Seniors (Rada Starszych) of the Polish Sejm and the Senate – the only bodies, the composition of which, according to professor Wiesław Skrzydło, does not depend on the chambers' will" (Skrzydło, 2008). It should be noted that the above associations are political bodies, whose performance is directed at establishing and securing interaction between parliamentary clubs on the issues related to the activities and performance of each of the Parliamentary chambers. Said otherwise, as professor Leszek Garlicki reasonably believes, "formally, the Council of the Seniors (Rada Starszych) is just an advisory body" (Garlicki, 2011). The powers of the Senate's Council of the Seniors (Rada Starszych) are mostly the same as those of the Sejm.

It is interesting that "in the Polish parliamentary system the 'seniority' criterion bears no relation to the age or experience in the Parliament" (Skrzydło, 2008). In other words, this body, pursuant to the above goals of the Councils of the Seniors (Rada Starszych) of the Polish Parliamentary chambers, includes, but is not limited to, the following persons: 1) Marshal; 2) Vice-Marshals; 3) chairpersons or vice-chairpersons of deputy clubs; 4) representatives of the coalitions formed for the purpose of joint representation in the Council of the Seniors (Rada Starszych) and including at least 15 deputies; 5) representatives of parliamentary groups, put on a separate voting list on the first day of the Sejm's powers (Article 15 of the Sejm's Rules of Procedure).



It should also be mentioned that the Council of the Seniors (*Rada Stars-zych*) assesses draft plans of the Sejm's activity, the agendas and scheduling of its sessions as well as proposals concerning the election of the Sejm's bodies, and solves other issues set by the Marshal of the Chamber or its Presidium.

The Council of the Seniors (Rada Starszych) is convened as requested by the Sejm's Marshal or its Presidium, or proposed by a club included in the Rada or a group numbering at least 15 deputies (Article 16 Part 2 of the Sejm's Rules of Procedure). Note that, although the Council of the Seniors (*Rada Starszych*) is an advisory body of the chamber, its resolutions are quite a great force in the Parliament.

Conclusions

Summing up and analysing the activities performed by Polish and Belarusian Members of Parliament within parliamentary coalitions and collegial bodies, we cannot but mention a succinct statement by a French legal researcher P. Lokke who compared parliamentary activity with an iceberg, with public parliamentary sessions being just a visible emerged part of it. They are just a performance staged for the public after the parliamentary majority and the government have come in ... commissions to an agreement concerning the legal initiatives to be passed (cit. ex. Nudnenko, 2004). We believe that this statement presents quite a fair description of MPs' activities within parliamentary coalitions and collegial bodies in any developed state, including Poland and Belarus.

References

- 1. Avakjan A. Member of Parliament: status and activities. M., 2000.
- Chmyha A. (b) The models of mandates of the parliamentarians in Belarus and in EU: comparative legal aspect. «The Studies of the Bode-rland Universities Network». – №3. – 2019.
- 3. Diamond L. Three paradoxes of democracy. M., 1996.
- 4. Duverger, M. Political parties. M., 2007.
- 5. Garlicki L. Polskie prawo konstytucyjne (zarys wykładu)., Wydawnictwo «Liber», Warszawa, 2011.
- 6. Golovko A. Soviet construction: text. manual. Minsk, 1979.

- 7. Kondratovich N. Subjects of the legislative process: autoref. dis.... candidate lawyer. sciences: 12.00.01/ N.M. Kondratovich; Belarusian. state. Un-t. Minsk, 1995.
- 8. Kotlyarevskij S. Main features of representation., Spb., 1905.
- 9. Nudnenko L. Constitutional and legal status of the deputy of the legis-lative body of state authority in the Russian Federation St. Peter-sburg: Jurid. Press Center, 2004.
- 10. Chmyha A. (a) The legal grounds of emergence and termination of mandates of members of Parliaments of Belarus and Poland. Политичка ревија. №3 (vol 61) 2019, 244.
- 11. Chmyha A. Legal restrictions of the members of Parliaments of Belarus and Poland. «The Studies of the Boderland Universities Network». №5. 2021.
- 12. Constitutional (state) law of foreign countries : / Strashun B. [et al.]; M., 2000.
- Ganshof van der Meersh, W.J. Pouvoir de fait et regle de droit dans le fonctionnement des instutions politiques / W.J. Ganshof van der Me-ersh. – Bruxelles : Libr. Encycl., 1957. – 173 p.
- 14. Grajewski, K. Status prawny posla i senatora, wyd. II zmienione I uzupelnione, "Wydawnictwo Sejmowe", Warszawa, 2006.
- 15. Karasev A. Deputy in the system of representative power (constitutional and legal study): dis.... Dr. Jurid. sciences: 12.00.02/A.T. Karasev. - Yekaterinburg, 2009.
- 16. Laski, H.J. Parliamentary government in England / H.J. Laski. London : G. Allen & Unwin Ltd. 1938. – 3 p. 1., 9–453, [1] p.
- 17. Parliamentary Law of Russia /A. Avtonomov [et al], M., 2003.
- 18. Skrzydło W. (red), Polskie prawo konstytucyjne., Wydawnictwo «Verba», Lublin, 2008.



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IMPLICATIONS OF POSITIVE LEGISLATION ON ICT SECURITY IN THE REPUBLIC OF SERBIA

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Key Words: Serbian legislation, ICT security, Corporate Security

Abstract: In the period from 2000 until today, the legislation of the Republic of Serbia has undergone a major transformation on the path to joining the European Union. Many existing laws have been amended or supplemented to a greater or lesser extent, and a number of new laws have been enacted relating to data security, in particular personal data, information security and critical infrastructure protection. Legal mechanisms are an important starting point for establishing a higher level of corporate security in each country, but it is necessary to provide the required technical and technological resources and knowledge to establish effective ICT security systems within public and private sector organizations. This paper aims to show the extent to which positive developments have taken place since the 2000 up to date and how it is possible to improve the security of ICT systems in the Republic of Serbia by applying current regulations, modern methodological principles and technical and technological means, as well as to point out the complex role of corporate security managers in today's security challenges.

Introduction

erbian legislation has undergone significant changes on its way to joining the European Union since 2000 in order to harmonize regulations in force in the EU. After the negotiations on the accession of the Republic of Serbia to the EU at the Intergovernmental Conference in Brussels, a total of 6 clusters with 33 chapters were defined. Chapter 3 of the Third Cluster, entitled "Competitiveness and Inclusive Growth", deals with the information society, media, tax system, economic

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and monetary policy, social policy and employment, industrial and entrepreneurial policies, science and research, education and culture, as well as the customs union. Chapter 10 electronic communications, information society and audiovisual policy are covered. Explanatory and bilateral screening for this chapter was held in the period from May to July 2014, but the chapter is not open yet. Despite the fact that Chapter 10 is still not open, the Republic of Serbia has made a number of changes to the existing legislative framework related to this chapter and adopted several new laws and bylaws important for harmonization with EU legislation. Numerous official institutions of the Republic of Serbia are involved in the negotiating group for the information society and media, as well as in the process of drafting new regulations and providing financial and technical-technological resources necessary for their implementation in the public and private sector. The goal of adopting numerous new regulations in the Republic of Serbia related to the security of ICT systems, in addition to striving for harmonization with EU regulations, is to meet the conditions for safe functioning of IT infrastructure in the entire economy and ensure stable functioning of all state institutions. Thus, the establishment of the security of the ICT system after the adoption of the necessary legal framework can be established through two basic phases:

- 1. Prevention of unwanted consequences
- Endangering the security of individuals, businesses and the state;
- Theft, embezzlement, losses, modifications of information;
- Unauthorized activities (internal and external factors);
- Infringement of intellectual property;
- Violation of privacy and confidentiality of personal data;
- Violation of business secrets, etc.
- 2. Providing preventive and protective measures:
- Drafting the Act on ICT Security;
- Regular inspection of ICT systems;
- Timely reporting in case of an incident;
- Education of employees on preventive and protective measures of the ICT system.

A major problem in the international community, and thus in the Republic of Serbia, is information security, ie the security of ICT systems, which, in addition to the still incomplete legislative framework, is weak by the low level of security and corporate culture, insufficient education of employees on existing IT risks and threats. as well as the application of security measures in the modern business environment imposed by newly adopted regulations.



In addition to all the above, it is necessary to point out that numerous regulations that have entered into force in the Republic of Serbia in the past ten years equate the private and public sectors in terms of their mandatory application, ie apply equally to legal business of both sectors and / or individuals. One such regulation is the Personal Data Protection Act.

Legislative framework of importance for corporate and ICT security in the Republic of Serbia

Any heavy regime of new regulations would make all transactions costlier and less convenient. To solve this situation, the focus should lie on the attempts to make the risk of detection of such transfers higher for the parties involved. Without interfering too strongly with the new financing system developing, this process asks for improved compliance and cooperation on all levels and capacities (Breu, Seitz, 2018, p.10).

Regulations that have been significantly changed in the period from 2000 until nowadays, but also the adoption of completely new regulations, require the introduction of organizational, personnel and technical-technological changes in modern business of the public and private sector in the Republic of Serbia. Prior to the adoption of numerous laws, on the way to joining the European Union, a number of strategies were adopted with action plans for their implementation.³ Among the most important strategies adopted in that period, on the basis of which the process of digitalization and development of ICT infrastructure was traced, the Strategy for the Development of Telecommunications in the Republic of Serbia in the period 2006 to 2010 stands out.⁴ Strategy of e-government development in the Republic of Serbia for the period from 2009 to 2013 i Information Society Development Strategy in the Republic of Serbia until 2020.

The legal framework for electronic business, corporate and information security in the Republic of Serbia is currently sufficiently established and defines a number of binding operational procedures. We have a brief overview of the norms governing e-business, corporate and ICT security

³ Strategies available on the website of the Government of the Republic of Serbia https://www.srbija.gov.rs/dokumenti/2430, accessed 06.04.2022.

⁴ http://www.gs.gov.rs/lat/strategije-vs.html , accessed 06.04.2022.

throught several applicable laws: the Law on Information Security (Sl. glasnik RS", No 77/2019), with its bylaws, the Law on Disaster Risk Reduction and Emergency Management (Sl.glasnik RS", No 87/2018) with its bylaws, the Law on Disaster Risk Reduction and Emergency Management(Sl.glasnik RS", No 87/2018), Personal Data Protection Act (Sl.glasnik RS", No 87/2018), Law on archival material and archival activity "Sl. glasnik RS", No 6/2020), Law on Electronic Document, Electronic Identification and Trust Services, Sl. glasnik RS", No 94/2017 i 52/2021), Law on Electronic Invoicing ("Sl. glasnik RS", No 44/2021 i 1292/2021), Electronic Commerce Act ("Sl. glasnik RS", No 52/2019), Disaster Risk Reduction and Emergency Management Act and other applicable regulations.

The penal provisions of the aforementioned laws prescribe fines in the range of 500,000.00 to 2,000,000.00 dinars for a legal entity, or 5,000.00 to 200,000.00 dinars for a responsible person in a legal entity for non-compliance with the law. However, Chapter 27 of the Criminal Code of the Republic of Serbia⁵ provides for criminal sanctions related to criminal offenses against the security of computer data, for certain offencess, a sentence of ten years is provided (Pharagraph 298, 301. art.3).

With the publication and implementation of these and other laws that regulate modern business, the list of new business obligations and responsibilities grows, especially in the part of business that relies on ICT systems, which includes the introduction of special security measures, development of precise procedures, documents and internal normative acts. In that sense, these obligations also create the need to expand the operational work of employees in the IT sector (Antonović, Marčetić, 2021), timely and continuous education of all employees, hiring professionals and a greater extent of responsibilities of appointed, designated and responsible persons. Storing data on worldwide networks makes the blockchain applications difficult to regulate as they are not residing in a specific area of influence of any given regulation or jurisdiction. Also the blockchain applications offer an extensive level of anonymity to their stakeholders. In future artificial intelligence will start to optimize the applications and trigger decisions automatically which will become a major challenge for competition and anti-trust regulators as it will be difficult to define legal entities with responsibility for the action taken (Breu, 2018, p.12).

⁵ "Sl. glasnik RS", N° 85/2005, 88/2005 - ispr., 107/2005 - ispr., 72/2009, 111/2009, 121/2012, 104/2013, 108/2014, 94/2016 i 35/2019



Legal obligations of legal entities in establishing and implementing measures for the protection of ICT systems

Obligations of legal entities regarding the implementation of measures for the protection of ICT systems are, above all, defined by the Law on Information Security ("Sl. glasnik RS", N° 77/2019) and bylaws accompanying this law. Legal entities that are obliged to conduct it are defined in Article 6. - ICT systems of special importance. Their obligations are defined in Art. 6a, as follows:

- 1) enter the ICT system of special importance which it manages in the records of the operator of the ICT system of special importance;
- 2) take measures to protect ICT systems of special importance;
- 3) adopt an act on the security of the ICT system;
- 4) check the compliance of the applied measures for the protection of the ICT system with the act on the security of the ICT system at least once a year;
- 5) regulate the relationship with third parties in a manner that ensures the undertaking of measures for the protection of that ICT system in accordance with the law, if it entrusts activities related to the ICT system of special importance to third parties;
- 6) submit notifications on incidents that significantly endanger the information security of the ICT system.⁶

ICT systems of special importance are defined in Article 6 of the Law on Information Security, as systems used:

- 1) in performing tasks in government bodies;
- 2) for the processing of special types of personal data, in terms of the law governing the protection of personal data;
- 3) in performing activities of general interest and other activities, which are more closely defined by the Decree on determining the List of activities in areas where activities of general interest are performed and in which information and communication systems of special importance are used.
- 4) in legal entities and institutions established by the Republic of Serbia, an autonomous province or a unit of local self-government. The request for entry in the Register shall be submitted in the form of an electronic document in the original or in the form of a certified digitized act, in accordance with the regulations governing the electronic document ("Službeni glasnik RS", N° 9 / 2020).

⁶ http://www.pravno-informacioni-sistem.rs/SIGlasnikPortal/eli/rep/sgrs/skupstina/zakon/2016/6/5/reg/20191108, accessed 11.04.2022.

The ICT system operator shall establish procedures to monitor activities, audit and supervision within information security management. When determining the responsibility of employees, it is necessary to envisage the responsibility for informing the competent authorities about incidents in the ICT system, in accordance with the regulations. The ICT system operator determines the procedures for communication with other institutions in the event of an incident in order to timely report or resolve the security incident. Article 3 of the Law on Information Security stipulates that the following principles should be followed when planning and implementing measures to protect ICT systems:

- 1) risk management principle selection and level of application of measures is based on risk assessment, risk prevention needs and accomplished, including all kinds of extraordinary circumstances;
- 2) the principle of comprehensive protection measures are applied at all organizational, physical and technical-technological levels, as well as during the entire life cycle of the ICT system;
- 3) principle of expertise and good practice measures are applied in accordance with professional and scientific knowledge and experience in the field of information security;
- 4) the principle of awareness and competence all persons whose actions effectively or potentially affect information security should be aware of the risks and have the appropriate knowledge and skills Therefore, in accordance with the Law and Regulation and in which information and communication systems of special importance are used, employees who work related to ICT systems have new work obligations, as well as the basis for disciplinary liability and liability for breach of duty. According to the above, it is necessary to change the general acts of the employer (especially the Rulebook on the organization and systematization of work and the Rulebook on disciplinary and material responsibility), and the employment contract.

The ICT system operator may entrust the verification of the ICT system, ie the security of e-documents, to a third party. In that case, it is necessary to regulate the relationship with that person in a way that ensures that measures are taken to protect that ICT system in accordance with the Law. The entrustment of activities is performed on the basis of an agreement concluded between the operator of the ICT system of special importance and the person to whom those activities are entrusted or by a special regulation. In its elements, the contract, in our opinion, must contain provisions that also refer to the obligation to keep secrets in relation to data that a third party comes into possession when accessing an ICT system of



special importance. Exceptional conclusion of a contract is not necessary, if the activities related to the ICT system are entrusted by regulation.

The aforementioned activities are all activities that include processing, storage, or access to data available to the operator of ICT systems of special importance, and relate to its business, as well as activities of development and maintenance of software and hardware components on which directly depends its proper acting when performing tasks within the competence, ie providing services. A third party is also considered to be an economic entity that is related to the operator of the ICT system of special importance by property and management relations (persons with participation, members of the group of companies to which that economic entity belongs, etc.). Data protection must be one of the most important responsibilities of any organization. The Law on Information Security requires the establishment of an information security system - a total of 28 requests (Article 7), establish and document the ICT System Security Act (Article 8) and at least once a year perform an internal verification of compliance with the Act and document the report, independently or with external experts (Article 8).

Personal Data Protection Act ("Sl. glasnik RS", N° 87/2018) also orders the undertaking of personnel, organizational and technical measures for the purpose of safe processing and storage of personal data, as well as the verification of implemented measures at least once a year by the person in charge of personal data protection. In that sense, technical measures include ensuring the safe and uninterrupted functioning of the ICT system. Namely, regarding the security of personal data processed, in accordance with the level of technological achievements and costs of their application, nature, scope, circumstances and purpose of processing, as well as the probability of risk and the level of risk to the rights and freedoms of individuals, the controller appropriate technical, organizati-onal and personnel measures to achieve the appropriate level of security in relation to risk. If necessary, the measures referred to in paragraph 1 of Art. 50.

The Law on Personal Data Protection includes in particular:

- 1) pseudonymization and cryptoprotection of personal data;
- 2) ability to ensure lasting confidentiality, integrity, availability and resilience of processing systems and services;
- 3) ensuring the re-availability and access to personal data in the event of physical or technical incidents as soon as possible;

4) the procedure of regular testing, evaluation and assessment of the effectiveness of technical, organizational and personnel security measures for processing.⁷

Law on archival material and archival activity ("Sl. glasnik RS", N° 6/2020) which came into force on February 1, 2021, requires the undertaking of a number of measures related to the digitization of documents and their secure storage in electronic form. Among other things, the legal entity is obliged to draft an internal normative act regulating the manner of recording, protection and use of electronic documents.

Law on Electronic Invoicing ("Sl. glasnik RS", N° 44/2021 i 92/2021) whose application for public sector entities begins on May 1, 2022, and for private sector entities from January 1, 2023, requires that the legal entity or entrepreneur take all necessary measures to protect accounting documents from losses, damage and change. Also, all legal entities should ensure that the necessary technical equipment, data carriers and software used for e-invoice transactions are protected from misuse. In order for e-business to take place in accordance with applicable regulations, it is necessary that electronic invoices and accompanying accounting documentation that takes place through the Electronic invoicing system.

The structuring of an electronic invoice can be carried out in a format offered by SEF itself either through accounting software with this capability, or through an integrated system through an electronic office. Electronic office (e-office) has become an increasingly present form of software solution for receiving, filing, archiving and uploading documents. Unlike the e-office in the state bodies of the Republic of Serbia, which is a centralized service, the private sector by introducing a software solution e-office increases the efficiency and efficiency of administration and significantly reduces security risks to the ICT system.

ICT Security Act

One of the binding internal normative acts prescribed by the Law on Information Security is the ICT Security Act, the detailed content of

⁷ http://www.pravno-informacioni sistem.rs/SlGlasnikPortal/eli/ rep/sgrs/skupstina/ zakon/2018/87/13/reg, accessed 11.04.2022.



which is defined by a sublaw act which "in accordance with the law, determines protection measures, principles, manner and procedures to achieve and maintain adequate system security, as well as powers and responsibilities related to the security and resources of ICT systems of special importance ("Sl. glasnik RS", No 94/2016").

Accordingly, the ICT Security Act should contain:

- 1. Basic provisions, which define the subject of the act;
- 2. Objectives of the security act, which states the main objectives of the organization to improve the security of ICT systems;
- 3. Obligation to apply the provisions of the Security Act, which lists the persons responsible for the implementation of the Security Act, as well as the persons obliged to implement all measures imposed by the Act;
- 4. Liability of employees, where the obligation to respect the prescribed measures is regulated in more detail and indicates the existence of disciplinary liability if the measures prescribed by the Act are not implemented;
- 5. Subject of protection, where the property and resources of the operator to be protected are clearly indicated; Within the framework of the Act on ICT Security, special protection measures are regulated, namely those related to the establishment of the organizational structure, with the determined tasks and responsibilities of employees, which achieves information security management within the ICT system operator.

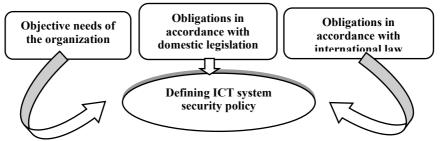
Also, it regulates the achievement of safety of remote work and the use of mobile devices, it is envisaged that persons who use the ICT system or manage the ICT system will be trained for the job they perform and fully understand their responsibilities, methods of checking candidates and employment conditions in the organization. Protection against risks arising from job changes or termination of employment of ICT operators, the method of identifying information assets and determing responsibility for their protection is regulated, data is cassified so that the level of their protection corresponds to the importance of data in accordance with the principle of risk management in accordance with article 3.

Law on Information Security, defining authorized access and preventing unauthorized access to ICT system and services provided by ICT system, regulates the manner of implementation of physical and technical protection of facilities, spaces, or zones where ICT assets and documents are located and processes data in ICT system, the manner of ensuring the correct and safe functioning of data processing facilities, prescribes the manner of concluding agreements on information transfer and electronic message exchange, prevention and response to security incidents, which includes adequate exchange of information on ICT security vulnerabilities, incidents and threats, as well as incident reporting and measures that ensure continuity of work in extraordinary circumstances.

Once adopted, the ICT Security Act must always be harmonized with all the changes in the environment and / or in the ICT system itself. The person in charge of the security of the ICT system performs the harmonization, ie verification of the Act on ICT Security with all new changes at least once a year. Verification is performed by:

- 1) checking the compliance of the ICT System Security Act, taking into account the acts to which the reference is made, with the prescribed conditions, ie checking whether the Act adequately provides for protection measures, procedures, powers and responsibilities in ICT system;
- check whether the envisaged protection measures and procedures are adequately applied in the operational work in accordance with the established authorizations and responsibilities, methods of interviews, simulations, observations, insight into the envisaged records and other documentation;
- 3) checks security weaknesses at the level of technical characteristics of ICT system components by the method of insight into selected products, solution architectures, technical configurations, technical status data, records and logs by testing the existence of known security vulnerabilities in similar environments.

A number of procedures that are necessary to apply in order to implement preventive measures in the protection of ICT systems of special importance are prescribed by a special bylaw. The simplest schematic representation of the requirements for the protection of ICT systems can be presented as follows:



Picture 1. Overview of the basic requirements for the protection of ICT systems



Security corporate culture and its importance in the modern business environment

Security corporate culture is a set of norms, values, rules of conduct and procedures related to the security system of an organization whose goal is to establish preventive activities to reduce risks and measures necessary for business continuity and disaster recovery planning.

Norms of conduct, rules and safety procedures within an organization are regulated by management, and they should be accepted and implemented by all employees. Modern business is increasingly relying on ICT systems in both the public and private sectors. It is of great importance to preserve the security of information in the modern information society, which is a kind of challenge of the 21st century. The lower the level of safety culture in an organization, the higher the risk of potential incidents and accidents. The development of a security corporate culture in every organization should, among other things, reduce the risk of various abuses, thefts, and unauthorized intrusions into business information systems. Investing in educating of employees on the proper use and security of ICT systems greatly increases the level of knowledge and awareness of employees about the real threats and risks that are synonymous with Cyber Crime. Establishing a hierarchy of responsibilities implies respecting the principle according to which rules and regulations exist in order to be respected, and any violation of them must be punished (Zorić at all, 2017, p. 255).

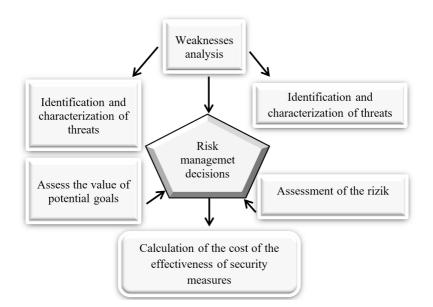
Numerous issues related to security corporate culture are complex and challenging in terms of contemporary security threats. Their classification, measurement and evaluation are essential for the business, survival and growth of any organization. The Law on Information Security stipulates that the security of ICT systems can be entrusted to third parties, precisely because the organizational and security culture poses complex socio-technical challenges. The implementation of legally prescribed measures implies the integration of all sectors in one organization, ie the coordinated work of the legal, information and economic professions, which should be guided by experienced management.

An integrative approach to the implementation of security measures in one organization provides an opportunity to largely prevent and eliminate personal prejudices about responsibility, but also to more successfully implement all legally defined obligations. Such an approach can ensure more successful risk management through the development of a Business Continuity Plan and a Disaster Recovery Plan. Implementing a security corporate culture within each organization is essential for ICT security at the state level, while the task of the police is to perform the most complex tasks aimed at preserving and improving the security system in the country (Zorić at all, 2017, p.53).

Business continuity (BC) plan and Disaster Recovery Plan

The vulnerability of business information systems has multiplied by switching to networked computer systems. Theoretically, it is possible to identify hundreds of weaknesses (points) in business information systems that may be subject to certain hazards. Taking preventive protective measures is of great importance for the continuity of business of every organization, however the absolute security of ICT systems is not possible in today's business environment and the constant multiplication and complication of security threats. It is the responsibility of ICT system operators to identify and manage all security threats. In practice, there are several ways to treat and manage risks.

One of the risk treatment approaches is described in the picture below.



Picture 2. Risk management procedure Risk management decisions are regulated as follows, by the formula:



Pr · Ra · Z

Pm

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R - degree of risk from 0.1-1.000
Pr - degree of threat from 1 to 10
Ra - degree of vulnerability of the system from 1 to 10
Z - significance of the system from 1 to 10
Pm - intensity of measures taken from 1 to 10
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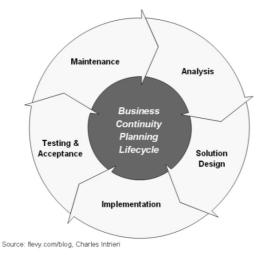
Consequences of inadequate protection of ICT systems can be categorized into the following groups:

- 1. Financial when the perpetrator commits acts in order to gain illegal property or when the perpetrator does not act to benefit himself or others, but objectively causes financial damage.
- 2. Intangible which are reflected in the unauthorized disclosure of other people's secrets, or other intentional harmful conduct.
- 3. Combined when revealing a certain secret, or violating copyright, by abusing a computer or information network, damages one's reputation, ie violates moral rights and at the same time causes specific financial damage.

The Business Continuity Plan and The Disaster Recovery Plan describe different aspects. The Business Continuity (BC) Plan is a methodology that defines how critical functions and operations of an enterprise will continue to operate in the event of unforeseen unfoarvorable circumstances. Disaster Recovery (DR) Plan is part of the BC plan and refers to the narrower aspect, the aspect of recovery of the IT system itself - data preservation, launching key applications, recovery of company infrastructure and technological components. When creating a Business Continuity (BC) Plan should be guided by the principle of criticality of individual sectors in the organization. The level of criticality of each system determines the ability of a system to continue to operate immediately after a disaster. We distinguish the following levels:

- Level 1 The element is critical for performing all essential business operations and without it it is not possible to continue doing business;
- Level 2 The element is necessary to achieve the strategic goal of the business and the company can continue to operate, although in a damaged state and reduced business volume;
- Level 3 The element is necessary to achieve the strategic goal of the business, but is not necessary in the first phase of disaster recovery.

The Business Continuity Plan takes place in several phases for all organizational units within one organization, which can be schematically shown as follows:



Picture 3. Business continuity planning lifecycle⁸

When considering the Business Continuity Plan and the Disaster Recovery Plan, one should keep in mind the factors whose impact can be crucial for the security of the ICT system, and these are internal and external factors.

The most important internal factors are: Influence of functional requirements of ICT system; Influence of organizational structure; Influence of technology development; Influence of frequency of changes of ICT system components; Influence of adopted protection policy; Adopted internal normative acts and their compliance with applicable regulations ; Risk assessment of the entire business; Personnel policy (employee training, security corporate culture, loyalty); Compliance of technical and technological solutions with market requirements; Frequency of security checks of ICT systems.

The most important *external factors* are: Amendments to legislation or non-compliance of legislation with requirements in practice; Global crises; Deficit of technical and technological resources

⁸ https://flevy.com/blog/business-continuity-planning/ accessed 14.04.2022.



Disaster recovery plan is a strategic document that should provide a kind of guarantee for the recovery of not only data, but the entire IT system and infrastructure of an organization. Forming a budget within a disaster recovery plan takes time, but it is necessary for the most effective management of the company in a crisis situation. Many international disaster recovery companies allocate between 2% and 8% of the total budget depending on the risk assessment to which they are exposed. The recommendation for organizations in the Republic of Serbia is to plan the budget for Disaster Recovery based on their previous fiscal year, ie. usual income and expenses.

Conclusion

The Republic of Serbia is a modern state aiming at the harmonization in all areas with the highest European and world standards. Harmonization in the field of telecommunications and IT can be achieved by rational, economical and efficient use of national resources (national radio-frequency spectrum), balanced development of telecommunication-information capacities and development of compatibility and interoperability of systems for their interconnection and utilization in order to obtain a unified technical and technological unit at the national and international level (Zoric, Berisa, 2019, p. 136).

During the past twenty years, huge material resources have been invested in the digitalization process, which is still ongoing and which, in addition to the legislative framework and the introduction of new technical and technological solutions, requires the introduction of special security measures, primarily ICT security. The great changes that were initiated at the beginning of the 21st century in Serbia represent the basis for further development, but also a great challenge for management that needs to provide concrete and timely answers to ICT security and bring risks and threats under control.

In modern society, information literacy is one of the conditions for employment, but in parallel, employees are increasingly required to have a high level of security culture and to act in accordance with the procedures prescribed by security management, to identify potential threats and risks and to react in accordance with its powers. The great changes that were initiated at the beginning of the 21st century in Serbia represent the basis for further development, but also a great challenge for management that needs to provide concrete and timely answers to ICT security and bring risks and threats under control. In modern society, information literacy is one of the conditions for employment, but in parallel, employees are increasingly required to have a high level of security culture and to act in accordance with the procedures prescribed by security management, to identify potential threats and risks and to react in accordance with its powers.

Acting in accordance with the newly adopted regulations, prevention of various forms of risks and threats is necessary for the legal and uninterrupted functioning of each organization. The current laws have created new obligations and responsibilities of each employee, especially responsible persons, which creates an even greater need for the introduction of security management, education of employees and raising the safety culture to a higher level.

In order for the digitalization process to be implemented as successfully as possible in the business of the Republic of Serbia, it is necessary to conduct internal training of employees in the field of information technology, digital skills, corporate security, and especially information security. The introduction of procedures to reduce the risk of incidents, theft of information or unauthorized access should not be such as to hinder or restrict employees from carrying out their business obligations, but should be set up in such a way that ICT systems function smoothly but more protected.

There is a huge demand for ICT security managers on the world labor market, which indicates a growing need for such professionals, which indicates that security threats are growing. The shortage of professionals of this kind indicates the growing need for their education, which speaks in favor of the fact that investing in the education of IT security professionals will mark the next decade.

Referece

- 1. Antonović R., Marčetić A., (2021) Bezbednosni aspekti telekomunikacionog i poštanskog saobraćaja u Republici Srbiji. Horizonti menadžmenta. II(1), 183-201.
- 2. Beriša, H., Zorić, O. (2019). Safety culture of tourism sector in the function of strengthening the security culture of citizens. TISC –



Tourism International Scientific Conference Vrnjačka Banja, 4 (1), p. 625-641.

- 3. Beriša H., Zorić O., (2018). Influence of the achieved level of development of the telecommunication-information system of the Serbian Army on the defense of the Republic of Serbia, Vojnotehnički glasnik br.1 / 2019, p. 131-158.
- 4. Breu S. (2018). Are blockchains and cybercurrencies demanding a new legislative framework. Journal Law and Digital Economy, No1, 2018, p.12-19.
- 5. Breu S., Seitz T. (2018). Legislative Regulations to Prevent Terrorism and Organized Crime from Using Cryptocurrencies and Its Effect on the Economy and Society. Forthcoming, Legal Impact on the Economy: Methods, Results, Perspectives,(eds. Vaypan, Egorova) Moscow, Lomonosov State University, p.1-12.
- 6. Nikolić Z., Matijašević M., Zorić O. (2017). Sensitively oriented operational work, Požega.
- Zorić, O., Jonev, K., Rancic, I. (2018). The new security challenges of information war. *Knowledge International Journal*, 28 (6), Vol 28 No6, p. 312-338.
- 8. Zorić O., Jorgić A., (2017). The impact of the application of infor---mation and communication technology on increasing the efficiency of management in tourism. Manager of the Balkans, p. 444-461.
- 9. Zorić O., (2017) .The Impact of ICT innovation on improving business Ministry of Education and Science of the Russian Federation Belgorod State Technological University. V.G. Shukhov Institute of Economics and Management, Belgorod, pp.7-19.

Documents:

- " Službeni glasnik RS ", No 77/2019
- " Službeni glasnik RS ", No 87/2018"
- " Službeni glasnik RS ", No 6/2020
- " Službeni glasnik RS ", No 94/2017 and 52/2021
- " Službeni glasnik RS ", No 44/2021 and 92/2021
- " Službeni glasnik RS ", No 52/2019"
- " Službeni glasnik RS ", No 94/2016
- " Službeni glasnik RS", No 35/2019

Web pages:

- 1.https://www.mei.gov.rs/srp/obuka/e-obuke/vodic-kroz-pregovoresrbije-i-evropske-unije/klasteri/klaster-3/poglavlje-10-informacionodrustvo-i-mediji, accessed 07.04.2022.
- 2.https://www.srbija.gov.rs/dokumenti/2430, accessed 06.04.2022.
- 3.http://www.gs.gov.rs/lat/strategije-vs.html, accessed 06.04.2022.



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CYBER SECURITY AND LEGAL CHALLENGES ON MANAGING ONLINE DATA

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Key Words: cyber security, cybercrime, data leak, legal framework, Albania

Abstract: This article examines cyber security challenges and legal repercussions, in the face of the sensitive data leak scandal in Albania. Since 2015 the Albanian government has been working on going digital and register sensitive citizens' data in online systems that have failed to provide a high-level of cyber security, eventually leading to data leak and a serious breach on the right of privacy and legal security for the Albanian citizens. On April 2021 the first major data leak contained personal data of Albanian citizens along with a pre-determined vote for the upcoming government election, then on December 2021 another data leak scandal hits, where personal data including wages, place of work, and car plates of Albanian citizens were open for anyone to access. Albania has ratified, among others, the European "Convention on Cybercrime", which binds Albania not only to regulate its cyber security legal framework, but to actually provide real effective tools to guarantee cyber security. This article aims to answer questions on legal responsibility for the data leak, the current legislation on cyber security, and who really is the active subject of this unlawful act, concluding in recommendations on cyber security best practices to be applied and legislation amendments.

Introduction

n December 22nd 2021, a massive data breach related to private information of citizens of Albania was leaked online through the "Whatsapp" app. It was followed later by the second major leak on December 24th 2021. This situation was named "The wage scandal" and it shook the Albanian society, on many different levels. At first, everyone wanted to get their hands on the data, then after they saw how personal the data was the rage raised. The leaked data of 630.000 citizens contained detailed information on the social security

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number, full name and father's name, job and salary, as well as car plates, birthdays and phone numbers. In Albania, this kind of data is collected and saved in different places, and it is not all registered in one, for example: you can find the job and salary information at the Tax Office, the car plates at Road Transport Office, personal data like names and birthday at Civil Status Office. Therefore, there were many questions that needed answers, and much confusion.

How was the data leaked? Where was it found? Most importantly, who leaked it and why? It became a matter of personal security, physical security, financial security, and cybersecurity. The wage scandal was the second of his nature, coming first the leaked data on April of nearly 910.000 citizens, detailing on their names, social security numbers, phone numbers, and their choice of vote for the upcoming government elections. This situation was brushed off faster than it happened, and most citizens did not think much of it. The wage scandal is what made everyone put a second thought on how their personal data is registered, handled, and protected by the government and their offices.

In the first part of this article is referred the Albanian legislative framework on cyber crime, in the light of "Convention on Cybercrime" signed on Budapest 23.11.2001 and ratified by Albania on June 20th 2002. It is discussed the legal responsibility of the subject that would leak such data, in cases there is cyber attack, and in case there is an office employee who leaked the data. Following the "Wage Scandal", the Tirana Prosecution Office registered the case and eventually arrested 4 persons, on grounds of abuse of power and corruption affairs.

The article follows with the governmental projects on digitalizing personal data, and offering online documents with electronical signatures that create the same legal effects as the original documents provided on paper signed by a public or private office. Such projects may be an effective solution to not submit to large amount of paperwork, waiting days or weeks to receive the specified document, or even waiting hours in line to hand your request over, as well as it is very helpful to citizens who don't live in the capital, but have to travel all day just to get a document.

However, this project can not be an effective solution, if it is not backed up by effective technology that guarantees protection of personal data from damage, loss, or cyber attacks. The project has been found to have failed not only as a result of not updating the cybersecurity tools, but



mostly because of lack of training the employees that access computer data and computer systems while exercising their duties of maintaining or registering new data in the online systems network.

This article concludes on legal and technical measures to be taken, as well as consider the best practices moving forward, to prevent cybercrimes of such magnitude or larger in the future.

The Albanian cyber security legal framework

Cybercrime is defined as an illegal act against any person or entity, using a computer or a computer system and its applications, thus the computer is an instrument through which are committed crimes like fraud, stealing and sharing intellectual property, trafficking child pornography, stealing person's identities, and privacy violations. Cybercrime will be sanctioned as such only when it is done intentionally, and not when it is accidental.

The intention on accessing a computer, taking information and sharing it, is the most important element of the cybercrime, that will hold the subject accountable. Cybercrime can be committed through intellectual property theft, manipulating the computer system in order to commit fraud, unauthorized access to private information and steal another person's identity, industrial spying or stealing digital materials, spreading malware and computer viruses, and distributing illegal materials like child pornography. All these actions can be committed through cyberattack, as well as authorized persons who taking advantage of their duty, commit cybercrime for different purposes.

Cybercrime should not be confused with technology of information crime, as cybercrime is a specific category of the technology of information crime. Cybercrime is committed through using the computer as the main tool, accessing materials that are saved or administered in a specific computer, or computer's system or application. While technology of information crime does not necessarily need to physically access the computer or computer system where the information is saved, but it can be committed through accessing an information network, thus can be accessed through any ordinary computer.

The European "Convention on Cybercrime" signed in Budapest on November 23rd 2001, and ratified by Albania on June 20th 2002, aims at

directing states on providing effective legal guarantees to protect citizens from cybercrimes, through effective legal framework, backed up by technology tools that secure the internet networks as well as computer systems or applications, the computer data, and to prevent illegal acts towards computer systems or data. This convention, also known as the Budapest Convention on Cybercrime, is the first international treaty of its kind, that aims to sanction crimes committed through internet networks and computer systems, focused particularly on computer fraud, hate crimes through network systems, infringements and copyrights, violations of network security, the right and duty of prosecution to search and seize computer data or applications for investigations on cybercrimes. The main objective of the Convention is international cooperation, as it sets rules of proceedings and extradition of citizens on ground of cybercrime or cyberattacks. In the Albanian legal framework on cybercrime, the illegal acts provided in the Convention, are sanctioned in the Criminal Code, and the rights and duties of prosecution for lawful intervention on computer systems or data, is also sanctioned in the Criminal Procedures Code.

The Criminal Code of Republic of Albania sanctions cybercrime attacks, as well as unauthorized access to certain data by special subjects. Among the criminal acts that this Code sanctions are the right to prosecute foreign citizens for cybercrime towards Albanian citizens, or Albanian technology of information systems, the right to prosecute publishing and sharing racist, discriminative, xenophobic, pro-genocide calls and child pornography crimes. Furthermore, there are sanctioned illegal acts like computer fraud, computer forgery, unauthorized access or excess of access on computer data, illegal wiretapping computer system, and intervention on computer data and computer system. These illegal acts in the sphere of cybercrime can be committed through accessing, changing, deleting, or removing computer data or manipulating the functions of a computer, or damaging, distorting, changing, deleting or suppressing computer data. The legal articles on cybercrime sanction aggravating circumstances if the illegal act is committed through the computer system of the army, national security, public order, civil protection, public health, or any computer system of public and national importance.

The Criminal Procedures Code of Albania provides legal procedures rules when investigating a cyber crime act. It is stated that the Court has the right to order the administer of computer data to deliver the data saved in a computer system or any other memorizing tool. The Court can also order any provider of technology of information service to deliver data on



their services, or their service subscribers.² The Court can also confiscate computer data or computer system, and it can sanction the rights to access, search and retrieve computer data or system, as well as restrict further actions on the computer to prevent data changes or loss.³ Urgent measures can be taken when there is reasonable doubts that the computer data may be lost, or computer system may be manipulated. The legal provisions in the Criminal Code of Albania focus more on cyberattacks and unauthorized access on computer networks, rather than on cybercrimes that can be committed by persons who access the network as part of their daily job.

In the light of the Convention, Albania has made further amendments to the legal provisions on cybercrime, through Law no. 2/2017 "On Cyber Security". This law aims at regulating the cooperation between subjects that operate on the field of cyber security, and it provides security measures, rights and duties of each subject. The law doesn't go any further in cyber offences, however it provides the organigram of critical infrastructure of information, the private and public subjects rights and duties in matters of providing information on illegal acts, and taking security measures like managing security of information, putting in place security policies, guaranteeing the integrity of communication networks, verifying the identity of users, etc. The Convention urges the member states to regulate their legal framework to sanction and punish computer fraud, computer forgery, child pornography through online networks, access of computer data or network by criminal organized groups, terrorist acts conducted through technology means, unauthorized access to computer data or computer systems.

The legal responsibility on the case of the "Wage Scandal".

The Prosecution of Tirana started the investigation on the scandal and possible responsible subjects, after it received several complaints from citizens. The Prosecution questions three institutions that administer online personal data information, General Directorate of Taxes, Social Security Institute, and National Agency of Information Society. The questioning and investigation was focused on the experts of information techno-

² Criminal Procedure Code of Republic of Albania, article 191/a

³ Criminal Procedure Code of Republic of Albania, article 208/a

logy at these institutions, as well as other employees, with the necessary access to enter the specific computer data that was shared through Whatsapp following the scandal on December 22nd and December 24th. On January 7th 2022 was reported that the Prosecution had arrested 4 citizens that were believed to have shared the data. 2 of them, A.A and E.Q were experts of information technology at the General Directory of Taxes, who accessed and downloaded the data through different periods of time, and they sold it for around 247 Euros, through Wetransfer app to the other 2 suspects K.S and E.I, who worked as legal bailiffs.

One of the experts, E.Q decided to cooperate with justice by sharing every detail and action that was undertaken to access and share the computer data. The computer data was downloaded and shared by the expert E.Q to the other expert A.A in 6 different occasions, through September 2020 to April 2021. A.A sold it to K.S, who sold it to E.I. The Prosecution decided to proceed the experts E.Q and A.A on article "Abuse of Power", and the 2 legal bailiffs on "Active corruption of public functionaries" and "Passive corruption on private sector". The Court imposed the security measure "House Arrest" for K.S, E.I and A.A, while cooperator of justice E.Q was put under security measure "Obligation to appear". There is an ongoing investigation, and the case is still to be brought in front of the Court.

The question that rises is how can a cybercrime act, that has violated the fundamental human rights, like the right of a private life, and who as posed danger to physical and material security of the citizens, can be prosecuted on grounds of "Abuse of Power"? "Abuse of Power" article 248 of the Criminal Code of Republic of Albania, sanctions intentional acting or lack of acting in opposition to legal provisions, that is unrightful exercise of duty by a person in a public position, when it has brought him or others, material or non-material unrightful advantages, or has violated legal interest of state, citizens or legal subjects. This article is applied, only when no other article can be applied, and it sanctions imprisonment up to 7 years of jail time.

In the Albanian legal framework, is there another article, more specific to the illegal deed? The facts of the "Wage Scandal" case have placed a reasonable doubt on 4 subjects, 2 of each are persons who work in a public office, and who had access to the computer data as part of their duties and office function. This fact makes them "special subjects" and that's the reason they have committed "Abuse of Power", however, the act they



committed is related to cybercrime, as well as gaining material advantage because of their illegal actions.

The "Computer fraud"⁴ as accessing, changing, deleting, or removing computer data or manipulating the functions of a computer system, in order to gain a material advantage for self or others, or to diminish someone's wealth. In order to accomplish this illegal act, it is sanctioned that the subject must intentionally access computer system to gain a material advantage. If the cybercrime act has not created a material advantage, then the crime will not be prosecuted as Computer Fraud. In the "Wage Scandal" case, the subjects that committed the crime can not be prosecuted under this article, even though they did gain a material advantage. This particular provision sanctions manipulating the computer system, through accessing and making changes in the computer system, though the data is not downloaded from the system, which is not proved by the facts on this case.

Another cybercrime in the Criminal Code of Republic of Albania is "Computer forgery"⁵ which sanctions the same illegal acts as "Computer fraud", but the goal is different, because it aims to create false narrative of the data and making it seem authentic. In our case, the subjects can not be prosecuted under this article because they did not change any computer data. "Unauthorized access to computer"⁶ sanctions unauthorized access, or excess of authorized access in a computer system, or part of it, through invasion of security measures, is punishable by fine or imprisonment up to 3 years of jail time. If this illegal act is committed through the computer system of the army, national security, public order, civil protection, public health, or any computer system of public importance, it is punishable by longer imprisonment time. The experts can not be held accountable on this article either, though they have access in the computer system, they have not done so by invading security measures, as they already had the right and the means to access the data.

"Illegal wiretapping computer data"⁷ sanctions illegal wiretapping through different tools of private information, or computer data, in a computer

⁴ Criminal Code of Republic of Albania, article 143/b

⁵ Criminal Code of Republic of Albania, article 186/a

⁶ Criminal Code of Republic of Albania, article 192/b

⁷ Criminal Code of Republic of Albania, article 293/a

system or through electromagnetic emissions from a computer system. It also sanctions aggravating circumstances if accessed a computer system of public and national importance. "Intervention in computer data"⁸ sanctions the damaging, distorting, changing, deleting or suppressing computer data, and it previses aggravating circumstances as well. "Intervention in computer system"⁹ sanctions the creation of serious and unauthorized blockages in order to damage the function of a computer system, through entering, damaging, distorting, changing, deleting, suppressing the data, and it previses aggravating circumstances too. "Misuse of technology tools"¹⁰ sanctions the production, retention, selling, using, sharing a technology tool that enables accessing a computer system for illegal purposes. The "Wage Scandal" subjects can not be held accountable on these articles because they have not illegally wiretapped the computer, or intervene in the computer data or system to change in any way its data.

As analyzed above, the objects and objective of the criminal acts, and the manners or tools to accomplish certain cybercrime acts were specified, and made the difference for legal accountability on different grounds. However, not one of the legal provisions on cybercrime has sanctioned the special subject acts or fault to act; special subject being the person who has rightful access to computer data or system because of his duty and function. The provisions imply a general subject, as noticed in the title of each article as well as the acts describes, whereof each cybercrime is committed through unauthorized access or excess of access. Also, these provisions do not sanction unauthorized sharing of computer data or system data, after accessing it.

If the subject that accessed and shared the "Wage Scandal" data would be an ordinary subject, who did not have rightful access to the computer data or system, while all the other factors remain the same, then we would have a different legal responsibility is placed upon them. They could be held accountable to "Unauthorized access to computer", taking into account not only the breach of security, but also the aggravating circumstances of accessing a computer system of public and national importance, thus risking imprisonment of 3 years up to 10 years jail time.

⁸ Criminal Code of Republic of Albania, article 293/b

⁹ Criminal Code of Republic of Albania, article 293/c

¹⁰ Criminal Code of Republic of Albania, article 293/ç



On another note, there are legal provisions in place that ensure the protection of personal data or other facts that have been accessed or there is knowledge of, because of the special function of the person that comes to know these facts or personal data. These can be lawyers (Alban, Çabej, 2013, 204), doctors, and of course the persons who have a rightful access to certain data because of the type of function they exercise. These specific subjects have the right and at the same time the duty, to not share the personal information any under circumstances, except for when asked by the Court, and under specified circumstances. Therefore, the fact that the personal data sharing is not implied on and when accessing computer data or computer systems, is problematic, and it should be regulated in the cybersecurity legal provisions.

The Convention specifies illegal access as criminal offenses through accessing the whole or part of the computer system without legal right, and obtaining data found in the accessed computer system. It also requires legal provisions to be put on place on cases where the data is transmitted in any way or through any tool. These provisions have not been put to place, especially the transmitting of the data obtained in a computer system. If there was to be sanctioned the transmission of computer data, then in the case of "Wage Scandal" the subjects would hold responsibility on cybercrime, instead of abuse of power. In fact, even if the cybercrime article would not mention the special subject, it would still be applied and take precedence in this case, because the fact of cybercrime and violations it brings, is more dangerous than the abuse of power. Moreover, the abuse of power article can only be applied if any other criminal provision can not be applied. This provision of data transmission should be amended in the legal framework of cybercrime, along with other measures to be taken. In this way, the law can fulfill its duty of preventing any illegal situation that comes from general and special subjects of law.

Therefore, the experts E.Q and A.A., have not committed cybercrime in terms of the cybercrime legal provisions of the Criminal Code, and they can only be held accountable for "Abuse of Power", that includes gaining material advantages which they did. The private data, though private, is not classified as a state secret, so sharing the data can not be protected by legal provisions of guaranteeing the safety of secret documents by employees who have rightful access to them.

The Albanian government project on digitalizing personal data

The Albanian government has aimed to apply projects regarding technology of information on creating online databases where the personal data of citizens, and public services could be accessed through tools of technology, online networks, or computer systems. The digitalizing data objectives are transparent and open governance, effective management and cooperation between all levels and sectors of government. It also aims to bring sustainable growth by ensuring equality between people, and ease of access for anyone.

In 2013 the government created the "E-Albania"¹¹ portal in accordance to Council of Ministers Decision No. 734 date 28.08.2013 "Creating the uni-que system of registration, authentication and identification of users that partake in public services and electronic systems". The E-Albania portal is a technology of information tool, to be used as an online portal, where any Albanian citizen can access and get online electronic services from public institutions in Albania. This portal access the e-government portal where public institutions cooperate and exchange data, in order to offer it to the citizen that request the document through E-Albania. Any Albanian citizen, who holds an Albanian Identification Number, or an Albanian passport, can use the E-Albania portal, through registering with his per-sonal identification number, full legal name, and birthday. Once registe-red, the citizen can access and request to download his own licenses, pa-tents, authorization, birth and family certificates, social contributions, car warranties, and almost 150 other services. E-Albania portal was effec-tively used during the Covid pandemic, where any citizen could get per-mission to leave home past the curfew, for work or health purposes.

The E-Albania portal is administered by National Agency of Information Society. Regarding personal data rights, it is provided that the personal data is saved in the portal only if the user permits it, and in relation to the criteria of using the portal and its services. In this matter, the user complies to personal data being saved and administered by the portal system, and every request for documents will be possible through registering the identification number. Regarding the technology of information tools, and 'cookies' used on the portal, it is provided that the portal will register the

¹¹ www.e-Albania.com



IP address of the user, identify the web-browser of the user, url details, identification number and phone number, and full legal name. any citizen has the right to request from the National Agency of Information Society to add, change, delete personal data, and they also have the right to appeal decisions taken by the agency, or any violations of personal data rights.¹²

The National Authority for Electronic Certification and Cyber Security on 2018 requested an overall assessment of cyber security in Albania. With the assistance of the World Bank, the Global Center for Cyber Security Capacities conducted an assessment on the Maturity of Cyber Security in Albania,¹³ to enable and understand the level of our country, as well as to take measures for investments in cyber security capacities. During the period 3-4 September 2018, a series of roundtables were held with various actors from academics, justice, police, representatives and heads of technology and information departments, representatives of public entities, owners of critical infrastructure, policy makers, leaders of Information Technology in government and the private sector, such as telecommunications or banks. The assessment focused on several dimensions, ranging from cyber security strategy and policies to cyber culture and society, education, training and skills for cyber security, as well as the legal and regulatory framework or organizational standards and technologies. In the report, the training and skills on cybersecurity is still considered in its infancy. Awareness of personal data protection and concern for the security of this data is generally low. Users and actors within the private and public sectors lack knowledge of how personal information is managed online. Participants expressed that personal information is often shared through social media, especially by new users. Lack of trust in privacy and data protection is one of the biggest barriers to greater use of online services. The report found that protocols like Secure Sockets Laver (SSL) and/or Transport Layer Security (TLS) were applied on government sites, including E-Albania.¹⁴

Cyber security and cyber defense are considered key in Albania's agenda, related to the institutions. Their situation is considered at a stage between the conception of the legal framework and their practical implementation. As part of NATO, Albania has been obliged to implement several strate-

¹² Law no. 9887 date 10.03.2008 "On personal data protection", article 16

¹³ Report on Cyber Security Maturity Level in Albania, 2018

¹⁴ Report on Cyber Security Maturity Level in Albania, 2018, page 70

gies and to conceive a kind of protection of this nature, according to the principles required by the treaty. The Cyber Security Strategy has four main objectives, related to the implementation of organizational and technical measures of cyber security systems, the development of levels and skills of cyber security specialists, the increase of cooperation with structures at the national level and within NATO.

The government has continued to increase the provision of e-services on dedicated sites, but there is a general perception that Albanians are unfamiliar with this and lack confidence in the electronic services provided. Thus, during this time, e-albania, tax, e-procurement have been offered, but the attitude of citizens is somewhat rigid towards them, given certain events that occur with the internet. Private companies have launched the application towards e-cloud, but this is perceived even more difficult, as the concept is abstract and not something that can be touched or seen. E-commerce still remains at an early stage and suffers from the issue of trust.

Online incident reporting mechanisms exist, but are still in the second stage of development out of a total of five. Citizens can report them to the State Police, by appearing there themselves or through an online platform. The police, after receiving the cases, share them with other responsible institutions. Despite this, the report concluded that the investigation of cyber security crimes by the State Police is limited by insufficient resources and lack of hardware equipment to cover part of the incidents at the national level. Therefore care should be taken to enable sufficient resources and to continue with the training of the employees of the dedicated unit.

On October 24th 2021, the High Audit Council published the report conducted during 2017-2020 on technology of information uses, and the National Agency of Information Society procedures related to cyber security. It was found that almost 83 public institutions were still on the process of digitalizing their documents, with the risk of not being able to fully protect the digitalized data, as the agency is the only institution to administer the technology of information tools and hardware-s that secure online data. The agency had not taken precautions or effective steps to identify the cybersecurity incidents, therefore to take measures to secure and prevent further cyber incidents. Another problem is the lack of employee training about the hardware platforms, software, and technology of information policies and practices. This makes it much easier, not only to not be able to immediately identify an incident or



cybersecurity threat, but it also poses the possibility that the employee can make a mistake, and cause a cyber issue. 15

It is understood by these reports, that the main issue of cybersecurity breach, is not only the cooperation of public institutions and the use of best technology tools to prevent cyberattacks, but the most risky factor is the lack of training of employees and public in general about cybersecurity, cybercrimes, and when someone can easily commit a cybercrime. As in our case, it was the person who had access to the computer data, who easily downloaded and shared the data.

Guaranteeing cybersecurity

After the "Wage Scandal", the first act of the Albanian government was to make changes on accessing the online computer data and systems of public institutions, and notifying the citizen when his data was accessed through the E-Albania portal. For example, if an employee of the municipality with the right to access personal data like personal certificate, would download this data, the system immediately notifies the citizen whose data was accessed by sending a message on his e-Albania account. The notification contains details of what type of personal data was accessed, when exactly was it accessed showing the date and time, the name and place of work of the employee who accessed it.

Secondly, the Albanian government signed a treaty with "Jones International Group" to guarantee and strengthen the cyber security of information infrastructure in Albania. The objectives of this treaty include cyber evaluation for governmental agencies and develop plans to further secure the cyber systems, assisting the Albanian government to develop, apply and operate the National Centre of Cyber Security Operations for the evolving technology of information and supply monitoring the cyber security threats on government agencies networks, training the employees and other persons that would work on the computer data or computer systems as part of the government agencies, as well as supporting the cyber security in Albania in any other direction, and where it is needed.

¹⁵ The High Audit Council, October 9th 2021, Performance Audit Report, page 57

The treaty with "Jones International Group" was ratified on January 1st 2022, but it has yet to be fully applied through practical measures and tools. Meanwhile, there are other precautions and steps that can be taken by other structures of the society, that share knowledge on the legal matters, can help educate the general public and employees, as well as provide tools and practices on fighting cybercrimes, and guaranteeing cybersecurity. Awareness and training can be accomplished through educating the employees of public and private sectors on legal matters regarding cybersecurity, by organizing trainings known as street law conducted by legal clinics (Alban, Lulzim, 2017), or other faculties of law and justice system, that have the capacity to train on cybercrime.

In the case of "Wage Scandal", the expert E.Q claimed that she wanted to help A.A. for a personal project he had, so she accessed the data and transmitted it to A.A. It is not made public the fact if A.A. had access to the same data or not, but the reason of accessing and downloading the data begs the question if it is a claim to "escape" justice, or it happened because she lacked understanding of the seriousness of her actions. The fact is that cybercrimes level in Albania has risen lately, mainly through using social media platforms and technology tools to spy on others accounts, or get information on their location. The fact is also concerning because it sheds light on the lack of training and auditing the employees of public sector who handle public data, and also educating the general public on cybercrimes and all the ways in which these crimes are committed. The Audit Report from High Council of State, and other international reports has shown that the lack of training on cybercrimes is concerning. Even though the technology of information has been evolving for a decade, only for the last 8 years has the Albanian general public be asked to administer their documents through online governmental platform. Therefore, it is necessary to train the employees, no matter their education background or their age, on the cybersecurity developments, and on the illegal activities that they would be responsible for, under the cybercrime legal framework.

Recommendations

The main objective of law is to regulate, protect, guarantee and prevent violations of legal relationships. In this case, the Albanian legal framework could amend its provisions in order to sanction legal circumstances where the special subject illegally shares computer data which he rightfu-



lly accessed. Cybersecurity is a critical component of the transition to a more resilient e-government. Inadequate training, accessibility, and e-illiteracy are the most common challenges to e-government resilience. There is a need for integrity, privacy, and confidentiality, that can be defined through the respective cybersecurity policies by adopting a co - ordinated set of laws at multilateral level against the abuse of technology for criminal purposes, incorporating sufficient technical expertise in detection and response to cyber-attacks, and to guarantee a culture of trust and security, and creating minimum security standards and certification. To maintain security and applicability on the route to sustainable development, the digitalization must be carefully planned and updated on a regular basis. The government should engage with other public and private institutions, the commercial sector, and civil society to guarantee secure measures in digital public operations such as E-Albania services.

Cybersecurity measures to be applied would include, but not limited to:

- •Promote awareness and implementation of cybersecurity standards
- •Enhance collaboration in online network infrastructure between public and private sectors
- •A catalogue of best cybersecurity practices related to software platforms, applications, internet infrastructure used in public and private sector
- •Regular assessments of technology of information tools and software-s that secure and prevent cyberattacks
- •Regular assessments and training on cybersecurity of employees and other persons who have rightful access to computer data or a computer system because of their duty and function
- •Regularly identify potential failure points especially on online government portals like e-Albania, and others
- •Develop systems that ease the immediate finding of actions that pose a threat to secure cyber information

Refference

1. Alban, K., Lulzim, H. (2017) Evolimi i te drejtave te njeriut, International Scientific Conference, Developments and New Approaches in Public Law, Proceedings Book 17, November 2017, ISBN: 978-9928-131-73-7

- Alban, K., Çabej, L., (2013) Clinical Education part of Legal Education, Internation Journal Science 2013, Vol 4, ISSN 2225-7063, page 204-205
- 3. Criminal Procedure Code of Republic of Albania, article 191/a
- 4. Criminal Procedure Code of Republic of Albania, article 208/a
- 5. Law no. 9887 date 10.03.2008 "On personal data protection", article 16
- 6. Report on Cyber Security Maturity Level in Albania, 2018
- 7. The High Audit Council, October 9th 2021, Performance Audit Report,
- 8. United Nations E-Government Survey 2018, page 25



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CYBERCRIME AND MODERN INFORMATION TECHNOLOGY

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Key Words: Information Technology, Internet, Attacks, Cybercrime

Abstract: Information technology is the development, research, implementation, design and management of information systems, especially software and computer hardware support. It is used by computers to transmit, process, store and protect data. This is the general name for each technology which helps in working with information. Information technology professionals perform a wide range of activities from system installation to designing complex computer networks and information databases. Information technology is a combination of computers and information management through computers. It helps to transfer knowledge and education.

Defense

ontrol theory is the study of how to make a series of decisions to most efficiently steer, or control, a system toward a stated goal while there is some uncertainty about the system's evolution (Miehling et al., 2019). Maintaining a system's output at a desired set-point in the presence of external disturbances, e.g., an aircraft autopilot system responsible for maintaining speed and altitude in varying weather conditions, or tracking a path or trajectory subject to measurement noise and estimation errors, e.g., an autonomous vehicle's road following algorithm tasked with translating noisy measurements from multiple sensors, are some examples of problems addressed by control theory. The information available for making decisions might take several forms depending on the control environment. The current status of the system is readily observable in some contexts and can be used in decision-making. In others, the uncertainty stems not only from the control action's effect on the

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system's evolution, but also from the difficulty to precisely detect the system's condition, necessitating control decisions based on noisy observations or measurements. In either case, sequential control decisions must be based on new, potentially noisy data that emerges as the problem develops. The nature of this feedback loop – the influence of control decisions on the observable output and the dependence of revealed information on the choice of subsequent control actions – is the precise topic that control theory addresses, with the end goal of prescribing optimal control actions, that is, those that achieve the goal at the lowest operational cost.

From both a modeling and a computational standpoint, the defense problem poses numerous challenges. The issue is essentially dynamic, evolving over time as a result of the defender's actions and (possibly unobservable) cyber-environmental occurrences. As the situation progresses, more information is provided to the defender, all of which must be considered in the defender's decision-making process. The threat model, which describes the cyber environment, must be sufficiently expressive to represent the complex nature of attacks. Attacks are progressive, comprising of numerous phases and including the combination of many vulnerabilities across multiple network parts, as well as persistent, with attackers attempting to achieve their goal through various attack pathways until they succeed. The defender must be cognizant of the contradictory implications of its defense decisions on the system when attempting to interfere with or reduce attacks. It must make an inescapable tradeoff between security and availability; making system modifications that reduce the likelihood of an attack succeeding interferes with the system's normal functionality and usability by trusted users. Aside from modeling difficulties, the defense problem has major computational difficulties. Cyber attacks target big-scale systems that are made up of numerous hosts that each include a diverse set of software and are managed by a large number of users. Thinking about all of the different ways to attack such systems typically results in a combinatorial explosion of complexity. As a result, scalable algorithms are required, which frequently necessitate approximations or unique solution strategies (such as sampling methods or system decompositions). It's also important to make sure that algorithms can match the system's rigorous timing requirements by prescribing defense judgments fast. Defense decisions have a finite window of effectiveness, and prescribing one too late can be as ineffectual as taking none at all.



Incidents

Given the global nature of modern remote information systems, international cooperation undoubtedly plays an important role in ensuring cybersecurity and combating cybercrime (Radoniewicz, 2022). Therefore, since the superstate of remote information, efforts have been made at the international level to create a legal framework for intergovernmental cooperation aimed at ensuring the security of computer data and information systems. Emphasize that international cooperation is not only done at the national level, but that private organizations, representatives of the IT sector, especially Internet service providers, need to be involved so that all cybersecurity-oriented measures are effective is needed.

Computer and network security incidents occur (Rajnović, 2011). They occur every minute of every day, somewhere in the world. Many are overlooked. Others can be caught by automated surveillance solutions, direct contact, or even total luck.

- •Direct network intrusion
- •Brute force authentication attack
- •Denial-of-service attack
- •Lost employee laptop
- •Lost backup tapes
- •Exposed confidential or proprietary information
- •Extortion
- •Attacks through portable media such as USB thumb drives
- •Spyware
- •Keyloggers
- •Wireless sniffing

First and foremost, you need to identify the owner of the incident. The owner of an incident, or "handler" for short, is responsible for coordinating, directing, and making decisions in resolving an incident. The incident handler must be responsible for the entire incident. This does not mean that they need to perform superhuman acts or make all decisions, but they are responsible for ensuring that all aspects of the incident are properly addressed by the right resources, there is. To save valuable time during an incident, you need to identify handlers quickly and efficiently. Time spent identifying who will take the lead is time spent not actually dealing with the incident.

Attacks

Rapid growth in the digital environment has created gaps in organizations' cybersecurity awareness, making it easy for threat actors, such as nation-states and cybercriminals, to exploit widely known vulnerabilities (Falco et al., 2022). Consequently, cyber risk management, which is the process of preventing cyberattacks and maximizing organizational resilience to them, has developed into an essential requirement for senior executives and key leaders responsible for operations.

The interconnectivity of the numerous parties relying on the internet to achieve various purposes has created a diverse cyber threat landscape. All entities, whether individuals, privately owned companies, or governmental organizations, must deal with the constant threat of cyberattacks. While many organizations believe that implementing robust cybersecurity measures is enough to protect their information systems from hackers, it is inevitable that all beneficiaries of the internet will have to confront cyberattacks at some point.

Cyber risk management is broken. Today we live in a world of cyber "haves" and "have-nots." The "haves" spend millions of dollars on the latest technical defenses to improve the perception of their organization's security. Most of these defenses are Band-Aids. Those organizations in the "have-not" category wait for a disaster and then try to pick up the pieces. Neither approach is sustainable. You need a strategy and you need to take action.

The traditional approach to cybersecurity generally focuses on designing a defensive perimeter and network that attempt to prevent valuable assets from being hacked. This approach is based on an informed understanding of potential cyber threats to the organization. Although preventative approaches are crucial for securing assets from conventional methods of attack, stopping there results in an organization that has not truly prepared for the impact of a successful attack.

Rather than pursuing a simplistic security-focused strategy, modern organizations take a risk management approach to cyber. Risk management is the



process of identifying risk, assessing risk, and taking steps to reduce risk to an acceptable level. Cyber risk management strategies foster cyber strength by considering critical business processes and allocating more resources to risk resilience, while also emphasizing the implementation of preventative technical cybersecurity mechanisms to protect assets from cyber threats.

Cybercrime

Computer crimes are one form of criminal behavior that appears as a type of crime, or the computer is used as a type of crime, or the computer is used as a criminal means or purpose. (Franjič, 2020). Computer crimes are also illegal infringement of the property that computer data was intentionally changed (manipulated by computer), destroyed (blocked computer), or in combination with hardware (Theft).

Computer crimes are an unavoidable positive participant in the exponential development of information or computer technology, especially in digitized electronic networks in all living areas (Franjić et al., 2017). A well-known computer that performs highly digitized data, a major tool for illegal activity, or the purpose of the execution of its execution, and the invisible computer that performs a specific activity in the removal time. It is different from the form. It was hardly harmful. Information Society's development has adopted more complex forms and expanding "traditional" criminal areas. Computer crime today is not a unique phenomenon with clear signs of its own appearance, a particular profile of a criminal, and the way it is carried out. This adds a new dimension to it, making it much more dangerous, and the consequences are more damaging and widespread. Therefore, modern society needs to protect itself by all available methods and means, thereby legal protection is certainly one of the most important.

The concept of cybercrime can be interpreted in different ways (Kosiński, 2021). Cybercrime is understandable in the narrow sense (computer crime) and includes illegal acts carried out by electronic activities aimed at the security of computer systems and the data processed therein. Cybercrime can also be understood in a broader sense (computer-related crimes)-by computer systems or networks, including crimes such as illegal possession, provision, or distribution of information through computer systems or networks. Related illegal acts. Cybercrime in this sense includes economic crimes such as fraud, counterfeiting, industrial espionage,

sabotage, and blackmail, crimes against computer piracy and other intellectual property and privacy infringements, and the promotion of illegal and harmful content. It extends to prostitution and other crimes against the public. To dignity and organized crime. The latter frontier is also characterized by cyberterrorism, including attacks on electronic warfare against public security, life, and critical infrastructure. Similar to the concept of cybercrime, in the concept of cyberterrorism, the prefix "cyber" involves the use of cyberspace for new information technology or traditional activities (such as planning, communications, intelligence, logistic and financial activities). Refers to the consignment of a crime.

Cybercrime is generally accepted as one of the threats involving fraudulent access, acquisition, tampering, or loss of integrity, confidentiality, or availability to data, applications, or computer systems... Cyber threats also include cyber terrorism, cyber spying, and cyber warfare. Cyber threats are considered in the context of cyber security, which is understood as the security of globally connected information systems (such as Internet infrastructure), communication networks, computer systems, and industrial control systems. Cybersecurity breaches are used in a variety of criminal activities that cause serious and serious damage to organizations, businesses and individuals. It cannot be overlooked that this is an important issue in the context of internal security and thus national security.

Cybercrime is a broad term for violations of national and international law in cyberspace (Mjølsnes, 2012). By this definition, cyberspace represents a new area of digital network infrastructure that allows people to connect globally and expand their social and organizational operations and businesses. Most of us are trying to conquer and take advantage of this new land of opportunity and happiness, where domestic and international law has yet to be applied. Many cyberspace romans behave like the real world, but some want to violate domestic law. And some act like archetypal robbers, outlaws, and snake oil traders who can be called cybercriminals. Local sheriffs struggle to track down the perpetrator while remaining within his or her power and jurisdiction.

The issue of attacks and disruptions to network systems has escalated and will continue to do so. Information servers for businesses and organizations are being attacked for competitive or political reasons. A country's critical information infrastructure can be attacked and disrupted. Many investigations of networked attacks face cross-border, cross-jurisdiction investigation challenges. This is a cybersecurity problem.



It is hard to imagine our world without the Internet (Alexandrou, 2022). Television and radio may shorten the distances between us or let us imagine the world from afar, but the Internet has changed our planet into a virtual global village with no boundaries.

New technologies and the Internet have transformed the way we communicate, how we access information, how we form opinions, and how we find and enjoy entertainment. It has changed the shopping experience and has altered the face of crime. While there are drawbacks to the technocentric world of the 21st century, the Internet is generally seen as a powerful space that we would never choose to give up.

As the Internet and computing technologies continue to evolve, criminals have found ways to use these technologies to commit unlawful acts, giving rise to massive cybercriminal activity. Cybercrime, a relatively new type of crime, is committed using a computing device and the Internet. While in the 20thcentury oil was our most valuable commodity, today, the most precious commodity is data, and cybercriminals are masters at finding and using our data while abusing our right to privacy. Cybercrimes encompass a broad category of offenses. One attraction to cybercrime is that it is so easy to be anonymous in cyberspace. The borderless nature of the Internet, and its lack of territorial jurisdiction enable the cybercriminal to pursue personal gain and rarely get caught.

The most common motivations for cybercrime are:

- •Financial gain: skimming bankcard numbers and PINs, payment system fraud (PayPal, Bitcoin), identity theft, and use of tools like malware, ransomware, and phishing
- •Espionage or spying: accessing information/data from political entities, the military, government, industries, manufacturers, and corporations
- •Ideology: hacktivism, disagreement over politics or values, cyberterrorism, cyber warfare, or the desire to evoke fear
- •Harassment, revenge, and fun: seeking of revenge, fun, fame, thrillseeking, recognition, or to control, manipulate, bully, or stalk.

Where the Internet and its related technologies have been fundamental in reshaping global societies and economies, they have changed the criminal landscape fundamentally (Lukings et al, 2022). Online marketplaces, anonymous forums, and Internet-connected devices provide the same opportunities and benefits for serious and organized criminal networks as they do for legitimate businesses. Through new and evolving information technologies, criminals are expanding their reach to commit entirely new crimes and old crimes in new and creative ways.

The vast popularity and ever-increasing interconnectedness of our mobile devices have made them an especially attractive target for criminal exploitation, with malware increasingly being developed to target vulnerabilities found within our mobile operating systems. Mobile device features, including text messaging and downloadable applications, can be used to deploy malware and gain unauthorized remote access to those same mobile platforms. This can be done for a variety of illicit purposes including, but not at all limited to: interception or theft of personal data; obtaining GPS coordinates; cyber-surveillance; revenge porn; and cyberstalking.

Widespread months-long lockdowns of cities around the world during the COVID-19 pandemic have shown that we are more dependent on our ties with technology than ever before. With this reliance must come an increase in legal protective measures to prevent malicious actors from causing widespread harm to individuals, businesses, organizations, and governments.

Widely available, ready-made malware and other hacking tools provide both professional and amateur criminals with new and simplified ways to steal information and financially impact businesses and individuals. Criminal activities in cyberspace are complex and often transnational, where potential evidence can be transient or spread across multiple legal jurisdictions. As so many facets of our daily lives move to online and cloud-based forums, such online criminal activity should be a growing concern for everyone. Addressing these challenges requires both domestic and international cooperation and legislative engagement with public and private sector organizations.

Cybercrime refers to the act of breaking the law online (Steckman, 2021). It occurs when people decide to violate the law, usually for monetary or other personal gain. It is a fast-growing criminal industry because it can be extremely profitable and has natural, built-in barriers to being caught due to the technologies employed. According to the International Criminal Police Organization (INTERPOL), "more and more criminals are exploiting the speed, convenience and anonymity of the Internet to commit a diverse



range of criminal activities that know no border, either physical or virtual, cause serious harm and pose very real threats to victims worldwide."

Law enforcement agencies are aware of multiple types of cybercrime. These usually fall into one of two categories: high-tech crime and cybercrime. High-tech crimes occur when a criminal's goal is to destroy or destroy computer hardware or software. The creation of malicious viruses designed to spread over the Internet and prevent the booting of computer systems is an example of a high-tech crime. Cybercrime refers to adapting crimes that are normally committed in cyberspace offline, or inventing new ways or means to steal information such as personal identities and financial information over the Internet. The boundaries between these two categories are not always clear. For example, hacking is a cybercrime. Hackers trying to rewrite their code to change their computer software are committing high-tech crimes. If this code rewrites the software to send bank information to a hacker, steal money from an account, or create a fraudulent credit card based on that account, the hacker is committing a cybercrime.

The rapid development of new technologies makes it easier for criminals to circumvent the law, and it is just as difficult to enact a law that covers all aspects of cybercrime. Another concern is that while cybercrime is relatively new and often evolving, lawmakers do not always have a solid understanding of technology. Without a basic, sometimes advanced understanding of how the Internet or Internet-enabled technologies work, it is difficult to assess how they are used in violation of the law.

Internet Jurisdiction

It is no exaggeration to say that the issue of Internet jurisdiction is currently receiving unprecedented attention (Svantesson, 2017). In fact, Internet jurisdiction is currently one of the most important and most discussed topics in Internet law and related disciplines. The progress of the actual solution is relatively small, so this can continue for some time, even if you feel tired that the number of publications on "hot" topics usually slows down after a while.

At you may be asked what the problem is. This is probably a poorly designed question, as you are actually facing some type of problem in the area of internet jurisdiction. Perhaps the closest answer to such an overly

broad question is: The problem with Internet jurisdiction is the difficulty of finding the right balance between the various endangered interests and expressing that balance sufficiently clearly. Accurate to provide appropriate guidance to those who are expected to act according to the expressed balance. This issue clarifies almost all possible legal issues, as evidenced by those who are legally trained or who actually have a sufficient level of so-called "common sense".

It may be. Even this problem statement points to multiple problems, as if that were not enough. Therefore, we can already draw some interesting conclusions.

First of all, the issue of internet jurisdiction is not unique. Addressing these issues requires a balance of interests, as is the case with all legal issues. Second, when it comes to law, the cause of the problem has always been the difficulty of verbally expressing the balance of interests we are trying to achieve. Finally, here is clear evidence of the first claim that there is a set of them, not a single issue of Internet law. Moreover, this final observation definitely needs to influence how we approach the realm of cyber justice and how we work towards solutions.

Cyberspace is increasingly affecting the rights of individuals and the activities of businesses around the world (Feraci, 2019). The Internet is not only an incredibly powerful means of communication, but also the heart of most social relationships and commerce, for storing and managing digital content of all kinds, both professional and individual. It is the main means. Therefore, the possibility of human rights violations is very high. It is also undeniable that the number (and complexity) of cross-border conflicts in the digital environment is increasing each year, raising various regulatory concerns. This trend has led to an increase in the exploitation of intangible rights around the world. Such developments are of particular importance regarding the protection of intellectual property rights (IPRs) or privacy and publicity rights.

Legal reflection on online behavior begins with the general assumption that the Internet creates a temporary space (cyberspace) that is essentially borderless, geographically independent, and insignificant. increase. In fact, it is widely recognized that every activity performed in a digital environment is ubiquitous. The same content published online (photos, audio, video files, identity and privacy personal information, regardless of format) may be used (at the same time) anywhere in the world. Sending it



is to access the website and the type of electronic device connected to the internet. Therefore, the virtual and global aspects of online disputes challenge traditional legal categories and are new legal solutions, or at least existing ones designed for similar situations that occur in the physical environment. Requires proper adaptation of the rules. At the same time, some new digital technology makes it possible to reduce the nature of the internet border.

In particular, today's so-called geographic position technology enables geographical location of high-precision internet users with GPS, such as smartphones and tablet computers and WiFi hotspots and geographical technology of server side.

One of the most important discussions addressed by Internet governance, such conflict ("unclear) jurisdiction or" conflict Responsible for how to limit the government court lawsuit. Jurisdiction ") The interaction between the Internet and the jurisdiction is" Internet distributed fundamental "that promotes legal uncertainty Considering infrastructure, it brings legal inconsistencies between national authorities and and online actors, given the "Internet's decentralised underlying infrastructure", thus fostering legal uncertainty.

APT

Computers are an integral part of our society (Vert et al., 2018). Computer security efforts are engaged in an asymmetrical struggle with an enemy consisting of thousands of independent interconnected actors on a vast and incredible number of fronts. Given the asymmetry, it is inefficient and impractical for analysts to manually investigate new attacks. This is true for common cases of known attacks, but especially for Advanced Persistent Threats (APTs). Advanced Persistent Threats are cybercrimes that occur when unauthorized persons access the network and stay on the network for extended periods of time to steal information rather than endanger the organization itself. APT is used to attack financial institutions, military defense, aerospace, healthcare, manufacturing, technology, utilities, or political institutions. When discussing the possibility of automating part or all of a process, you should first observe the process. When a new attack occurs, detection is the first step. Once detected, the offending code and its effects are isolated from background noise and investigated. That is, you need to determine the potential relationship (if any) between that feature and existing attacks. It may contain a unique signature that has not been discovered so far, but that signature may be somewhat similar to previous attacks. The function points to the target of the attack. B. Service interruption. This relationship can be familial, as in a new variant of an existing exploit, or typical, as in the case of a wide range of types (ie, categories) of attacks. Finally, it is important to design and implement preventative and palliative measures to eliminate existing infections. Previously established factors such as type, family, function, and code are important for these preventive and remedial tasks.

While automating the entire process is fascinating, this technology focuses on automating the process identification and classification phases. The main focus is detection, but some type classifications are possible and desirable. In addition, this classification supports external improvement efforts and helps reduce false positive rates. Not only does this indicate malicious activity, but it is consistent with behavioral patterns associated with a wide range of Advanced Persistent Threat.

Forensics

Forensic medicine is a scientific field dealing with the detection of criminal crimes (Franjić, 2018). In a sense, it proves that investigators collect, document, and analyze all the facts related to crime. The investigator's most important task is to collect as much evidence as possible related to the crime. They are usually found at the scene of a criminal case and are technically referred to as physical evidence. Based on these hypotheses that connect one fact to another, we arrive at a theory that explains the nature of criminal activity. Forensic evidence of a crime is a very complex transaction with the ultimate goal of proving or disproving the crime and finding the perpetrator.

If you need to investigate system activity, look at Forensics (Shema, 2014). Log files do not always capture information related to answering questions. You can collect data such as "when and from what IP address the user accessed the system", but you may not be able to answer questions such as "which files were executed or deleted". Or "Did you access these files when the user logged on?" You need tools and techniques to recover or infer this type of information.



The activity under investigation need not be malicious or illegal. It may be related to violations of corporate policy (such as viewing and downloading porn on a corporate system, or sending harassing e-mails). One important facet of computer forensics is the legal aspect of collecting evidence, maintaining a chain of custody, and working with law enforcement.

Forensics focuses as much on the temporal characteristics of an event as it does on the sources and targets associated with it. An investigator may spend a lot of effort piecing together a timeline of events in order to build a story of what happened. The order in which systems were compromised may indicate an attack vector (earlier systems may have been compromised by software exploits, while later systems may have been accessed by compromised credentials). Or, the order of events may indicate an attacker's motivation or level of sophistication. It's important not to overanalyze events and ascribe more characteristics than evidence supports, but such evidence should help inform levels of confidence in defining an attacker or comparing them to other events.

Two broad categories of information to collect are volatile data and nonvolatile data. Volatile data typically covers anything that disappears when you turn off or restart a system. For example, you'll lose the list of currently running processes; possible clues within the system's memory will disappear; and network connections that might indicate an attacker's origin or their next target will be lost. This kind of information can provide clear indicators of activity when you can directly view a suspicious process or user access.

Nonvolatile data typically covers anything that remains static (or relatively so) even when a system is not running. The system's drive is the most obvious example. Deleted files remain on the drive even if they no longer appear in the file system. This category could also cover more specific files, like browser caches or the Windows Registry.

It's important to have an incident response procedure in place that instructs investigators on what to collect and how to collect it. This way they do not lose volatile data, forget to copy log files, or make trivial mistakes when dealing with suspicious activity on a system.

Conclusion

Computer crime is a crime that is directed against the security of information systems with the intention of gaining a certain property benefit or to harm another. Computer crime can also be defined as the misuse of a computer in the sense of any event related to the use of computer techno-logy in which the victim suffers or could suffer loss, and the perpetrator acts with the intention of gaining benefit. Unfortunately, such situations happen and the question arises how to protect yourself, so it is necessary to be especially careful when it comes to publishing personal information on the Internet. This applies to personal data, dates and places of birth, employment, hobbies, photography, video content, bank accounts and the like, because in certain circumstances all this data can be drastically misused. Despite this, millions of people do it every day on popular social networks, and so often fall victim to very dangerous and ruthless cybercriminals.

References

- Alexandrou, A. (2022). Cybercrime and Information Technology -The Computer Network Infrastructure and Computer Security, Cyber-security Laws, Internet of Things (IoT), and Mobile Devices, CRC Press, Taylor & Francis Group, LLC, Boca Raton, USA, pp. 53. - 54.
- 2. Falco, G.; Resenbach, E. (2022). Confronting Cyber Risk An Embedded Endurance Strategy for Cybersecurity, Oxford University Press, New York, USA, pp. 4. - 7.
- Feraci, O. (2019). Digital Rights and Jurisdiction: The European Approach to Online Defamation and IPRs Infringements in Carpanelli, E.; Lazzerini, N. (eds) Use and Misuse of New Technologies -Contemporary Challenges in International and European Law, Springer Nature Switzerland AG, Cham, Switzerland, pp. 277. - 278.
- 4. Franjić, S. (2018) Legal aspects of Forensics. Forensic Sci Today 4(1): 009-017. DOI: http://dx.doi.org/10.17352/pjfst.000011
- Franjić, S. (2020). Cybercrime is Very Dangerous Form of Criminal Behavior and Cybersecurity, Emerging Science Journal, Vol. 4., Special Issue "Internet of Things, Internet of Vehicles,, and Blockchain", Reggio Calabria, Italy, pp. 18. – 26., DOI: http://dx.doi.org/ 10.28991/esj-2020-SP1-02



- Franjić, S. (2022) Internet and modern information technology in the function of society development. *Horizonti menadžmenta*. II (1), 35-52
- Franjić, S.; Silaev, S. (2017). Criminal law aspects of computer crime. The International Jo-urnal of Forensic Computer Science, Brasilia, Brazil, Volume 12, Number 1, pp. 36.-41., DOI: 10.5769/J201701004 or http://dx.doi.org/10.5769/J201701004
- Kosiński, J.; Krasnodębski, G. (2021). Cybercrime Predicting in the Light of Police Statistics in Jahankhani, H.; Jamal, A.; Lawson, S. (eds) Cybersecurity, Privacy and Freedom Protection in the Connected World - Proceedings of the 13th International Conference on Global Security, Safety and Sustainability, London, January 2021, Springer Nature Switzerland AG, Cham, Switzerland, pp. 55. - 56.
- 9. Lukings, M.; Lashkari, A. H. (2022). Understanding Cybersecurity Law and Digital Privacy - A Common Law Perspective, Springer Nature Switzerland AG, Cham, Switzerland, pp. 91.
- Miehling, E.; Rasouli, M.; Teneketzis, D. (2019). Control-Theoretic Approaches to Cyber-Security in Jajodia, S.; Cybenko, G.; Liu, P.; Wang, C.; Wellman, M. (eds) Adversarial and Uncertain Reasoning for Adaptive Cyber Defense – Control - and Game-Theoretic Approaches to Cyber Security, Springer Nature Switzerland AG, Cham, Switzerland, pp. 12. - 14.
- Mjølsnes, S. F.; Willassen, S. Y. (2012). ICT and Forensic Science in Mjølsnes, S. F. (ed): A Multidisciplinary Introduction to Information Security, CRC Press, Taylor & Francis Group, Boca Raton, USA, pp. 245.
- Radoniewicz, F. (2022). International Regulations of Cybersecurity in Chałubińska-Jentkiewicz, K.; Radoniewicz, F.; Zieliński, T. (eds) Cybersecurity In Poland - Legal Aspects, Springer Nature Switzerland AG, Cham, Switzerland, pp. 53. - 54.
- 13. Rajnović. D. (2011). Computer Incident Response and Product Security, Cisco Press, Indianapolis, USA, pp. 75. 76.
- 14. Shema, M. (2014) Anti-Hacker Tool Kit, Fourth Edition, McGraw-Hill Education, New York, USA, pp. 534.
- 15. Steckman, L. M. (ed) (2021). Examining Internet and Technology Aro-und the World, ABC-CLIO, LLC, Santa Barbara, USA, pp. 73. -74.
- 16. Svantesson, D. J. B. (2017). Solving the Internet Jurisdiction Puzzle, Oxford University Press, Oxford, UK, pp. 1.

Vert, G.; Claesson-Vert, A. L.; Roberts, J.; Bott, E. (2018). A Technology for Detection of Advanced Persistent Threat in Networks and Systems Using a Finite Angular State Velocity Machine and Vector Mathematics in Daimi, K. (ed) Computer and Network Security Essentials, Springer International Publishing AG, Cham, Switzerland, pp. 41. - 42.



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THE ROLE OF ELECTRONIC PAYMENTS IN MONEY LAUNDERING

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Key Words: electronic payment system, crypto currencies, online betting, money laundering.

Abstract: Developed banking market and strong competition in the offer of banking services requires the need to shift the focus to electronic banking. The need to focus on e-banking stems from the structure of clients using banking services and the development and availability of technology. Electronic banking brings with it advantages that are reflected in the speed of transaction execution and saves the time that clients spend waiting in lines at the bank's branches. In addition to the advantages, electronic banking carries with it risks that are reflected in the potential misuse of electronic payment systems for laundering illegally acquired money. With the development of technology, the laundering of illegally acquired money has been made possible through online bookmakers and casinos, and especially through the purchase and sale of crypto currencies. The subject of this paper is the misuse of electronic payment systems, online betting and crypto currencies for laundering illegally acquired money. The aim of the research is to identify ways in which the electronic payment system, through money transfer, online gambling and crypto currencies, can be used to launder money.

Introduction

he electronic payment system is an operational network, regulated by regulations, rules and business standards, which connects clients' accounts in banks and enables the exchange of funds from those accounts electronically (Summers, 2012). This system enables the transfer of large sums of money in a short period of time without obstacles in the form of borders or continents, which makes it difficult to monitor the origin of electronic transfer and the flow of

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funds (Tomić, Todorović and Jakšić, 2017). This fact makes the electronic payment system susceptible to misuse for various illegal activities, one of which is money laundering. Money laundering is an activity that aims to translate illegally acquired money into legal flows through various financial transactions, most often through electronic payment systems (Krzysztof, 2006).

The development of technology contributes to the development of electronic payment systems, as well as the ways in which money laundering can be performed through these systems. Although account-to-account transfers are still the most prevalent, online gambling and betting and electronic money, with an emphasis on crypto currencies, have become an extremely effective way of money laundering (Mabunda, 2018). Electronic transfers are precisely regulated in most countries and there is an obligation to identify bank customers before making electronic money transactions (Mabunda, 2018). Online betting and electronic money in some countries are not precisely regulated, so this fact is used by criminal organizations. Given that in some countries there is no legislation related to the identification of persons who transfer electronic money and the obligation to report large transfers of funds, the focus in money laundering is shifting from cash to electronic money.

The subject of this manuscript is the misuse of electronic payment systems, online betting and electronic money for the purpose of laundering illegally acquired money. The aim of the research is to identify ways in which the electronic payment system, through money transfer, online gambling and electronic money, can be used for money laundering. The paper is structured across five areas. The first part of the paper will discuss the concept of money laundering. The second, third and fourth parts of the paper will be based on electronic payment system, online betting and electronic money. The fifth part of the paper will investigate measures for prevention and protection against the use of electronic payment systems for money laundering. The conclusion of the paper will be focused on the lessons learned from the current practice of money laundering and recommendations for further research.

Money laundering

The term "bleaching money" originates from the United States from the Prohibition era, i.e. from the 1930s (Levi & Soudijn, 2020) and means



investing money in a bank that does not require providing information on the origin of money or using money from drug sales to buy luxury goods that are later sold at a lower price than the purchase price, in order to introduce illegally acquired money into legal flows (Levi & Reuter, 2011).

As early as 1931, when Al Capone was arrested, it was determined that he laundered about a billion dollars through various business ventures that served as a screen for money laundering. For money laundering operations, illegal organizations often hire experienced accountants whose main task is to make money transfers for the purpose of laundering and investing money in seemingly legal business ventures. There is a well-known case of Mayer Lensky, who paid money from illegal casinos (about a billion dollars) into accounts in the Swiss bank, and then invested the money from those accounts in business ventures in Hong Kong, South America and the Caribbean. The fact that Lanski was never convicted for these crimes, even though he laundered money for the needs of the mafia for over 50 years, shows how difficult it is to trace money laundering transactions. One of the most famous cases of money laundering is related to Pablo Escobar, whose fortune was estimated at nine billion dollars in 1989. All this money came from the sale of narcotics and went through the process of money laundering through transfers through various financial institutions.

Money laundering is a process in which illegally acquired money, through various financial transactions, is translated into legal flows (OECD, 2019) and it is an illegal activity (He, 2010). It harms the economic growth of countries and is most often used to finance terrorist activities, and is considered a serious threat at the global level (Simser, 2013).

Money laundering consists of three phases (Tomić, Todorović and Jakšić, 2017):

- •Investment. The investment is the initial phase of money laundering and represents payments of illegally acquired money to various accounts with commercial banks in smaller amounts (Tomić, Todorović and Jakšić, 2017). Investments are made in accounts in several countries in amounts that are not subject to verification by the competent organizations of that country and for which documentation on proving the origin of money is not required (Schneider & Windischbauer, 2008). In Serbia, the Law on Prevention of Money Laundering and Terrorist Financing defines the amount as 15,000 euros in dinars.
- •Layering. Layering implies multiple transfers of money invested through accounts in several banks in different countries, in order to conceal

the origin of money. Layering is also achieved by buying fictitious goods from foreign companies, which are later sold to other companies, and the money from the sale gets its legitimate origin (Schneider & Windischbauer, 2008). Another way is to invest money in a bank and then take a loan from that same bank in the value of the money invested (Schneider, 2008). The goal of the stratification phase is to give the illegally acquired money a legal origin, for further investment.

•Integration. Integration is the final money laundering process where seemingly legal money flows from fictitious accounts to one primary account, with the aim of investing money in legal business ventures (OECD, 2019). Money is invested in securities, movable and immovable property, the purchase of companies and the like, in countries that have an underdeveloped degree of control over the origin of money (Schneider, 2008).

Lucian (2010) states that money laundering consists of three steps. The first step of "money laundering" is to deposit money in banks or buy expensive goods and transfer them abroad. The second step is the realization of complex financial transactions between banks in various countries aimed at hiding the origin of money. The last step is to create the illusion of the legality of money through fake invoices or the purchase of luxury goods.

The Financial Action Task Force (FATF) is a global organization that provides guidance to member countries on the fight against money laundering (Financial Action Task Force, 2014). According to FATF documents, there are three main methods by which criminal organizations transfer money for the purpose of laundering and including it in legal flows (Balani, Lewer & Saenz, 2017). The first is through financial systems, the second involves the physical transfer of cash, and the third is the transfer of goods purchased with illegal money through the trade system.

The United Nations Office on Drugs and Crime (UNDOC) in its 2011 report states that about \$ 2.1 trillion was laundered in 2009, or about 3.6% of the world's gross domestic product. About 70% of this amount was most likely laundered through financial systems. Walker (1999) states in his research that about 46.3% of laundered money originates from the United States, and about 18.9% of laundered money returns to the United States after laundering.

The most commonly used methods of money laundering are (Lucian, 2010):



- •Fake invoicing. This method involves selling goods or works of art at far higher prices than estimated. Goods or works of art are sold to an intermediary in the value of the money to be laundered. When the trade is completed, the work of art is returned by the intermediary to the original owner, who refunds the money to the buyer, in the amount reduced by the commission.
- •False lawsuits. The money is illegally paid into a bank account in the Cayman Islands. After the payment, the executor of the payment initiates a lawsuit against the bank in which he invested the money. In the procedure on the lawsuit, the bank accepts the settlement and pays the money in the amount of the invested amount, in order to suspend the lawsuit against it.
- •Layering. A person who wants to launder money opens a fake company in a smaller country, in whose name he opens a bank account. The person contracts with the bank for money laundering in the amount of one million dollars and sends the bank cash in the specified amount through another client of the bank. The client of the bank who received the cash, upon receipt of the same, transfers the money in the amount reduced by the commission to the account of the company whose owner is the person who wants to launder the money.
- •Reverse money laundering. An organization that wants to launder money steals goods (luxury goods) in the amount it wants to launder. The goods are sold and the money from the goods is invested in a bank in another country. After that, through the banks controlled by the organization that performs money laundering, it is requested to issue new banknotes of a certain currency in the amount of the invested amount from the sold goods. The country whose currency is requested prints banknotes in the requested value and delivers them to banks that are under the control of organizations that want to launder money.

These methods are not the only ones used and very often a combination of several of these methods is used to ensure stratification and conceal the illegal origin of money.

The role of electronic payment systems in money laundering

Electronic payment refers to the use of a specific data packet that is sent over a computer network and enables the payment of goods and services in real time (Weibing, 2011). Electronic money transfer is the easiest method of money transfer related to money laundering activities (Krzysztof, 2006). Electronic money transfers are financial transactions where money is transferred between two parties via telecommunications networks. In cases of money laundering, the sender and recipient of an electronic transfer is usually a person who wants to conceal the origin of the money. There are legal and illegal electronic payment and money transfer systems (Krzysztof, 2006). In legal systems, payments are made via SWIFT or TARGET. For illegal financial transactions, systems such as Hawala are used, which are based on confidential connections and allow the transfer of money without the use of official bank accounts (Krzysztof, 2006). In legal payment systems, any electronic money transfer in excess of \notin 15,000 that takes place in the European Union (EU Directive 2001/97 / EC, Article 3) or above \$ 10,000 in the United States (US Patriot Act, Article 326) initiates automatic transfer reporting, followed by an examination of the origin of the money by bank clerks.

Prior to the terrorist attack on the World Trade Center in 2001, electronic money transfer was not considered suitable for financing terrorist activities. The investigation after the terrorist attack established that the attack was financed mainly through legal and illegal electronic payment systems (Krzysztof, 2006).

The choice of an electronic money laundering payment system depends on a number of factors such as the amount of money to be laundered, the nature of the transfer (local or international), the adaptability of money laundering organizations to new technologies and the like (Krzysztof, 2006). Organizations that decide to launder money through an electronic payment system can do so in one of the following ways (Krzysztof, 2006):

- •Using false identities. Clients of banking institutions with good credibility, which are related to a terrorist organization due to religious, national or other motives, transfer money internationally from their official bank accounts to the bank accounts of other credible clients who are also affiliated with that terrorist organization. Another way is to open an account through false documents and transfer funds without the knowledge of the person whose documents were falsified.
- •Structural payments or "smurfing". Large payments are divided into smaller amounts that are below the amount for which the transaction is reported and the origin of the money is checked. Such payments are made through a mobile or online banking application from multiple sources, that is, from multiple accounts.



- •Transfers through banks in offshore countries. In these countries, the identity of the account holder is protected by law, and since transfers take place online, the parties who made the transfer can be traced only through the IP address from which the account was accessed, from the computer memory from which the transaction was made or through internet provider. The problem is that in these transactions, the internet provider of a country that does not cooperate with organizations such as the FATF is selected, and no transfer data can be obtained in this way. In addition, transaction data is most often encrypted and can be shared between participants without the risk of disclosure.
- •Transfer as a consequence of criminal activity. These transfers include hacking banking systems or private computers and making electronic money transfers from hacked computers. This method is suitable for financing terrorist activities, but not for money laundering, because money laundering is a longer-term process for which more complicated and layered money transactions are performed, the goal of which is to legalize illegally acquired money.
- •Informal money transfers. Informal electronic money transfer systems such as Hawala specialize in money transfers in the Far and Middle East. The money is paid into the account of the Hawala representative in the country of the payer, and the payment of the Hawala representative in the country of the recipient of the transaction is made by a third party (another Hawala representative). Hawala representatives charge their commission and transfer the rest of the money. This system is mostly cash, while the verification of transactions takes place via e-mail, fax or similar informally. Hawala payment system combines the advantages of a traditional cash payment system (anonymity, lack of regulation on the amount of the transaction, etc.) and electronic communications (availability, speed and low cost).

All the above methods of money laundering through the electronic payment system have led to constant improvements in terms of security, and newer electronic payment systems are certainly not anonymous because they leave a trace of every transaction (Tomić, Todorović and Jakšić, 2017). Improving the protection of electronic payment systems makes them less accessible for money laundering, but in addition, the speed of money transfer from one country to another, and from one continent to another, still makes them attractive for illegal activities.

The role of online gambling in money laundering

The phenomenon of online betting and gambling is closely linked to money laundering and tax evasion (McMillen, 2003). In the early 2000s, there was a global expansion of online gambling and betting due to the availability of websites offering these services and the fact that they do not have working hours, ie the possibility of 24 hour betting was opened (McMullan & Rege, 2010). In many countries, most forms of online gambling are banned (USA, China, Russia, Pakistan, etc.), while in some countries there is no specific law on online gambling, and online companies use this fact to establish their headquarters (Rose and Owens, 2005). For this reason, most online gambling and betting companies are based in the Netherlands Antilles, Malta, Gribraltar, Canada, the United Kingdom and Australia (Williams & Wood, 2009).

There are about 150 different deposit payment methods for online bookmakers and betting, and the most popular method of payment is via Visa and MasterCard, which is used on about 90% of online betting sites (Williams & Wood, 2009). However, in the United States, Visa and Master Card denote transactions related to online gambling and betting, and most banks and financial institutions reject such transactions, which has led to the emergence of new payment methods and the use of financial institutions located outside the United States. Online gambling and betting generated revenue of about \$ 50 billion in 2019, while that amount climbed to about \$ 66.67 billion in 2020, and is expected to reach \$ 100 billion by 2026 (data downloaded from https://playtoday.co).

Online casinos offer great opportunities for money laundering (Hugel & Kelly, 2002; Brooks, 2012). Good examples of the use of online casinos for money laundering are the cases of Giordano, Uvari Bookmaking and the Corozzo network for online betting and gambling (McMullan & Rege, 2010).

Members of the Giordano money laundering network were skilled in transferring illegal money through online casinos, fake corporations and bank accounts in Central America, the Caribbean, Switzerland and Hong Kong. Members of this network have formed an online gambling site (www. playwithal.com) with about 40,000 customers. The entire operation was led by James Giordano, his son-in-law oversaw daily activities related to online betting and gambling, while his wife and daughter laundered money from profits in several foreign banks (McMullan & Rege, 2010).



The Uvari Bookmaking Network also combined illegal gambling, money laundering and tax evasion. This network was an intermediary between clients and sports betting companies. They determined their commission based on the number of clients who accessed online betting through their accounts. They took social security numbers from individual users and used them to open hundreds of other fake accounts from which members of this network made deposit payments for bets. This allowed network members to remain anonymous, thus avoiding paying taxes and laundering money without sanctions (McMullan & Rege, 2010).

The Corozzo network was stationed in the United States and Costa Rica and had at least 26 members. Through telephone and online bets, the network earned about \$ 10 million from November 2005 to January 2008. This was an elaborate network of telephone receipt of bets, payment of money to foreign banks and money laundering. Unlike the previous two examples, members of this network lent money to gamblers at interest and thus made a profit (McMullan & Rege, 2010).

These three examples show that money laundering through online casinos can be done by opening fake accounts on gambling and betting sites through stolen identity. However, when it comes to online casinos and casinos, we can look at them through profit tax evasion rather than through the perspective of money laundering. Although money laundering through online games is available and used, it is still intended for laundering small sums of money. It would take a lot of time and effort to launder a large amount of money earned through the sale of narcotics, weapons and the like through online games (Levi, 2009).

The role of electronic money and crypto currencies in money laundering

Although traditional money laundering instruments are still the most prevalent (Reuter & Truman, 2004), the development of technology has contributed to the consideration of electronic money as a way of money laundering. The best practical example of electronic money laundering is the Liberty Reserve (Mabunda, 2018). Liberty Reserve was an electronic money service formed in 2006 and located in Costa Rica and had more than a million users worldwide. When Arthur Budovsky and six other people were convicted of money laundering in 2013, it was estimated that about six billion dollars earned through illegal activities were laundered during the existence of this service.

When opening an account on Liberty Reserve, the user left only basic information (name, surname, address and date of birth), but the said service did not request their verification through any other documents. This meant that accounts could be easily opened through fictitious identities. When an account is opened, money can be transferred to other Liberty Reserve clients via electronic money called "LR". Also, through this service, goods could be purchased from users who accept electronic money. Each transaction was charged one percent of the transferred amount, while the client could pay an additional 75 cents "privacy fee" for each transaction. This privacy fee allowed users to hide their Liberty Reserve account number, and payment could not be tracked even by the Liberty Reserve system (Mabunda, 2018).

Crypto currencies are the most modern type of electronic money. Crypto currencies are decentralized and partially anonymous currencies based on cryptography and peer-to-peer technology (Antonopoulos, 2017). Simply put, crypto currencies are a series of codes that are recorded on public servers and enable the exchange of money without intermediaries (Albrecht et al., 2019). Bitcoin, as the world's first crypto currency, was introduced in 2009 by a person or group that identified as Satoshi Nakamoto (Harvey, 2014). It was introduced after the global financial crisis in 2008 with the intention of becoming an alternative currency completely independent of the influence of financial institutions or country regulations (Kharif, 2018). Crypto currencies do not use banking systems, but function completely independently of banking institutions and regulations (Brenig et al., 2015). In traditional banking systems, bank accounts are used by the persons in whose name they are opened, under the control of the competent institutions. The amount of money in each account is confidential and the validity of all transactions is verified by the central bank of a country or another competent institution of that country. In the case of crypto currencies, users do not have classic current accounts, but each unit of a crypto currency is tracked via a set of access keys. The owner of that crypto currency receives a private key to access it, which identifies him as the owner of that crypto currency unit (Brenig et al., 2015).

At the moment, there are nearly 10,000 different crypto currencies in the world that are traded, but about the 20 largest crypto currencies (Bitcoin, Ethereum, Tether, Binance Coin, U.S. Dollar Coin, etc.) cover about 90



percent of the market value. To transfer funds via crypto currency, the user only needs an internet connection. Since there is no regulatory body that controls transactions, funds are easily transferred among users from different countries (Levi, 2015), which makes crypto currencies suitable for money laundering.

There are several reasons why crypto currencies are suitable for money laundering, but the most dominant reason is anonymity (Forgang, 2019). No less important reason is the informal character of crypto currencies, ie the fact that their transfer is not done through banks or intermediaries, and verification of transactions by any financial institution is not required (Kelly, 2017). A large number of countries have not decisively regulated crypto currency transactions, and thus the system of reporting suspicious crypto currency transactions (Forgang, 2019), and this facilitates money laundering in this way.

Money laundering through crypto currencies is done through the same phases as cash laundering, that is, through investment, layering and integration (Forgang, 2019). In the investment phase, money from bank accounts is used to buy well-known crypto currencies such as Bitcoin or Ethereum. In the stratification phase, purchased crypto currencies are exchanged for alternative or less used crypto currencies, while in the integration phase, smaller crypto currencies are exchanged for primary crypto currencies, which are later exchanged for money (Forgang, 2019).

One of the ways to launder money through crypto currencies is "smurfing", ie the use of several people to launder money in smaller transactions for the needs of one person or organization (Forgang, 2019). There is a known case of money laundering acquired through the sale of narcotics, in which 11 people were arrested and 8 million euros were seized (Europol, 2018). Crypto currencies were bought with money from hundreds of bank accounts. Crypto currencies were sold in Colombia, and the money from their sale was paid into accounts in Colombian banks, and later that money was used to buy narcotics (Europol, 2018).

One of the newer ways of money laundering is "Initial Coin Offering", which is the initial sale of crypto currencies. Through this process, investors are buying a new crypto currencies that has just entered the market, expecting growth in its value, and thus profit (Forgang, 2019). By buying a currency that is new to the market, stratification can also be achieved. The new currency can be exchanged for more well-known cu-

rrencies and then for cash, ensuring the anonymity of the origin of the money. With the development of the crypto currencies market, new ways of using it appear every day, and with them the abuses of the same.

Money laundering prevention measures

The European Union's anti-money laundering directive, adopted in 1991 on the basis of the 1988 United Nations Convention, was the first to establish the concept of money laundering. This Directive calls on all members of the United Nations to ban money laundering with an emphasis on money earned from the sale of narcotics (Mitsilegas & Gilmore, 2007). This Directive has imposed on financial institutions a number of obligations to prevent money laundering, including identifying and keeping records of all clients and reporting all suspected transactions that may be intended for money laundering to national authorities.

As recognized in the Directive, the first line of defense against money laundering through electronic payment systems is banks. By identifying and recording all clients, and monitoring financial transactions that may be related to money laundering (large financial transactions without coverage in documents or invoices), banks can provide a proactive approach in the fight against money laundering (Mabunda, 2018). The second line of defense is the legislation of some countries. If a country has regulations for the fight against money laundering, and precisely defined measures and procedures for the prevention of money laundering, it will discourage criminal organizations from trying to launder money in the financial institutions of that country.

The Fifth European Union Directive against money laundering, adopted in 2018, identifies crypto currencies as one of the ways of money laundering, and requires member states to ensure the registration and licensing of all crypto currencies exchange services. Registration and licensing of crypto currencies exchange services would impose on these services the obligation to keep records of clients, and the possibility of control by the financial institutions of that country. These measures would contribute to reducing anonymity when buying crypto currencies, and thus reduce the possibility of money laundering.

Since money laundering is a global problem, it is necessary to implement measures to prevent money laundering as a global regulation. There are



several bodies formed specifically to prevent money laundering. One of the most recognizable is the Financial Action Task Force on Money Laundering (FATF), established in 1989 by the International Monetary Fund. This organization consists of 39 members, of which 37 countries and two regional organizations. By providing recommendations for the fight against money laundering, the fight against terrorism and the reduction of weapons of mass destruction, the organization provides guidance to national regulators, with the aim of establishing legislation that will speed up the fight against money laundering. Through research into money laundering techniques and prescribing prevention measures (Matejic et al., 2021), this organization contributes to the stabilization of the global financial system.

Another important global factor in the prevention of money laundering is the Anti-Money Laundering Global Task Force (GTF-AML). This institution, in cooperation with the FATF, the World Bank, the International Monetary Fund, the United Nations Office on Drugs and Crime (UNODC), Interpol and many other organizations, is leading the fight against money laundering. The current two main goals of this organization are transparency of the origin of money and the fight against money laundering to finance terrorism.

In the Republic of Serbia, the Law on Prevention of Money Laundering and Terrorist Financing has been passed, which prescribes actions and measures taken to prevent and detect money laundering and terrorist financing. As it is a recommendation on a global level, so in this law the first measure is "knowing the party and monitoring its business" (Ćurčić & Matejić, 2021). Knowing the customer means identifying the customer when opening an account or making large money transactions (if they are not bank customers). In Serbia, there is an obligation to identify a party that is not a client for transactions of more than 15,000 Euros in Dinars. The Law on Digital Property in the Republic of Serbia regulates trading in digital money, i.e. crypto currencies. However, both worldwide and in Serbia, the entire area related to crypto currencies is still in the gray zone, considering that the possibilities of using crypto currencies are still being discovered, and with them the possibilities of abuse.

As noted, the basis for combating money laundering is to establish the identity of the person or organization sending the money transaction and the person or organization receiving the money transaction. For this reason, the biggest threat to the global fight against money laundering is crypto currencies, given that the very goal of establishing crypto currencies is anonymity. Many countries do not yet have developed regulations for recording, monitoring and dealing with crypto currencies, which makes them extremely vulnerable to money laundering targets.

Conclusion

The availability of electronic payment systems, the possibility of transferring large amounts of money to accounts in other countries and the possibility of layered transfers to hide the origin of money, makes electronic payment systems extremely susceptible to abuse. The abuse of electronic payment systems is particularly affected by the fact that some countries do not have developed regulatory systems, while the regulations of some countries are not adapted to new forms of money laundering (through online gambling and betting and electronic money). Although organizations at the global level are trying to regulate measures to prevent money laundering, it all comes down to national legislation and the implementation of regulations. Most regulations are based on the amount of a single or aggregate transaction as an indicator of potential money laundering. This has proved not so successful, given that by opening fake accounts, numerous transactions can be made below the limit that requires monitoring by banks. Given the above, one of the key measures for the prevention of money laundering is the identification of the ordering party and the recipient of the financial transaction. Identification of parties in electronic transactions can provide indications of possible money laundering, and initiate the process of further monitoring of transactions of these clients.

The development of technology also affects the development of money laundering, and poses new challenges to organizations to combat money laundering. Crypto currencies, as a new form of electronic money, insist on the anonymity of users, which makes it harder to prevent money laundering. Large amounts of money can be laundered through crypto currencies by trading on the stock exchange or buying goods, with very little possibility of establishing the identity of the buyer or seller. It is this fact that makes the fight against money laundering more difficult, and thus the fight against organized crime and terrorism. The possibility of buying goods and services through crypto currencies is becoming more and more widespread, which represents an additional danger. The purchase of crypto currencies is still somewhat limited via the Internet, while through the "dark web" crypto currencies can be used to buy weapons and rent the



services of criminal organizations. This poses another challenge for antimoney laundering and anti-terrorist financing agencies.

Electronic payment systems are evolving with the development of technology, but as much as this development brings with it benefits for users, so does the danger of misuse. The misuse of these systems achieves anonymity in money laundering, terrorist financing and the purchase of illegal goods, and makes it more difficult to combat these illegal activities.

References

- Albrecht, C., Duffin, K. M., Hawkins, S., & Rocha, V. M. M. (2019). The use of crypto currencies in the money laundering process. Journal of Money Laundering Control, Vol 22, No. 2, 210-216
- 2. Antonopoulos, A. M. (2017). Mastering Bitcoin: Programming the open blockchain. O'Reilly Media, Inc.
- Balani, H., Lewer, J. J., & Saenz, M. (2017). Trade Based Money Laundering in Select Asian Economies: A Comparative Approach Using the Gravity Model. Southwestern Economic Review, Vol. 44, 15-26
- 4. Brenig, C., Accorsi R. & Müller, G. (2015). Economic analysis of crypto currencies backed money laundering. ECIS 2015 Completed Research Papers. Paper 20
- 5. Brooks, G. (2012). Online gambling and money laundering: "views from the inside". Journal of Money Laundering Control, Vol. 15, No. 3, 304-315
- 6. Ćurčić, M. & Matejić, I. (2021). Knowledge management as a determinant of job satisfaction. Trendovi u poslovanju, Vol. 9, No. 2, 64-74
- Directive (EU) 2015/849 of the european parliament and of the council (2015). Official Journal of the European Union, 73-116
- 8. FATF (2015) Financing of the Terrorist Organisation Islamic State in Iraq and the Levant (ISIL), Financial action task force, Paris, France
- 9. Forgang, G. (2019). Money laundering through crypto currencies. Economic Crime Forensics Capstones, 40
- 10. Harvey, C. R. (2014). Bitcoin myths and facts. SSRN 2479670
- Hassan, M. A., Shukur, Z., & Hasan, M. K. (2020). An efficient secure electronic payment system for e-commerce. Computers, Vol. 9, No. 3, 66

- He, P. (2010). A typological study on money laundering. Journal of Money Laundering Control, Vol. 13, No. 1, 15-32
- Hugel, P., & Kelly, J. (2002). Internet gambling, credit cards and money laundering. Journal of Money Laundering Control, Vol. 6, No. 1, 57-65
- 14. Kharif, O. & Leising, M. (2018). Bitcoin and Blockchain. Bloomberg QuickTake
- 15. Krzysztof, W. O. D. A. (2006). Money laundering techniques with electronic payment systems. International & Security. An International Journal, 27-47.
- Levi, M. (2002). Money laundering and its regulation. The Annals of the American Academy of Political and Social Science, 582(1), 181-194.
- 17. Levi, M. (2009). Money laundering risks and e-gaming: A European overview and assessment. Final Report.
- Levi, M. (2015). Money for crime and money from crime: Financing crime and laundering crime proceeds. European Journal on Criminal Policy and Research, Vol. 21, No. 2, 275-297
- Levi, M., & Reuter, P. (2006). Money laundering. Crime and justice, Vol. 34, No. 1, 289-375
- 20. Levi, M., & Soudijn, M. (2020). Understanding the laundering of organized crime money. Crime and Justice, Vol. 49, No. 1, 579-631
- 21. Lucian, R. D. (2010). The concept of money laundering in global economy. International Journal of Trade, Economics and Finance, Vol. 1, No. 4, 354-360
- 22. Mabunda, S. (2018). Crypto currencies: The new face of cyber money laundering. International Conference on Advances in Big Data, Computing and Data Communication Systems
- 23. Matejić, I., Ćurčić, M. & Kostić, R. (2021). Transformational leadership in the service of organizational changes. Journal of Process Management and New Technologies, Vol. 9, No. 3-4, 69-77
- 24. McMillen, J. (2003) On-line gambling, in Qiurk, P. & Forder, J. (eds.) Electronic commerce and the law, John Wiley and Sons, Quinley, Australia
- 25. McMullan, J. & Rege, A. (2010) Online crime and internet gambling, Journal of Gambling Issues, 24, 54-84
- 26. Mills, J. (2001). Internet casinos: A sure bet for money laundering. Journal of Financial Crime, Vol. 5, No. 1, 303-330
- 27. Mitsilegas, V., & Gilmore, B. (2007). The EU legislative framework against money laundering and terrorist finance: a critical analysis in



the light of evolving global standards. International & Comparative Law Quarterly, Vol. 56, No. 1, 119-140.

- 28. OECD (2019). Money Laundering and Terrorist Financing Awareness Handbook for Tax Examiners and Tax Auditors, OECD
- 29. Rose, I. N. & Owens, M. D. (2005). Internet gaming law. Larchmont, NY: Mary Ann Liebert, Inc
- 30. Schneider, F. (2008). Money laundering and financial means of organised crime: some preliminary empirical findings. Global Business and Economics Review, Vol. 10, No. 3, 309-330.
- 31. Schneider, F., & Windischbauer, U. (2008). Money laundering: some facts. European Journal of Law and Economics, Vol. 26, No. 3, 387-404.
- 32. Simser, J. (2013). Money laundering: emerging threats and trends. Journal of Money Laundering Control, Vol. 16, No. 1, 41-54
- Sumanjeet, S. (2009). Emergence of payment systems in the age of electronic commerce: The state of art. Global Journal of International Business Research, Vol. 2, No. 2, 18-40
- 34. Summers, B. J. (2012). Payment systems: design, governance and oversight. Central Banking Publications
- Tomić, N., Todorović, V., & Jakšić, M. (2017). Misuses of electronic payment systems. Contemporary Issues in Economics, Business and Management–EBM2016, 245-253
- 36. Uprava za sprečavanje pranja novca Ministarstva finansija Republike Srbije (2011), Tipologije pranja novca u Republici Srbiji
- 37. Walker, J. (1999). How big is global money laundering?. Journal of Money Laundering Control, Vol. 3, No. 1, 25-37
- Weibing, P. (2011). Research on money laundering crime under electronic payment background. Journal of Computers, Vol. 6, No. 1, 147-154.
- 39. Wood, R. T. & Williams, R. J. (2009). Internet Gambling: Prevalence, Patterns, Problems, and Policy Options. Final Report prepared for the Ontario Problem Gambling Research Centre, Guelph, Ontario, CANADA.
- 40. Yu, H. C., Hsi, K. H., & Kuo, P. J. (2002). Electronic payment systems: an analysis and comparison of types. Technology in Society, Vol. 24, No. 3, 331-347



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CYBER SECURITY CURRENT SCENARIO IN INDIA

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Key Words: intercultural communication, police, thirdcountry nationals, fundamental rights and freedoms, language assitance

Abstract: Cyber Security is a part and parcel of information technology. It is a virtual world driven by information communication technology. Actually it is a system of exchanging digital information electronically with the help of communication network. Its need is escalating day by day by improving economic growth in every economy of country. Its vitality can be reported in various areas like delivering governance to people by governments, trading in various organizations, paying bills, playing games, banking transactions etc. That is why securing information regarded as money. But recently it has become a big challenge to obtain it. Cyber security is very important term that refers to it but difficult to prescribe it. Sometimes it is defined as privacy, information sharing, intelligence collecting and surveillance. Its participation in information technology cannot be ignored but there are legion risks associated with it like threats, vulnerabilities and impacts. Legion steps and initiatives have been taken by Government of India in order to tackle this problem. Here the primary duty of Government of India is to secure Governmental system and protecting Non Governmental systems. Thus the main objective of this study is to throw light on need, challenges and opportunities of cyber security in India.

Introduction

e are living in information communication Technology World. A doctor can easily diagnose a disease of his patient when he is living at thousands of kilometers, talk to friends living in foreign country, pay his bills by clicking a button. Thus impact of information technology can be reported at global level in every sector. No event can think without its existence. Recently

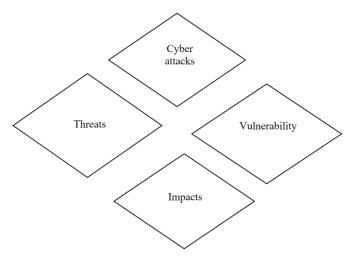
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continued and exponential advancement in processing power have made IT hardware lighter, faster, cheaper and easy to use. Now most of industries have been associated with IT sector and known as Information Communication Technology. This technology has become a part and parcel of our daily life. This technology is ubiquitous and has been increasing in every sphere of life. But devices and components of ITC are independent. Thus any disturbance in one system impacts function of other. One should think about its complexities and dangers that are accelerating day by day. According to survey that during 2009 physical thefts and money transfer crimes had been reported to maximum extent as compare to previous years. The report from National Crime Records Bureau has declared 561 cases in Maharashtra, 454 cases in Andhra Pradesh and 437 cases in karnatak during 2011.That is why protection of actions of ICT is the need of the hour that is known as Cyber security.

The concept of cyber security is very fuzzy, arguable and broad. Regarding its definition, precision is very herculean task. No doubt cyber security is very lucrative term but tends to defy precise definition. Sometimes it is also known as Privacy, information sharing, intelligence and surveillance. Its vitality can be reported in protecting privacy and preventing unauthorized surveillance and information sharing. But there are legion risks associated to information system and its mitigation is indispensable. Actually there are three factors that cause risk to information system.

Figure 1. Factors causes cyber attacks



Source: Autor's work



•THREATS

- it refers to who is attacking

•VULNERABILIT - attacking weaknesses

•IMPACTS - what the attach does

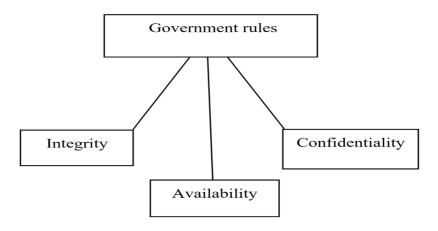
Research reports that mostly cyber attacks have limited impacts but in case of private sector, such impacts can create a big problem for national security, economy, livelihood and safety to citizens of a country. Here its mitigation is very necessary in order to avoid such impacts. It can be done by removing threat sources, considering vulnerabilities and mitigating impacts to maximum extent. The main duty in cyber security is to secure federal system and avoid non federal systems in order to make it successful. In this area, the role of federal agencies is praiseworthy because these are spending more than 10% of their annual ICT budgets on cyber security.

Concept of cyber seurity

The concept of cyber security is very fuzzy. Thus to describe it properly is not so easy. Over the past several years, experts and policy makers are trying to define its concept. Additionally they are also trying to protect it from unauthorized persons who are using it with goal of theft, disruptions, damage and unlawful actions. Some researchers opined cyber security as act of protecting ICT and its contents. Most authors include three things as mentioned under

- •Summation of activities and measures in order to protect computers, computer networks, related hardware and devices software and information in it
- •Qualitative spectrum in order to protect from such threats
- •Arrange some efforts in order to bring improvements in cyber security

Figure 2. Government rules



Source: Autor's work

Bur government rules describe it in a legion ways as given under:

- •Integrity refers to safe guard information against improper modification or destruction
- •Confidentiality refers to maintain authorized restriction on access and disclosure
- •Availability timely information at right place relevantly.

But the good cyber security should have following attributes as given under:

- Privacy controllable
- Protectable
- Monitoring ability regarding flow of information.

FACTORS CAUSING RISKS

The risk related to cyber security associates with three factors.

THREATS

People who cause cyber attacks can be classified into five categories:

- •Criminals their main motto is to gain monetary gain by theft and extortion.
- •Spies steal proprietary information used by government and private sectors
- •Hactivists create terrorism situation in the country.



VULNERABILITY

ICT system is very complex. Thus attackers take its advantages and create cyber attacks. Though defenders defend themselves but some challenges have been taking place in this ICT:

•Inadvertent acts created by insiders in order to create loss to the system

•Vulnerability of Supply chain that causes malicious software

•Unknown or zero day vulnerability with no established fix.

IMPACTS

Impacts refer to what the attack does. But a successful attack can make a compromise among confidentiality integrity and availability by handling information. Whenever any attack takes place, it results in cyber theft or espionage. This theft causes loss to ex-filtration of financial, proprietary or personal information. In case of denial of service attacks makes accessing system slow. BOT-Net malware commands for using other system by attacking. The attack on industrial control system brings destruction on some equipment like generators, pumps and centrifuges.

Methods of mitigating risks

Attacks can be mitigated by using ways

•Remove threat source

•Address vulnerability by hardening ICT

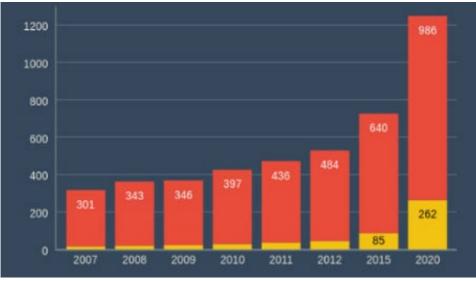
•Lessening impacts by restoring function.

CAUSES OF CYBER CRIMES

There are five common trends that gave birth to it

•More on line transactions

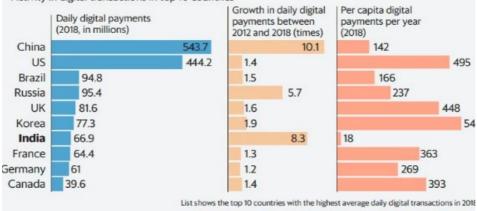
Recently 90% transactions have been running through digital media like transaction and customer information regarding new products launching, selling, buying and supplying etc as shown in the figure-3 increasing trend of e- commerce from 2007-2020.



Source: founding fuel.com

•Transparency among corporations and companies

Comparatively corporations and companies are aspired to be more transparent than before. Mostly people want to access to corporate networks through their mobile phones in order to deal with their day to day activities as shown in the following figure -4 Transaction usages in ten countries including India.



Activity in digital transactions in top 10 countries

Source: Twitter.com

Thus hackers can crack their securities and easily enter into corporate networks.



•Malicious software

Viruses and spyware are very strong in order to take partial control of main applications.

•Joined networks

Many customers and vendors are aspired to gain more profits by enhancing their business through digital networks. In December 2010, E- business website was attacked by dozens of people claiming to be part of the unnamed group.

Challenges

The use of ICT is wide spread in every sector but it is without futuristic challenges that increasing day by day. The role of government is very crucial in order to stop cyber attacks but all in vain. Government is assisting in protecting government and non government systems by some laws. Recently all government departments have been advised to protect their own systems. Some sector specific responsibilities are also assigned in this area for CI. The cyber crimes have been shown in the figure 3.

Figure 3. Cyber crimes are increasing from 2013-2020



Source: News18.com

This policy has been formulated by department of electronics and information technology, ministry of communication and information technology and government of India whose main objective is to protect public and private infrastructure from cyber attacks. This policy also protects personal information of web users, banks and sovereign data users.

But this policy is not too much result oriented and suffers from some short comings

•This policy is not cyber prepared

•This policy is not implemented successfully

•The working is not praiseworthy in order to stop cyber attacks

There are some other steps taken by government of India in order to mitigate attacks like

•NATIONAL INFORMATICS CENTRE•NATIONAL SECRITY POLICY 2013•NATIONAL INFORMATION SECRITY ASSURANCE PROGRAM

The main objective of upper stated organizations is to mitigate or stop cyber attacks but ICT in India is not free from long term challenges as mentioned under.

•CHALLENGES TO DESIGN

The main attention of designers is to focus on features rather than security. Thus this challenge is unsolvable in the future.

•CHALLENGES TO INCENTIVE

Cyber crime is normally cheap, lucrative and safe for criminals. They do it in order to gain in short time.

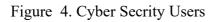
•CHALLENGES TO CONSENSUS

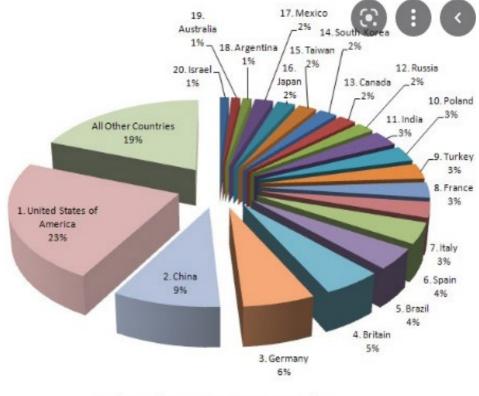
Regarding its meaning, different thinkers and researchers take differently. Thus this problem is unsolvable in the future.

•CHALLENGES TO ENVIRONMENT



Recently new electronic communication devices like social media, mobile computing, big data, cloud computing and internet of things made this ICT more complex. Consequently cyber security users are increasing day by day as shown in figure 4. Thus cyber attacks have been also accelerating rapidly.







Source: Enigmasoftware.com

Role of government of india in cyber security

In protecting cyber security, the role of federal is very crucial. Some federal agencies are assigned their responsibilities with specific sector wise. Research reports that more than 50 statues have threw light on aspects of cyber security. The hierarchy of cyber security has been shown in the under given figure 5.

PM Office/cabinet SECY (PMO. CABSEC)	Ministry of home afairs (MHA)	Ministry of ehtemal afairs (MEA)	Ministry of defence (MOD)	Ministry of common info- technology (MCIT)	Non government organization (NGO)
National security council (NSC)	National cyber cord centre (NCCC)	Ambasadors and ministers	Tri service cyber commad	Department of information technology (DIT)	Cyber security and antihacking organization (CSAHO)
National technical research organization (NTRO)	Directorate of foresenic (DPS)	Defence attaches	Army (MI)	Department of Telecom (DOT)	Cyber security of India (CYSI)
National critical info infrastructure protection	National disaster management authority (NDMA)	Joint secretary (IT)	Navy (NI)	Indian computer emergency response team (CERT-IN)	Centre of Excellence for cyber security research and development in India (CESCRDI)
Joint intelligence	Central foresnic science lab (CFSL)		Air force (AFI)	Educational research network (ERNET)	Cyber security of India

Figure 5. Hierarchy of cyber security of India

Source: iasgyan.com



Government initiatives in cyber attacks

Cyber attacks in India had enhanced by 300% during 2020. During February 2021 India was in headlines after power outages across Mumbai in the summer of 2020 when China hacked its power grid at one set of the LADAKH standoff. By observing this unforgettable incident in Indian history, India decided to create cyber secure India. For this purpose Government of India formulated a cyber security strategy policy in January 2020 in order to gain fixed target of \$5 trillion economy. For this purpose, Indian state governments have framed nine policies as mentioned under in figure 9.

•CERT-In
•CYBER SURAKSHIT BHARAT
•NATIONAL CRITICAL INFORMATION INFRASTRUCTURE PROTECTION CENTRE
•APPOINMENT OF CHIEF INFORMATION SECURITY OFFICES
•WEBSITS AUDIT
•CRISIS MANAGEMENT PLAN
•TRAINING AND MOCK DRILLS
•MALWARE PROTECTION
•PERSONAL DATA PROTECTION BILL
•CERT In

Computer Emergency Response Team is a national agency whose main task is to tackle country's cyber attacks on government networks. This agency is providing training to government employees in fighting against cyber crimes. This agency is also issuing alerts and advisories regarding cyber vulnerabilities and counter measures in order to stop cyber attacks.

•CYBER SURASHIT BHARAT

This initiative has been launched by MEIT (The ministry of electronics and information technology) in association with NATIONAL E-GO-VERNANCE DIVISION (NEGD) whose main function is to create awareness for stopping cyber attacks. This public and private partnership have arranged many workshops to make people more cognizant regarding best practices for stopping cyber attacks.

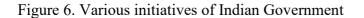
•NATIONAL CRITICAL INFORMATION INFRASTRUCTURE PROTECTION CENTRE

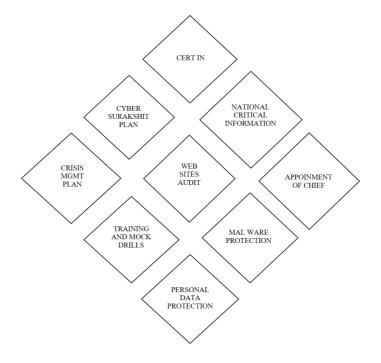
The main function of this agency is to keep a check of the cyber security posture and preparedness of the government and the critical sectors. It has outlines some sectors as critical as given under

- Power and energy
- Banking financial services and insurance
- Telecom
- Transport
- Government
- Strategic and public enterprises

•APPOINMENT OF CHIEF INFORMATION SECURITY OFFICES

Due to increasing cyber attacks, there was an urgent need of skilled security leader who can identify and document the security requirements tking place because of technical innovation. Thus this agency has been doing this function effectively and efficiently. The government of India is also issuinVarious initiatives of Indian Government





Source: Autor's work



• WEBSITES AUDIT

For stopping cyber crimes, government of India has been auditing government websites and applications, emails, phishing, data theft and privacy breach cases. For this purpose 90 security auditing organizations are working presently in order to stop cyber crimes in India.

•CRISIS MANAGEMENT PLAN

The main motive of this initiative is to establish a strategic framework for employees and leaders to prepare for a breach incident. It also manages cyber interruptions of critical sectors of government. IT helps organizations to put in place the correct mechanisms behind the desk in order to deal with cyber security crisis.

•TRAINING AND MOCK DRILLS

The government of India has started training and mock drills in order to assess the cyber security posture of organizations. According to MEIT presently 44 drills have been conducted by CERT 2020. In this drills, 265 organizations had participated from different states and sectors. Mostly finance, defense, power and telecom were the major participants in these mock drills and training programs. Survey reported that about 515 participants took proper training in October 2019 under this program.

•MALWARE PROTECTION

The central government started Cyber SWACCHAT Kendra whose main mission is to clean BOT used for malware analysis and detecting malicious programs. Government of India has also launched a department which is creating awareness among public regarding existing and potential cyber security threats (NCCC).

•PERSONAL DATA PROTECTION BILL

Its main function is to protect Indian users from global breaches who focus on data localization. It suggests that sensitive personal data of persons must be stored locally. This bill also implies storing and processing of any critical information regarding individuals only in India. This bill suggests social media to solve issues regarding spread of offensive content.

Conclusion

It is obvious that government is taking many precautionary steps in order to raise cyber connectivity. But due to rapidly advancement in information technology, a boom can be reported in E- Commerce and E- governance. We are becoming totally dependent on internet. Thus we are becoming more vulnerable in cyber space. Recently government and private sectors are trying to find proper solution by apportioning responsibility. Cyber space stands fifth in common space. Cooperation and coordination are need of the hour among all nations regarding cyber space. Researchers report that cyber space and its exploitation are increasing day by day. Terrorists are attacking on important information in order to cause damages to nations. But existing laws are unable to stop cyber crimes. There should be some modification in cyber laws so some activities may be checked properly in the future. For this purpose international cooperation of all nations is strong weapon to stop cyber attacks. There is a need of universal collaboration of all nations to root out this disease of cyber attacks to manageable level.

References

- 1. Amid spying saga, India unveils cyber security policy". Times of India. INDIA. 3 July 2013.
- 2. Analysis of National Cyber Security Policy (NCSP-2013)". Data Security Council of India. 15 July 2013.
- 3. Analysis Of National Cyber Security Policy Of India 2013
- 4. Beyond the New 'Digital Divide': Analyzing the Evolving Role of National Governments in Internet Governance and Enhancing Cyber security". Stanford Journal of International Law, Vol. 50, p. 119, Winter 2014 Indiana Legal Studies Research Paper No. 290. 15 July 2014.
- Bharat S., Parvinder S., Dhaka V.S. (2012)Sensor Data Encryption Protocol for Wireless Network Security. *Global Journal of Computer Science and Technology*, [S.1.], may 2012. ISSN 0975-4172. Available at: https://computerresearch.org/index.php/computer/article/view/497. Date accessed: 31 aug. 2022.
- 6. Cyber Security Breaches Are Increasing World Over And India Must Be Cyber Prepared". Perry4 Law Organization. 22 May 2014.



- 7. Cyber Security Challenges In India Would Increase". Centre Of Excellence For Cyber Security Research And Development In India (CECSRDI). 18 November 2014.
- 8. For a unified cyber and telecom security policy". The Economic Times. 24 Sep 2013.
- 9. Institute for Defense Studies and Analyses, India's cyber security Challenge, First Edition, March 2012. [
- 10. (NCSP-2013) And Indian Cyber Security Infrastructure". Centre Of Excellence For Cyber Security Research And Development In India (CECSRDI). 21 November 2014.
- National Cyber Security Policy-2013". Department Of Electronics & Information Technology, Government Of India. 1 July 2013. Retrieved 21 November 2014.
- 12. National Cyber Security Policy 2013: An Assessment". Institute for Defense Studies and Analyses. August 26, 2013.
- National Cyber Coordination Centre (NCCC) Of India May Become Functional". Centre Of Excellence For Cyber Security Research And Development In India (CECSRDI). 20 January 2014. B. B. Gupta, R. C. Joshi, Manoj Misra, —ANN Based Scheme to Predict Number of Zombies involved in a DD Attack, *International Journal of Network Security* (IJNS), vol. 14, no. 1, pp. 36-45, 2012.
- 14. ORF Cyber Security Monitor, Volume I Issue 1. 1 August 2013
- 15. Poornima, Y, Navneen, Y, Vardhan Harsha (2017), Cyber Security issues and challenges. *International journal of scientific and engineering research*, Volume 8, Issues 5, May 2017.
- 16. Parvinder S., Piyush M., Rajkumar T. (2012) Security in e-Governance using Biometric. *International Journal of Computer Applications*, vol. 50, issue 3, pp. 16-19. DOI:10.5120/7751-0809
- 17. R. M. Johri Principal Director (information Systems) Office of CAG of India, --Cyber Security -- Indian Perspective
- 18. Ten things you should know about India's Cyber Security Policy". CXO Today.
- 19. The National Cyber Security Policy: Not a Real Policy.
- 20. T.P Deepa (2016) survey on need for cyber security in India, Https://www.researchgate.net

- 21. http://ncrb.nic.in/,-Cyber Crimes
- 22. ids.nic.in,SS Raghav —Cyber Security in India's Count.



SECURITY AND COVID-19



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RURAL DEVELOPMENT IN PANDEMIC ERA: RESEARCH TRENDS AND INSIGHTS

Inna Koblianska¹

Key Words: bibliometric, biblioshiny, research, rural, pandemic Abstract: COVID-19 significantly affected humans across the globe, changing social and economic structures, disclosing new problems stipulating further discussions on humans' well-being. The pandemic crisis gives a new sense to rural development studies worldwide. This paper provides an overview of existing pandemic-related rural research, discloses main trends and research insights through bibliometric analysis of Scopus indexed papers for 2020-2022. Obtained results witness an upward trend of research production, high relevance of pandemic-related rural issues for developing and developed countries and developed countries' leadership in thought construction. Rural tourism, health (mental and physical), poverty, food security, and e-learning comprise the core of the existing research, but the content differs due to the country's development level. Scholars rethink differences between rural and urban lifestyles under the pandemic restrictions, rethink different rural business models and tourist sectors' development given pandemic mitigation potential. There is a time of de-urbanisation discussions, and the digital infrastructure development appears to be a critical point for future rural development pathways: marginalisation or revitalisation. The study's findings can guide future research and inform political decision-making concerning rural post-pandemic development.

Introduction

he coronavirus pandemic has affected all spheres of human life. Its impact ranges from a significant increase in the role of information technology to a rethinking of human mental and physical health factors. The pandemic has also exposed new, previously unobvious, and insignificant issues, bringing them to the forefront of the

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research on success factors in the transition to the post-pandemic period. It is now clear that detailed further research is needed on how the pandemic has changed society and how to act and adapt to it. In this context, special attention should be paid to rural areas characterised by specific demographic structure, level of infrastructure development, services' accessibility, population density, and communication features (Koblianska et al., 2020a; Koblianska et al., 2020b). The results of research on the specifics of the pandemic crisis and post-crisis rural regeneration should lay the groundwork for changing the vector of policy discussions and research concerning rural areas, giving them new meaning to support the further promotion of equality and sustainable development. This paper summarises the trends in the development of science related to the study of rural areas in connection with the pandemic.

To make this research, the Scopus indexed documents were selected by the simultaneous content in the title of the article of the words "rural" and "pandem" from the beginning of the pandemic to the present (for 2020-2022, as of January 26, 2022), except for the field of "Medical Sciences". An initial list of 95 documents was screened and analysed for metadata and content and then reduced to 77 papers (five papers were excluded due to lack of abstract, one - due to repetition, and 12 - due to content inconsistency). The analysis of scientometric data and bibliometric analysis was performed via Biblioshiny - web-extension of the Bibliometrix package for R (R Core Team, 2014; Aria and Cuccurullo, 2017; RStudio Team, 2020). The geographical distribution, the most relevant sources, institutions, and authors were studied to characterise the trends in the reserch field. Content analysis was performed by estimating the frequency of keywords and phrases in the abstracts, supplemented by network and factorial analysis. An in-depth investigation of the most cited papers expands the bibliometric analysis results revealing the detailed research content.

Results

Pandemic-related rural research development and geographical distribution patterns

The analysed collection contains 65 articles, nine conference proceedings, and three other publications from 66 sources. The average number of citations is 3.65 per document (1.33 - annual rate), indicating this topic's relevance. Three hundred twenty-six scientists conducted these studies in



2020-2022, mainly in a group (the number of one-person publications amounts only to seven), with the average size of the research group about five people (collaboration index 4.56). The total number of bibliographic sources covered by the collection is 3395, the number of author's keywords is 298, and an additional (keywords plus) is 273.

In 2020, the number of documents relevant to the request was 16; in 2021 there were 3.5 times more publications -56. Five publications have been already indexed to the beginning of 2022 (Table 1). This demonstrates the high relevance of the research on the development of rural communities transformed by the pandemic.

Year	Number of publications	Mean total citations (TC) per article	Mean TC per year	Citable years
2020	16	14,125	7,0625	2
2021	56	0,982142857	0,982142857	1
2022	5	0		0

Table 1. Research production and citations

Source: author's development via Biblioshiny app (Aria and Cuccurullo, 2017)

Countries' top-five ranks (by the number of documents produced) constitute the USA (53 papers), China (29), the UK (17), India (17), and Peru (10) (Fig. 1). Developing countries (Fiji, Indonesia, Kazakhstan, Australia, Bangladesh) complete the top ten, mainly. According to the corresponding author affiliation, the United States (15 publications), China (nine documents), Great Britain (four papers), Bangladesh and India (two papers each) are leading countries in research production. At the same time, only developed countries form part of the most cited countries (topfive): the USA (92 citations), Croatia (45), Czech Republic (26), and China (25). This disproportion in countries' research production and citing demonstrates the high relevance of research on pandemic-related rural issues for developing and developed countries, but the leadership of developed countries in thoughts and expert opinion construction. International collaboration is limited in the research field now. Bangladesh has the highest value of multi-country research production ratio – 1,0, while USA's ratio is only 0.267 and China's – 0.111; India and the UK don't have multi-country publications. The highest research collaboration is between the USA and Australia (two joint publications), while the value is one for other countries.

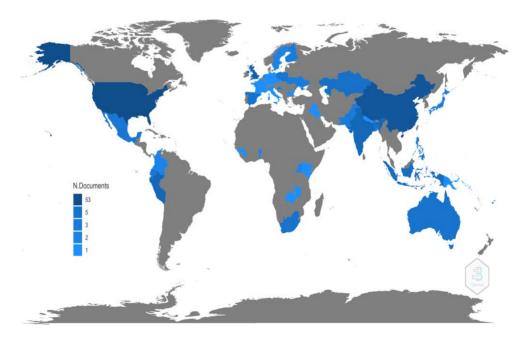


Figure 1: Country scientific production

Source: author's development via Biblioshiny app (Aria and Cuccurullo, 2017)

Table 2 shows the most influential institutions in the field of pandemicrelated rural development research (by the corresponding author's affiliation). Listed institutions have the largest but equal number of publications, three per each, while other institutions have less publications – two or fewer.



Table 2. Most relevant affiliations

Affiliation	Number of publications
Ateneo De Manila University, Philippines	3
National Taiwan University, Taiwan	3
Saveetha University, India	3
University of Kentucky, the USA	3
Yale University, the USA	3

Source: author's development via Biblioshiny app (Aria and Cuccurullo, 2017)

Sustainability (Switzerland) – with five documents published – is the leading platform to share research results. The following periodicals enlarge the most relevant sources to publish pandemic-related rural research: IOP Conference (three documents); Cogent social sciences, Nutrients, Proceedings of the National Academy of Sciences of the USA, Rural theology (two papers each).

The following authors have the most significant number of published articles on this topic: Francis LJ, Li X., Li Y., Village A., Zhou Y. (two papers each). Their productivity, measured by the number of fractionalised publications, is respectively: 0.83, 1.0, 0.5, 0.83, 0.43.

Pandemic-related rural research: main topics and insights

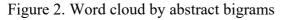
Word frequency was analysed using the author's keywords, and abstract phrases (unigrams and bigrams) approaches to provide a meaningful picture of the pandemic-related rural research.

The frequency of the author's keywords occurrence is dominated by words from the query: covid-19 (35 of 298); pandemic (15); rural (nine); covid-19 pandemic (eight). Except for them, the top-ten most frequent words are rural tourism (seven times), poverty and resilience (four times each), China, coronavirus, crisis, rural schools, well-being (three times each), central

java, Bangladesh, cultural capital, digital divide, e-learning, economic recovery, food security, impact (two times each). The above data testify that the tourism industry, one of the most affected by the pandemic, is gaining notable scholars' attention as a factor in rural development.

The essential pandemic-related rural issues attracting scholar attention also include (by abstract unigrams occurrence frequency): social (58), communities (45), food (44), tourism (38), health (34), learning (33), urban (33), people (32), community (31), data (31). The predominance of the word "social" in the abstracts of the analysed papers evidences the tremendous social significance of the covid pandemic and its consequences. At the same time, the social effects are not limited to the impact on the individuals: rural communities suffer from pandemics affecting the public health network, education system, food supply chains, etc.

To complete the research content characteristic, figure 2 shows the most frequent abstract bigrams. Obtained data complement the conclusions made previously: rural tourism, rural communities (and their viability given social distancing), public health performance, functioning of rural markets and food security issues form the core of rural development research in a pandemic period. Digitalisation is also gaining new impetus (with its development potential and possible implications in rural areas), putting the ability and adequacy of digital infrastructure development in rural areas to meet today's demands on the current agenda.

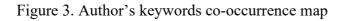


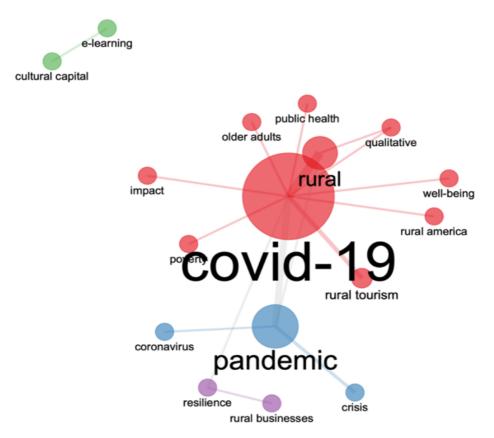


Source: author's development via Biblioshiny app (Aria and Cuccurullo, 2017)



Network ma-pping of the author's key-words cooccu-rrence (Figure 3) discloses four clusters of re-search: 1) the most relevant cluster integra-ting pandemic, well-being, po-verty, rural tou-rism, public he-alth, and older adults' concep-ts; 2) the clu-ster combining coronavirus, crisis, and pandemic terms; 3) the cluster comprising rural business and resilience notions; 4) a stand-alone cluster focusing on cultural capital and e-learning issues.

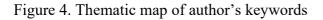


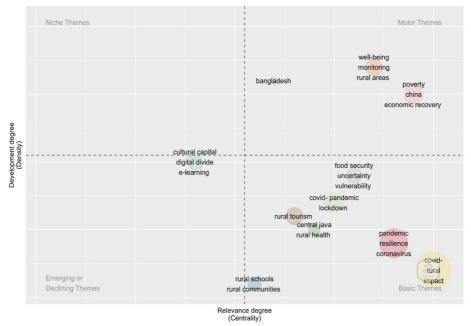


Source: author's development via Biblioshiny app (Aria and Cuccurullo, 2017)

Thematic map of the author's keywords (Figure 4) illustrates topics' relevance. Primary topics include the following: food security-uncertainty-vul-nerability; rural tourism; pan-demic resilience-rural business (the second large in the basic); rural schools and rural communities; covid-rural im-pact embracing leadership, public health, older adults, ru-

ral America (the most cluster among basic). Cultural capital, the digital divide, and e-lear-ning constitute emerging to-pics. Motor themes – China, poverty, and economic recovery; well-being, monitoring, rural areas – reveal the important but underestimated fields that receive less attention.





Source: author's development via Biblioshiny app (Aria and Cuccurullo, 2017)

To introduce the variety of topics covered, a factorial analysis of keywords plus was implemented via multi correspondence analysis (MCA) approach (Figure 5). The results show that pandemic-related rural development studies integrate notions of physical and mental health, issues on pandemic's impact on health, and other social effects of pandemics: distancing and difficulties in accessing food. Examining the interrelationships between concepts integrated into rural development research in the context of pandemics, one should note the close connection between issues of strategy development, governance, livelihood, and rural vulnerability, between attitudes towards health, health effects, and relevant knowledge. Rural population, rural areas, and physical and mental health are central to the researchers' efforts. A separate group of studies focuses on the pandemics' influence on different categories of the rural population (distinguished by age and sex): poverty and access to food.



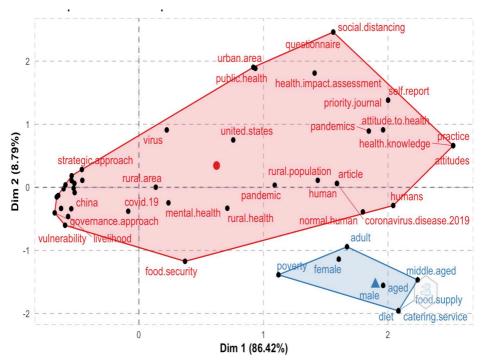


Figure 5. Conceptual structure map of keywords plus: MCA approach

Source: author's development via Biblioshiny app (Aria and Cuccurullo, 2017)

The following table (Table 3) shows the top ten most cited works in the field (ranked by the number of global citations per year).

Pandemic-related rural studies are notable for special attention to the social and human capital of rural areas examined through the lens of health, demographic structure, and communications.

The most cited works raise issues that were not obvious before the pandemics, particularly the relatively lower level of physical activity of the rural population than in urban areas (Zenic et al., 2020). On the one hand, this has had less painful effects of pandemic restrictions on rural people and has had less impact on the population's mental health. At the same time, the identified disparities raise questions about the health of rural residents and the need to reconsider the lifestyle in rural areas after the pandemic.

Table 3. The most globally cited papers

Paper	тс	TC per year
Zenic et al. (202). Levels and changes of physical activity in adolescents during the Covid-19 pandemic: contextualizing urban vs. rural living environment.	45	15
Mueller et al. (2021). Impacts of the COVID-19 pandemic on rural America.	37	12,3
Rice et al. (2020). Changes in recreational behaviors of outdoor enthusiasts during the COVID-19 pandemic: analysis across urban and rural communities.	36	12
Phillipson et al. (2020). The COVID-19 pandemic and its implications for rural economies.	34	11,3
Vaishar and Šťastná. (2022). Impact of the COVID-19 pandemic on rural tourism in Czechia Preliminary considerations.		8,7
Ali et al. (2020). Socioeconomic impact of COVID -19 pandemic: evidence from rural mountain community in Pakistan.		8
Luo et al. (2020). Impacts of the COVID-19 pandemic on rural poverty and policy responses in China.		4,7
Kim et al. (2020). The effect of big-city news on rural America during the COVID-19 pandemic.		3,3
Uehara et al. (2021). A model of stress change under the first Covid-19 pandemic among the general public in Japanese major cities and rural areas.		2,5
Mugauina et al. (2020). Development of Rural Tourism after the Coronavirus Pandemic.		2,3

Source: author's development via Biblioshiny app (Aria and Cuccurullo, 2017)



Information asymmetry is gaining new meaning too. Kim et al. (2020) emphasise the inadequate coverage of rural and urban communities on local television and the dissatisfaction of rural residents with insufficient attention of local media to the issues of rural communities. At the same time, scholars report the significant impact of local news on the behaviour of rural people in America. Following the local TV news, rural residents are more prone to social distancing practices and more receptive to the need for such restrictions in cities more affected by the pandemic (Kim et al., 2020).

The pandemic provides even a new context for the off-farm income: Luo et al. (2020) found off-farm income to be the farm's protection from poverty during the pandemic in China (Luo et al., 2020).

In the context of the pandemic, scientists emphasise the need to pay more attention to rural research because of the diverse pandemics' impact on rural residents and adverse effects on employment opportunities, overall life satisfaction, mental health, and economic expectations. Mueller et al. (2021) call for more prominent interdisciplinary pandemic research that integrates with rural research and goes beyond the traditional focus on cities and regions. Science should outline further pathways to enhance support for health, social, and public services development in rural territories (Mueller et al., 2021).

Scholars discuss the differences between rural and urban lifestyles. Rural life appears to be more attractive in the pandemic context because of recreation opportunities. Rice et al. (2020) found that urban residents in the UK, in contrast to rural, have significantly reduced leisure opportunities due to restrictions. This, in turn, has harmed urban residents' health (Rice et al., 2020).

Uehara et al. (2021), investigating factors of stress during the pandemic, found that communication with a wide range of people is the most stressful and affects humans despite the living area (rural or urban) (Uehara et al., 2021). Rural areas with less social contact (caused by lower density) provide more opportunities to avoid stress. This gives a new advantage to rural life, stipulating further discussions on rural and urban lifestyles.

Exploring the pandemic and its social consequences (including restrictions), scholars accentuate the impact on human physical and mental health and the various manifestations of this impact in rural and urban areas, stipulating a discussion on possible re-urbanisation (Phillipson et

al., 2020). Opportunities to work remotely, more opportunities for leisure and recreation, more living space, and food self-sufficiency - emerge as new benefits of rural life during the pandemic and post-pandemic period (Phillipson et al., 2020). Small economic forms, which are less demanding primarily on human resources and are more flexible in adapting to communications restrictions, appear to be the most rational and justified in a pandemic. Such forms are viable in small (usually rural) communities, creating additional benefits favouring the rural way of life. At the same time, scientists do not ignore the main challenges for rural development in the post-pandemic world: digitalisation, e-learning, and weak public services development (Phillipson et al., 2020). The ability to ensure the same quality of digital infrastructure as in urban areas determines the direction of further rural development: marginalisation or revitalisation. Digitalisation also emerges as an essential means to maintain social contacts and, consequently, proper mental health. This is especially true for less dense rural areas (Phillipson et al., 2020). Existing research show that rural businesses (dependent on external inputs and labour) suffer from pandemic restrictions. At the same time, local food chains and own-grown food are judged to mitigate pandemic adverse effects and support rural revitalisation (Phillipson et al. 2020).

While scholars in developed countries address physical and mental health issues and re-urbanisation, scientific debates on pandemic effects in rural areas of developing countries are centred around unemployment, food security, financial uncertainty, unavailability of public services, and weak community cooperation with government agencies. Lockdown and social distancing strategies are critically negative for these areas, primarily due to food supply problems and loss of tourism income (Ali et al., 2020).

Within the pandemic context, a particular focus of rural studies is given to tourism. Rural tourism potential and future pathways are being rethought under the pandemic restrictions paradigm. Together with related services and trade, the tourist industry has suffered the most from the pandemic and restrictions (Mugauina et al., 2021). At the same time, scientists point to the potential of rural tourism. Given the decline of international tourist flows, rural destinations focused on domestic tourists experience times of revival in some regions. Particularly, Vaishar and Šťastná (2022) note that rural tourism locations in the Czech Republic provide an excellent alternative to urban destinations. Scholars point to a 20 % increase in tourist flows in rural areas in the 2020 summer, compared to 2019, due to domestic tourists. Restrictions insignificantly affect rural tourism, and the



pandemic reveals the industry's role in rural development. The full use of the identified benefits requires appropriate investments in tourism infrastructure (Vaishar and Šťastná, 2022). In this context, one should note a new dimension of further tourism industry development: ensuring compliance with sanitary and hygienic requirements serves as a new competitiveness source and leads to a revision of industry standards. Matching the new criteria will require more investments and appropriate government support (Mugauina et al., 2021). In case of success, domestic rural tourism can be an excellent alternative to farming, a good source of farm income and a driver of rural communities' development (Mugauina et al., 2021). Despite regions' experience of rural tourism development differs, scholars all around urge strict measures to support rural tourism infrastructure development (Ali et al., 2020; Mugauina et al., 2021; Vaishar and Šťastná, 2022).

Conclusions

This research detects the upward trend in research on pandemic related rural issues for 2020-2022, disclosing the high importance of the topic. Existing studies have a wide geographical distribution, with an unexpected majority of developing countries among leaders of research published. Despite this, developed countries are suggested to be the leaders of thought and experts' opinions because of their high citing records. Low international collaboration is a current feature of research field development. The short period could be the main reason for this.

Diverse pandemic effects on rural tourism, business, food security, poverty, demography, people's health, communities' development, and well-being constitute the central insights of existing studies and are reenvisaged under the pandemic realm. The most frequent keywords (author's and additional) and phrases from abstracts evidence this. Existing studies are clustered around poverty, tourism, well-being; coronavirus and crisis; rural business and its resilience; cultural capital and elearning. The latter represents an emerging theme.

The most global cited papers point primarily to the pandemic's negative influence on rural communities in developing (Ali et al., 2020) and developed countries (Phillipson et al., 2020; Mueller et al., 2021). Despite many common issues, scholars from developed countries focus more on human health, digitalisation, and technological aspects of rural and business development in the pandemic and post-pandemic world. In con-

trast, scientists from developing countries focus mainly on problems of the vulnerability of rural residents caused by dependence on semisubsistence farming, underdeveloped public services and infrastructure.

The pandemic leads to rethought of local food chains and their ability to provide a viable alternative to existing food supply chains. Pandemic also opens the door to discussions on de-urbanisation: rural territories are suggested as an excellent alternative to urban settlements for living due to attractive space, abilities to work remotely, and more recreational opportunities. However, scholars point to the weak infrastructure (primarily digital) as the biggest challenge for future rural development.

Obtained results can inform future research and policy discussions on rural development strategies. Further research should focus on the study of rural tourism and measures to strengthen its competitiveness, review existing opportunities and infrastructure in rural areas to ensure good physical and mental human health, and develop appropriate strategies for creating digital infrastructure in rural areas. This will provide a starting point for future rural development policy.

References

- 1.Ali, A., M. Ahmed, & Hassan, N. (2020). Socioeconomic impact of COVID -19 pandemic: Evidence from a rural mountain community in Pakistan, Journal of Public Affairs, Vol. 21, No. 4, DOI: 10.1002/pa.2355
- 2.Aria, M., & Cuccurullo, C. (2017). Bibliometrix: An R-tool for comprehensive science mapping analysis, Journal of Informetrics, Vol. 11, No. 4, 959-975.
- 3.Kim, E., M. E. Shepherd, & Clinton, J. D. (2020). The effect of bigcity news on rural America during the COVID-19 pandemic, Proceedings of the National Academy of Sciences, Vol. 117, No. 36, 22009-22014, DOI:10.1073/pnas.2009384117
- 4.Koblianska, I., Pasko, O., Marenych, T., Kotseruba, N., & Tkachenko, V. (2020a). What drives peasant household to commercialize? An investigation of the factors leading to commercialization of semisubsistence farming in Ukraine, Economics of Agriculture, Vol. 67, Is. 4, 1169–1190, DOI: 10.5937/ekoPolj2004169K.



- 5.Koblianska, I., Pasko, O., Hordiyenko, M., & Yarova, I. (2020b). Are Peasant Households Feasible in Terms of Policy? The Debate on the Future of Semi-Subsistence Households in Ukraine, Eastern European Countryside, Vol. 26, 127-179, DOI: 10.12775/EEC.2020.006
- 6.Luo, R., Liu C., Gao, J., Wang, T., Zhi, H., Shi, P., Huang, J. (2020). Impacts of the COVID-19 pandemic on rural poverty and policy responses in China, Journal of Integrative Agriculture, Vol. 19, No. 12, 2946-2964, DOI: 10.1016/S2095-3119(20)63426-8.
- 7.Mueller, T. J., K. McConnell, P. B. Burow, K. Pofahl, A. A. Merdjanoff, & Farrell, J. (2021). Impacts of the COVID-19 pandemic on rural America, Proceedings of the National Academy of Sciences, Vol. 118, No. 1, 2019378118, DOI:10.1073/pnas.2019378118
- 8.Mugauina, R., Rey, I. Yu., Sabirova, R., Rakhisheva, A. B., Berstembayeva, R., Beketova, K. N., Zhansagimova, A. (2020). Development of Rural Tourism after the Coronavirus Pandemic. Journal of Environmental Management and Tourism, Vol. 11, No. 8, 2020-2027, DOI: 10.14505/jemt.11.8(48).14
- 9.Phillipson, J., M. Gorton, R. Turner, M. Shucksmith, K. Aitken-McDermott, F. Areal, P. Cowie, C. Hubbard, S. Maioli, R. McAreavey, D. Souza-Monteiro, R. Newbery, L. Panzone, F. Rowe, & Shortall, S. (2020). The COVID-19 Pandemic and Its Implications for Rural Economies, Sustainability, Vol. 12, No. 10, 3973, DOI: 10.3390/su12103973
- 10. R Core Team. (2014). R: A language and environment for statisti-cal computing. R Foundation for Statistical Computing, Vienna, Austria, http://www.R-project.org/, (26 January 2022).
- Rice, W. L., T. J. Mateer, N. Reigner, P. Newman, B. Lawhon, & Taff, D.B. (2020). Changes in recreational behaviours of outdoor enthusiasts during the COVID-19 pandemic: analysis across urban and rural communities, Journal of Urban Ecology, Vol. 6, No. 1, DOI: 10.1093/jue/juaa020
- 12. RStudio Team. (2020). RStudio: Integrated Development for R. RStudio, PBC, Boston, MA, http://www.rstudio.com/, (26 January 2022).
- 13. Uehara, M., Fujii, M., Kobayashi, K. (2021). A model of stress change under the first Covid-19 pandemic among the general public in Japanese major cities and rural areas, Sustainability, Vol. 13, 1207, DOI: 10.3390/su13031207

- Vaishar, A., & Šťastná, M. (2022). Impact of the COVID-19 pandemic on rural tourism in Czechia Preliminary considerations, Current Issues in Tourism, Vol. 25, No. 2, 187-191, DOI: 10.1080/13683500.2020.1839027
- Zenic, N., R. Taiar, B. Gilic, M. Blazevic, D. Maric, H. Pojskic, & Sekulic, D. (2020). Levels and Changes of Physical Activity in Adolescents during the COVID-19 Pandemic: Contextualizing Urban vs. Rural Living Environment, Applied Sciences, Vol. 10, No. 11, 3997, DOI: 10.3390/app10113997



UDK: 616.98:578.834]:366.1/.2(497.11)

SECURITY OF PERSONAL FINANCE AND CONSUMPTION DURING THE COVID-19 PANDEMIC

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Key Words: consumption, finance, health crisis, research, security Abstract: According to the findings of the following study, changes in consumption patterns and finances as a result of the Covid-19 pandemic are perceptually directly related to the pandemic's impact. As a result of these effects, there are financial shocks, weakening consumption, falling income, and falling savings, all of which have an impact on the population's purchasing power. We relied on previous research and relevant studies dealing with this topic in our research, and we specifically conducted an anonymous survey using the method of arbitrary sampling through the Raska district sampling unit and the Kraljevo city administration.

Theoretical and conceptual framework

onsumption, personal finances and personal income, inflation and other important macroeconomic indicators were in the focus of research by commercial research institutes, research centers, and academic research in the context of the Covid-19 pandemic. We are familiar with the fact that what we buy depends on our personal finances, which are the primary driver of economies and consumption worldwide (Guzman et al. 2019). As proof of this, we can cite research conducted in the 1950s by Franco Modigliani and his student, Richard Brumberg, who developed a theory of consumption based on the idea that consumption is limited by resources, primarily financial, available during life (Modigliani and Brumberg 1954).

Consumer behavior is influenced by a variety of factors. Consumer decision is affected by presentation (design, information provided, logo), for

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instance, wine consumers. As a result, acknowledging the need is the first stage in any decision-making process. The innovative marketing approach, in particular, comprises a range of marketing strategies, such as product-oriented strategies and advertising, to enhance the customer experience and value (Denić, Radević & Siljković 2018). Also, it is necessary to underline the influence of lobbying as an important factor that is a legitimate way of reflecting the varied interests of decision-makers (Terzić & Milosavljević 2018).

The above-mentioned research had a flaw in that they did not account for the vitally important psychology of consumers and moments of saving. Consumers, on the other hand, have been shown in some studies to be able to boost their savings when faced with certain circumstances (Druze & Modigliani 1970). Research in this area has also presented the theory of uncertain consumption, which states that when people are faced with uncertainty, they will save more and consume less (Leland 1968; Choi et.al 2001; Menegatti 2001;). Experience has shown that people's savings goals and options vary, making it difficult to develop a solution that works for everyone. The financial crisis may strike without warning, but with terrible economic consequences, and we must constantly be prepared for it. Thus, investing money, i.e., through spending, is a practical way to save money (Kahneman & Tversky 1979).

Despite the pandemic crisis that caused vaccination rates to rise and restrictions to be eased across the country, according to research from February 2021, most Americans were optimistic about the situation in the United States as a whole, including the economy, the stock market, and their personal financial prospects. In March 2020, at the commencement of the Covid-19 pandemic, household polls in the UK indicated that 35% of individuals felt financially secure and 50% are concerned about their finances (Kempson & Poppe 2020). We found highly relevant research, presented by Euart et al. in 2020, which encompassed 30 economies with 79 percent of the global population throughout April, May, and June 2020. Income and savings decrease ranging from 30 to 80 percent were reported by respondents from all four continents. Similarly, between 20 and 60 percent of decision-makers in most countries expressed concern about their jobs. Customers still demand substantial support in terms of credit conditions from their banks in this challenging pandemic conditions - eliminating late fees, lowering minimum payments, or allowing loan repayment to be deferred. Simultaneously, the usage of cash is decre-asing, while the use of digital



forms of payment is increasing, perhaps because people were quarantined or because they avoid interactions so that the virus could not spread.

In this context, consumers in most countries believe that banks meet but do not exceed their expectations, at least not on a net basis. Respondents rated the current state of their economies more negatively than their financial situation in all countries covered by the survey. This disparity was greatest in the United Kingdom, followed by Brazil, Italy, and the United States. Personal financial situation assessments were mostly consistent with economic views in China, India, and Indonesia. By mid-2020, over 90 percent of respondents in many European countries expected the decline to last at least a year. The perspective has worsened in South Africa, Mexico and Indonesia. Countries in Asia and the Pacific, including China, India and Indonesia, are generally more optimistic. During the Covid-19 crisis, it was discovered that most of the surveyed countries reduced their reliance on cash payments significantly. In South Africa, Brazil, and India, more than 30% of consumers said they would increase their use of online and mobile banking if their "normal life" restarted. Even in countries with more sophisticated digital banking, such as China, roughly 40% of respondents said they would increase their use of online and mobile services. The expected transition to online and mobile banking services in the United States and Europe is more subdued.

If we take into account a McKinsey & Company survey conducted in 2021, we will notice a certain optimism based on the fact that, due to the pandemic crisis, as many as 80 percent of Americans planned to save more than spend. According to the findings of this study, Europeans are more pessimistic than Americans, but Americans are less optimistic than people in China, India, or Mexico (McKinsey & Company 2021). The pandemic's shock is obviously least damaging to people with large amounts of liquid savings or jobs that can be transferred to a virtual environment. However, an important question arises. The terrain, in particular, can be transferred to the EU's less developed economies. As a result, what level of savings is considered adequate? Of course, the answer is not simple in this case. We propose defining emergency savings as "the gap between unexpected routine expenditures and funds for transaction accounts, particularly savings accounts, which were easily available to pay these expenditures" (Fox & Bartholomae 2020; Brobeck 2008).

Research on attitudes and behavior related to coronavirus discusses the impact of Covid-19 on financial status and how this impact varies depending on demographic characteristics, the presence of health risk

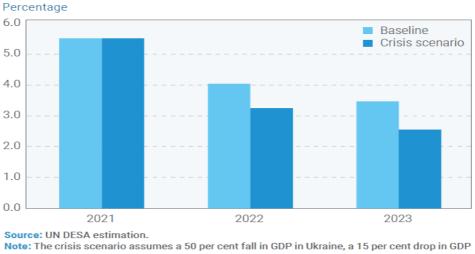
factors and financial status, including employment factors. The survey reveals significant disparities in financial impact because those who were financially most vulnerable prior to the pandemic, namely the poor, found themselves under greater financial pressure, whereas those who were more financially secure experienced a neutral or even positive impact of the pandemic on household finances. These findings have significant policy implications, as policymakers seek to target assistance to those in greatest need (Bruce et al. 2022). This statement is supported by 22 less developed economies in the analysis by the need for a significant inflow of FDI to support a sustainable recovery of development after the pandemic of less developed EU countries. As the need for external sources of financing, i.e., FDI inflows, grows in times of crisis, governments should take appropriate measures to reassure socially responsible foreign investors during difficult times caused by "black swan" events or the current pandemic crisis (Eglantina et al. 2022).

There are also numerous studies that contradict the previous one, which found that FDI inflows had a negative impact on unemployment (Kurtović et al. 2015). However, opposed findings indicate that changes in unemployment occur after technological advancements in a specific sector of the economy or after increasing the fund of various types of capital (Obradović & Siljković 2012).

After more than a year and a half of the Covid-19 crisis, in the middle of 2021, there was a slightly different attitude to savings because the share of savings in income increased, while consumption fell due to falling pandemic-related restrictions. However, as nations around the globe opened up during the Covid-19 pandemic's halt in 2020 and the first half of 2021, consumption increased. If we update this research with current events, many developing global economies are still weakened by the pandemic after a period of "calmness" during the first half of 2022. Because of the war in Ukraine in 2022, the healthy recovery that global economies experienced in 2021 has largely bypassed them. According to UN DESA estimates, combining production shocks in Russia, Ukraine, and other countries with sustainable energy price shocks could reduce global output by about 0.8 percent in 2022 (see Figure 1).



Figure 1. Crisis scenario of falling global production (GDP) at the global level 2021-2023 due to the Ukrainian war crisis



Estimated loss to the global economy in case of multiple shocks

Note: The crisis scenario assumes a 50 per cent fall in GDP in Ukraine, a 15 per cent drop in GDP in the Russian Federation, a 5 per cent decline in private consumption in other CIS countries, a price of \$150 per barrel of Brent crude in 2022 and a global increase in trade frictions. Postcrisis trajectories for the shocked variables are calculated endogenously. The scenario is modelled in UN DESA's World Economic Forecasting Model and evaluated against the baseline forecasts of the World Economic Situation and Prospects 2022.

Source: Department of Economic and Social Affairs Economic Analysis (April 2022), UN DESA, Monthly briefing on the world economic situation and prospects, No 159, pp. 1–6.

It is worth noting at this point that consumers save more as a precaution when faced with uncertainty. Savings increased during the previous global financial crisis, which occurred in 2009. It is also certain that the Covid-19 pandemic influenced consumer savings behavior. During the pandemic, people around the world increased their savings, and even employees held back on spending due to economic and health insecurity. This is the so-called "prudence" concept, which Kimball introduced in the 1990s (Kimball 1990a).

Panic shopping is a common consumer behavior during times of crisis, such as the current Covid-19 health crisis (Arafat et al. 2020a). There is a typical example of the new war crisis in Ukraine, which is reflected in panicked food purchases in Europe, similar to stockpiling during the Covid-19 pandemic, and prior to that due to climate change. More than a third of Britons rushed to get basic foodstuffs because of the stress caused by the Ukraine war crisis (see Figure 2).



Figure 2. Food stockpiling spikes after war in Ukraine strikes panic

Source: Food stockpiling spikes after war in Ukraine strikes panic, available at: https://www.standard.co.uk/news/uk/food-stockpiling-ukraine-war-russia-inflation-price-uk-b993869.html (02.04.2022)

In the midst of the Covid-19 pandemic, bad mood and herd psychology are factors that contribute to panic shopping (Wang & Hao 2020). This shopping behavior is a result of people's fear of scarcity, loss of control, and increased anxiety (Arafat and colleagues 2020b). This study has a forerunner in the form of changes in consumer behavior caused by the economic crisis prior to the one in 2008, which can be mitigated by personality traits. Several new trends emerged during the crisis, including demand simplification due to limited supply, which tends to persist after the crisis, with people purchasing a simpler offer with great value (Hoon Ang et al. 2001).

Changed the style of consumption behavior during the COVID-19 pandemic

Many authors have investigated consumer behavior during times of crisis because of changes in consumer behavior. Consumers' purchasing habits changed significantly during the Covid-19 crisis. Trends such as online shopping, an increased tendency toward non-contact consumption, and non-contact shopping spread during the Covid-19 pandemic, according to the "buy now, pay later" system. All of this was influenced by Covid-19 restrictions as well as by shifts in consumer habits and preferences, which obviously had an impact on e-commerce. The Covid-19 pandemic, which resulted in less physical contact, increased consumption of social network users, and simply a need for social networks (Mason, Narcum & Mason 2020).



In the 12 months preceding the 2021 survey, 90 percent of people aged 16 to 74 in the EU used the Internet, with 74 percent purchasing or ordering goods or services for personal use, according to Eurostat data. Online shopping increased by 1 percentage point (pp) compared to 2020 (73 % of Internet users) and by 11pp compared to 2016 (63 %). The Netherlands (94%), Denmark (92 %), and Sweden (89%) had the highest proportion of Internet users who purchased or ordered goods or services online in the 12 months preceding the survey. In Romania (44 %) and Bulgaria, however, less than half of all purchases were made online (42 %). Over the last five years, the Czech Republic (+27 pp), Slovenia, Hungary, and Romania (all +26 pp), as well as Croatia and Lithuania (both +25 pp), have seen the greatest growth in online shopping among Internet users (see Figure 3).

Figure 3. Online shopping in the EU



Source: Online shopping ever more popular datasets: isoc_ec_ib20 and isoc_ec_ibuy, Euro stat. Available at: https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20220202-1 (25.2.2022)

Three months before the survey, the most common online shopping in EU economies was clothing (including sportswear, footwear or accessories) ordered by 68% of online shoppers. Wearable products were followed by restaurant, fast food chain, and catering service deliveries (31%), furni-ture, household accessories, or garden products (29%), cosmetics, beauty, or

wellness products (27%), printed books, magazines, or newspapers (25%), sports equipment (except sportswear) (24%), computers, tablets, mobile phones, or their accessories (23%), and children's toys or childcare articles (20%). According to online shopping, clothing and footwear are the most popular in 2021, followed by restaurants and catering, furniture and garden products, cosmetic and wellness products, and so on.

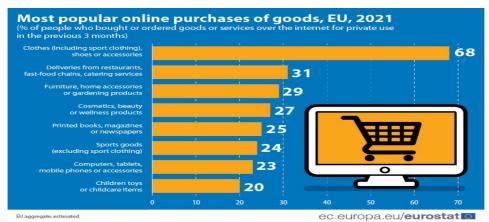


Figure 4. The most popular online shopping products in the EU

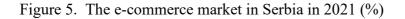
Source: Online shopping ever more popular dataset: isoc_ec_ibgs. Available at: https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20220202-1(25.02.2022)

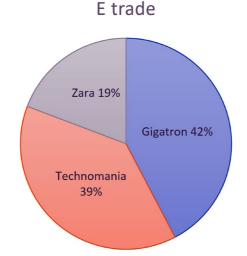
In Serbia, consumers are increasingly opting for online shopping, and the sector's growth rate is relatively rapid. With a 15% increase, the Serbian e-commerce market has contributed to a global growth rate of 29% in 2021. E-commerce revenue continues to rise. Northern Macedonia was the region's leader in the use of mobile e-commerce wallets at the time of the pandemic, with as many as 68 percent of respondents using this method when making payments. Albania, on the other hand, has the lowest usage - only one out of every ten consumers pay this way. Serbia, Bosnia and Herzegovina, and Montenegro are in the golden middle of SEE economies, with every fourth citizen using mobile wallets (VISA 2022).

In the Serbian e-commerce market, the largest player is Gigatron.rs, a store with \$ 44 million in revenue in 2021. Tehnomanija.rs comes in second with \$ 40 million, followed by Zara.com with \$ 20 million. Overall, the top three stores generate 20% of all online revenue in Serbia. Clothing and footwear were the dominant category of e-commerce by the end of 2020, with nearly two out of three online customers in Serbia purchasing



this type of product. This finding is consistent with EU trends. Nearly 30% are online shoppers buy electronic devices and phones, one out of four bookshelves, and one out of five order food, cosmetics and sports equipment online. Only one out of every ten citizens buys groceries and household necessities from retailer websites or online stores. Men are slightly more involved in online shopping in Serbia (50 percent vs. 44 percent for women). Three out of every four people under the age of 39 shopped online, while every second citizen under the age of 49 shopped online. Belgrade and Vojvodina have the highest percentages of online customers among citizens, with 59 and 51 percent, respectively. While nearly 70% of female online shoppers purchase clothing and footwear, and one out of three purchase cosmetics, men (in addition to clothing and footwear) purchase electronics (nearly 40%), bookshelves (29%), and sports equipment (24 %). People aged 30-39 are the most likely to use a payment card. This age group also prefers PayPal more than people over the age of 50. Cash is the preferred option for those aged 15 to 29, but it is the least preferred for those aged 30 to 39. (MASMI 2020).

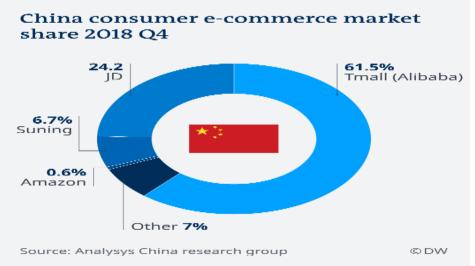




Source: The e-commerce market in Serbia (2021), available at: https://ecommercedb. com/en/markets/rs/all (20.12.2021)

Because consumers do not feel safe shopping in traditional stores, the research we chose for our paper focuses on safety. As a result of these circumstances, the appearance of several regional champions indicates increased competition in the e-commerce arena. Although Amazon is the undisputed global leader, there are regional champions in many economies, such as MercadoLibre in Latin America and Shopeei in Southeast Asia. Meanwhile, Alibaba clearly dominated and it was the most popular e-market in China by the end of 2021. As a result, by early 2022, Ali-baba.com was one of the world's largest e-commerce (B2B) companies, with virtually limitless product catalogs from over 200,000 suppliers (see Figure 6).

Figure 6. China consumer e-commerce market share at the end of 2018



Source: Why Amazon struggled to beat Alibaba online in China, Analysys China research group (2021) https://www.dw.com/en/why-amazon-struggled-to-beat-alibaba-online-in-china/a-48403733 (20.11.2021)

Safe management of personal finances and spending behavior: a case study of employees in the City Administration of Kraljevo during the Covid-19 pandemic

The research we conducted was supported by survey questions designed to assess the immediate effects of the COVID-19 crisis on Kraljevo city administration employees. Financial behavior of decision-makers, consumption indicators of individuals, and thus of their households, needs and expectations in spending and finances during the current and future pandemics, the use of online or traditional shopping methods, and so on were among the issues addressed. The study included 100 Kraljevo city administration employees who were polled in the CA Kraljevo. The survey was conducted between April and May of 2021. Males and females were equally represented in the surveys based on gender characte-



ristics. People aged 30 to 40 and 40 to 50 predominate in both males and females, with a significantly lower share of people aged 20 to 30 and the least represented people aged 50 and over, while 10 percent of respondents did not comment on their age.

The first question concerned how much money they spend during a pandemic. Highly dominant responses, 10 versus 1 or even less than 1 in favor of the answer that money is mostly spent on food and groceries, have been observed. The second largest expenditure in terms of money is that concerning clothes and shoes. When we talk about spending money on bills, we see a slightly higher representation of expenditures (electricity, water, other utilities, loan installments). There were no responses to the question dealing with how much money was spent on investments and luxury during the pandemic (see Figure 7 & Figure 8).

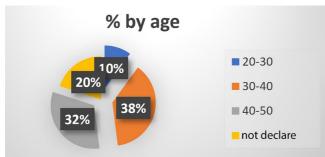


Figure 7. Representation by age in the survey

Source: Authors' presentation based on the survey





Source: Authors' presentation based on the survey

The question of whether or not you have a crisis fund was also included. Respondents answered with a resounding 79 % "yes". Other respondents, 11 percent, stated that they do not have a crisis fund, and 10% did not vote. The survey's next question was – did you use the banking moratorium to repay bank liabilities? The survey response was ten to one

in favor of the answer that they did not use the bank's moratorium. Concerning the bank moratorium, the question was whether you would be able to settle your obligations on a regular basis if you did not use the moratorium. Out of ten respondents, half answered 'yes' and half of the respondents said 'no', while 10% were indecisive. We also discussed whether other sources of money, such as state aid and tax breaks, are sufficient in times of crisis. The answer was 10 to 1, indicating that other sources of assistance were adequate. There was very rarely an answer to a specific question, such as how much they should be paid per month. The majority did not respond because each of the 30 respondents chose a different amount of assistance ranging from 100 to 500 euros. Some were very specific, recommending a monthly budget of 50 to 100 euros.

Sources of money	No	Yes	Indecisive				
Crisis fund	11%	79%	9%				
Moratorium	85%	10%	5%				
Settlement	45%	45%	10%				
Other sources of money	10%	85%	/				
Source money							
11% 79% 10% 85%	10% 5%	45% 45% 10%	10% 85% 5%				
CRISIS FUND MOR/	ATORIUM	SETTLEMENT	OTHER MONEY				
■ not ■ yes ■ indecisive							

Table 1. Sources of money at the time of the pandemic ³

Source: Authors' presentation based on the survey

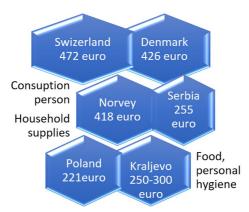
The next question was whether they agreed with millionaires who believe that managing a personal budget requires 80% discipline and 20% knowledge. We received responses in which one-third of respondents stated that discipline is required at 80% and knowledge at 20%, while the other third stated that discipline is required at 50% and knowledge at 50%. According to the third group of respondents, 90 percent of disciplines and 10% of knowledge are required for successful personal budget management. A critical question was how much the average Serbian consumer

³ Authors' presentation based on the survey



spends each month on food, household necessities, and personal hygiene products. During the same time period, these costs were 472 euros in Switzerland, 426 euros in Denmark, 418 euros in Norway, 221 euros in Poland, and 161 euros in Hungary (Ey indeks promena 2021, p. 4). According to a survey conducted in the Kraljevo Municipal Assembly in May 2021, the personal costs ranged between 250 and 300 euros.

Figure 9. Consumption per individual in the economies of the EU, Serbia and Kraljevo



Source: https://assets.ey.com/content/dam/ey-sites/ey-com/sr_rs/topics/consulting/ey-indeks-promena-navika-potrosaca.pdf?download(24.02.2022.)

Whether you buy online or in person during the pandemic is one of the questions asked in the Kraljevo city administration survey. The answer is that eight out of every ten respondents buy in the traditional manner, while two use online shopping. Mix shopping is barely represented in respondents' responses.



Source: Authors' presentation based on the survey

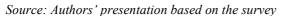
One of the questions was whether you had insurance for yourself and your family in the event of a pandemic. The majority of respondents said 'no,' with only a few saying 'yes.' The question was also whether your current income would be sufficient to cover your current expenses during the pandemic. In this case, 89 percent of respondents said 'yes,' while 11 percent said 'no.' One of the questions was about saving money during the pandemic. 90% of those polled said 'yes,' while 10% said 'no.' A very interesting question was whether you, like Rockefeller, are one of the world's wealthiest people and keep track of your income and expenses. Surprisingly, 100 percent of the respondents said no. The question was whether you would spend your money more wisely during the pandemic. According to the respondents' responses, only 80% spend more carefully, while 20% do not behave any differently than before the pandemic.

There was also the question dealing with the financial situation in their family at the time of the pandemic. The answer was 80% in favor of "it was same as a year ago", while 15% of respondents answered that the situation was worse than before the pandemic and 5% of respondents remained undecided. One of the questions was whether the pandemic changed your life habits as a consumer. The answer was 'yes' in 30% of cases, 'no' in 30%, and 'very little' or 'not at all' in 20% of cases' and or 'not at all'. The next question was whether you were more sensitive to lower prices in wholesale stores during the pandemic. The answer was 80% with 'yes' and 20% answered with 'no'. The question was also whether the lives of consumers will change in the future. The answer was 80% with 'yes' and 10% with 'no' and we have 10% who did not vote.

One of the questions concerned stress and whether the pandemic contributed to it. In this case, 100 percent of respondents said 'yes.' The question was also whether the money saved during the pandemic should be spent. The responses were split in half, with 50 percent answering 'yes' and 50 percent answering 'no.' Finally, whether you were saving money during the pandemic was asked. Ninety percent of respondents said 'yes,' while thirty percent said 'no.'

Figure 11. Financial situation, life habits, sale price and the future of consumption during the panemic







Conclusion

The presented research is the result of previous research conducted by eminent authors with the goal of demonstrating to the general public research in practice with specific changes that have occurred in relation to personal finance security and spending behavior in the Covid-19 pandemic. Consumer behavior and attitudes toward finances have changed as a result of changes in consumption habits, economic and health uncertainty, and the pandemic. The most notable similarity in research conducted within the EU, Serbia, and Kraljevo is that customers have similar purchasing habits: in the EU, it is clothes and footwear, while in Serbia and Kraljevo, it is groceries and food, bills, and then clothes and shoes. We spend a lot of money in Kraljevo, according to the respondents.

The communication relationship in purchasing, spending, and finance is another noticeable difference. Digital channels with consumers, businesses, society, and the environment serve as the foundation of communication in the EU, allowing people to get what they want quickly. The EU consumer is impatient and wants everything now. In the EU, most shopping is done online. In Serbia, the outbreak of the pandemic coincided with an increase in online shopping, whereas in Kraljevo, traditional shopping options remain dominant.

Consumers in Serbia and Kraljevo agreed that their lifestyle had changed during the pandemic, but they simply accepted the finished facts, following the principle 'as it is, so it must be.' When there is a surplus, consumers and their families in Kraljevo's city administration save money, as well as in the rest of Serbia. Savings in the EU 'suffer' and fall as a result of the pandemic. In terms of the way of life in the EU and Serbia, it has changed, as has consumption. According to Kraljevo's city administration, one-third did, one-third did not, and the remaining onethird did not respond. The consumer is not more careful with money and spending in general than before the outbreak of the pandemic, according to Kraljevo city administration employees. In the EU, we encourage consumers to be more frugal with their spending. When viewed collectively at the EU, Serbia, and the Kraljevo city administration levels, all of these changes bring a new world of consumption and finance, as well as a new reality of consumption and a new way of communication. Thus, the Covid-19 pandemic has created a new set of challenges.

References

- Arafat, S. M. Y., Kar, S. K., Marthoenis, M., Sharma, P., Apu, E. H., and Kabir, R., (2020a). Psychological underpinning of panic buying during pandemic (COVID-19). Psychiatry Res. 289:113061. doi: 10.1016/j.psychres.2020.113061
- Bruce C, Gearing ME, DeMatteis J, Levin K, Mulcahy T, Newsome J., 2022. Financial vulnerability and the impact of COVID-19 on American households. PLoS ONE 17(1): e0262301. https://doi.org/ 10.1371/journal.pone.0262301Burstein, F., Brézillon
- 3. Brobeck, S. James., 2008. Understanding the Emergency Savings Needs of Low and Moderate-Income Households: A Survey Based
- 4. Analysis of Impacts, Causes and Remedies. Washington, DC: Consumer Federation of America.
- 5. Choi, G., Kim, I., and Snow, A. 2001. Comparative statics predictions for changes in uncertainty in the portfolio and savings problems. Bull. Econ. Res. 53, 61–72. doi: 10.1111/1467-8586.00118,
- 6. Denić, N., Radević, B., Siljković, B., 2018. The role of digital marketing in promotion of wine fromap Kosovo and Metohija, Ekonomi-ka poljoprivrede, Volume 65, Issue 3, p.p.1071-1083 and it applica-tions Available online 25 April 2021, doi:10.5937/ ekoPolj1803071D
- 7. Ey indeks promena navika potrošača (maj 2021) p.p.4, Bulding and better working world, available at https://assets.ey.com/content/ dam/ey-sites/ey-com/sr_rs/topics/consulting/ey-indeks-promenanavikapotrosaca.pdf?download (20.12.2021)
- 8. Euart, J., Ferreira, N., Gordon, J., Gupta, A., Hilal A., White, O., 2020. Financial life during the Covid 19 pandemican update, McKinsey & company, United nations, link: https://www.mckinsey.com/industries/financial-services/our-insights/a-global-view-of-financial-life-during-covid-19, and aplications available: (19.08.2021).
- Eglantina, H., Imeraj, E., Feruni, N., Panailt, M., Vasile, V., 2022. COVID 19-A blacj swan for foreign direct investment: Evidence from European countries, Joyrnal od Risk Financial Management, Volume 15, Issue 4, and it aplications available: https://www.mdpi. com/1911-8074/15/4/156 (10.01.2022)
- Fox, Jonathan, and Suzanne Bartholomae. (2020). Household finances, financial planning, and COVID-19. Financial Planning Review 3: e1103. CrossRef
- 11. Food stockpiling spikes after war in Ukraine strikes panic, Evening standard, (april 2022), available at: https://www.standard.co.uk/ news/uk/food-stockpiling-ukraine-war-russia-inflation-price-uk-b993869. html(02.04.2022)
- 12. Guzman, F., Paswan, A., Tripathy, N. 2019. Consumer centric antecedents to personal financial planning, Volume 36, N0 6, Journal of



Consumer Marketing, ISSN 0736-3761, p.p. 858-868. https://doi. org/10.1108/JCM-01-2018-2514

- Hoon Ang, S., Sim Cheng, P., Lim, E.A.C. and Kuan Tambyah, S., 2001. "Spot the difference: consumer responses towards counterfeits", Journal of Consumer Marketing, Vol. 18 No. 3, pp. 219-235. https://doi.org/10.1108/07363760110392967
- 14. Jacques, H. Dreze., Franco, Modigliani., 1972. Consumption decisions under uncertainty, Journal of economic Theory, Volume 5, Issue 3, p.p.308-335 https://econpapers.repec.org/article/eeejet-heo/v_3a5_3ay_3a1972_3ai_3a3_3ap_3a308-335.htm
- 15. Kimball, M. S. 1990a. Precautionary Savings and the Marginal Propensity to Con-sume," Working Paper 3403, NBER. _________ (1990b): "Precautionary Savings in the Small and in the Large," Econometrica, 58, p.p. 53–73. ______ (1993): "Standard Risk Aversion," Econometrica, 61, p.p. 589–611. ______ (1997): "Precau tionary Motives for Holding Assets," in The New Palgrave Dictio nary of Money and Finance, New York, N.Y.: Grove's Dictionaries Inc.
- 16. Kurtovic, S., Siljkovic, B., Milanovic, M., 2015. Long-term impact of foreign direct investment on reduction of unemployment : Panel data analysis of the Western Balkans countries. Journal of Applied Economics and Business Research, Volume 5, Issue 2, p.p.112-129.
- 17. Kahneman, D., Tversky, A. 1979. Prospect Theory: An Analysis
- of Decision Under Risk, Econometrica, Volume 47, N0 2, p. p. 263-291 https://www.uzh.ch/cmsssl/suz/dam/jcr:00000000-64a0-5b1c-0000-00003b7ec704/10.05-kahneman-tversky-79.pdf
- Kempson E., Poppe C., 2020. Coronavirus Financial Impact Tracker. Key findings from a national survey. Retrieved (2020-07-10) from https://www.aberdeenstandard.com/docs?documentI d=GB-280920-130080-1. [Google Scholar]
- 20. Kurtović, S., Siljković, B., Denić, N., Petković, D., Mladenović,
- 21. Sokolović, S., Mladenović, I., Milovancević, M. 2018. Exchange rate pass-through and Southeast European economies," Physica A: Statistical Mechanics and its Applications, Elsevier, vol. 503(C), pages 400-409.
- Leland, H. E., 1968. Saving and uncertainty: the precautionary demand for saving. Q. J. Econ. 82, 465–473. doi: 10.2307/1879518, CrossRef Full Text | Google Scholar,
- 23. Modigliani, F., Brumberg, H. R. 1954, Utility analysis and the consumption function: an interpretation of cross-section data, in Kenneth K. Kurihara, ed., Post-Keynesian Economics, New Brunswick, NJ. Rutgers University Press. p.p. 388–436
- Menegatti, M. 2001. On the conditions for precautionary saving. J. Econ. Theory 98, 189–193. doi: 10.1006/jeth.2000.2751, CrossRef Full Text | Google Scholar
- 25. 24.Moyntly briefing on the world economic situation and prospects, De-partment of Economic and Social Affairs Economic Analysis

(april 2022), UN desa, No 159, p.p. 1-6 available at: https://www.un. org/development/desa/dpad/publication/world-economic-situation-and-prospects-april-2022-briefing-no-159/(22.04.2022)

- Mason, A., Narcum, J., & Mason, K., 2020. Changes in consumer decision-making resulting from the COVID-19 pandemic. Journal of Customer Behaviour, 19(4), 299-321. Available online at. https://doi.org/10.1362/147539220X16003502334181 [Crossref], [Google Scholar]
- Obradović, S., Siljković, B., 2012. Social and Economic Measures for Reduction of Unemployment in Serbia and Their Effects on Poverty and Level of Development, Monograph: Managing structural Chan-ges-Trends and requirements, Volume 1, p.p. 459-470, Institute of Economic Science, Belgrade, ISBN: 978-972-9344-06-0 and it apli-cationsavailable: https://econpapers.repec.org/ bookchap/ibgchaptr/ msc-25.htm (10.8.2021)
- 28. Online shopping ever more popular datasets: isoc_ec_ib20 and isoc_ec_ibuy, Euro stat, odnosno https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20220202-1(25.2.2022)
- 29. Online shoping in Serbia, Esomar corporate (2020) available at: https://masmi.rs/wp-content/uploads/2020/07/Online-kupovina-u-Srbiji MASMI Q2 2020-edit2 engl.pdf (20.03.2022)
- 30. Regionalno Visa istraživanje, odnosno avaliable at
- 31. https://rs.visa.com/pay-with-visa/promotions/regional-research.html
- 32. (20.03.2022))
- 33. Terzić, P., Milosavljević, A., 2018 Actors of a political process in the wasteland of challenges in combating political corruption, Tematic conference proceedings of international significance, Arcibald Reiss days, Belgrade, Academy of criminalistic and police studies, ISBN 978-86-7020-404-1, ISBN 978-86-7020-190-3, p.p.51-62
- 34. The e-commerce market in Serbia (2021), available at: https://ecommercedb.com/en/markets/rs/all (20.12.2021
- 33. Wang, H. H., Hao, N., 2020. Panic buying? Food hoarding during the pandemic period with city lockdown, Journal of Integrative Agricul-ture 2020, 19(12): p.p. 2916–2925
- 34. Why Amazon struggled to beat Alibaba online in China, Analysys China research gropup (2021) https://www.dw.com/en/whyamazon-struggled-to-beat-alibaba-online-in-china/a-48403733 (20.11.2021)



UDK: 614.21:614.4(497.11)"2017/2022" 616.98:578.834]:616.8-089

SAFETY OF NEUROSURGICAL PATIENTS AND HEALTHCARE WORKERS DURING THE COVID 19 PANDEMIC - OUR EXPERIENCE

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Key Words: Covid 19, Neurosurgery Ćuprija.

Abstract: The subject of this work is the organization of work during the pandemic and the impact of COVID 19 on the number of operations and the range of operations at the Cuprija Hospital. The goal of the work is to point out the possibilities of working during emergency epidemiological situations, to point out what kind of operations must be done and which ones to postpone, and to organize the work in that way. So that patients do not suffer significant harm, in the sense that those who do not have COVID 19 do not get infected and those who do get adequate treatment in the neurosurgery department. Also, the focus is on the prevention of infection among employees at the department of the Cuprija hospital - Department of Neurosurgery. The paper used official statistical data, data from the Ministry of Health of Serbia, as well as statistical data from the department of neurosurgery in Cuprija, and the observation time frame is 2017-2019, the situation before COVID 19, and from 2020 to April 2022.

Introduction

oronavirus disease 2019, recognized by the acronym kovid 19 or COVID-19, is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-Cov-2). Late in December 2019, pneumonia-related symptoms of a new coronavirus infection first surfaced in Wuhan, Hubei. On February 8, 2020, the National Health Commission designated this novel coronavirus pne-

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umonia as "New coronavirus pneumonia." On February 11, WHO formally referred to the novel coronavirus as "COVID-19," the coronavirus illness for 2019. Due to their ignorance of the new disease and its mode of transmission at first, a large portion of the medical personnel were afflicted. Due to sickness, some neurosurgeons have had to cut back on personnel or even close the ward, which has an adverse effect on the progress of their job (Liuqing, et al., 2020). The coronavirus disease 2019 (COVID-19) outbreak has seriously endangered the health and lives of Chinese people. The cumulative number of confirmed cases in the mainland of China will be 86 763 (95%) on May 2, 2020. Up until March 15, 2020, the case fatality rate increased to 6.42% (95%). On February 23, 2020, the existing confirmed cases reached its peak, with 60 890 cases (95%) (Zu, et al., 2020). Departments of neurosurgery must use an immediate reaction to combat this epidemic, as well as recommendations from neurosurgical associations in areas with a high infection rate. (Kuroda, 2020).

Some authors state (Petter, et al., 2021), one of the key questions regarding COVID19 vaccines is whether they can reduce viral shedding. The vaccination rollout started on Dec 20th 2020, utilized mainly the BNT-162b2 vaccine, and focused on individuals who are 60 years or older. Taken together, findings indicate vaccination is not only important for individual's protection but can reduce.

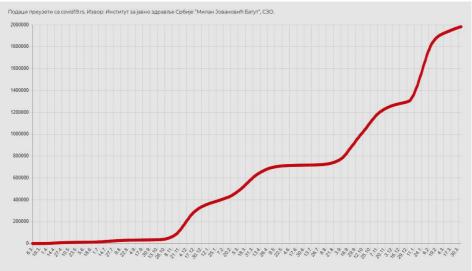
Panidemic of Covid 19 spread to Serbia on March 6, 2020, when the first case of a sick patient was registered in Bačka Topola.

On March 15, 2020, a state of emergency was declared throughout the country, which brought with it a large number of restrictions and the introduction of new rules and recommendations in everyday life and in the functioning, development, organization and work of medical services (Weiss, Leibowitz, 2011; Li, 2016; Gralinski, Menachery, 2020)

In the period from the first declared case of a sick patient, a total of 1,988,000 people fell ill in Serbia until April 2022, of which 15,877 died. Mortality according to the number of confirmed cases is estimated at between 1% -5%, but varies depending on the patient's age and his current health condition (Gralinski, Menachery, 2020)



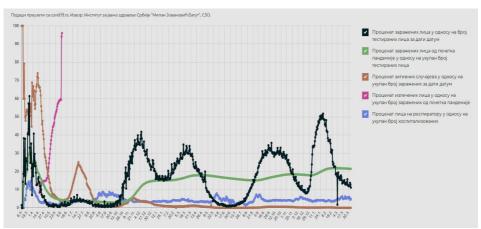
Graph 1: Number of total ill persons by cut-off days in the period from March 6, 2020 o April 2022.



Source: Institut za javno zdravlje Srbije "Milan Jovanović Batut", https://www.batut.org.rs/

On the shown graph no. 1. the number of total ill persons by cut-off days in the period from March 6, 2020 to April 2022 is presented.

Graph 2: statistical ratio of the percentage of infected persons in relation to: the total number of tested, the total number of infected, the total number of cured, total number of persons on respirators, and total number of recovered persons on certain days from the beginning of the Covid 19 pandemic to April 2022.



Source: Institut za javno zdravlje Srbije "Milan Jovanović Batut", https://www.batut.org.rs/

On the shown graph 2. we can see the statistical ratio of the percentage of infected persons in relation to: the total number of tested, the total number of infected, the total number of cured and the total number of persons on respirators, on certain days from the beginning of the Covid 19 pandemic to April 2022.

The set of symptoms of 19 diseases is different, and depends on a large number of factors, primarily on the previous health status of the patient, comorbidity, phenotype, etc.

The most common set of mild symptoms of this disease are fatigue, fever, cough, loss of sense of taste and smell, gout, headache, diarrhea, rash, itching and burning of the eyes. Other more severe, but less common symptoms of the disease are a feeling of suffocation and shortness of breath, severe fatigue, disorientation, chest pain, etc. (Comber, et al., 2021).

The number of patients with the most severe form of the disease included people aged 60-70 years, in a slightly smaller percentage of elderly patients as well as younger ones, in the period of 40-50 and 50-60 years. The youngest patients most often had a set of milder symptoms of the disease. Complications of covid 19 diseases most often occurred between 7-14 days from the onset of the disease (Petter, et al. 2021; Polack, et al. 2020)

The consequences of the 19th pandemic significantly affected the work, organization and functionality of the health system of the Republic of Serbia.

The aim of this paper is to review and analyze the impact of the kovid 19 virus pandemic on the work and organization of the Department of Neurosurgery of the Ćuprija General Hospital.

Since the beginning of the pandemic, the Department of Neurosurgery of the General Hospital Ćuprija has monitored and acted by discretion of the Ministry of Health and was guided by the most modern protocols and organization of work in order to achieve maximum effect and improve the quality of treatment of both positive and negative patients.

Department of Neurosurgery of OB Ćuprija is the only neurosurgical department of the Pomoravski district, which consists of about 400,000 people and includes the municipalities of Ćuprija, Jagodina, Svilajnac, Despotovac, Paraćin, Rekovac and Kruševac.



The geographical position of the Department of Neurosurgery and the General Hospital Ćuprija is also vital for the timely care of patients as part of the "golden hour", and providing the best and fastest treatment and surgical treatment of patients (Jovanović, Radović, Simić, 2021; Jovanović, Radović, 2021a).

Covid 19 infection, had influence on work and organization on pretty much all surgical and intern departments.

From the start, WHO introduce a lot of new organization advices. Our department give their best, to keep up with them and invested significant effort and funds. A special isolated operating room was designated for surgeries that involve COVID-19 patients whether suspected or confirmed. High air flow cycles would be effective in halting viral transmission. Operating rooms usually have positive pressure air circulation. In the COVID-19 area, all the staff should wear all personal protective equipment as a mandatory precaution. Doors at the COVID-19 area in the operating room should be closed all the time. All instruments for surgery should be available on a case-to-case basis before beginning to avoid overcrowding at the COVID-19 operating area.

We took special care to keep our patients safe (from protocol), at first by lifestyle and hygiene changes and obligations:

- 1) Ensure good personal hygiene, balanced diet and 8 hour sleep,
- 2) Avoid belts, wallets, cash inside OT, minimize cellphone use; clean with 70% alcohol,
- 3) Avoid keeping beard to allow proper N-95 mask seal,
- 4) Change footwear before entering home; Leave keys/wallet in a separate box at entrance,
- 5) Frequent hand hygiene, shower, change of clothes; separate linen and utensils at home,
- 6) Maintain social distancing from family members,
- 7) Curtail/quit smoking, manage comorbidities like diabetes, hypertension (Priyanka, et al., 2021)

Patients and methods

The Department of Neurosurgery consists of fourteen people: three doctors, six shift nurses / technicians and four instrumentalists. The work of the staff is organized so that it can provide twenty-four-hour care and nursing. Performs highly specialized, specialist-consultative and inpatient health activities in the field of prevention, diagnosis, treatment and rehabilitation of diseases and injuries of the central and peripheral nervous system and spine of patients of all ages.

In the table 1. we can see the number of examined, hospitalized and operated patients in the years 2017, 2018 and 2019. The total number of cared for patients for the aforementioned period was a total of 12,795. The number of hospitalized patients is 4,566. The total number of operations is 392.

Table 1. Show total number of reviewed, hospitalized and patients with surgical management.

	2017	2018	2019
Number of reviewed patients	4017	4223	4555
Number of hospitalized patients	1401	1550	1615
Number of patients with surgical treatment	117	131	144

Source: Ćuprija hospital - Department of Neurosurgery

The number of patients according to the main reason for hospitalization for 2017, 2018 and 2019 is shown in Table 2.

Table 2. The number of patients according to the main reason for hospitalization

	2017	2018	2019
Degenerative diseases of spine	522	660	740
Craniocerebral injury (mild)	315	342	365
Craniocerebral injury (severe)	211	221	222
Intracranial tumors	179	176	164
Vascular diseases	174	151	124

Source: Ćuprija hospital - Department of Neurosurgery



In the table no. 9 we can observe a significant increase in hospitalized patients, primarily as part of degenerative diseases of the spine.

Table No. 3 shows the number of examined patients, hospitalized patients as well as operatively cared for patients during 2020, 2021 and 2022 until April.

Table 3. number of examined patients, hospitalized patients as well as operatively cared for patients.

	2020.	2021.	2022.
Number of reviewed patients	3121	3755	845
Number of hospitalized patients	1011	1350	425
Number of patients with surgical treatment	105	124	43

Source: Ćuprija hospital - Department of Neurosurgery

Number of patients in the period from March 6, 2022. yr. until April 2022, according to the reason for hospitalization, is shown in table no. 4:

	2020	2021	2022
Degenerative diseases of spine	332	425	126
Craniocerebral injury (mild)	264	360	100
Craniocerebral injury (severe)	175	184	84
Intracranial tumors	125	182	66
Vascular diseases	115	181	49

Source: Ćuprija hospital - Department of Neurosurgery

Measures taken to prevent the spread of Covid 19 infection can be divided into measures taken under:

- 1) Reorganization of the work of clothing staff,
- 2) Introduction of mandatory testing of patients before admission to the organizational unit,

- 3) Introduction of wearing obligatory protective masks, visors, protective suits (spacesuits),
- 4) Introduction of isolation space for patients suspected of covid 19 infection,
- 5) Introduction of new facilities for the care of 19 positive patients,
- 6) Introduction of a new room for the care of 19 positive patients,
- 7) Introduction of a special intensive care unit for covid 19 positive patients.

The work of the clothing staff has been reorganized in the form of the minimum possible contact between them, in order to minimize contact and prevent the spread of infection in this way. A ban on organizing collective meetings was also introduced, which in this case took place via the Internet platform during the Covid 19 pandemic. In terms of protective equipment, the organization was as follows:

- 1) In contact with the proven Covid 19 negative patients, the staff was obliged to wear a protective mask, gloves and goggles, which were regularly changed to work with each patient separately.
- 2) Work with Covid 19 suspected positive and Covid 19 proven positive patients included mandatory wearing of all the above equipment, as well as wearing protective suits.

Contact between patients was reduced by a ban on movement, a ban on visits as well as the separation of beds and a reduction in the number of beds per room.

Running a new care room for Covid19 positive patients was the biggest challenge for the members of our team. The hall consisted of a completely separate instrumentation, with separate anesthesia machines, which were separated in relation to the systemic central supply and exhaust of gases necessary for their operation.

During the operative treatment of 19 positive patients, the staff spent all the time in protective equipment, with:

- 1) Protective masks of minimum permeability,
- 2) Safety goggles / visors,
- 3) Protective suits.

Intensive and semi-intensive treatment units were also completely separated from centralized units.



The work of the intensive care unit is covered for 24 hours by the on-duty anesthesiologist and neurosurgeon.

The number of 19 positive patients who were cared for within our ward is presented in Table 5.

Table 5.	Positive patients	who were	cared for within	our war
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	2020.	2021.	2022.
Number of reviewed patients	144	152	47
Number of hospitalized patients	24	35	10
Number of patients with surgical treatment	11	13	3

Source: Ćuprija hospital - Department of Neurosurgery

Table 6 show us a reason of hospitalizations in 2020., 2021. and 2022.

Table 6. reason of hospitalizations in 2020., 2021. and 2022.

	2020.	2021.	2022.
Craniocerebral injury (mild)	13	17	4
Craniocerebral injury (severe)	7	10	2
Urgent spinal cord compressions and	1	3	2
complications			
Urgent exacerbation of intracranial tumor	3	5	2
and vascular diseases			

Source: Ćuprija hospital - Department of Neurosurgery

In the above table, we can see that the dominant number of patients hospitalized as part of our service was due to craniocerebral injuries of mild or severe type (more than 80%).

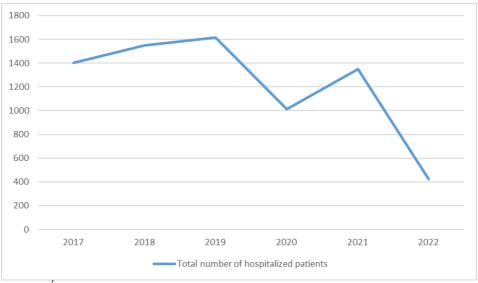
Acute exacerbations of patients with degenerative diseases of the spine are in most cases outpatient care and care until the end of the mandatory incubation period.

Results

In the table shown 8. we can see an increasing trend of all parameters. The increase in the number of examined in 2017 and 2018 was 1.015%, while the increase compared to 2019, that percentage was 1.14%. The largest percentage difference was in the number of operated patients, 18.75%.

In the period from the beginning of kovid 19 infection, the number of patients in all bases was significantly reduced, primarily due to the mandatory command system of outpatient examinations, which were reduced in the period from March 6 to May 10, 2020 only to emergency care, as well as hospitalization of only craniocerebral and spinal trauma and acute exacerbations and complications of other neurosurgical diseases.

The number of outpatient examinations in 2020 was reduced by 25-30% compared to the same periods in 2017, 2018 and 2019. Graph no 2. It shows a significant decline during the first year of the Covid 19 pandemic, while in the following years we can see a gradual return of the number of patients compared to previous years.

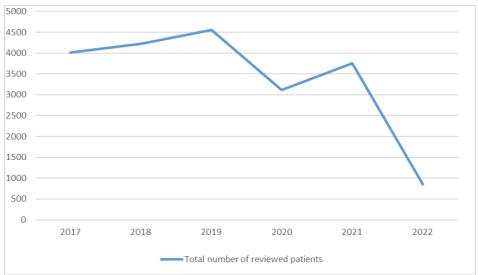


Graph 3. proportional variations in the number of hospitalized patients

Source: Ćuprija hospital - Department of Neurosurgery

On the presented chart, we notice proportional variations in the number of hospitalized patients as on graphic 3.





Graph 4: total number of rewieved patients for period 2017-2022.

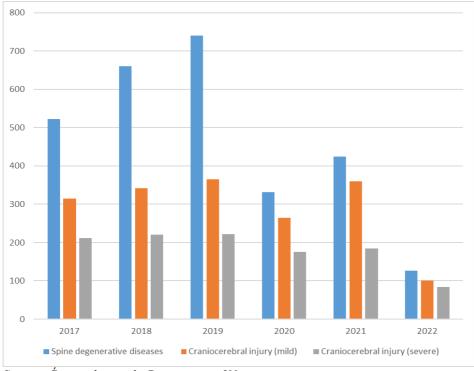
Source: Ćuprija hospital - Department of Neurosurgery

The most significant decline was observed primarily in the group of patients with degenerative diseases of the spine, but also severe craniocerebral trauma, most likely due to strict measures of restraint.

The total difference for the compared periods was between 45-57%. Within our department, for the entire duration of the Covid 19 pandemic, there was no transmission of the virus between staff and patients, primarily due to good and adequate protection with the aforementioned equipment.

The most significant decline was observed primarily in the group of patients with degenerative diseases of the spine, but also severe craniocerebral trauma, most likely due to strict measures of restraint.

Graphic no. 4 shows us radio of surgical management by diagnosis, from 2017-2022. yr.



Graph 5. Surgical management ratio in period 2017-2022. Yr.

Source: Ćuprija hospital - Department of Neurosurgery

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Like we can see on graphic contests before, there exist significant drop in number of patients during this period. Covid 19 positive patients were rarity, where all medical centers operated only urgent and life life-threatening patients. Compared to different medical centers, our Department maintained the highest level in this patient care.



Compared to results experience of neurosurgery in The Third People's Hospital of Hubei Province after the outbreak of COVID-19 in 2019, there were about 9% of COVID 19 patient with surgical treatments in relation to the total number of patients. Global ambulance and hospital treatments have a global decreasing trend. In different authors, there is a number between 37-49% less patients in this period, 2020-2022.

Conclusion

Covid 19 pandemic caused a large number of changes in the organization of health systems, including our department. The changes themselves were difficult and very complicated to adapt, there was a significant slowdown in previously daily activities, the circulation of patients, their examinations and treatment (Jovanic, Radović, 2021b).

During the Covid 19 pandemic, there were no newly infected patients within our department, as well as the spread of the infection between them. Previously proven covid 19 positive patients were diagnosed in a timely manner by mandatory screening were completely isolated in relation to covid 19 negative patients.

Daily adequate use of protective equipment by staff has prevented the spread of the disease within staff both among staff and between staff and patients.

Total monetary costs and losses due to covid 19 infection were:

- 1) 768 lost working hours kovid 19 positive staff,
- 2) RSD 1,203,000 of costs due to the introduction of mandatory kovid 19 testing before admission to the organizational unit as well as testing for other reasons,
- 3) 11,678,000 dinars spent on protective means in order to prevent covid 19 infections.

During the kovid 19 pandemic within our department, 6 workers fell ill with a total average absence of 16 days from kovid 19 proven infection to return to work. There were no seriously ill workers and they all returned to their jobs successfully.

After the introduction of mandatory vaccination, our team was vaccinated in a high percentage (90%). The remaining unvaccinated collective could not be vaccinated due to the existence of chronic diseases that prevented them from doing so.

Reference

- 1. Institut za javno zdravlje Srbije "Milan Jovanović Batut", https://www. batut.org.rs/
- 2. Gralinski L.E., Menachery V.D. (2020) Return of the coronavirus: 2019-nCoV. Viruses.;12(2):135. DOI: 10.3390/v12020135
- 3. Li F. (2016) Structure, function, and evolution of coronavirus spike proteins. Annu. Rev. Virol.;3:237–261. DOI: 10.1146/annurev-viro-logy-110615-042301
- 4. Weiss S.R., Leibowitz J.L. (2011) Coronavirus pathogenesis. Adv. Virus Res.;81:85–164. DOI: 10.1016/B978-0-12-385885-6.00009-2
- 5. Tang Q., Song Y., Shi M., Cheng Y., Zhang W., Xia X.-Q. (2015) Inferring the hosts of coronavirus using dual statistical models based on nucleotide composition. Sci. Rep.;5:17155.https://www.nature. com/articles/srep17155
- Comber L., Walsh K.A., Jordan K., O'Brien K.K., Clyne B., Teljeur C., Drummond L., Carty P.G., De Gascun C.F., Smith S.M. (2021)Alternative clinical specimens for the detection of SARS-CoV-2: a rapid review. Rev. Med. Virol.;31:2185. https://search.bvsalud.org/global-literature-on-novel-coronavirus-2019-ncov/resource/en/covidwho-884413
- Petter E, Mor O, Zuckerman N, et al. (2021) Initial real world evidence for lower viral load of individuals who have been vaccinated by BNT162b2. February8,. doi: https://doi.org/10.1101/2021.02.08. 21251329



- Polack FP, Thomas SJ, Kitchin N, et al. (2020) Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine. N Engl J Med;383:2603-2615. DOI: 10.1056/NEJMoa2034577
- 9. Mohammed A, Ahmed Y, Ahmed E, (2022) Impact of COVID-19 on neurosurgical service: A one-year experience from a provincial countryside hospital in a rural area in north Egypt, Elsevier V 27, March 2022. https://doi.org/10.1016/j.inat.2021.101416
- Priyanka K, Pragati G, Sakshi D, Kiran L, Lavina D, Monica S. TandonD, Singh A. J., (2021) Perioperative Practices and Outcome of Neurosurgery during the COVID-19 Pandemic: Institutional Experience and Retrospective Observational Analysis, Indian J Neurosurg;10:128–135.
- 11. Jovanović, M. Radović, M. Simić, V. (2021) Operative management of lumbar disc herniation, Medicine and healthcare, 12th international scientific conference SED 2021, October 2021:1
- 12. Jovanović M, Radović M. (2021a) Uticaj COVID 19 infekcije na rad Odeljenja neurohirurgije OB Ćuprija, Serbian neurosurgical section, September 2021:1
- 13. Jovanić M., Radović, M. (2021b) Hirurgija za strukovne studije. Akademija vaspitacko-medicinskih strukovnih studija, odsek Ćuprija, Tehnostil PR.
- Liuqing S, Yingchun C, Zhizhong W, Bizhou B, Huichao Y, Jianfeng Y, Juanjuan F, Chun Z, Jun L, (2020) Experience in Neurosurgery During the Prevalence of COVID-19, Journal of Craniofacial Surgery: September V31 Issue 6 p e622-e624, doi: 10.1097/SCS.00000000 00006619
- Kuroda N, (2020) Seven-point Checklist: Have You Prepared Sufficiently for the COVID-19 Crisis in Your Neurosurgery Department? Neurol Med Chir (Tokyo). Aug 15;60(8):411-416. DOI: 10.2176/ nmc.rc.2020-0140
- 16. Zu J, Li Ml, Li ZF, Shen MW, Xiao YN, Ji FP. (2020) Transmission patterns of COVID-19 in the mainland of China and the efficacy of

different control strategies: a data- and model-driven study. Infect Dis Poverty. 2020 Jul 6;9(1):83. https://search.bvsalud.org/global-litera ture-on-novel-coronavirus-2019-ncov/resource/en/covidwho-657687.



UDK: 658.8:656.61]:005.31 616.98:578.834]:656.61

MARKETING ASPECTS OF MARITIME TRANSPORT DURING THE COVID-19 PANDEMIC

Gruja Kostadinović¹, Marija Ilievska Kostadinović²

Key Words: Covid 19, maritime transport, marketing mix, economy Abstract: The subject of this paper is the impact of the Covid 19 pandemic on the global economy, with a focus on maritime transport logistics, through the prism of three elements of the marketing mix: product, price and distribution. The aim of this paper is to point out that the Covid 19 pandemic negatively affected production around the world, increased the prices of many products, and significantly increased the price of transportation, i.e., distribution of products to the end customer (consumer). All estimates say that in addition to the current negative impacts, the pandemic will have long-term consequences. What is even more significant, despite the significant reduction in the number of those infected worldwide, is that the complete end of this pandemic is not yet in sight.

Introduction

he global economy and investment climate are being impacted by the COVID-19 virus, also known as the coronavirus. Global supply chains are seriously threatened by the linked and global character of today's corporate environment, which might lead to large revenue losses and have a detrimental effect on the world economy. Just a few months before the proclamation of the pandemic caused by the COVID-19, as it was later discovered and published by the SARS-CoV-2 virus, at the end of 2019, the world met the hitherto unknown virus for the first time. Unlike the SARS-CoV-1 epidemic, the SARS-CoV-2 epidemic grew into a global pandemic in just three months, i.e., a very serious health crisis that led to the outbreak of the global economic crisis and the energy crisis.

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The precondition for ending the economic crisis is that the health crisis should end first. For now, many see the vaccine as the only solution to ending the health crisis, while others strongly oppose it. We are aware that the health crisis has caused an economic crisis, but ending this paper, I come to the situation that I must add that the world is slowly entering a serious energy crisis caused by increased demand for energy. The increase in demand for energy will almost certainly be reflected in the increase in prices of finished products and services. The prices of energy sources, oil (Stevens, 2021), coal (Trading Economics) and gas (Trading Economics) are skyrocketing, and this increase in prices will be reflected in all links in the supply chain due to possible shortages of energy or their high price.

After the COVID-19 pandemic, the necessity for infrastructure and logistics is more obvious than ever. The availability of food, medical supplies, and all other consumables is aided by the continuity of logistical services. (Figure 1). Because of this, it's essential to consider the particular needs of LLDCs that depend on having access to transport gateways in adjacent nations yet lack independence and control over the connecting network (inland, fluvial or maritime ports in foreign territories). It is crucial to lessen this burden, especially during times of crisis, by developing strong domestic and cross-border infrastructure as well as logistics services that may provide crucial linkages to overseas markets. (Rivera, 2020)



Figure 1. Conceptual layers of the environment for commerce

Source: Rivera, 2020



For example, 94% companies of Fortune 1000 list Fortune 1000 companies have suffered earthquakes in its supply chains as a result of the effects of the Covid-19 virus. However, these earthquakes probably represent only the tip of the iceberg in terms of the overall economic impact that the virus will leave (EY Global, 2020). A deeply worrying epidemic such as Covid-19 is just one of many destructive events that could unexpectedly hit supply chains, to the detriment of business results. For instance, over the past ten years, natural calamities like the Tohoku earthquake in 2011 that halted manufacturing for Japanese automakers have disrupted supply networks. Terrorist attacks and civil disturbance, such as the widespread demonstrations in Chile in 2019 that caused a decline in output at the nation's copper mines, have also put the supply chain's resiliency to the test. Disruption of the supply chain poses a long-term risk to companies, especially in our highly globalized age where companies typically have long, complex chains. Such chain structures are essentially ill-prepared to deal with an increasing number of unplanned disasters.

Literature review

The pandemic caused by the COVID-19 virus is an event of low probability and significant effects, which predicted major disruptions in the supply chains of all industries around the world (Van Tatenhove, 2021; Chang, et al., 2020; Milovanović, et al., 2021; Dašić, et al., 2020; Stanković, et al., 2022).

The backbone of global trade is maritime shipping; it is believed that 80 percent of all goods are transported by water. Global maritime container trade is predicted to account for over 60% of all seaborne trade in terms of value, with a total value of around 14 trillion US dollars in 2019. While the volume of commodities transported by containers has expanded from roughly 102 million metric tons in 1980 to around 1.83 billion metric tons in 2017, vessel capacity has also increased. (Placek, 2021).

There are different, yet similar, definitions of supply chains in the literature, which are more or less comprehensive, but ultimately boil down to essentially the same claim. The purpose of existence, and at the same time the goal of the supply chain, is to supply end users, i.e., consumers, with certain products or services. Hence the fact that at the end of each supply chain are the final consumers of goods or services. The rest of the supply chain is a complex network between companies and their suppliers between whom certain activities are performed (Kostadinović Ilievska, 2021). It is these activities that are aimed at the ultimate goal, which is to meet the needs of end consumers. According to Min (2015), the supply chain is defined as an integrated system that synchronizes through interconnected business processes.

Depending on the type of product or service, this network can be simpler or more complex. Chopra and Meindl (2016) point out that the supply chain consists not only of manufacturers and suppliers, but also of transport companies, warehouses, retailers and customers. According to Hugos (2002), companies are dependent on their supply chains because they provide them with everything they need to survive and thrive. The same author states that each company fits into one or more supply chains and that each company has its role in each of the supply chains in which it forms a link. Those companies that succeed in building solid supply chains are more likely to survive in the market. Based on the previous statements, graphically shown, the supply chain looks like the following illustration.

Some authors (Jabbour, et al., 2020) present two important facts. They emphasize that the pandemic of the COVID-19 virus only brought to light the fact that the supply chains are the veins of every economy and society. Another important fact they emphasize is that some of the supply chains require special attention from the state, because as such they are vital to society and the economy and call them key supply chains. These are, for example: health supply chains, pharmaceutical supply chains, food supply chains, etc. And as a logical conclusion, they state that we should learn from this situation how to build more resistant supply chains on the one hand, and on the other hand that governments around the world should get involved in regulating key supply chains.

The healthcare supply chain is one of the key supply chains. Like other supply chains affected during the pandemic, this one is failing. The healthcare supply chain is under one of the biggest pressures during the pandemic. The treatment of patients depends on medical means and equipment, and in addition, it is important that personal protective equipment for medical staff is available. As the pandemic companies in the healthcare supply chain focused on cost reduction and "just in time" delivery before the pandemic, rapid demand quickly left hospitals without medical supplies and equipment (Iyengar, et al., 2020), and also due to "locking" and reduced production capacity around the world, especially in China. The mentioned authors conclude that the coronavirus epidemic only



emphasized which disorders can occur in the health supply chain. Disruption of the supply chain in health care, as the authors conclude, is unacceptable because the lack of personal protective equipment increases the risk of spreading the virus.

The food supply chain is also considered a key supply chain. At the same time, the COVID-19 pandemic affected all segments of food supply chains, from farms, the processing industry, logistics and transport, to end retailers and consumers. Food production relies heavily on human labour and as such is largely affected by the pandemic. The reasons for this are illness and restrictions on the movement of workers and measures of social distancing (OECD, 2020). For the same reasons, the processing industry also found itself in trouble. Finally, there have been major changes on the final consumption side. Due to the introduced measures, lock downs and measures of social distancing, consumers turned to ordering food for consumption at home, instead of going to restaurants. In order for the delivery of food to end consumers to be feasible now, certain changes had to take place in the food supply chains.

Esper (2021) states in his paper that with the beginning of the pandemic, supply chains have failed and that there has been a shortage of hand sanitizers, cleaners and toilet paper. Disinfectants and cleaners are essential when it comes to pandemics, and they must not be allowed to run out.

Metod

Maritime transport supports global supply chain connections and economic interdependence, handling more than 80% of global commercial trade by volume and more than 70% by value. Disrupted supply chains and transport networks can have a significant impact on international commerce and economic activity. (Maritime transportation and COVID-19). In preparing this paper, the authors used secondary data sources, relevant and contemporary literature on uticaja Covid 19, data on the Internet, as well as analysis and synthesis in correlation with descriptive statistics. Covid 19 as a process consists of several key subjects of consideration that we can present in relation: Covid 19– maritime transport – marketing miks - Commercial effects. From the presented relations arises the basic hypothesis which reads,

HO: The Covid-19 pandemic has negatively affected three elements of the marketing mix, product, price and distribution within maritime transport.

Result and discussion

Product

After the declaration of a pandemic and "closure" in a large number of countries, things began to take on a new dimension. As cinemas, gyms, catering and other mass gathering facilities are closed, people are turning to their home, where they live and where, due to the pandemic, they are starting to work and spend more and more time. There is a great demand for products that were not in such demand until then. From computers, laptops, printers and similar things needed to work from home, to "fitness" equipment, garden tools, TVs, home projectors and game consoles, as well as many other things that would make life and work from home more comfortable for everyone during the lock down and duration of the pandemic. An increase in demand leads to an increase in production, to an increase in demand for raw materials, energy sources and for higher transport capacities. Apart from the fact that the demand jumped for the mentioned product groups, it jumped at the same time, all over the world. And because of "locking up", restricting movement, measures of social distancing, and finally for fear of infection, people are increasingly turning to online ordering.

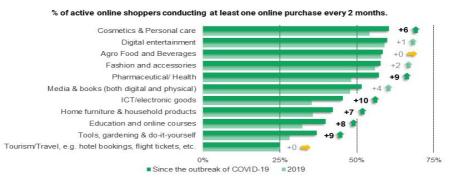
For example, the automotive industry is one of the largest and most important industries in the world, employing a large number of workers. Even before this pandemic, there were major problems in car production, reduced demand, lack of components and parts for car production. Due to the pandemic, there was a big drop in demand of 2.5 million cars, difficult distribution, and thus the closure of many car factories around the world, which will lead to huge financial losses, about 77.7 billion US dollars (Radić, Stevanović, 2020).

According to UNCTAD, the e-commerce sector saw a "dramatic" increase in its percentage of total retail sales, rising from 16 percent to 19 percent by 2020. The Republic of Korea saw the biggest growth in the digital retail economy, with internet sales increasing from roughly one in every five transactions in 2019 to more than one in every four last year. "These statistics show the growing importance of online activities", said Shamika Sirimanne, UNCTAD's director of technology and logistics. "They also point to the need for countries, especially developing ones, to have such information as they rebuild their economies in the wake of the COVID-19 pandemic." The UK also saw a spike in online transactions over the same period, from 15.8 to 23.3 per cent; so too did China (from 20.7 to 24.9 per cent), the US



(11 to 14 per cent), Australia (6.3 to 9.4 per cent), Singapore (5.9 to 11.7 per cent) and Canada (3.6 to 6.2 per cent). Online business-to-consumer (B2C) sales for the world's top 13 com-panies stood at \$2.9 trillion in 2020, UNCTAD said on Friday (United Nations, 2021). The survey conducted by UNCTAD and Netcomm Suisse eCommerce Association, in collaboration with the Brazilian Network Information Center (NIC.br) and Inveon (Figure 2), shows that online purchases have increased by 6 to 10 percentage points across most product categories (CNUCED (2020). Manufacturers, distributors, traders and logistics were not able to keep up with that demand, and since then problems have started to pile up.

Figure 2. Percentage of online shoppers making at least one online purchase every two months



Source: UNCTAD and NetComm Suisse eCommerce Association

From 2010 onwards, consumption in retail outlets in the United States on the eve of the Christmas and New Year holidays has been increasing every year. Three years ago, in 2019, retail stores in the United States had a total turnover of 733 billion US dollars (Tighe, 2021). Due to the already increased demand for goods, ships are slowly crowding in American ports, and there is already a slowdown in the whole maritime supply chain.

Distribution

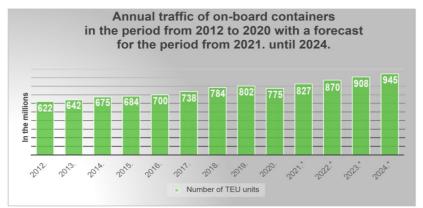
According to one survey, the COVID-19 pandemic has had a severe impact on 59.2 percent of transportation and freight professionals around the world, while 25% have been 'moderately affected.' The majority of the shipping and freight industries had volume decreases, and more than half of them encountered transit delays. Delays from the port to the client affected 50% of the companies, while 40% had to deal with capacity concerns. (COVID-19 and maritime transport).

The reliability of the schedule was relatively stable in the period from 2018 onwards and ranged from about 70% -85% (Murphy, 2021). However, from the middle of 2020, the reliability of the schedule will fall to below 50%, and with the beginning of 2021, the reliability of the schedule will fall to an extremely low value of just over 20%. The reasons are numerous. It is enough that you happen to have one crew member suffering from COVID (The Maritime Executive, 2021). In that case, with respect to all quarantine measures, it can happen that the ship is late for up to two months, which significantly affects the reliability of the schedule and the number of days of delay.

The reliability of the schedule is directly reflected in the number of days of delay in maritime transport. By mid-2020, the number of days of delay averaged about one day, while since mid-2021, the number of days of delay has approached about six days. However, although the average delay is only six days, which doesn't really seem like much, it can happen that the delays of individual voyages are 20 or more days (Wackett, 2021).

However, despite all the above, the container traffic in the world has been increasing from year to year for 10 years, and predictions say that such a trend will continue in the coming years. The exception is 2020, when the annual container turnover dropped to 775 million (Picture 1).

Picture 1. Annual traffic of on-board containers in the period 2012 to 2020 with a forecast for the period from 2021. unitl 2024



Source: Adapted to: statista.com, 2021. https://www.statista.com/topics/1367/container-shipping/

The year 2020 passed relatively peacefully in terms of supply of goods, because there were still so many stocks at distributors and in retail facilities.



However, in 2021, everything changed. The largest buyer of Chinese goods is the United States. In a review published by the USTR (The Office of the United States Trade Representative), in 2019, China was the largest supplier of goods to the United States. That year, goods worth 451.7 billion US dollars were procured from China. As before the end of each year, huge quantities of goods are placed on the United States market from China, so that these goods will be available before Christmas and New Year.

Due to labour shortages, due to absence because of SARS-CoV-2 virus infection, container unloading takes longer. For the same reason, the ships' containers are later returned to the port terminal and to the ships. And this is not a situation specific only to the United States, but the same scenario is happening all over the world. Nevertheless, as the United States is the largest importer of goods from China, they are given as an example since, according to their size, their influence on supply chains by sea is great. In the absence of equipment, i.e., ships and free containers, there is an in-crease in the production of containers, but this takes some time, so that these containers are not immediately available. Like any other production, the production of containers requires certain raw materials and energy, so the demand for energy sources increases in this way. The mere fact that the number of containers in circulation will increase does not mean much, if there are no free capacities at points and free capacities in ports. Thus, we come to the conclusion that at the end of September 2021, in one of the largest American ports in California, 66 ships are waiting to unload (Kay, 2021). In addition, due to covid measures, loading and unloading of goods is also slowed down. In order to compensate for the number of employees in the supply chain, higher wages are most often resorted to. However, new employment and higher wages lead to an increase in purchasing power and thus to even greater demand for goods, and thus for raw materials, energy and vacancies on ships.

If we take a step back, from port terminals to producers, we will see that producers who produce goods have to be stored in warehouses for longer. As the wait for loading goods into ships is a little longer now, the goods in the warehouses of the producers are piling up. As more and more producers have no place to store the produced goods, production is postponed until the warehouse space that could receive the newly produced goods is freed. So now the production time and the waiting time for loading goods is being extended. In order to compensate for the fact that their ships are late and stop, shipowners must raise the prices of maritime transport.

To stop the Coronavirus illness (COVID-19) from spreading, several nations across the world imposed unprecedented containment measures and

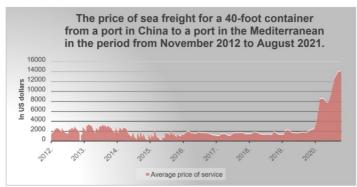
went into lockdown. These limitations eventually changed social behavior and patterns of global migration, disrupting social and economic activity. We discovered an unusual decline in marine mobility following the epidemic, across all types of commercial vessels. From March to June 2020, when the most severe limitations were in effect, there was a general reduction in activity, with a few outliers. (Millefiori, et al., 2021).

Price

Similar to commercial aviation, incidences of COVID-19 among passengers and crew members of cruise ships have been documented all over the world, from Yokohama (Japan) to Corfu (Greece) and Sydney. The marine tourist industry was the first and most-affected traffic segment (Australia). National and local restrictions concerning ship operations were enforced, The fshing and aquaculture sectors were also afected by containment measures, leading to, e.g., voluntary fshing cess (Millefiori, et al., 2021).

When we add to that the port costs that accompanied the increase in the price of transportation, as well as the delivery from the port to the final destination, either by train or truck, we can easily reach the figure of over 20.000 US dollars. By the end of 2020, in the past, the prices of freight for a 40-foot container for these routes amounted to about two to three thousand dollars, depending on the service, and the prices of freight did not differ much between services. With the increase in the price of transportation, the gap between the prices of services has increased (Picture 2).

Picture 2.



Source: Cargo-partner doo. https://www.cargo-partner.com/sr/spedicija-i-logistika (4.3.2022)



However, what is a big problem is that there is no place on ships with cheaper services. There is no equipment, i.e., free containers, and not enough ships, nor port capacities. It takes at least 15 or more days to reach a free place on the ship, and that time is getting longer from week to week (internally available source). Considering that the prices of shipping fares jump every year at the end of the year, until the second quarter of next year, no one can say with certainty what awaits us at the end of 2021 and the beginning of 2022. New Year's and Christmas holidays are the ones that entail a lot of consumption.

Maritime industries play an important role in the global economy and social well-being. Since early 2020, the COVID-19 has had a considerable impact on the maritime industry. Operators in various businesses (such as shipowners, exporters, importers, terminal operators, shipping carriers, and so on) have experienced operational losses and inconvenience as a result of health and safety concerns. (Yazır, et al., 2020).

The COVID-19 outbreak has wreaked havoc on global supply chains like never before. People and business closures, as well as restrictions on cross-border mobility and transportation (Kostadinović, 2021a), have resulted in a considerable drop in international trade, much of which has manifested in the maritime industry. Assessing the pandemic's impact on marine connectivity is fraught with ambiguity due to a slew of new public health, economic, social, logistical, political, and other considerations. (Tianming, et al., 2021).

Conclusion

Most authors agree that the COVID-19 pandemic has brought to light the fact that supply chains, as they are today, are extremely vulnerable (Kostadinović, 2021b). In order to prevent future supply chain failures in the future, as was the case during the COVID-19 pandemic, it is necessary to define which supply chains are crucial for the economy and society, and to the governments of each state are actively involved in the organization of these chains.

During the pandemic, large international corporations are making unusual moves to solve the huge problems they have in the procurement of goods that have arisen due to disruptions in supply chains, prices but mostly in distribution. Many corporations have already started renting ships for their needs, and some companies see a solution in shortening supply chains, returning production closer to their markets, or closer to "home".

Despite everything that is happening, in August 2021, the port of Shanghai achieved a record container traffic of 4.32 million TEU (Si, 2021). However, in September of the same year, due to the lack of coal and the increase in its price, as well as the pressure to reduce CO2 emissions, the Chinese government decided to impose restrictions on electricity supply. This is all happening at the time of writing, so I can't say for sure how the restrictions will affect production at the "world factory", but my guess is that the restrictions will lead to a drop in production in China and at the same time increase in purchase prices of finished products and the increase in prices was announced to me by some suppliers with whom the company in which I am employed does business.

In order for firms to survive in the market and thrive in the future, they need to review existing supply chains and translate the knowledge and experience gained during the pandemic into strengthening their supply chains. Strengthening the supply chain can be reflected in the shortening of supply chains, its simplification and diversification. This primarily refers to finding alternative suppliers, as well as finding alternatives in the way of delivery of goods from suppliers and distribution of goods to the next member in the supply chain. As each company is a member of several supply chains and as it has a certain role in each of them, so by strengthening their supply chains, companies will strengthen at the same time other supply chains in which they have a different role.

The coronavirus pandemic has had, and unfortunately, since it is still going on, will have a greater or lesser impact not only on supply chains but on all areas of human activity. From private life to business activities, there is no area of human activity that is not more or less affected by the pandemic. The coronavirus pandemic caused a global health crisis, followed by the outbreak of the global economic crisis and finally the global energy crisis. In order to solve all the crises that have arisen, it is necessary to solve them in the order in which they arose. Without ending the pandemic caused by the SARS-CoV-2 virus, it is unnecessary to talk about ending the economic and energy crisis that has befallen humanity.

A global event that has the potential to be the most disruptive in several generations is now under progress. Society has been put on pause by the COVID-19 outbreak for a very long period. There will likely be a signi-



ficant change in how many of us live and how goods are created and distributed. The course of the coronavirus outbreak will determine how we come out of this process, but we do have some influence over it, and sustainable transitions are real options. The first question in terms of long-term supply and manufacturing is whether we will return to global supply chain systems. (Sarkisa, et al., 2020).

References

- 1. Chang, S.-M., Huang, Y.-Y., Shang, K.-C. and Chiang, W.-T. (2020) Impacts of regional integration and maritime transport on trade: with special reference to RCEP, Maritime Business Review, Vol. 5 No. 2, pp. 143-158. https://doi.org/10.1108/MABR-03-2020-0013
- 2. CNUCED (2020) COVID-19 has changed online shopping forever, survey shows. https://unctad.org/fr/node/28850
- 3. COVID-19 and maritime transport: Impact and responses. UNCTAD/DTL/TLB/INF/2020/1. https://unctad.org/webflyer/covid-19-and-maritime-transport-impact-and-responses
- 4. Dašić, D. R., Tošić, M. Z., Deletić, V. (2020). The impact of the COVID-19 pandemic on the advertising and sponsorship industry in sport. Bizinfo (Blace), 11(2), 105-116. DOI: 10.5937/bizinfo2002105D
- 5. EY Global (2020) COVID 19: Kako iskovati lanac snabdevanja koji može da izdrži olujne udare. https://www.ey.com/sr_rs/consulting/how-to-forge-a-supply-chain-that-withstands-severe-shocks. (3.6. 2022)
- 6. Esper, T.L. (2021) Supply Chain Management Amid the Coronavirus Pandemic. Journal of Public Policy & Marketing, Vol. 40 (1) 101-102, https://journals.sagepub.com/doi/pdf/10.1177/0743915620932150
- Iyengar, K., Vaishya, R., Bahl, B., Vaish, A. (2020) Impact of the coronavirus pandemic on the supply chain in healthcare. British Journal of Healthcare Management Vol. 26, No. 6 https://doi.org/10.12968/ bjhc.2020.0047

- Jabbour, L.S. A.B., Jabbour, C., Hingley, C.J., Vilalta-Perdomo, M., Ramsden, E.L. and Twigg, D. (2020), "Sustainability of supply chains in the wake of the coronavirus (COVID-19/SARS-CoV-2) pandemic: lessons and trends", Modern Supply Chain Research and Applications, Vol. 2 No. 3, pp. 117-122. https://doi.org/10.1108/MSCRA-05-2020-0011
- 9. Kostadinović, G. (2021a) Osnovi marketinga. Fakultet za pravo, bezbednost i menadžment "Konstantin Veliki" Niš.
- 10. Kostadinović, G. (2021b) Marketing u saobraćaju. Fakultet za pravo, bezbednost i menadžment "Konstantin Veliki" Niš.
- 11. Kostadinović Ilievska, M. (2021). Poslovna komunikacija. Fakultet za pravo, bezbednost i menadžment "Konstantin Veliki"Niš.
- Lopes de Sousa Jabbour, A.B., Chiappetta Jabbour, C.J., Hingley, M., Vilalta-Perdomo, E.L., Ramsden, G. and Twigg, D. (2020), Sustainability of supply chains in the wake of the coronavirus (COVID-19/ SARS-CoV-2) pandemic: lessons and trends, Modern Supply Chain Research and Applications, Vol. 2 No. 3, pp. 117-122. https://doi.org/ 10.1108/MSCRA-05-2020-0011
- Milovanović, V., Paunović, M., & Avramovski, S. (2021). Uticaj COVID-19 na menadžment lancima snabdevanja hotelskih preduzeća. Menadžment u hotelijerstvu i turizmu, 9 (2), 63-78. https://doi.org/ 10.5937/menhottur2102063M
- 14. Min, H. (2015) The Essentials of Supply Chain Management: New Concepts and Applications. 1st edition, Pearson Education.
- Millefiori, L.M., Braca, P., Zissis, D., Spiliopoulos, G, Marano, S, Willett, P. & Carniel, S. (2021) COVID-19 impact on global maritime mobility. Scientifc Reports 11, 18039. https://doi.org/10.1038/s41598-021-97461-7
- Moriarty, L. (2020) Public health responses to COVID-19 outbreaks on cruise ships—Worldwide, February-March 2020. Morbid. Mortal. Wkly. Rep. 69, 347 352. https://doi.org/10.15585/mmwr.mm6912e3



- 17. Placek, M. (2021) Container shipping statistics & facts. https://www.statista.com/topics/1367/containershipping/#dossierContent s_outerWrapper
- Rivera, A. (2020) The impact of COVID-19 on transport and logistics connectivity in the landlocked countries of South America, Project Documents (LC/TS.2020/155), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC).
- Radić, V., & Stevanović, M. (2020). Ekonomski uticaj pandemije korona virusa na automobilsku industriju. Oditor, 6(3), 55-88. https://doi.org/10.5937/Oditor2003055Rtps://unctad.org/fr/node/28850D 19: OVI
- 20. REVIEW OF MARITIME TRANSPORT, (2021), UN, ZENEVA, https://unctad.org/system/files/official-document/rmt2021_en_0.pdf
- Sarkisa, J., Cohenc, M., Dewickd, P., Schröder, P. (2020) A brave new world: Lessons from the COVID-19 pandemic for transitioning to sustainable supply and production. Resources, Conservation and Recycling, Volume 159, August 2020, https://doi.org/10.1016/j. resconrec.2020.104894
- 22. Stanković M., Virijević Jovanović S., Alijević A., (2022) Pravni režim plovidbe Dunavom i dunavska strategija u kontekstu razvoja ekološki prihvatljivog turizma u Rapublici Srbiji. Horizonti menadžmenta. II (1), 143-164
- 23. Tianming, G.; Erokhin, V.; Arskiy, A.; Khudzhatov, M. Has the COVID-19 Pandemic Affected Maritime Connectivity? An Estimation for China and the Polar Silk Road Countries. Sustainability 2021, 13, 3521. https://doi.org/ 10.3390/su13063521
- 24. United Nations (2021) Global e-commerce jumps to \$26.7 trillion, fuelled by COVID-19. https://news.un.org/en/story/2021/05/1091182
- 25. Van Tatenhove, J.P.M. (2021) COVID-19 and European Maritime Futures: Different Pathways to Deal with the Pandemic. Marit. Stud., 20, 63–74.

26. Yazır, D., Şahin, B., Leung Yip, T., Tseng,P. (2020) Effects of COVID-19 on maritime industry: a review. Int Marit Health; 71, 4: 253– 264, 10.5603/IMH.2020.0044



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LOGISTICS MANAGEMENT OF HEALTHCARE INSTITUTIONS DURING THE CIRCUMSTANCES OF THE COVID-19 PANDEMIC

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Key Words: Coronavirus, COVID-19, Healthcare, healthcare industry, Logistics, menagement Abstract: Due to the ongoing fight against the spread of the new virus, the borders of many countries have been closed, traffic (air, road, rail) has been limited, production in companies around the world has been jeopardized or significantly reduced, so the process of exchanging goods between countries has been almost completely suspended. Logistics management of various healthcare institutions around the world has also been affected due to this suspension of the goods and people mobility, which has led to interruption of the supply chain and work of numerous companies. Also, a significant deficit of qualified manpower has been noticed in many healthcare institutions, due to the large number of infections among healthcare workers.

Introduction

n their day-to-day lives, people use a large number of different products and services, without putting a lot of thought into the activities that have led to their presence at the place of consumption or use, as well as about their future, after those products have lost their innitial value (Pavićević, 2021a). Nowadays, all of the activities that include temporal and spatial transformation of material goods, services, information, capital, energy and knowledge fall under the term "logistics". Logistics is present in all areas of human activity, as it includes all systems and processes that are enabling the movement of material and imma-

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terial flows in physical, informational and organizational terms (Milenkov, et al., 2015).

We have closely followed the COVID-19 epidemic, one of the most extensive and sad public health disasters in a century, as members of the Future Earth Knowledge-Action Network on Systems of Sustainable Consumption and Production. The issue is still developing and in its early phases in many parts of the world as we write this viewpoint essay (Pavićević, et al., 2022). As people, governments, communities, businesses, and academic institutions grapple with the difficulties of reducing the loss of human life in the face of an unseen epidemic, the practice of social distance has permeated daily life (Pavićević, 2021b). We have all seen figures on "flattening the curve" to help spread out the impact on medical facilities. The coronavirus outbreak will diffuse, but behavioral actions are needed to mitigate the number of contractions, illnesses, and deaths. Some of the actions of social distancing include self-quarantining, avoiding large gatherings, working from home where possible, sending students back to their residences, providing online education, reducing travel (especially in confined and mass transportation modes), limiting visits to stores, and many other everyday activities. Numerous of these modifications go against "typical" routines. We must learn to help one another remotely at a time when we are being pressured to get together and support one another in society. However, the behavioral modifications are essential, and some of them could offer insightful information about how to support shifts toward more sustainable supply and production. (Sarkisa, et all., 2020).

Even though there have been past shocks to the medical supply chain, COVID-19's impact is distinct. This is as a result of its unpredictable transmission pattern. Additionally, the illness has an impact on the physical and mental health of manufacturers and supply chain management staff (SCM). Therefore, COVID-19's primary impact is the supply chain's unpredictability. Additionally, the illness has prevented movement, which results in lower output since individuals are underperforming in their particular businesses and sectors.

The findings also indicated that the COVID-19 pandemic significantly impacts the manufacturing of medical products thereby causing shortage in the medical supply. Based on the materials that are used in healthcare industry manufacturing is largely dependent on countries such as China for medical supplies.



The quality of any healthcare system, among other things, highly depends on its readiness to respond to emergency situations and disasters. Unpreparedness, or only partial readiness, can lead to unforeseeable consequences for the overall health of the population, which further endangers all segments of the social system.

The importance of highly prepared crisis management tactics in emergency situations, such as the pandemic of SARS-COV-2 has come to the fore in all countries around the world, from the most developed ones and to the so-called "third world" countries. Although the leading countries of the world are incomparably richer and, in a way, more organized, in a situation such as the pandemic, they did not prove to be ready to approach a joint action.

Difficulties in the supply chains keep happening, so there are continious problems in relation to the shortage of containers, which, on one hand, reduces the supply of containers, and, on the other hand, raises the demand and increases the prices of container transport from China to the rest of the world – as they are now three to five times more expensive. The war in Ukraine has made everything even more difficult, as the Covid-19 restrictions in China continue.

Literature review

One of the most significant worldwide disruptive occurrences in recent generations is currently taking place. Society has been forced to take a long hiatus because to the COVID-19 epidemic. Most certainly, the way that many of us live and the way that commodities are made and delivered are about to undergo a significant upheaval. The path the coronavirus pandemic takes will define how we come out of this process, but we are by no means helpless to influence the future, and sustainability transitions are potential alternatives. In the months and years to come, how will businesses manage their inventory of necessities? Facilities for storage will be required even when there is no immediate requirement due to the higher supply on hand.Will supply-chain resilience require excess capacities of all materials and will there be greater energy and waste losses from excess inventory? (Sarkis, et al., 2020). Following the outbreak of the COVID-19 pandemic, various lockdown strategies restrained global economic growth bringing a significant decline in maritime transportation (Hong-Mei, et al., 2022).

The coronavirus pandemic is an unprecedented event, putting global supply chains (SCs) into the focus of a wider public (Meyer, Walter, Seuring, 2021). The upstream and downstream movements of goods, services, money, and/or information from a source to a consumer are referred to as supply chains. A supply chain is a group of three or more entities (organizations or persons) actively participating in these flows. Seuring and Müller define sustainable SCM as "the management of material, information and capital flows as well as cooperation among companies along the supply chain while taking goals from all three dimensions of sustainable development, i.e., economic, environmental, and social, into account which are derived from customer and stakeholder requirements (Seuring and Müller, 2008, p. 1700). Firms emphasizing sustainable SCM typically have aligned financial and environmental goals, which lead to the incorporation of sustainability into every aspect of their business, SC, and partnerships, which once more protects the entire SC from commodity traps, improving financial value to the focal firm and suppliers (Pagell and Wu, 2009, p. 54)

The COVID-19 crisis has created new expectations among stakeholders, including regarding organizations' proactive participation in collective efforts to fight the pandemic, their responsibility in preventing illness in certain particularly affected sectors and in limiting the rise of unemployment, and their resilience to a crisis likely to create numerous disruptions in the supply of essential goods and services. Organizations must reevaluate procedures, develop new skills, and put creative strategies into place to address the demands of a situation that has grown a lot more unstable and unpredictable during times of crisis and great uncertainty. In fact, many company executives are unsure about how to handle the present issue and what procedures to implement. In addition, the uncertainties about the pandemic's implications and the possible occurrence of new waves of contamination should prompt leaders to plan measures that could be adopted in the event of future outbreaks (Boiral, et al., 2021).

Supply chain globalization has increased logistics complexity, necessitating a better comprehension of a nation's logistics performance. This performance is usually captured through infrastructure, services, and procedure elements and is understood in operational and economical terms (Kesavan, Deif, 2021). Finally, it should be pointed out, In one study (Jishuang, et al., 2020) the numerical results show that although the COVID-19 epidemic does not significantly affect the number of ships



arriving at China's ports, it has a significant impact on the average berthing time of ships arriving at the port.

Logistics and transport

Today, logistics is said to be a modern business function that identifies, provides, monitors and controls all resources in the broadest sense of the word. It thoroughly supports the management process, by providing qualitative (by types), quantitative (by quantity) and term (by deadlines) support of the system that is being managed, i.e. supported, in an integral form. The result of that support is the required availability, reliability and functional suitability of system elements and the system as a whole. From the business point of view, the purpose of (civilian) logistics is defined by seven rules ("7R" - Seven Rights): Ensure that the ideal product is accessible, in the ideal quantities, in the ideal quality, at the ideal location, at the ideal moment, for the ideal client, and at the ideal cost. The aim of logistics operations has been achieved if all of these requirements are accomplished.

Mapping available and spare resources is a key to achieving the continuity of support in the fight against the COVID-19 pandemic. In such crisis situations, which are of a pandemic or similar nature, and when the entire civilization is in a state of recession, a safe supply of basic products, medicines and medical devices that are necessary for the functioning of not only the health system but also others, for citizens of vital services, must be ensured (Dobričanin et al., 2021).

The (partial or full) suspension of traffic (air, rail, sea and road), has led to the interruption of the people's mobility, goods mobility and economic cooperation. The suspension of travel between the two countries on the external front is accompanied by a package of various measures on the internal level, all with the intention of stopping the spread of the new virus and protecting the safety of their citizens. A significant number of countries have even decided to introduce the state of emergency. Most countries have, in that manner, introduced rigorous measures of prohibited gatherings and even leaving the house. A small number of countries, such as Sweden, have applied liberal measures, freedom of movement and assembly, while respecting the rule of social distance, i.e. the existence of distance between people. The closing of borders and the fear of the consequences of this virus have exposed the character of the behavior of countries in the international community - countries were primarily and mainly concerned with their own interests (how to protect their health system and citizens), before they took into consideration any other, common obligations. Solidarity between the two countries has disappeared even within the European Union, as a unification body (Obradović, 2020, 13).

When compared to February 2019, the amount of international container commerce fell by 8.6%. Although official numbers for March 2020 have not been made public, given the widespread lockdowns, the decline is probably greater. In the Far East, the fall in container commerce was particularly pronounced. In Europe, North America and Oceania it is also significant, while it is not yet noticeable in other emerging economies (Latin America, Sub-Saharan Africa and the Indian Subcontinent and the Middle East). The table below (Table 1) lists the changes in January and February 2020 for different world regions.

	Change Jan 2019 to Jan 2020 (%)	Change Feb 2019 to Feb 2020 (%)
Far East	0.0	- 17.5
Europe	0.7	- 4.0
North America	- 0.3	- 7.0
Australasia and Oceania	- 6.5	- 2.8
Indian Subcontinent and M. East	3.7	6.1
South and Central America	2.4	2.8
Sub-Saharan Africa	5.4	7.4

Table 1. Changes in container trade volume by world region, 2020

Source: International Transport Forum, CTS

Many businesses suffered as a result of the lack of intermediate products coming from China owing to COVID-19. The cost of commodities decreased, with crude oil particularly seeing its all-time low. The transportation and carrying industry has suffered, and people's options for travel have been limited. As a consequence, in the first quarter of 2020, practically every country saw growth. Due to this circumstance, economists naturally made estimates for the remainder of 2020 based on both gloomy and optimistic scenarios. These scenarios predict that 2020 won't be a great year for either the global economy or global transportation, even if things pick up in the second half. The International Monetary Fund's growth projections provide insight into this scenario (IMF). The container industries



have recently encountered a number of new obstacles, including concerns with trade legislation (such as the US-China trade war), the deployment of the shipping fleet, and green shipping and green port issues (e.g. sulphur content in fuels). The introduction of COVID-19 has presented new difficulties for managing and operating ships. For instance, an additional wait time for berthing operations, inland seaport transshipment operations, hinterland transportation management, etc., might be caused by a port security check. The container shipping market's freight and charter rates are impacted by changes in trade volume, and shipping companies must devise resilience plans to minimize potential business losses and put this market back on a development path. During the early of the year 2020, many cruise ships have berthed at ports empty of passengers due to the influence of COVID-19. The spread of viral pandemics has made this industry face serious challenges since it has involved public health and life safety problems (Yazır, et all., 2020).

Most companies are experiencing a disruption in their supply chain as the import and export of their equipment and materials is halted because there is a decrease in demand amid the global pandemic COVID-19 virus (Balfour, 2020). Therefore, those companies started to focus on domestic distributors to meet their needs. However, when the global distributors have shut down or slowed down globally, that means the business will negatively be affected and that will be bad for the cash flow as many companies will go bankrupt (Balfour, 2020). Thus, the high speed of shutting down the global industries is currently causing a bad situation and will have a bad impact on supply chains both globally and domestically (Balfour, 2020; Đorić, Sinanović, Vukosavljević, 2021).

In one survey (Cengiz, Turan, 2021), the question "How have your business operations been affected by the coronavirus (COVID-19) pandemic?" and three options have been allowed for them to answer. Nine firms (11%) claimed to be unaffected, compared to 29 (34.5%) who claimed to be moderately impacted, 26 (31%) who claimed to be somewhat affected, and 20 (24%) who claimed to be significantly affected. Additionally, respondents were asked how the coronavirus (COVID-19) pandemic affected their business, and their responses are included in Table 2 along with the consequences of the pandemic.

Effects	Percent (%)
Reduced logistics services	16.8
Reduced investment	16.8
Temporary shutdown	16.2
Clients not paying their bills	10.1
Reduced certification services	10.1
Employee absences due to sickness or childcare	8.9
None of the above	6.7
New problems with infrastructure, e.g. internet or roads	5
Other	5
Increased administrative bottlenecks	4.5
Total	100%

Table 2. Effects of the pandemic on maritime companies.

Source: Cengiz, Turan, E.2021

Marine scholars are interested in containerization and how it may affect structural changes in maritime transport. Study (Fei, et al., 2021) finds that path dependence is evident in the container shipping structure, and major regional connections are still present between China and the maritime regions of East-Southeast Asia, Western Europe, and North America. The pandemic in 2020 caused supply, demand, and logistics to change, as well as production and consuming activities. Growth in international marine commerce was already meager in 2019 at 0.5%, but it fell by 3.8% in 2020. Total volume dropped by 422 million to 10.65 billion tons (Review of Maritime Transport, 2021).

Logistic management is a part of the supply chain and it is the part that plans, implements, and controls storage and product flow, services and information between the point of origin and point of consumption in order to meet customer requirements. Thus, logistic management has an impact on all activities of the supply chain (Archetti, Speranza. 2014). As these activities are linked, they need to be coordinated to guarantee a good performance of the supply chain. "The essence of logistics integration is a well-coordinated flow of materials from suppliers which allows firms to have a smooth production process".

Lean manufacturing processes, which are defined by consistent order cycles and inventory reduction, are also made possible by integrated logistics for businesses. Through the use of logistics integration, businesses and



the people who work with them in the supply chain may operate more effectively. A worldwide pandemic is only one of the logistical issues that might occur in supply chain management, distribution, and inventory management that need the integration of many product components. Routing problem is one of the problems that the supply chain is facing today due to the spread of the coronavirus COVID-19, and this problem arises when products such as medicines must be collected from the origin and delivered to the final destination (Archetti, Speranza. 2014).

Healthcare systems are encountering difficulties in procuring the necessary equipment because of the rapid changes in social, economic and political environment. Rising prices is a problem that needs to be solved urgently. Under normal circumstances, the price of one intensive care bed is about 30,000 USD. However, as worldwide demand skyrocketed and prices soared, the provision of this equipment turned into a horrific scramble. The European Commission announced a package of EUR 38 million in direct support, primarily focused on procuring medical and protective equipment. In addition to the direct impact of the crisis on the prices of the equipment and the demand for it, the challenges in financing healthcare are also increasing, as the revenues of healthcare institutions and the public sources of funds for healthcare systems both decrease. Patients around the world are forced to stop or limit interventions that are not urgent but which represent a key source of arrival. Short-term and medium-term shortages of equipment have resulted in additional demands and risks for doctors and health workers, who have a high probability of contracting COVID-19 themselves.

Drug supply management is a process of strategic planning, selection, procurement, storage, transport and delivery of drugs in order to meet the needs of healthcare institutions and patients. Patients must receive high-quality, safe and effective medicine at the right time and in the right place. If medical institutions or pharmacies want to provide quality services to users, it must not happen at any moment that some medicines or necessary work tools are not in stock or otherwise available. This means that there must always be a required amount of edge in the edge warehouses. Supply chain management represents the process of planning, organizing and controlling the flow of medicines and services from the supplier to the patient, i.e. service user. Medical supply chain management represents to the integration of suppliers, manufacturers, warehouses and pharmacies in such a way that the right amount of medicine and medical equipment is ordered and delive-

red, to the right locations, at the right time, with minimal costs in the supply system and with a certain level of provision service, i.e. the satisfaction of consumer requirements (Marinković, 2012).

Through timely planning and good organization, the Serbian Army has shown the sustainability and continuity of its logistics, which, in addition to successfully meeting all the needs of the army, has helped the civilian population overcome numerous and unpredictable challenges posed by the Kovid-19 pandemic. In a very short period of time, by engaging significant capacities and its own supplies, the Serbian Army managed to equip and provide all the conditions for accommodation and life in temporary covid hospitals. During the state of emergency, the army prepared 6,040 beds from its supplies, more than 35,000 people and 22,000 tons of various cargo were transported, with the engagement of more than 2,000 vehicles, which covered about 800,000 kilometers. The logistics of the Serbian Army were also in charge of receiving, accommodating, transporting, feeding and providing conditions for regular hygienic needs of all members of the medical team from China (Ministarstvo, Danas).

Global supply chains have, after fighting against the pandemic of the Corona virus for two years, have made the availability of goods and trade difficult, and have faced a crisis due to the war in Ukraine. These days there are complications again due to the Corona virus, which is, again, breaking out, at the time of writing this report, in Shanghai and Shenzhen, through whose ports about 50 percent of Chinese goods arrive in Serbia. The closure of the two ports of Shanghai and Shenzhen were just an additional problem in the already difficult situation with the global supply chains, and it can significantly affect the domestic market as well. China has limited the availability of the port. In the economic theory, this is called the "bullwhip effect" - when a congestion on the delivery side in China is created, the ports in Europe and America practically have a few days off until the containers arrive, but when the goods arrive in the USA and the EU, their ports are clogged and it all results in a turbulence on the market, which is largely caused by problems in logistics and supply chains. If the shutdown in China is to be prolonged, we can expect the suspension of the production chain and, as a result, less production in the countries that import raw materials from China. A potential "jamming" of the container and an imbalance between imports and exports can still be expected. Then, the increase in the price of the transport services themselves, delay and extension of the delivery time of shipments (Radović, 2022).



Human resources - an indispensable part of logistics

Human resources management is constantly changing and improving by following modern trends, challenges and changes. Relations of superiority and subordination give way to relations of cooperation and creative solving of set goals, raising the confidence, self-awareness, integrity and initiative of the employee to a higher level. An employee who is respected, appreciated, adequately rewarded and satisfied with his status and overall position in the school, is motivated for the greatest achievements.

Global productivity and international trade both initially decreased with the pandemic's onset. It goes without saying that this was due to the lockdown in China, the shutdown of many of its industrial facilities, the subsequent lockdowns in Europe and North America, and the lockdown in China itself, which significantly decreased the demand for Chinese imports. Furthermore, the Chinese shutdown caused significant disruptions in global supply chains, highlighting China's crucial position as the world's main producer of industrial goods if any further lessons were required. However, the worldwide market for merchandise products has decreased significantly, and passenger travel, vacations, and leisure activities have all decreased as a result. These are the short-term economic repercussions of COVID-19 that have been felt most instantly and painfully. It should be noted, however, that the contraction in overall demand experienced over the course of the whole of 2020 has not been as dramatic as many analysts were predicting, and to the benefit of the shipping industry, the same was also true for international trade (Cullinane, K., Haralambides, H. (2021).

During the Covid-19 crisis, medical logistics was of great importance. The Covid-19-specialized hospitals lacked resources due to the high demand for the same needs in other hospitals. There was a lack of respirators, Covid-19 antigen and rapid tests, a sufficient number of hospital beds, etc. However, medical logistics does not only have the task of providing the necessary resources for the health care system, it is also obliged to ensure the optimal number of accommodation centers for the emergency admission of patients. When choosing a location, it is important that emergency medical assistance reaches all parts of the city in the shortest time possible. Medical logistics also refers to ensuring the correctness of all medical devices used in hospital institutions, managing the stock of all medical preparations, transporting patients between hospital

institutions, transporting the injured, planning future hospital needs related to preparations, etc.

The spread of the Corona virus within the states caused a huge "pressure" of the incoming infected persons on the health systems of the states. It has been shown that the largest number of countries in the conditions of the sudden influx of a large number of people suffering from Covid-19 do not have the appropriate (necessary) healthcare space, nor the necessary medical equipment and medicines needed: protective masks and suits, oxygen bottles, respirators, different types of medicaments, disinfectants etc. Therefore, many hospitals in countries with a high level of health care, with numerous equipment, were not able to provide the necessary medical care and assistance to all arriving patients infected with Covid-19.

Migration and labor shortages also make health systems vulnerable in pandemic and similar conditions. The importance of emigration of healthcare workers has been gradually increasing for decades. On average, the Medical Chamber of Serbia annually issues over 700 certificates of good practice that enable doctors from Serbia to work abroad. The Medical Chamber of the Federation of Bosnia and Herzegovina (FBiH) stated in 2016 that about 3,009 highly qualified doctors left this country - which is a good indicator of the problem at the level of the entire region: the "brain drain" and the departure of qualified workers, that are leaving to work in Western health systems, that offer better opportunities for professional development and higher incomes. In 2013, there were 128 doctors for every 100,000 inhabitants in Albania; in 2014, there were 234 in Montenegro, and 280 in North Macedonia. The EU average in 2014 was 369 per 100,000 inhabitants. As health systems strain to detect and treat patients with Covid-19 in a timely manner, the long-term shortage of health workers is a serious problem (impact of Covid-19 on health systems in the Western Balkans).

According to the Croatian Professional Union of Nurses (HSSMS), even before the pandemic of Covid-19, Croatia lacked 12,000 nurses, and according to official statistics, from 2013 to 2018 alone, 3,180 nurses and technicians went abroad directly from the system, mostly in Germany. However, the departure of medical staff was observed much earlier: from 2009 to 2013, according to the data of the Croatian Employment Service, 4,279 nurses left the country (CES, 2013). The said data refer only to medical workers who were employed in the Croatian health system, while the number of those who left directly after completing their education is



not known at all. Therefore, in the past ten years, about 7,500 nurses have left the Croatian health care system alone, in fact every fourth nurse/ technician from a system that numbers about 28,000 (Mihajlović, 2014). The incidence is most pronounced in large hospital systems, especially clinical hospital centers, while in general and county hospitals, staff shortages in the profession are usually between 10 and 35 percent.

In order to compensate for the shortage of personnel in healthcare, the Republic of Serbia announced a call for the recruitment of new doctors, nurses, technicians, etc. According to the Data of the National Employment Service for March 2020, in March 2020, there was a slight increase in new jobs in healthcare. In the beginning, there was a total of 254 available places for medics, while 93 were available during February. The most needed healthcare workers were nurses (116), followed by medical technicians (21), medical doctors (42) and specialist medical doctors (20), according to the Monthly statistical bulletin.

Conclusion

The pandemic and the war in Ukraine have shown how vulnerable the model of manufacturers in Germany, that are waiting for parts from China actually is, and how much countries in East Africa depend on wheat from Russia. Many countries are seriously considering shortening supply chains - to have everything in their neighborhood (Avaku-mović, 2022).

The purpose of this study was to evaluate the COVID-19 epidemic's impact on the healthcare supply chain. Natural disasters, like the occurrence of COVID-19, have been shown to have a significant influence on the healthcare industry's supply chain. One of the trickiest procedures in the healthcare industry is the supply chain since every step must be exact or someone might lose their life.

The results showed that the COVID-19 epidemic has a major impact on the supply chain for the healthcare sector. These consequences include a medical supply shortfall brought on by excessive demand and market uncertainty. The uncertainty is brought on by the fact that COVID-19's expected length of stay is indefinite and unpredictable in and of itself. A decrease in the sales of medical items is another effect of coronavirus. The way things are done in the medical supply chain has also undergone major change. Furthermore, the standard of treatment that patients get has been impacted by government initiatives to stop the virus's spread and control it.

The COVID-19 has a significant impact on people's lives all across the world. On both domestic and foreign transportation, it made a striking effect. Lockdown, on the other hand, delayed global trade and manufacturing, which had an adverse effect on the global economy. The epidemic has a major impact on a global scale.

Reference

- Archetti, C., & Speranza, M. G. (2014). The Value Of Integration In Logistics. ECMS 2014 Proceedings Edited by: Flaminio Squazzoni, Fabio Baronio, Claudia Archetti, Marco Castellani. doi: 10.7148/2014-0691 35.
- Avakumović, M. (2022) Пуцање глобалних ланаца снабдевања. https://www.politika.rs/scc/clanak/505864/Pucanje-globalnih-lanacasnabdevanja#.YmhNHcYm67Q.facebook. 26.4.2022
- Boiral, O., Brotherton, M.C., Rivaud, L. (2021) Guillaumie, L. Organizations' Management of the COVID-19 Pandemic: A Scoping Review of Business Articles. Sustainability 13, 3993. https://doi.org/10.3390/su13073993
- 4. Balfour, H. (2020). COVID-19 update: coronavirus and the pharmaceutical supply chain. European Pharmaceutical Review. https:// www.europeanpharmaceuticalreview.com/article/116145/covid-19updatecoronavirus-and-the-pharmaceutical-supply-chain/
- Cengiz, H. & Turan, E. (2021). Business impact of covid-19 pandemic on global maritime industry. Journal of Naval Sciences and Engineering, 17 (1), 43-75. Retrieved from https://dergipark.org.tr/en/pub/ jnse/issue/61654/851475
- Cullinane, K., Haralambides, H. (2021) Global trends in maritime and port economics: the COVID-19 pandemic and beyond. Marit Econ Logist 23, 369–380 (2021). https://doi.org/10.1057/s41278-021-00196-5
- Dobričanin, S., Arsić, Lj., Dobričanin, V., Tripković, A. (2021) Krizni menadžment zdravstvenih sistema u uslovima pandemije COVID-19. Ecologica, Vol. 28, No 102, 193-200 https://doi.org/10.18485/ ecologica.2021.28.102.8
- 8. Đorić, N., Sinanović, Š., & Vukosavljević, I. (2021) Quality management as a determinant of healthcare user satisfaction. Horizonti menadžmenta, I (1), 69-91.



- Fei F., Xuerong Z.; Wenyi Y.;Chengliang L. (2021) Spatiotemporal Evolution of China's Ports in the International Container Transport Network under Upgraded Industrial Structure . Transportation Journal (2021) 60 (1): 43–69. https://doi.org/10.5325/transportationj.60.1.0043
- 10. Global Container Shipping and the Coronavirus Crisis (2020) International Transport Forum, CTS. https://www.itf-oecd.org/sites/default/ files/global-container-shipping-covid-19.pdf
- Hong-Mei Z., Hong-Di H.,Kai-Fa .,Xiao-Long ., Yi D., and Zhong-Ren P. (2022) Measuring the impact of an exogenous factor: An exponential smoothing model of the response of shipping to COVID-19. Transp Policy (Oxf). 2022 Mar; 118: 91–100. doi: 10.1016/j.tranpol. 2022.01.015
- Jishuang Z., Weiwei Q. and Wentao J. (2020) Evaluating Impacts of the COVID-19 Pandemic on China's Container Ports Based on AIS Big Data. Journal of Physics: Conference Series 1624 (2020) 032050 IOP doi:10.1088/1742-6596/1624/3/032050
- Kesavan, D. P. Deif, A.M. (2021)Exploring National Culture Impact on Logistics Performance. Transportation Journal (2021) 60 (1): 20– 42. https://doi.org/10.5325/transportationj.60.1.0020
- 14. Meyer A, Walter W and Seuring S (2021) The Impact of the Coronavirus Pandemic on Supply Chains and Their Sustainability: A Text Mining Approach. Front. Sustain. 2:631182. doi: 10.3389/frsus. 2021.631182
- Mentzer, J. T., DeWitt, W., Keebler, J. S., Min, S., Nix, N. W., Smith, C. D., and Zacharia, Z. G. (2001). Defining supply chain management. J. Business Logistics 22, 1–25. doi: 10.1002/j.2158-1592.2001. tb00001.x
- Marjan Milenkov, Milan Dronjak, Vladan Parezanović(2015) Prilog boljem razumevanju logistike. Vojnotehnički glasnik, 2015, Vol LXIII, No 4, 68-98. https://scindeks-clanci.ceon.rs/data/pdf/0042-8469/ 2015/0042-84691504068M.pdf
- 17. Marinković V. (2012). Upravljanje snabdevanjem lekovima i sistemi podrške. Farmaceutski fakultet Univerziteta u Beogradu.
- 18. Ministarstvo: Tokom vanrednog stanja vojska iz svojih zaliha pripremila za smeštaj 6.040 kreveta. Danas, 24.08.2020. https://www. danas.rs/vesti/drustvo/ministarstvo-tokom-vanrednog-stanja-vojska-izsvojih-zaliha-pripremila-za-smestaj-6-040-kreveta/

- 19. Mesečni statistički bilten. https://www.nsz.gov.rs/live/digitalAssets/ 14/14415_statisti_ki_bilten_-_mart_2020..pdf
- 20. Обрадовић Ж. (2020) Пандемија новог коронавируса: последице у међународној заједници. U: of sustainable supply chain management using case studies of 10 exemplars. J. Supply Chain Manage. 45, 37–56. doi: 10.1111/j.1745-493X.2009. 03162.x
- 21. Pavićević, A. (2021a) Savremeni lanci snabdevanja kreiranje vrednosti za potrošače. Zadužbina Andrejević ISBN 978-86-525- 0397-1
- 22. Pavićević, A., Pavlović, M., Đoković, G., (2020) Branding of state and nation in the case of Spain, U: Ratković M., Perić N. (eds.) Branding of states and nations, possibilities and implications. Beograd: Faculty of Business Studies and Law: Faculty of Strategic and Operational Management, pp. 221-243. ISBN 978-86-81088-49-4
- 23. Pavićević, A. (2021b), Redefining value for consumers. International journal of economics and law, vol. 11, no 31, 218-229. https://www.ceeol.com/search/journal-detail?id=655
- 24. Radović, Z. (2022) Gužva u logistici se nastavlja: Luke iz kojih u Srbiju stiže 50 odsto kineske robe rade otežano zbog kovid zatvaranja . https://www.euronews.rs/biznis/privreda/44031/guzva-u-logistici-se-nastavlja-luke-iz-kojih-u-srbiju-stize-50-odsto-kineske-robe-rade-otezano-zbog-kovid-zatvaranja/vest
- 25. Review of Maritime Transport 2021. United Nations Publications New York. https://unctad.org/system/files/official-document/rmt2021_ en_0.pdf
- 26. Sarkisa, J., Cohenc , M. J., Dewickd , P., Schröder, P. (2020) A brave new world: Lessons from the COVID-19 pandemic for transitioning to sustainable supply and production. https://doi.org/10.1016/j. resconrec.2020.104894
- 27. Seuring, S., and Müller, M. (2008). From a literature review to a conceptual framework for sustainable supply chain management. J. Cleaner Production 16, 1699–1710. doi: 10.1016/j.jclepro.2008.04.020
- 28. Uticaj kovida-19 na zdravstvene sisteme na Zapadnom Balkanu. https://thedocs.worldbank.org/en/doc/726641590707354436-0080022020/original/RER17HealthnoteSRB.pdf
- 29. Yazır, D., Şahin , B., Yip, T.L., Tseng, P.H. (2020) Effects of COVID-19 on maritime industry: a review. Int Marit Health; 71, 4: 253–264 10.5603/IMH.2020.0044



ECONOMIC ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

Tomislav Sudarević, Milan Brkljač - MILLENNIAL'S RISK PERCEPTION ...



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MILLENNIAL'S RISK PERCEPTION AS A DETERMINANT OF USAGE INTENTION OF DRIVESHARING SERVICES

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Key Words: risk perception, usage intention determinants, drivesharing, millennials, consumer behaviour Abstract: This paper deals with consumer behaviour in the - of drivesharing services, through a prism of millennial generation. Commonly, researches test consumer behaviour by models that refer to impacts of different determinants on consumer usage intention. Consumer safety during the consumption of a service, as well as multiple risks that can occur, make direct influence on decision that consumer can make regarding the final choice. Due to their specific character, drivesharing services are extremely sensitive to different risks that represent usage intention determinants. Based on existing elements from Theory of Planned Behaviour model, which we have arrived to by an extensive review of the literature, this paper aims to point out risks that can inhibit usage intention of drivesharing services. It can result in a slowdown of sharing economy sector, which has experienced a rapid rise through digital platforms. Besides this, paper discusses other effects on economy and companies that resulted from existing risks in sharing economy usage intention. Millennial generation is in the focus of this paper due to the fact that it represents leading generation of drivesharing users, as well as other sharing economy services through digital platforms.

Introduction

ontemporary trends in global and local markets condition the constantly changing nature of companies' businesses and their adaptation to the consumers' needs and desires. Natural, social, economic, political and cultural environment create intertwined factors, at first sight visible or invisible, under the influence of which

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consumers decide to buy and use certain, specific products and services. Also, under the influence of the same factors, consumers decide to interact with each other and with employees in companies, to avoid service contact when shopping and many other manifestations of behaviour when buying and making spending decisions. Today's consumer environment abounds with numerous benefits that contribute to easier and more comfortable lifestyles than has ever been the case in the past. Technical and technological progress, innovation, velocity in transport and communications, global connectivity on a once unimaginable scale, are all advantages that modern consumers, often unknowingly, take for granted, and which make them through the entire consuming process feel complete satisfaction.

In addition to the increased level of quality of life and consumption, the modern way of life has caused certain problems, obstacles and risks in the market. Patterns of purchase are increasingly unsustainable, that requires environmentally-conscious behavior of buyers in the future (Raletić Jotanović et al., 2016). From the point of view of companies, such risks and obstacles represent the starting point for creating marketing strategies and tactics in market performance, in order to eliminate or mitigate them. Having in mind the above, the analysis of consumer behaviour, their desires and needs, but also determining the factors of motivation and intention to purchase certain products and services, are imposed as necessary activities for every business entity in a free, competitive market.

Unwanted economic and social, as well as environmental effects of excessive consumption of resources have encouraged academic and business circles to strive to find solutions to the ubiquitous problems of the modern market. This situation has put in focus, among the socially important topics, the modalities and ways to efficiently use resources, which at the same time create benefits for all market participants. According to Matzner et al. (2015), one of the starting points for companies that strive to create value in a sustainable way is to increase the utilization rate of existing resources. According to the same authors, in a world of limited resources, sharing is becoming a fundamental principle of sustainable development (Matzner et al., 2015). People have always shared the things they own (Belk, 2010), but the digital sharing economy now allows them to do so with people they have never met before, and with whom they can connect through the Internet. Thanks to the connection of users on a global level, with the help of communications, the Internet has provided companies and individuals with the opportunity to organize digital platforms for sharing goods and services. Within those platforms there is no



transfer of ownership, and value exchange takes place in a limited time frame. New technologies, above all the Internet and dedicated online platforms, have enabled individual consumers to get in touch with each other and make transactions in the emerging sharing economy market (Brkljač & Sudarević, 2018). Therefore, it can be said that with the advent of the Internet and the creation of efficient ways of communication, the sharing economy has gained "critical mass" (McArthur, 2014, p. 1). This has enabled the sharing of goods and services between people, as a specific mechanism for resource allocation, to become increasingly popular and to represent a potential way to reduce resource overconsumption (Botsman & Rogers, 2011).

An argument that also supports the idea of resource sharing, in addition to reducing the negative impact of excessive resource consumption, is the emergence of new business opportunities arising from organizing and participating in the sharing economy services (Bainbridge, 2013; Owyang et al., 2013). Malone et al. (1987), long ago predicted that information technology will reduce transaction costs and thus make the coordination of economic activities in the market more attractive, which proves to be true in the case of the sharing economy as well. Today's Internet technologies and mobile communications are the basis for efficient connections between service providersv, who own resources, and users, who need those resources, but who do not want or cannot own them for some reason. Existing platforms of the sharing economy are only "on the surface of what is potentially possible", and "new businesses are constantly emer-ging" (Wosskow, 2014, p. 14).

This paper aims to point out the potential risks, barriers and their impact on the decision of millennial consumers to use drivesharing services, as a subset of sharing economy services. For a growing sector of the economy such as sharing economy services, determinants such as "privacy concerns", "concerns about risks in use processes", "environmental sustainability", "trust in service providers" and the like, can lead to consumers` reduction of service usage, and consequent decline in economic activity. Also, similar risks affect the business of companies, i.e. the social environment and the quality of life of the society as a whole. The millennial generation is in the focus of this paper as the segment of consumers who mostly use drivesharing services, who have a significant discretionary income and whose views have been researched in the literature to date to a significant extent.

Sharing economy and drivesharing services

The effort to precisely determine and define the concept of sharing economy in the literature is marked as one of the significant problems faced by all participants in the exchange of goods and services, as well as members of the scientific community who seek through their researches to explain and shed light on the elements which the functionality of the sharing economy is based on. The problem of definition of the sharing economy is still open (Frenken & Schor, 2017), and the current approach to a single definition is "almost impossible", because there is great diversity among participants in the sharing economy, as well as among the boundaries that participants themselves seek to establish (Schor, 2014). As the author Botsman (2013), vividly states "the sharing economy lacks a definition that everyone could share". Discussing the same issue, the authors Acquier et al. (2017), believe that the effort to establish a single definition of the concept of sharing economy inevitably leads towards two difficulties: (a) too strict restrictiond of the domain (b) in an insufficiently precise determinant that includes a wide variety of concepts and ideas, and thus "includes too many elements to allow a correct theoretical consideration" (Acquier et al., 2017, p. 2).

According to the author Parezanović (2018, p. 6), "economic activities in which participants share access to products or services instead of individual ownership, have come to life to the extent that the sharing economy is considered an economic direction with undoubted prospects in many areas of life and work". The sharing economy is a phenomenon that creates conditions for market participants to exchange goods and services, by providing access to available, unused resources for a certain period of time, often for a fee. Thus, the basic characteristic of exchange within the sharing economy is the inalienability of ownership of goods that are used or given in exchange. Consumers may use resources owned by the other party, which are idle and not currently in use, and which would otherwise most likely remain unused.

The sharing economy, which has become a particularly popular phenomenon, in the form of umbrella includes a variety of concepts and ideas (Hawlitschek et al., 2018). Some authors view the sharing economy as an alternative to the existing form of market capitalist organization, while at the same time there are views that the sharing economy encourages further development of the existing economic system (Richardson, 2015). In addition, in practice there are many concepts related to the phenomenon



of sharing economy, such as platform capitalism, collaborative consumption, gift economy, access economy, and others (Acquier et al., 2017), leading to confusion in the comprehension. In a narrower sense, the authors Laamanen et al. (2018), define the sharing economy as: "Socioeconomic ecosystem that in most cases uses information technology to connect different participants - individuals, companies, authorities and others - to share or access different products and services and to enable common consumption" (p. 213). The elements that essentially characterize the sharing economy are the existence of the C2C (consumer-toconsumer) business model, the temporary access, and the existence of the physical good in value creation (Frenken & Schor, 2017). The sharing economy is developing at different pace around the world. The arising trend of the use of services and products within the sharing economy has spread primarily from developed countries to those that are developing or underdeveloped. For example, in the United States, according to available data (Ferrell et al., 2017), 72% of the population used some form of sharing economy service or on-demand service. According to Laamanen et al. (2018), business models of the sharing economy have experienced a rapid rise in both, Europe and Asia. The sharing economy is expected to continue to grow, which is justified by the potentials in terms of price advantages, environmental sustainability, usability, new consumption experiences, and social interactions (Kathan et al., 2016).

Sharing platforms are the basic distribution channel in the domain of sharing economy, and therefore the success and growth of sharing economy as such depends on their quality design, success and value they create for users, i.e. participants at this market. The basis of a successful platform makes a quality relationship towards the needs of its users. Thus, people who voluntarily engage in transactions in the sharing economy market (Frenken & Schor, 2017, p. 6), do so only if the benefit of the transaction is mutual. Also, in the case of sharing goods, there is a mutual benefit: the costs for the lender are small because the product is not needed by its owner at the moment, while the person renting a certain product gets access and the opportunity to use the product without paying costs for owning it. The effect of entity networking has become key to the survival of sharing platforms. Whether it is physical goods, services, intellectual property, or some other intangible use of goods, attracting a "critical mass" of equal participants in the sharing becomes the basis for creating sufficiently high perceived values by users (Andersson et al., 2013).

The market situation of P2P (Peer-to-Peer) platforms operating at the level of EU countries and Norway was analysed in detail in the study, which included a total of 485 platforms, classified into 5 separate sectors (European Commission, 2017). Of that number, 247 were identified as sharing economy platforms operating in one of the following three (out of five defined) sectors: 82 in the product sharing sector, 89 in the drivesharing sector, and 76 in the accommodation sharing sector. In order to preserve the value of the platform for its users, it is necessary to avoid some of the potential pitfalls and errors that can lead to consumers giving up further use of a particular platform and weakening the impact of the network effect. Some of the basic problems that arise when managing sharing platforms are: (a) error in establishing interaction between users; (b) monitoring and encouraging user engagement; (c) delivery of the promised level of quality of service or product; (d) negative network effects that can be manifested in the rapid growth of the number of community members that the platform with the existing infrastructure cannot serve (Van Alstyne et al., 2016, p. 9).

Drivesharing services

Drivesharing services are among the five currently most developed in the global sharing services market. Increasing attention in the literature is paid to this type of services, because they are considered a sustainable mode of transportation (Wang et al., 2018), as well as an alternative to existing solutions in transportation. In the paper (Meelen & Frenken, 2015), it is pointed out that drivesharing can be considered an example of sharing economy service only if the particular driving on a route will certainly be realized regardless of whether a sharing platform user has applied to use idle place in the vehicle and pay the appropriate fee for that service or not. That is, if the exchange uses the truly unused capacity of goods owned by sharing service providers, and not assets procured for the purpose of their commercial employment and usage. The essence of drivesharing comes down to connecting sharing platform users who have an identical timeline and similar trajectory, and thus can be transported together to their destination by the same vehicle, whether it is a workplace, school, travel to distant places or driving some short distances. All participants in drivesharing achieve multiple benefits, primarily by sharing travel expenses, fuel bills, parking fees, toll collection and other similar expenses. The authors Amirkiaee & Evangelopoulos (2018), state that cities that embrace shared modes of transportation will be those



where people will spend less time blocked in traffic jams or in search of free parking space, cities where people will spend less money on vehicles and transportation and cities who will live and breathe easier. As one of the most popular drivesharing platforms in the world, Uber is expanding its business model to various types of related services, which often erases the clear definition of this platform as taxi service, drivesharing platform, delivery platform (food and other goods) or as the provider of some other services. The service of this platform that most closely matches the definition of drivesharing services is called UberPool. This platform claims that using the UberPool service can reduce travel costs for the driver by up to 50% (Amirkiaee & Evangelopoulos, 2018, p. 10). Also one of the great international drivesharing platforms is BlaBlaCar. Primarily it is focused on drivesharing services on long distances between cities. Other platforms have appeared in Serbia in previous years, and one of them is Car:Go. Due to the fact that the legal status of these platforms and their members is insufficiently precisely defined by legal regulations, there are often protests made by employees of various taxi associations, as well as other traditional transport providers who believe they are damaged by the "unfair" competition.

The specific characteristics of the drivesharing service are reflected in the various aspects that passengers must agree on before setting off together. First of all, these are the exact time of departure, place of departure and place where the ride will end, waiting time at the stop, driving conditions, volume and type of music, whether the driver talks in the car, whether smoking is allowed, compensation conditions of travel costs and the like. There are a number of incentives that more and more countries are introducing to encourage the use of this type of sharing service. Some of them are enabling the vehicle to move in a fast so-called "yellow" lane, while performing drivesharing service (Andersson et al., 2013).

Consumer behaviour in drivesharing services usage

Consumer behaviour, in general, can be seen as a tool of environmental management (Raletić Jotanović et al., 2019). When talking about previous research on the behavioural intentions of members of the millennial generation to participate in the sharing economy services, it can be divided into two sections. One group is represented by researches whose focus was exclusively on members of the millennial generation and their attitude towards services in the sharing economy market. The second group include

researches aimed at determining the consumer behavioural intention in the sharing economy market, and their sample of respondents consisted mostly of members of the millennial generation, although not entirely. The authors (Hwang & Griffiths, 2017), in their research sought to establish a link between cognitive perception of value and influential attitudes of millennials and their intention to participate in collaborative consumption. Their research confirmed that specific dimensions of value perception, such as utility (functional and economic benefits) and hedonistic (satisfaction, comfort, positive feelings and enjoyment) dimensions have a positive relationship with the attitude of participating in collaborative consumption but at the same time symbolic dimensions (such as improving social sustainability) do not achieve such a positive relationship (Hwang & Griffiths, 2017). Studies such as (Garikapati et al., 2016; Ketter, 2019; Tussyadiah & Pesonen, 2015; Amaro et al., 2019) look at the millennial generation in the context of accepting the sharing economy services and their usage in tourism, while traveling or seeking accommodation, that is the impact of sharing economy services on millennial travel behaviour.

Research on consumer behaviour, i.e. their intention to use certain products and services, requires an interdisciplinary approach and often goes into the domain of socio-psychological research. This is also the case with drivesharing services, where most of the studies use some of the theories based on elements of social psychology, but also the theory of acceptance of technology and information technology (Theory of planned behaviour - TPB, Theory of Reasonable Action - TRA, Unified Theory of Acceptance and Use of Technology - UTAUT, Technology Acceptance Model – TAM, etc.). Elements of these theories become the starting determinants whose character and relative importance determine, directly or indirectly, consumer behaviour and their intention to carry out the planned exchange. As noted in part, most studies that have addressed consumer behaviour in the field of drivesharing services and the sharing economy in general, have analysed millennial generation behaviour and the determinants that have the strongest impact on them.

Millennial generation

Members of the millennial generation are often referred to by different names: as "millennials", members of the "Y" generation or "digital natives". With slight deviations, it is generally accepted that the millennial generation includes people born between 1980 and 2000. Their de-



velopment, from childhood to adulthood, was accompanied by technological progress, the development of computers and the Internet, the emergence of advanced devices for production, but also consumer devices based on the principles of the modern digital era. According to some researches, the average modern student spent less than 5,000 hours in the reading process, but more than 10,000 hours in playing video games and more than 20,000 hours in watching a television program (Brkljač et al., 2018). Their essential connection with digital technologies is reflected in the fact that when trying to achieve the process of communication, members of the millennial generation first reach for their "smart" devices or "smartphones" (Lukić et al., 2019). Such data is not surprising, considering that a significant number of members of the millennial generation grew up with such devices.

This generation has changed the way we communicate, reshaped traditional business models, and redefined the meaning of the notion of sociability in real life as well as online presence (Payton, 2015). Private online platforms strive to meet their demands such as: value for money, fully digitalized reservation system, offering more authentic accommodation (Bucher et al., 2018), giving preference to experience over ownership and the like. According to a survey of the characteristics of the millennial generation conducted by PewResearchCenter, millennials are the most alienated from institutions in society compared to other generations before them (Taylor et al., 2014). Thus, 50% of the surveyed millennials describe themselves as politically independent, while 29% of them do not associate themselves with any religious community (Taylor et al., 2014). The same research showed that millennials get married much later compared to their predecessors. Only 26% of members of the millennial generation marry between the ages of 18 and 32. Millennials show a high level of conscience when it comes to preserving the environment and consuming so-called green products. In various studies, they show the intention to buy brands of those products and services that support environmental activities (Lu et al., 2013). With the help of communication via the Internet, this generation feels connected, as part of the global community, which is further encouraged by information about global issues. Communication with others for millennials is almost an all-day activity, but most of these relationships and communication take place through screens and electronic devices. Members of this generation are driven by open communication, involvement in meaningful working tasks and activities, realization of set goals, sense of fulfilment, positive work atmosphere, etc. (Lukić Nikolić, 2021).

Millennials' risk perception of drivesharing services usage

Young people today have fundamentally different needs for transportation and other types of services that remain unmet, and which did not exist or did not have such form in the past. Thus, millennials today face obstacles such as large traffic jams, or large distances between the place where they live and their school, or workplace (Dutzik et al., 2014). Nearly 31% of millennials in the United States (Dutzik et al., 2014, p. 24) stated that they want their basic mode of transportation to be bus, cycling, or drivesharing. Millennials own cars to a lesser extent, but are also less likely to obtain a driver's license compared to generations before them (Klein & Smart, 2016). Thus, this generation introduces changes in the way of movement, i.e. transportation, which opens space for alternative solutions to find their place and role in the market. Risks, and obstacles that arise in the market can significantly inhibit the use of drivesharing services and completely change the mode of transport of the millennial generation. One of the basic factors necessary for the functioning of drivesharing services is trust among the participants. The dilemma that arises with the users of the sharing platform services is whether the other party will respect the agreement, i.e. whether the users will suffer certain damage due to the activities of others. It can be overcomed if there is a certain level of trust between the participants. The level of trust required to complete a transaction to the satisfaction of both parties is a variable category, as it depends on the market, geographical distance, transaction value, time frame, and the like. The lower the value of the transaction, the lower the level of risk in the relationships between platform users, the lower the level of trust is required to complete the transaction (Lee, 2015).

Research conducted (Amaro et al., 2019; Hawlitschek et al., 2018; Tussyadiah & Pesonen), as well as many others, have shown some of the factors that prevent and encourage consumers to use the sharing economy services. Thus, one of the risks of using drivesharing services, perceived by millennials, is privacy concerns. This risk is manifested in the need to leave a significant amount of personal data on sharing platforms, so that the service can be realized in the first place. Consumers have justifiably expressed reasonable doubts about the reliability of the use and storage of such information, as well as the possibility of misuse by third parties. In addition to concerns about data privacy, millennial consumers are also concerned about the risk that comes with providing the service itself, that is, the risk of the process. This risk is directly borne by service users, and includes inexperience in providing the service, unresolved legal issues,



non-standardized communication, the possibility of unfulfilled promises, problems in the execution of billing for services and many other aspects. Another risk that arises when making decisions about the use of drivesharing services is the environmental sustainability of such services. Issues such as reducing exhaust emissions, saving resources, reducing noise, traffic jams and the like. In the case of drivesharing services, this determinant has positive effects on consumers and thus encourages their further use. Ease of use is always a barrier to consumers. In the case of drivesharing, simplicity or difficulty in using applications and vehicles may prevent consumers from continuing to use the observed services in the future. Millennials show a high commitment to this factor, due to their own consumption habits and their own lifestyles. As already mentioned, one of the most important risks and barriers to using drivesharing services is trust in service providers. Users must literally believe in the honesty and honourable intentions of the service provider that the entire process will proceed in a planned and expected manner. In most studies, the trust factor has proven to be the guiding in deciding on the use of drivesharing services by millennial consumers.

Millennials experience these risks in different ways, depending on the way they consume sharing services, on the geographical distance, the location of the service, whether they use the service alone or together with close people etc. Depending on their perception, the relative importance of risk varies over time, but all of these risks affect, either positively or negatively, the use of drivesharing services with a predefined character, or in a predetermined manner. The ability to reduce these risks can improve the consumption of drivesharing services, and consequently improve sharing economy market.

Conclusion

Contemporary market, which is globalized by ever faster means of communication and transport, "intelligent" systems, the Internet, various innovations and the use of technology, imply that companies and consumers must adapt their own business on daily bases. In such an environment, there are ways to provide products and services that open up completely new types of markets and market exchanges. With the assistance of digital online platforms, the sharing economy has become a place where consumers can meet their needs without having to own a product, while service providers can achieve positive economic effects thanks to the material goods they already own, which are in the moment of exchange unused or idle in their capacity. Thanks to that, the sharing economy has managed to connect individuals who have never met before, through digital platforms and who can approach a new form of market exchange. Sharing as such is not a new phenomenon. What is new is the way in which the sharing takes place, as well as the distribution of users and service providers in a wide geographical area. With the acquisition of a critical mass of users, the sharing economy has become a significant economic factor in economies around the world, and its further development is conditioned by consumers' perceptions of the risks that arise as barriers to consumption.

Potential risks that may inhibit millennials' usage of drivesharing services, identified in numerous studies, include, among others, privacy concerns, process risk concerns, environmental sustainability of the observed service, ease of use, trust in service providers, etc. Each of these risks is manifested through two characteristics, character and relative importance. By character, they can inhibit or positively influence the decision of millennial consumers to use drivesharing services. On the other hand, according to their relative importance, the observed risks can to a greater or lesser extent affect the consumers' perception of the acceptability of drivesharing services. Failure to eliminate risks and barriers to the usage of drivesharing services can lead to a complete diversion of consumers from this type of consumption. As a consequence, a significant growing economic segment could disappear and thus reduce the wellbeing of people in whole society. Considering the above, digital platforms that organize sharing economy services, as well as the participants themselves, either on the provider's side or on the user's side, must make joint efforts to reduce or eliminate certain risks and encourage further use of sharing economy services, with the goal of increasing growth and mutual benefits for all participants.

References

1. Acquier, A., Daudigeos, T., Pinkse, J. (2017). Promises and paradoxes of the sharing economy: An organizing framework. Technological Forecasting and Social Change, Vol. 125, 1-10.



- Amaro, S., Andreu, L., Huang, S. (2019). Millenials' intentions to book on Airbnb. Current Issues in Tourism, Vol. 22, No. 18, 2284-2298.
- 3. Amirkiaee, S., Y., Evangelopoulos, N. (2018). Why do people rideshare? An experimental study. Transportation Research Part F, Vol. 55, 9-24.
- 4. Andersson, M., Hjalmarsson, A., Avital, M. (2013). Peer-to-peer service sharing platforms: Driving share and share alike on a mass-scale. In: International Conference on Information Systems, Milano, Italy, 2964-2978.
- Bainbridge, J., (2013). Understanding collaborative consumption. Campaign, https://www.campaignlive.co.uk/article/understandingcollaborative-consumption/1208887?src_site=marketingmagazine, (10 March 2022).
- Belk, R. (2010). Sharing. Journal of Consumer Research, Vol. 36, No. 5, 715-734.
- 7. Botsman, R., Rogers, R. (2011). What's mine is yours: How collaborative consumption is changing the way we live. Harper Collins, London.
- 8. Botsman, R. The sharing economy lacks a shared definition. Fast Company, https://www.fastcompany.com/3022028/the-sharing-economy-lacks-a-shared-definition, (15 December 2021).
- Brkljač M., Lukić, M., J., Dejanović, M., A. (2018). Inovacije, nove tehnologije i milenijumska generacija – istovremeni razvoj. In: Proceedings of Fourth International Scientific-Business Conference LIMEN 2018, Integrated Politics of Research and Innovations, Belgrade, Serbia, 4, 411-418.
- Brkljač M., Sudarević T. (2018). Sharing economy and "Industry 4.0" as the business environment of millennial generation - a marketing perspective. Annals of DAAAM & Proceedings. Vol. 29, 92-1101.
- 11. Bucher, E., Fieseler, C., Fleck, M., Lutz, C. (2018). Authenticity and the sharing economy. Academy of Management Discoveries, Vol. 4, No. 3, 294-313.
- Dutzik, T., Inglis, J., Baxandall, P. (2014). Millennials in motion -Changing travel habits of young Americans and the implications for public policy (U.S. PIRG Education fund, Frontier Group) https://trid.trb.org/view/1328287, (28 January 2019).

- 13. European Commission, Exploratory study of consumer issues in online peer-to-peer platform markets (Consumers, health, agriculture and food executive agency). Brussels, https://ec.europa.eu/info/ sites/info/files/final_report_may_2017.pdf, (22 January 2022).
- 14. Ferrell, O. C., Ferrell, L., Huggins, K. (2017). Seismic shifts in the sharing economy: Shaking up marketing channels and supply chains. Journal of Marketing Channels, Vol. 24, No. 1-2, 3-12.
- 15. Frenken, K., Schor, J. (2017). Putting the sharing economy into perspective. Environmental Innovation and Societal Transitions, Vol. 23, 3-10.
- Garikapati, V., Pendyala, R., Morris, E., Mokhtarian, P., McDonald, N. (2016). Activity patterns, time use, and travel of millennials: A generation in transition? Transport Reviews, Vol. 36, No. 5, 558– 584.
- 17. Hawlitschek, F., Teubner, T., Gimpel, H. (2018). Consumer motives for peer-to-peer sharing. Journal of Cleaner Production, Vol. 204, 144-157.
- Hwang, J., Griffiths, M. (2017). Share more, drive less: Millennials value perception and behavioral intent in using collaborative consumption services. Journal of Consumer Marketing, Vol. 34, No. 2, 132-146.
- 19. Kathan, W., Matzler, K., Veider, V. (2016). The sharing economy: Your business model's friend or foe? Business Horizons, Vol. 59, No. 6, 663-672.
- 20. Ketter, E. (2019). Eating with EatWith: analysing tourism-sharing economy consumers. Current Issues in Tourism, Vol. 22, No. 9, 1062-1075.
- 21. Klein, N., J., Smart M., J. (2016). Millennials and car ownership: Less money, fewer cars. Transport Policy, Vol. 53, 20-29.
- 22. Laamanen, T., Pfeffer, J., Rong, K., Van de Ven, A. (2018). Editors' introduction: Business models, ecosystems, and society in the sharing economy. Academy of Management Discoveries, Vol. 4, No. 3, 213-219.
- 23. Lee, J., Y. (2015). Trust and Social Commerce. University of Pttsburgh Law Review, Vol. 77, 137-181.
- 24. Lu, L., Bock, D., Joseph, M. (2013). Green marketing: what the Millennials buy. Journal of Business Strategy, Vol. 34, No. 6, 3-10.



- 25. Lukić, M., J., Brkljač, N., M., Perčić, R., K. (2019). Brendiranje poslodavaca u funkciji privlačenja i zadržavanja talenata koji pripadaju generaciji milenijalaca. Marketing, Vol. 50, No. 2, 83-93.
- 26. Lukić Nikolić, J. (2021). Angažovanost zaposlenih sa organizacionim ponašanjem i menadžmentom ljudskih resursa. Visoka škola modernog biznisa, Beograd.
- 27. Malone, T., Yates, J., Benjamin, R. (1987). Electronic markets and electronic hierarchies. Communications of the ACM, Vol. 30, No. 6, 484-497.
- 28. Matzner, M., Chasin, F., Todenhöfer, L. (2015). To share or not to share: Towards understanding the antecedents of participation in IT-enabled sharing services. In: Twenty-Third European Conference on Information Systems, Münster, Germany, 23, 1-13.
- 29. McArthur, E. (2014). Many-to-many exchange without money: Why people share their resources. Consumption Markets & Culture, Vol. 18, No. 3, 239-256.
- 30. Meelen, T., Frenken, K. Stop saying Uber is part of the sharing economy. Fast Company. https://www.fastcompany.com/3040863/ stop-saying-uber-is-part-of-the-sharing-economy, (15.02.2022)
- 31. Owyang, J., Tran, C., Silva, C., The collaborative economy: Products, services, and market relationships have changed as sharing startups impact business models. To avoid disruption, companies must adopt the collaborative economy value chain (Altimeter Group report), San Mateo, https://www.slideshare.net/Altimeter/thecollaborative-economy?qid=6bf8114e-8bc7-49f9-a4fe-158736477928&v=&b=&from search=12, (06 March 2022).
- 32. Parezanović, T., M. (2018). Modeli za podršku razvoju mobilnosti u skladu sa konceptom ekonomije deljenja. Doctoral thesis. University of Belgrade, Faculty of Transport and Traffic Engineering, Belgrade.
- Payton, F. (2015). Workplace design: The Millennials are not coming - They're here. Design Management Review, Vol. 26, No. 1, 54-63.
- Raletić Jotanović, S., Sudarević, T., Katić, A., Kalinić, M., Kalinić, Č. (2016). Environmentaly responsible purchasing – analysis of the ex-Yugoslavian Republics. Applied Ecology and Environmental Research, Vol. 14, No. 3, 559-572.

- 35. Raletić Jotanović, S., Sudarević, T., Grubor, A., Katić, A., Vuksanović, N. (2019). Consumers' environmental management of waste analysis of the the former Yugoslavian Republics. Applied Ecology and Environmental Research, Vol. 17, No. 4, 7229-7248.
- 36. Richardson, L. (2015). Performing the sharing economy. Geoforum, Vol. 67, 121–129.
- 37. Schor, J., Debating the Sharing Economy. A Great Transition Initiative – Toward a Transformative Vision and Praxis, https://www.greattransition.org/publication/debating-the-sharingeconomy/, (20 March 2022).
- Taylor, P., Parker, K., Morin, R., Patten, E., Brown, A. Millennials in Adulthood (Pew Research), https://www.pewresearch.org/wpcontent/uploads/sites/3/2014/03/2014-03-07_generations-reportversion-for-web.pdf, (14 November 2021)
- Tussyadiah, I., P., Pesonen, J. (2015). Impacts of peer-to-peer accommodation use on travel patterns. Journal of Travel Research, Vol. 55, No. 8, 1022-1040.
- 40. Van Alstyne, M., W., Parker, G., G., Choudary, S., P. (2016). Pipelines, Platforms, and the New Rules of Strategy. Harvard Business Review, Vol. 94, No. 4, 54-62.
- 41. Wang, Y., Wang, S. Wang, J., Wei, J., Wang, C. (2018). An empirical study of consumers' intention to use ride-sharing services: using an extended technology acceptance model. Transportation, 1-19.
- 42. Wosskow, D., Unlocking the sharing economy: An independent review (Recommendations on how the UK can become the global centre for sharing for the sharing economy). London: Department for Business, Innovation and Skills, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_dat a/file/378291/bis-14-1227-unlocking-the-sharing-economy-an-independent-review.pdf, (15 December 2021).



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QUALITY OF DATA AND INFORMATION IN THE FUNCTION OF BUSINESS

Nebojša Denić¹, Milan Mišić²

Key Words: Data, information, knowledge, business decision making Abstract: Research in practice indicates that today companies manage to analyze only 10% of the collected data, and that the enormous increase in the amount of business data is a new challenge for company managers. This paper will explore the impact, significance and importance of data quality in the business decision-making process. Based on the relevant literature, the parameters of information quality that are crucial for the successful operation of the company will be defined. The paper will present models of original theoretical models of transformation from data to business knowledge. For the realization of the research of this paper, a research framework is proposed that combines different research methods, which includes quantitative and qualitative research methods. The aim of the research is to point out to the company's managers the parameters that determine the quality of information, and to present original models for the process of improving data quality through the results of the research. In the conclusion of the paper, the summarized results are derived from the performed research. Their importance was pointed out, both from the theoretical aspects and from the practical side, as well as the basic characteristics of the entire theoretical and practical consideration.

Theoretical considerations

hese days enormous amounts of business data from external and internal sources is going to companies and business systems. Although the situations with pandemic caused by corona virus (COVID-19) is still current and has set new challenges for companies, the problematic of processing great amounts of business data

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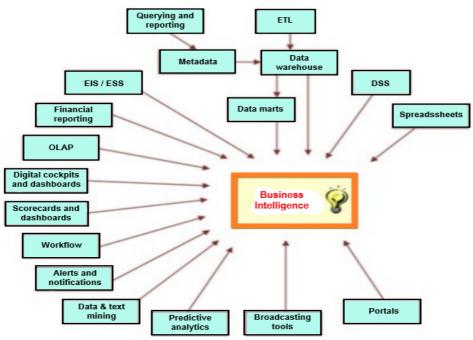
for companies existed even earlier. Research results from companies and business systems in world and Serbia show what when working, they often come across problems caused by: lack of qulity informations for the needs of the management and decision-making process, insufficient operational support, poor analytical data processing, bad organization of data etc. Though this theme's actuality and obrious effects for business, there is still not enough scientific research papers about it which can add even more meaning to this paper. Acording to famous authors, companies can have multiple benefits and advantages from informations, because their size favours flexibility and spees of given information (Olszak & Ziemba 2008). But new researches show that today, classic company has 90% of necessary business data and informations much needed, but it ifficiently uses only 10% available business informations (Liautaud & Hammond 2006). Chances for companies to miss some important data are huge, and that's why they need a system of business intelligence, because it is the only way to use the rest of 90% collected data (Denic et al.2016). Experiences in practice show that in modern operationing companies can easy store large amounts of data, byt many companies are faces with struggles of transforming data in to useful information. Main feature of todays operating is that large amounts of data are available to companies. To much data and informations, which can be found by these data, can be harder to handle in the decision making process, where getting relevant informations is not automated and based on well defined processes (Eppler, 2006). It is out of question that the informations in companies and business systems is their's propertly, byt I want to point out how they can be used in the best way for upgrading and improvement of business. One solution that these famous authors offer is applicating tools of method and business intelligence. By applying BI, organization can learn from the already collected data from their operating systems, they transform those informations into strategical knowledge and infront of competition they remain inside their industrial sector (Ramacrishnan et al. 2012.). Companies collect internal data from various transation systems, apps they use, as data from external surrounding. It is very important that the companies are able to propertly set data in everyday operation and that these data help them in decision-making (Vujovic et all 2020). By adding the number of data in business systems, on the other hand, increases the wish to make decisions based on results off business intelligence (Kernochan 2014.)



Theoretical fundamentals of business intelligence

Business intelligence is a process of collecting meaning full internal and external data and their transformation into data and useful knowledge which companies require when making business decisions (Denic N. 2020a). On the next picture 1, development of tools in presented to begin with basic questions and informing, ETL (process, installing, metadata, and base of data and conceptual data, and even more complicated decisions about supporting system(DSS decision support system) and usual cross tables(MS Excel) which are grouped into modern concept of business intelligence.

Picture 1. The evolution of BI capabilities.



Source: Turban, E., Sharda, R.Delen, D. Decision Support an business Intelligence Systems. New Jersey. Pearson Education, 2011.

Last diagram contains most options and functions of systems which business intelligence uses such as executable information system, financial reporting, analytical processing digital cockpits and dashboards, warnings and notifications, searching data etc. On the second picture systems of the business intelligence are shown and functions most used: 1) reporting and company analysis, 2) global searches, 3) controltables 4) tools.

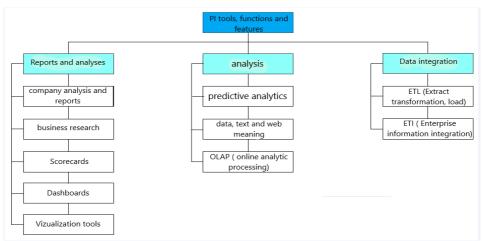
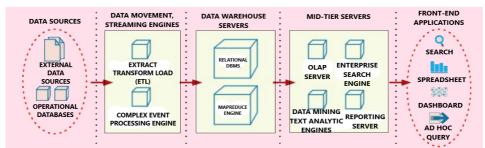


Figure 1. Functions and characteristics of business intelligent systems

Source: Turban and Volonino. (2010). Information technology for management improving performance in the Digital economyle. Dallas: John Wiley & Sons, Inc. Retrieved from http://docplayer.net/13791650-Turban-and-volonino-enterprise-systems-supplychains-erp-crm-km.html

Famous authors say that business intelligence is "analyzing of business and business information in main business processes which lead to business decisions and procedures being done for improvement of business companies" (William & William, 2007). That comes to practice which shows that if the adventages of using sophisticated tools such as discovering knowledge about data, or mining data, is noticed, they whill invest more sources for the process of analysing data in the future(Coleman Shirley, 2016). Well known author Eckerson says that the business Intelligence is a discipline which started to form in the beginning of ninety as a way to provide better access to informations for decision-making of users (Eckerson, 2006).

Picture 2. Typical business intelligence



Source: Chaudhuri S, Dayal U. & Narasayya V, (2011). An overview of business intelligence technology. Communications of the ACM.



Our attention must be put forward to import of data from one or multiple sources to data storage, where it can come to mistakes such as: not showing the same valve, multiplaying data or missing informations in data before implementing it is good to profile data. Some authors say that in this process comes to analysing and identifying of content consistency, and structure of data (Cebotarean, 2011). That being said, when it comes to import data from external sources it is important to be aware which columns are one of a kind or main for a source, and coming data can be compored with existing data in data storage. For previously described process called ETL process, in average 70% of time is spent to realise business intelligence, which is caused mainly by the llw quality of data sources, which without a doubt shows us that informations must be quality (Kimball R., Ross M., 2011). One of the most spread and extremely successful way of creating knowledge. From data is OLAP tools (multidimensional analysas). According to authors I mentioned in the text above multidimensional data showing and options such as filtering, turning and upgrading are available with BI apps which gives analytical data processing. (Chaudhuri, Daial & Narasaiia, 2011).

Quality of date and business decisions

It is important to know that the quality of decisions in business, amongst, is depending of quality informations which we have available. The right decision can be made only when knowing all relative informations, and when every business system gets to the real informations, it will appear more competitive on the market (Denić et all. 2014). By that being said, positive changes depend from visions and strategies of companies, with regard to quality of process of deciding where so called "good decisions" must be based od knowledge and experience of immediate executives and which are the key for decision-making process and require true, timely and reliable information. It can be found in literature that the very basic business activities are associated with collecting data about the market and analysing business and that they existed in 1960, but systematic use of business data in strategical decision -making goned academic interest anly since ninty (Pirttimäki, 2007). There for it is important to mark that the process of collecting and processing data in real time represent activity of operational business intelligence and every day decision-making (Denić et all 2018). In representative literature emphasizes that business intelligence with help of IT infrastructure enables converting data from various sources available to company and usefull data which contribute to business knowledge and enable support when deciding about strategical, tactical and operational levels. Picture number 3. Show how business intelligence is used when it comes to different levels of decision-making.

Picture 3: Methods of using business intelligence in terms of decisionmaking levels



Source: K.Quinn (2006) "Strategic, tactical and Operational Business Intelligence, Information Management", http://information-management.com/news/columns/-1055164-1html.

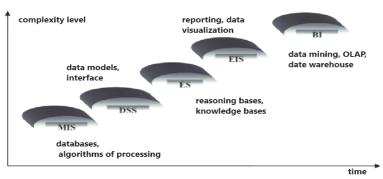
Conclusion here is that the goal of every business intelligence is to provide quality informations, which for data base is needed and without it no business analysis can be done. Therefore, famous autors emphersize that without quality data base no quality business anlysis can be expected (Grossmann & Rinderle-Ma, 2015). This came across opinions which show that main goals of business, intelligence is to provide users interactive acces to data, to provide manipulating with data and to give lidership and analysis a chance to do certain analysis (Turban, Sharda i Delen 2011, str. 19). Research done in practice show that process of dragging business data is in the hands of programmer, which only he has the magical key to opper compey systems with. Even 56% of business users can not find needed informations, 44% is not sure if the informations they are getting are true, and 76% claims that bad decision are only made because of information lack (Denić N., et all. 2018). With this it is confirmed that the researches of many foreing authors which said that companies and people who work in them are often overwhelmed with enormous amounts of informations instead of being focused on the key questions. For efficient process of businessmaking decisions prereguisite represent true, up to date and reliable informations, as to theare the main resource for successful business of companies regarding the industry they work with. Most authors thinks that exactly them is the main factor of success of the companies business. Based on written it can be concludes that informations became, with work and capitalism, key resource of



companie's business. Although, as with the other resources, using data which a company has must be efficient, and to make company even more valuable more than expances which storage of the data causes. In that case conclusion would be that if we have good definied goal at once, true and relevant data and selected way of handling tasks, step with analyzing data begins (Denić et all. 2020b). In their researches some autors mark that adegute decisions must be based on true, true to date, checked and realiable informations, and that accordin to author, indicative, more the quality of the information, more the quality the decision, which can eliminate risks, doubt and uncertainty (Burstein F., 2010). Although, the first processing of business analyzes started even in 1960, It is noticeable that processing of data for business purposes compared to nowadays evolved relaitively slowly until 1990, when Howard Dresner, later analyst of famous research company Gartner, suggested a term of business intelligence to describe concepts and methods for improving and supporting process of decision-making in business based on facts from business activities (Burstein F., 2010).

Quality of data and systems for decision-making support

For the process of managing and making decisions, not all data has the same value, so it is needed to get the key informations and data from the collected ones, which help business users in everyday decision-making. On the next picture number 5. There is conceptual evolutionary development of managing informational systems presented.

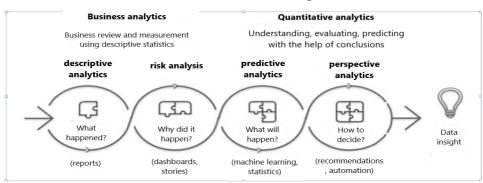


Pucture 4. Development of management information systems

Source: Olszak, C.M & Ziemba, E. "The conceptual model of a web learning portal for small and medium sized enterprises". The journal of issues in informing Science and Information Technology.

Some authors like lindboln mark that finding informations in companies and business systems is for known as a very important step in learning and business

decision-making (Lindblorn A., 2008). However researches point that 40% of key business decisions are not made by facts, but based by managers sense. We can say that the key activities of defining and documenting requests are based for successful usage of technicue methods and tools of business intelligence. In that case experiences in practice show that many requests can exist, such as business requests, requests with data, requests with quality of data, functional requests, regulation reguests, technical reguests, etc. (R. Sherman, 2015). Current researches show that large storages off data are tripled every few years. Sources of that data are different (internal, external, analytical), informations can be attributive and numerical, they can be for factors which impalt on company business, internal procedures, on users of company services, business rivals, business environment. Although, these rough data, inadeguately structured and in different forms, don't have that much off using value for company management. It is necessary that these informations must be prepared propertly analysed and based on that get to useful informations (Knowledges), which can provide accomplishment of business success to company. In that way business analytic appeared and represent process in researching data for discovering validity in data which improve business decisions (M. R. Ralph Kimball, et all 2015). According to them, analytics is a comparation of business decision-making, rapidness of deciding and ability of finding data, shown on next picture.



Picture 5: A look at the level of business intelligence

Source: Kimball, R. Ross, M. Mundy, J & Thornthwaite, W. The Kimball group reader: Relentlessly practical tools for data warehousing and business intelligence remastered collection. New York: john Wiley& Sons.

Researches show that the best model of business intelligence in times of economic crisis and recession, is the one that will help organisations to achive a competitive advantage, and also in the same time isn't expensive (Denić et all 2020b). The importance of informations for the decision-making process is obrious and invaluable because, among other things, it helps to predict the future, and like that move easy for organizations to



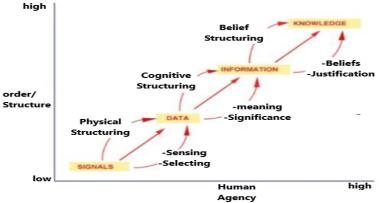
understand trends of production, sales and to improve their position on the market with rival companies. In that case it would reduce the gap between amount of available data and informations in companies, there is a need to define processes of collecting data and their "processing" into informations. Researches show that the time of reaction must be cut, to "real time" if possible.

Process of decision-making in business requires effective and true to date decisions, so that Waters in his researches axplain how time doesn't represent a significant adventage, but, it is very important that the way companies use time, adept strategy and maneuver their resources by creating rival adventage (Waters T.J., 2010). According to Minimol and Sarnga-dharan, series of operations for conrerting data from unorganized to organized form of information, is called processing data and it encompasses resources such as people, procedures and devices for converting data into informations.(Sarngadharan, M., & Minimol, C. 2010).

Defining of quality data informations and knowledge

He is well known that data represent neutral description of facts and inport size for design off informations. For making quality decision, one must have quality informations available (Denić et all 2014). On the next picture number 6 Choov's graphic display is shown where human activities are presented on abscissa where the extent of structuring is shown on ordinate (Choo C. W., 2006)

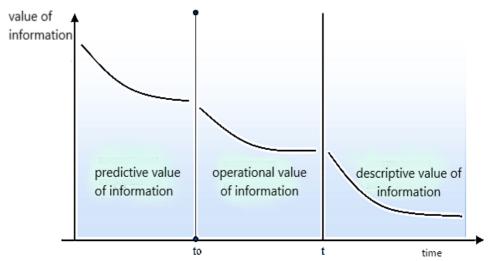
Picture 6: Choov's graphical presentation of data, knowledge information



Source: Choo C.W, The data-information-Knowledge Continuum. http://choo. fisutoronto.ca/klauwer/Data info Know.html.

In literature it is market that on the value off informations significantly affects their importance for person making decisions, in that case in variety off informations accumulated by spicies, there can be huge amount of less relative informations. Know authors such as Liautaud and Hammond, mark that the value of informations is related to time in which those must be accepted like what is shown on picture number 7. (Liautaud B., Hammond M., 2001).

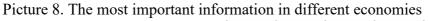
Picture 7: Value of information as a function of time



Source: Liautaud B, Hammond M. E-Busines Intelligence: Turning Information into Knowledge into Profit, McGraw-Hill, New York, 2011.

According to the results of researches by some authors, the most important assets of informations for decision-making are: quality (65%) absoluteness (18%) timeliness (13%) and price (5%). Although Eppler marks that for companies and business systems today, the key is overall quality off informations and no more the amount of those, this is confirmed by other authors which say that for process off business decision-making comprehensive, true and timeliness informations are needed (Eppler M.J., 2003). Bad quality of informations stops them from doing business effectively which causes alienation of buyers because of using the wrong data (Eckerson W.W 2006). Some author works that dimensions and features off quality informations is sometimes unclear and the terms is often used as a synonym, but between them the key difference exists (English L.P., 2005).



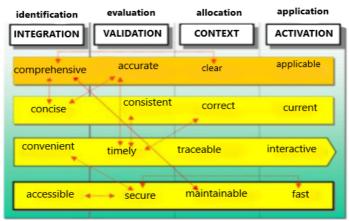




0% 10% 20% 30% 40% 50% Source: Davenport T.D. Snabe J.H, How fast and flexible Do You Want Your Information, Really. MIT Sloan Management Review.

As shown on previous picture number 8. (Davenport T.D., Snabe J.H., 2011). Except thought about availability and time contitions off data and informations it is also interesting to see the results off research about the importance off some informations related to state off the market economy which respondents function on. In data storage and appropriate informations it is shown respectively see some usefull knowledges, which are than used in the process off decision-making.

Picture 9. The information Quality Framework



Source: Eppler M. J, Managing Information Quality: Increasing the value of Information in knowledge-intensive Product and Processes, Springer, New York, Berlin, 2003.

Quality of data and informations is one of a kind category, which is important in all business informational systems. One wide spectre for valuing quality off informations is Epplers spectre off quality informations, which was made by analyzing existing 20 criteria framework and criteria for consolidation quality off informations in these contexts.

On the previous picture number 9, Eppler's context which includes factors which influence the quality off informations is shown ass seen on the picture, quality off informations depends on quality content and quality intercessor which carries specific informations. Within the category of content and quality, there are some factory which separate from but that is mainly because the responsibility which they carry on one side and the users on the other side, IT services, which cherishes proper infrastructure. By that being said Eppler describes criteria box which are important for managing quality off informations.

Conclusion

This paperwork is based on researches from relevant literature true to date of eminent authors and researches in practice with a goal to show the importance of quality data and informations for improving company business. The latest research show that typical company possesses 90% of needed data and informations, required for efficient business, but efficiently uses only 10% of existing data and informations. Daily import of informations that now a days business systems and companies lake into their data bases is huge. This research show possiable aspects off using new methods, tools and techniques for solving problems of using business data in function off improving business companies.

Companies nowadays collect meaningfull amounts of data from various sources, and by using BI for collecting, organizing and analysing these data they can add huge value to business and their company. From theoretical and practical aspect it is evolved that the quality of data and informations as direct influence on efficiency and effectiveness off business processes of companies and plays a huge ride in providing pleasure for bigers and represents basics for making the best time today decisions. Business intelligence contains off concept and methods for improvement and support off business decision based on a fact from business activities. In implementation off business intelligence systems, as by rule, most problems begins in process of transforming data from original systems. Although in the newest



researches the importance off managing process of business is shown, there is still no meaningfull number of scientific paperworks in this area. With this paper based on conducted researches amongst others, the answer on a question "how much are the managers of companies, pleased with given informations, are they getting real reliable and usefull informations" was looked for. The greates number of managers is partially pleased with collected informations, but it is much needed that there still is enough space for improving quality of business informations.

References

- 1. Burstein, F., Brézillon P., Zaslavsky A., (2010). Supporting Real Time Decision-Making: The Role of Context in Decision Support on the Move, Volume 13 of Annals of Information Systems, Springer Science& Business Media, ISBN 1441974067, 9781441974068.
- 2. Cebotarean, E., (2011). Business intelligence. Journal of Knowledge Management, Economics and Information Technology, 1(2), 1-12.
- Chaudhuri, S., Dayal, U., & Narasayya, V., (2011). An overview of business intelligence technology. Communications of the ACM, 54(8), 88-98.
- 4. Choo, C.W., (2006). The Data-Information-Knowledge Continuum. http://choo.fis.utoronto.ca/kluwer/DataInfo Know.html (10.01.2022.).
- 5. Coleman Shirley, Y., (2016). Data-Mining Opportunities for Small and Medium Enterprises with Official Statistics in the UK. Journal of Official Statistics, 32(4), 849–865.
- Davenport, T.D., Snabe, J.H., (2011). How Fast and Flexible Do You Want Your Information, Really? MIT Sloan Management Review, 52 (3), p.57-62. 2011.
- 7. Davenport, T.D., Harris, J.G., & Morison, R., (2010). Analytics at Work: Smarter Decisions - Better Results, Harvard Business School Press, Boston.
- Denić, N., Petković, D., Vujović, V., Spasić, B., i Vujičić, I., (2018). "A survey of internet marketing by small and medium-sized enterprises for placing wine on the market" Physica A: Statistical Mechanics and its Applications Available online 25 April 2021, https://doi.org/10.1016/j.physa.2018.04.095.
- 9. Denić, N., Moračanin, V., Milić, M., i Nešić Z., (2014). Risk Management in Information System Projects, Tehnicki Vjesnik-

Technical Gazette, (2014), vol. 21 br. 6, ISSN 1330-3651 (Print), ISSN 1848-6339 (Online), str. 1239-1242., UDC/UDK 658.51.001.3:004.451 https://pdfs.semanticscholar.org/e296/bdeb45d1529063da938bf6182e 2cf02ba946.pdf

- Denić, N., Vujović, V., Stevanović, V., i Spasić, B., (2016). "Key factors successful implementation of erp systems" "The journal Tehnički Vjesnik/Technical Gazette, ISSN 1330-3651, Vol. 23./No. 5, OCTOBER 2016, (pp.1335 1341)DOI: 10.17559/TV-20150618213311, https://doi.org/10.17559/TV-20150618213311
- Denić, N., Petković, D., Spasić, B., (2020a). Global Economy Increasing by Enterprise Resource Planning, Editor(s): Saleem Hashmi, Imtiaz Ahmed Choudhury, Encyclopedia of Renewable and Sustainable Materials, Elsevier, 2020, Pages 331-337, ISBN 9780128131961,https://doi.org/10.1016/B978-0-12-803581-8.115 90-5. (https://www.sciencedirect.com/science/article/pii/B9780128 035818115905)
- Denić, N., Petković, D., Siljković, B., and Ivković, R., (2020b). Opportunities for Digital Marketing in the Viticulture of Kosovo and Metohija. In: Hashmi, Saleem and Choudhury, Imtiaz Ahmed (e ds.). Encyclopedia of Renewable and Sustainable Materials, vol. 1, pp. 600–615. Oxford: Elsevier. http://dx.doi.org/10.1016/B978-0-12-803581-8.11592-9
- 13. Eckerson, W. W. (2006). "Performance Dashboards: Measuring, Monitoring, and Managing Your Business". Hoboken, New Jersey: John Wiley & Sons, Inc.
- 14. English L.P., (2005). Business Intelligence Defined. http://www.beye-network. com/view/1119 (Pristup sajtu 20.05.2021).
- 15. Eppler, M. J., (2003). Managing Information Quality: Increasing the Value of Information in Knowledge-intensive Products and Processes, Springer, New York, Berlin.
- 16. Eppler, M. J. (2006). "Managing Information Quality: Increasing the Value of Information in Knowledge-intensitive Products and Processes (2th ed.)". Berlin: Springer.
- 17. Grossmann, W., & Rinderle-Ma, S., (2015). "Fundamentals of Business Intelligence". Springer.
- Kernochan, W., (2014). "Business Intelligence 101: A brief history". http://www.enterpriseappstoday.com/business-intelligence/businessintelligence-101-abrief-history.html (besökt 2015-04-16)



- 19. Kimball, R., Ross, M., (2011). The Data Warehouse Toolkit: The Complete Guide to Dimensional Modeling, Vol. 2, Illustrated, John Wiley & Sons, ISBN 1118082141, 9781118082140.
- 20. Kimball, R., Ross, M., Mundy, J. & Thornthwaite, W., (2015). The Kimball group reader: Relentlessly practical tools for data warehousing and business intelligence remastered collection. New York: John Wiley &Sons.
- 21. Liautaud, B., Hammond, M., (2001). E-Business Intelligence: Turning Information into Knowledge into Profit, McGraw-Hill, New York.
- 22. Lindblorn, A., (2008). Information sources used by contractually integrated retail entrepreneurs: A preliminary study, Journal of Small Business and Enterprise Development, Vol. 15., No. 3, pp. 527-539.
- 23. Olszak, C. M., & Ziemba, E., (2008). "The conceptual model of a web learning portal for small and medium sized enterprises". The Journal of Issues in Informing Science and Information Technology, 5, 335-351.
- 24. Pirttimäki, VH. ," (2007). Conceptual analysis of business intelligence", SA Journal of Information Management No. 9, Vol. 2.
- 25. Ramakrishnan, T., Jones, M. C., & Sidorova, A., (2012). "Factors influencing business intelligence (BI) data collection strategies: An empirical investigation", Decision Support Systems, Vol. 52, No.2: 486-496,
- 26. Sarngadharan, M., Minimol, C., (2010). Management Information System, Himalaya Pub. House, United States.
- 27. Sherman, R., (2015). Business Intelligence Guidebook. Publisher Elsevier Science, 2014 ISBN 9780124115286
- 28. Turban, E., Sharda, R., Delen, D., (2011). Decision Support and Business Intelligence Systems (9th ed). New Jersey. Pearson Education.
- 29. Turban and Volonino. , (2010). Information Technology for Management Improving Performance in the Digital Economyle (7th ed). Dallas: John Wiley & Sons, Inc. Retrieved from http://docplayer. net/13791650-Turban-and-volonino-enterprise-systems-supplychains-erp-crm-km.html
- Vujović, V., Denić, N., Stevanović, V., Stevanović, M., Stojanović, J., Cao, Y., Alhammadi, Y., Jermsittiparsert, K., Van Le, H., Wakil, K. & Radojković, I. (2020). Project Planning and Risk Management

as a Success Factor for IT Projects in Agricultural Schools in Serbia. Technology in Society, 63 (November Issue), Article No. 101371, https://doi.org/10.1016/j.techsoc.2020.101371.

- 31. Waters, T.J., (2010). Hyper performance: Using Competitive Intelligence for Better Strategy and Execution, Jossey-Bass, SanFrancisco.
- 32. Williams, S., Williams, N., (2007). "The Profit Impact of Business Intelligence", Morgan Kaufmann Publishers, San Francisco, pp. 219.



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LEGAL NATURE AND SIGNIFICANCE OF THE CONTRACT ON COMBINED TRANSPORT IN TRAFFIC SYSTEM OF SERBIA

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Key Words: Contract, Combined Transport, Traffic System **Abstract:** A large and significant group of economic contracts consists of contracts for the transport of goods, which include contracts for the transport of goods in all modes of transport, including the contract for combined transport of goods. In the modern conditions of global traffic expansion, out of the need for business practice, a new contract on combined transport of goods emerged as an expression of autonomy of contractual will, which was finally named in our law with the adoption of the new Law on Railway Transport Contracts in 2015.

The contract on combined transport of goods is of great economic and legal importance, so the aim of this paper is to bring the interested parties closer to the properties and features of this contract, and points to its advantages over other, practical problems and other modes of transport its application in Serbia. In terms of content, this paper, conditionally speaking, consists of two parts. The first part contains general considerations of contracts for combined transport of goods, which include introductory remarks on the terminological and conceptual definition of "combined transport" and "combined transport contract", indicating the legal regulation of combined transport contracts in parallel and our law. The second, central part of the paper is dedicated to the importance and reasons for the application of the contract on combined transport in the distance transport of goods.

Introduction

egarding the conceptual definition of "combined transport" and "combined transport contract", as well as the delimitation of this contract from similar contracts, it should be said that different approaches are possible and in theory, but, on this occasion and for the purposes of this paper, we will point only most significant in our theory and legislation.

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In comparative and international traffic law, the term "combined transport" is most often used (Dabić, Spirović Jovanović, 2013, p.580), but the names "multimodal" are also used. transport "or" intermodal transport "in Anglo-Saxon law, (Jovanović, 2004, p.32) as well as" mixed transport "in French law and earlier in our law. All of these terms are used interchangeably, although there are indications of terminological differences.

Thus, according to the European Economic Commission, the following terms are distinguished: 1) combined transport is the transport of goods in one and the same form of transport device, but using more than one mode of transport, 2) mixed transport is covered by a single supporting document, using more than one modes of transport, 3) multimodal transport is the transport of goods using the same type of transport device (Vlaškalin, 1996, p.48.).

According to the "Glossary" of the Law on Contracts for Transport in Railway Transport (hereinafter: the Law), combined transport is the transport of intermodal transport units (ITJ) whose transport is performed by different modes of transport with one transport document. This definition is the amendments of 2021 (hereinafter: amendments to the Law on Contracts in Railway Transport so that combined transport is the transport of intermodal transport units (ITJ) or road vehicles when most of the transport route is performed by rail, and the initial executive part of the transport route by road for as short distances as possible.

General considerations on the combined transport contract

In doing so, the legal definition from the basic text of the Law, according to which an intermodal transport unit (ITJ) is a container, semi-trailer, exchangeable container and other transport unit used in combined transport; has been amended to read as follows: the intermodal transport unit (ITJ) is a removable transport vessel or container, as well as a semi-trailer and a trailer suitable for lifting by crane.

Following the above terminological determinants, the contract on combined transport of goods is also called the contract on mixed transport of goods, the contract on multimodal transport and the contract on multifaceted transport of goods.

In the conceptual definition of the contract on combined transport of goods, legal theory is based on international conventions, as international



sources, (Pavić,1979, p.1) or from the manner of defining contractual obligations in the Law on Obligations (Arsić, 1985, p.27).

In general, the contract on combined (mixed, multimodal) transport of goods is defined as a legal business in which the co-organizer (entrepreneur, operator) of this transport undertakes to organize transport to the destination, using carriers from at least two branches of transport (at least two means of transport). document and sole responsibility, and the ordering party undertakes to pay the fare for that (Vasiljević, 2006, p.39).

In domestic law, the contract on combined transport of goods is specifically regulated, for the first time, by the Law on Contracts in Railway Transport of 2005 (hereinafter: the Law governing contractual and other contractual relations in the field of public transport of passengers and goods in internal rail traffic. The field of transport of goods includes the contract of carriage of goods, the contract of carriage of goods as a means of transport, consignment note and consignment note, electronic consignment note and consignment note, probative value of consignment note and consignment note, transport costs, packaging, ordering, loading and unloading mass and inspection of the consignment, performance of customs and other procedures, amendment of the contract of carriage, execution of the carriage, interference with the carriage, interference with the issue, rectification of the interference with the mass during transport, compensation in case of loss, compensation in case of damage, compensation in case of exceeding the delivery deadline, persons responsible for the carrier as well as complaints, claims and lawsuits), in a special fifth chapter entitled "Combined transport". This fifth chapter includes the contract of combined transport and liability of the carrier. The liability of the carrier for damage caused by the performance of combined transport is regulated, and the legal provisions relating to the transport of goods apply to complaints, claims and lawsuits related to combined transport.

According to the legal definition, the contract on combined transport of goods obliges several carriers of different types of traffic to transport the goods from the departure to the sending station and to deliver them to the recipient, with the payment of transport costs. This definition, even after the changes, reads: "The contract on combined transport of several carriers of different types of traffic is obliged to transfer the goods from the departure of the non-travel station and to issue it to the consignee, with payment of transport costs" (Article 112).

Article 112 The contract on combined transport of goods obliges several carriers of different types of traffic to transport the goods from the departure to the sending station and to issue them to the consignee, with the payment of transport costs. The tariff is an integral part of this agreement.

Article 112 the agreement on combined transportation of goods of several carriers of different types of traffic undertak that they will transfer the goods from the departure to the sending station and that they will deliver it to the recipient, for a charge, general conditions of transportation are an integral part of the contract. The explanation of the proposed amendments to the law states the amendment of Article 112, in order to harmonize with the terminology from Regulation 1371/2007 on the rights and obligations of passengers in railway traffic.

General conditions of transport are an integral part of the contract, furthermore, these are the conditions of the carrier in the form of general conditions or tariffs that are legally in force and which have become an integral part of the contract of carriage.

The general conditions of transport are determined by the carrier, and they are made public. It is considered that the general conditions of transport are made public when the carrier makes them available to transport users, in printed form and in electronic form on the carrier's website. conditions of carriage, may not be applied before the expiration of the period determined by the general conditions of carriage. "Article 4 of the amended Law."

The contracting parties are the carrier and the customer of the combined transport. The contracting parties in the case of a combined transport contract differ from the contracting parties in the contract of carriage in special modes of transport, since in the case of a combined transport contract there is one contracting carrier who concludes a contract of carriage with the transport customer damages The stated existence of one carrier and unique liability is the specificity of the contract on combined transport of goods.

The carrier may be organized in the administrative form of a company or other legal entity, provided that it is registered for the predominant activity of providing freight services, and to whom a license has been issued.



A distinction should be made between a contractor and a successive carrier. According to the legal glossary, a consignor is a person who, on the basis of a contract, hands over a thing for transport; and the thing is a part of material nature which is in human power and over which there is a property right or some other real right. A successive carrier is a carrier who, on the basis of a concluded contract of carriage between the consignor and the contracting carrier, undertakes the obligation of further carriage.

The basic obligation of the carrier is to transport the goods from the departure to the sending station and to deliver them to the consignee (the consignee is the person authorized to redeem the transport document and pick up the item at the sending station), and the basic right of the carrier is to collect transport costs. for fare, fare supplements, fees for ancillary services, additional and other transportation costs charged by the carrier from the user in the carriage of goods, in accordance with conventions, tariffs, regulations, agreements, instructions and contracts.

Legal nature and characteristics of combined transport contracts

What are the properties of a combined transport contract? This contract is in our law: named, bilaterally binding, cargo, commutative, permanent, informal, and concluded as a form, which is a pre-prepared contract on the form by one party, as a rule, the carrier, so that the other party (transport user) there are not many possibilities to change the offered conditions.

First of all, according to the criterion of legal regulation of the contract, the contract on combined taxation of goods is a *named contract*. This contract is often concluded in business practice, so their legal nature and essential content is determined by the imperative or dispositive norms of the basic law (Law on Obligations) and special law (Law on Contracts for Railway Transport).

Then, given the relationship between the rights and obligations of the contracting parties, the contract of combined transport is bilaterally binding, cargo and commutative.

Bilaterally binding agreements create mutual obligations so that both parties acquire both rights and obligations. In the contract on combined transport, the contracting carrier is obliged to transport the goods from the station of departure to the point of departure and to deliver it to the con-

signee, and the ordering party of combined transport is obliged to pay the transport costs. In concluding bilaterally binding agreements, the parties start from the principle of equal value of benefits.

All bilaterally binding contracts are at the same time *cargo* (onerous, contracts with compensation), since the contracting party provides the appropriate compensation for the service it receives. Thus, the orderer of transport pays the transport costs for the performed transport, which is his basic obligation. The obligation to pay the transport costs arises from the moment of taking over the goods from the orderer of transport, based on the issued transport document.

The category of *commutative contracts* includes the largest number of freight contracts, including the contract on combined transport of goods, since at the time of its conclusion a certain relationship and the amount of obligations and rights of the contracting parties.

Furthermore, considering the form of conclusion, the contract on combined transport of goods is an *informal (consensual) contract*, because it is concluded with the simple consent of the will of the contracting parties. This contract was concluded when the contracting parties agreed on the essential elements of the contract, firstly on the subject of transport, namely goods, secondly on the transport route, specifically on the starting and ending point of transport, as well as the points where it will change means of transport, and the third on the fare, ie the monetary fee paid by the ordering party and which must be determined or determinable.

Then, the contract on combined transport of goods is permanent, or the *contract with permanent services* that are performed in time (deadline) with several acts of doing, not doing or omitting. Thus, this contract, by the nature of things, is a contract in which established obligations can be performed only in a certain period of time.

Following the above, we can say that the contract on combined transport is an independent legal business, a special contract, which should be distinguished from other contracts in which several carriers participate in the transport of goods, as well as from the contract on forwarding.

The contract on combined transport of goods differs from direct (consecutive, one-way) transport, which is the transport of goods by carriers of uninterrupted traffic in means of transport of the same type,



and to which the rules of a given branch of traffic apply (Dabić, Spirović Jovanović, 2013, p.581).

The freight forwarding contract differs from the combined freight contract in terms of liability: the mixed transport carrier is liable for loss or damage to the goods, as well as for delay in transport, regardless of whether he carried out the transport himself or not; the freight forwarder is not responsible in this case (except for the conscientious choice of the carrier), but will be liable to the carrier on whose part of the road the damage occurred according to the rules of its branch of transport (Vasiljevic, 2006, p.243).

Especially on the liability of the combined transport carrier

In the legal literature, regarding the different liability systems of combined transport carriers, which are accepted in comparative law, it is generally pointed out that there are three liability systems (Vasiljević, 2006, p.244), although there are authors according to whom There are four systems of responsibility (Jovanović, 1-4 / 2004, p. 40), each of these systems of responsibility of the combined transport carrier has its advantages and disadvantages.

First, the system of single (autonomous) liability implies the existence of special material rules on liability, which apply only to the combined transport of goods and according to which each carrier of this transport will be liable, regardless of where the damage occurred and whether it can be determined or not. This system, therefore, is based on the assumption that it is an independent and indivisible contract. Since in most cases it is not possible to determine where the damage (loss, damage or delay) occurred in transport (due to the specifics of container transport), the combined transport company is liable under autonomous rules, independent of the liability rules for individual carriers participating in realization of this contract. This is exactly one of the basic advantages of the system of unique responsibility of the organizer of combined transport (the relationship between the customer and the organizer of combined transport).

However, the main disadvantage of this system is that in the internal relationship (recourse procedure of the combined transport organizer towards the carriers performing the transport), the organizer of this transport is not able to charge the full amount paid to the customer from the specifically responsible carrier, if that carrier according to the regulations of its branch, it has a lower limit of liability.

Secondly, the system of network liability, unlike the system of single liability, is characterized by the fact that the organizer of the combined transport complies with the regulations of the carrier of the means of transport on the part of the road where the damage occurred. The advantage of this system is that the organizer compensates the customer for the damage exactly to the extent that it can be reimbursed by the responsible carrier. However, the main disadvantage of this system is that it is applicable only if it is known exactly where the damage occurred, which, in turn, is particularly difficult to establish in the case of damage caused by delays in transport. In addition, this system leaves "uncovered" damages arising from the takeover of goods to the beginning of transport or from the end of transport to the delivery of goods to the consignee, as well as damages incurred in the transhipment phase (violation).

Third, a mixed system of responsibility, by combining a system of single (autonomous) responsibility and a system of networked responsibility, eliminates their shortcomings. Thus, if it can be determined on which part of the road the damage occurred, the network liability system would be applied, and if it is not possible to determine where the damage occurred or if the network liability system is not applicable, the single liability system would be applied.

According to the fourth, the system of own responsibility, the carrier is responsible to the customer according to the rules of the traffic branch to which it belongs (Stanković, Virijević Jovanović, Alijević, 2022).

Responsibilities of the combined transport carrier in our law

Regarding the liability of the carrier from Article 113 of the law, two situations should be distinguished.

First, if, based on the contract, several carriers from different types of traffic participate in the transport, the carrier who concluded the contract is responsible for the damage according to the regulations on compensation of damages that apply to the carrier on whose part of the transport damage occurred. Therefore, the contracting carrier of combined transport is liable according to the system of network liability and it compensates



the damage to the ordering party to the extent that it can be reimbursed by the responsible carrier.

Secondly, if the carrier uses carriers from other types of traffic without the knowledge of the sender, the carrier who concluded the contract of carriage is liable for damages under the provisions of this law, regardless of which part of the carriageway the damage occurred, if it is more favorable for the user transportation.

In this second case, the combined transport carrier is liable according to the rules on the liability of the railway carrier, therefore, by applying the provisions of Art. 92-104 of the law.

In short, the basic characteristics of the railway undertaking's liability are: 1) the railway undertaking's liability for damage caused (due to complete or partial loss or damage to the consignment, as well as for damage caused by exceeding the delivery deadline) is determined by law; 2) the railway undertaking is liable for damage due to non-fulfillment or due to improper fulfillment of obligations under the contract (contractual liability); 3) the railway undertaking is liable according to the principle of strict liability, ie regardless of its fault; 4) the reasons for releasing the railway undertaking from liability for damage are provided by law, as general, if the railway undertaking proves that the damage was caused by the actions or omissions of the right holder, some of his requests not based on the fault of the carrier, circumstances that the carrier could not avoid or eliminate their consequences) and special (if complete or partial loss or damage occurred in connection with one or more special circumstances). According to Article 93 the railway undertaking shall be released from liability if the complete or partial loss or damage occurred in connection with one or more special circumstances: a) transport performed in open cars on the basis of applicable regulations or contracts concluded with the consignor and specified in the consignment note. If the consignor uses blankets for the transport of goods in open cars, he assumes the same responsibility as he has for the transport of goods without covers, even when it comes to goods that are not transported in open cars on the basis of the carrier's tariffs; b) loading of goods, improper loading and unloading, when loading or unloading is performed by the consignor, consignee or their authorized person, based on applicable regulations or contracts concluded with the consignor orconsignee specified in the consignment note, c) the properties of the goods due to which they are particularly susceptible to complete or partial loss or damage (due to breakage,

rust, rot, frost and heat, leaks, drying, spoilage, etc.); d) hands over for transport with incorrect, incorrect or incomplete indication of the type of goods or number of pieces in the consignment note for goods excluded from transport or accepted for transport under special conditions, or if the consignor does not take precautionary measures prescribed for goods accepts for transport under special conditions, e) special dangers to which live animals are exposed during transport; f) transport of live animals or certain goods which, based on the tariff or contract with the consignor specified in the consignment note, must be accompanied, if complete or partial loss or damage occurs due to failure of the companion to eliminate the danger related to transport; 5) sthe railway undertaking is liable according to the principle of limited liability, etc. (Vasiljević, Stanković, 2010, No. 1-3; B. p. 341-371).

At this point, it is necessary to point out, first of all, the provisions of Article 96 of the Law according to which: "If the transport, which is the subject of one transport contract, is performed by several successive carriers, each subsequent carrier with the road list, becomes a party to the contract of carriage, and in accordance with the conditions of the consignment note, ie road list, assumes the obligations arising therefrom. In this case, each carrier is responsible for carrying out the transport on the entire transport route. The carriers who participated in the transport are jointly and severally liable for the damage"; as well as the rules from Article 97 of the Law."

When the carrier entrusts the transport, in whole or in part, to the executive carrier, whether authorized or not on the basis of the contract of carriage, the carrier remains solely responsible for the total carriage. Any special contract by which the carrier accepts obligations not arising from this law or waives the rights that belong to him under this law, applies to the executive carrier only if he has expressly, in writing, accepted. that both the carrier and the executive carrier are liable and to the extent that they are liable, their liability is joint and several.

The total amount of compensation paid by the carrier, the executive carrier and its staff, as well as other persons whose services they use in performing the transport, may not exceed the amounts provided by this law (Stanković, Demirović, 2013,No1, p.421-440).



Complaints, claims and lawsuits related to combined transport

According to Article 114 of the Law on Complaints, Claims and Lawsuits Related to Combined Transport, the legal provisions relating to the transport of goods apply. (Complaints, claims and lawsuits are regulated by the provisions of Art. 105-111 of the Act.)

The complaint is a claim of the user for compensation from the carrier. Complaints related to the contract of carriage must be sent in writing to the carrier against whom a lawsuit may be filed, within the deadlines set by law, depending on the type of transport damage.Complaints for damages in case of complete or partial loss or damage to the shipment shall be submitted in writing to the carrier no later than 60 days from the date of knowledge of the damage, and claims for damages in case of overdue de-livery shall be submitted in writing to the carrier no later than 30 days. the day of issuing the thing (Article 105, paragraphs 2 and 3). If the carrier has the right to subsequent collection of its receivables from the user up to the amount that should have been charged according to the contract or tariff.

The right to file a complaint for a claim or lawsuit has: 1) the sender – while he has the right to dispose of the shipment; 2) consignee - from the moment of receipt of the consignment note, ie the car list. If the complaint is submitted by the sender, he is obliged to submit a duplicate of the consignment note, ie in the absence of a duplicate of the consignment note, ie the consignment note.

Exceptions to the carrier, arising from the contract of carriage, shall cease when the right holder receives the consignment. Notwithstanding this rule, the right of claim shall not cease: 1) if the right holder proves 2) in case of partial loss or damage; (1) if the partial loss or damage has been determined in accordance with the provisions of Article 88 of this Lawbefore the right holder received the consignment, According to Article 88: If the carrier or the right holder determines or suspects that there is a complete or partial loss or damage to the goods received for transport, the carrier is obliged to immediately draw up a reconnaissance report and determine the condition and, if necessary, the mass and cause, if possible, stating the time when the damage occurred and under what circumstances. In doing so, the carrier shall issue a copy of this record to the right holder. If possible, the carrier is obliged to determine the complete or partial loss or damage of the goods in the presence of the right holder and, if necessary, in the presence of one or more experts.

In case the right holder does not accept the facts established in the reconnaissance report, he may request that the condition and weight of the goods, as well as the cause and amount of damage be determined by an expert appointed by the parties to the contract of carriage.

If the inspection performed at the request of the right holder does not determine any damage, or only the damage that the carrier has already acknowledged, the right holder is obliged to reimburse the incurred costs. (2) if the fault of the carrier failed to establish the allegations under the provisions of Article 88 of the Law, 3) if the right holder at the time of receipt of the shipment only after the right holder has taken over the goods, provided that the request for determination of damage, ie partial loss, according to the provisions of Article 88 of the Law, was submitted as soon as he discovered the damage, but no later than seven days from the date of receipt. the damage occurred between the time of acceptance for transport and the issuance of the consignment;4) if the claim relates to the return of paid amounts, 5) in case of exceeding the delivery deadline, if the right holder submits a request to one of the carriers within 30 days (Article 107 of the Law).

Receivables from the transport contract become obsolete, as follows: 1) receivables due to more or less collected transportation costs - for one year, 2) receivables due to damage when handling cars during loading or unloading - three years, 3) other receivables - for one year, unless otherwise provided by this Law (Article 109 of the Law).

The legislator regulates when the statute of limitations begins to run depending on the type of claim. (Article 110 of the Law), as well as that the statute of limitations is terminated on the day of submitting the complaint to the carrier in writing. In this case, the statute of limitations begins to run again from the day when the right holder was submitted, in writing, a response to his request and when the documents attached to that request were returned to him (Article 111 of the Law).



Significance of the contract of combined transport of goods

The contract on combined transport has great legal and economic significance, especially in the transport of goods over long distances, when the participation of several carriers from different modes of transport is required.

The existence of one contracting carrier and its unique liability, as well as a single transport document, as specifics of the contract of combined transport of goods, represent its advantages in the transport of goods.

Transport documents

Transport documents, which have long been used in national and international traffic, are bills of lading and consignment notes. The bill of lading is a transport document in international maritime traffic, and consignment notes in all other branches of traffic.

However, both transport documents are provided for inland navigation. These transport documents are, as a rule, legally regulated by international conventions or other international rules, as well as national laws.

The division of consignment notes according to the types of transport is common, so that we can talk about consignment notes in road, rail, air, inland waterway transport, sea and combined (multimodal) transport. Unlike a bill of lading, which is a security, bills of lading usually do not have these properties. However, in addition to the ordinary consignment note, a portable consignment note can be issued in road, rail and air transport, which have the property of a security.

When it comes to the content of consignment notes, it should be pointed out that there are significant differences in the content of consignment notes in certain branches of traffic, but also that there is a tendency to simplify the contents of consignment notes and issue them in more copies. On the other hand, there are more and more unique forms of consignment notes in domestic and international transport.

A special transport document is issued for combined transport, which is based on a special transport contract in which at least two carriers of different types of transport participate. Thus, instead of more separate transport based on special transport contracts and special transport documents, multimodal transport offers door-to-door transport on the basis of a single contract and a single transport document.

As mentioned above, international combined transport is regulated by two legal sources, with different legal nature, first, by the UN Convention on International Multimodal Transport of Goods, adopted in 1980 (hereinafter: the Convention), and secondly, by the Rules UNCTAD-ICC for Multimodal Transport Documents, 1992, adopted in Geneva (hereinafter: UNCTAD-ICC Rules). We emphasize here that the Convention has not entered into force to date, as well as that the Rules are optional or nonbinding, but in practice the UNCTAD-ICC Rules are most often applied.

Until the adoption of the Convention, the Uniform Rules for Combined Transport Documents, adopted by the International Chamber of Commerce in 1975, were used in practice for a long time, despite the fact that these are non-binding rules that can be agreed by the contracting parties. These rules provided for the possibility of issuing a transferable or nontransferable transport document. The aim of these rules was to apply them until the Convention entered into force, which, in turn, did not enter into force, so these rules are accepted in most transport documents used in multimodal transport.

Also, as important autonomous sources, we should mention the models of the bill of lading for mixed transport, which are adopted by some international organizations, of which for the purposes of this paper we will single out only the forms of the bill of lading for mixed transport. (hereinafter: FIATA) and the International Maritime Council (Baltic and International Maritime Council, hereinafter: BIMCO).

Since international freight forwarders are important organizers of combined transport, on this occasion we will single out FIATA - the International Organization of Freight Forwarders, which in 1970, made a form of transport document for mixed transport, the so-called. FIATA bill of lading for combined transport FBL This is a unique document for the entire route, from collection to delivery of goods, and on the basis of this form, the relationship between the parties from the transport business is regulated. The consignment note serves as a contract of shipment and proof that the goods have been transported using more than one mode of transport. It also determines the responsibility of the freight forwarder. Unlike other transport documents, the FBL bill of lading does not identify any



type of transport as the principal, so the responsibility falls on the freight forwarder who acts as a carrier from collection to delivery of goods, including the involvement of any third party. The Freight Forwarder Agent, designated the Multimodal Transport Operator (MTO), is authorized by FIATA to perform multimodal transport. This transport document is used only in international transactions in which the goods are transported in two or more modes of transport (multimodal), and is also called the freight forwarder's consignment note and multimodal consignment note.

The newer UNCTAD Rules from 1991, which stipulate that a document in multimodal transport can be a consignment note, are mentioned. These Rules for Multimodal Transport Documents have been incorporated into multimodal transport documents such as the 1992 FIATA FBL and the 1995 MULTICON is not a security, MULTIDOC - a bill of lading for multimodal transport from 1995 and MULTI WAYBILL - a bill of lading from 1995. It is especially important in terms of content that these documents for multimodal transport contain provisions on the liability of operators in multimodal transport, limitation of liability of operators, the amount of freight and instructions for the transport of dangerous goods.

At the end of this thematic unit, we emphasize, as a novelty in international transport documents, the possibility of issuing a document in electronic form.eta.

From the very beginning of the use of electronic communication in the transport of goods in international traffic, there was a need to legally regulate this area at the international level, with the aim of equating electronic documents with written ones. Electronic data interchange is a very complex issue for legal regulation. In practice, there are problems with electronic signatures, authorization of data on electronic media, data transmission and protection, data storage and their availability. Since electronic data processing has become commonplace in the field of transport, it was necessary to put it into practice and regulate the possibility of issuing a bill of lading in electronic form by conventions and laws. In addition to that possibility, the one to issue a classic paper bill of lading was also retained.

Instead of conclusion

Regarding the different approaches in the terminological and conceptual definition of "combined transport" and "combined transport contract", as well as the distinction between this contract and similar contracts, only the most important ones in our theory and legislation are pointed out.

In our law, the contract on combined transport of goods is specifically regulated, for the first time, by the Law on Contracts in Railway Transport (2005), in a special fifth chapter entitled "Combined Transport". This fifth chapter includes the contract of combined transport and carrier liability. At the same time, the liability of the carrier for damage caused by the performance of combined transport is regulated in more detail, and complaints, claims and lawsuits related to combined transport are subject to legal provisions relating to the transport of goods.

This approach of the legislator is subject to justified criticism, from a nomotechnical point of view, which will be the subject of special work.

According to the legal definition, the contract on combined transport of goods obliges several carriers of different types of traffic to transport the goods from the departure to the sending station and to deliver them to the consignee, with the payment of transport costs.

The contract on combined transport of goods is in our law: named, bilaterally obligatory, cargo, commutative, permanent, informal, and it is concluded as a form.

The carrier who concluded the contract, as a basic rule, is liable for damages under the regulations on compensation for damages that apply to the carrier on whose part of the transport route the damage occurred, therefore, according to the network liability system.

However, if the carrier uses carriers from other modes of transport without the knowledge of the consignor, the carrier who has concluded the contract of carriage shall be liable for damages under the rules on liability of the railway undertaking, regardless of which part of the carriageway the damage occurred. more favorable for the transport user.



The existence of one contracting carrier and its unique liability, as well as a single transport document, as specifics of the contract of combined transport of goods, are its advantages in the transport of goods.

References

- Antonović, R., Stanković, M. (2021). Crisiss Communication and Risk Management. At: Stanković, M. and Nikolić, V. (edit.). 3rd Virtual International Conference Path to a Knowledge Society-Managing Risks and Innovation (31-36). Belgrade: Complex System Research Center - Nis, Serbia & Mathematical Institute of the Serbian Academy of Sciences and Arts, Belgrade, Serbia.
- 2. Arsić, Z. (1985), Combined transport of goods, Belgrade
- 3. Dabić, Lj., Spirović Jovanović L. (2013), Business Law, Center for Publishing of the Faculty of Economics, Belgrade
- 4. Jovanović, N. (2004), Responsibility of Mixed Transport Entrepreneurs, Law and Economy, No.1-4 / 2004
- Law on Contracts in Railway Transport, "Official Gazette of RS", No. 38/2015
- Marković, Ž. D. & Krasić, D. (2016). Upravljanje kvalitetom obrazovanja. Rad i obrazovanje u informacijskom društvu, str.97. Stanković, M.: Fakultet za pravo bezbednost i menadžment "Konstantin Veliki", [In English: Marković, Ž. Danilo & Krasić, Danijela (2016). Niš Education quality management. Work and education in the information society, p.97. Stanković, M .: Faculty of Law, Security and Management "Constantine the Great", Nis]
- Stanković B. (2010), Ugovorna odgovornost železničkog prevoznika, Pravo i privreda, Beograd, 2010, no. 1-3 [In English: Stanković, B. (2010), Contractual liability of a railway undertaking, Law and Economy, Beograd, no. 1-3]
- 8. Stanković, B. (2007), Newspapers in the Legal Regulation of International Railway Traffic in COTIF, Yearbook of the Faculty of Law, Banja Luka
- Stanković, B., Vignjević, N. (2017) Legal and financial stimulation of foreign investment in Serbia, Journal of Applied Engineering Science, Paper number: 15 (2017) 1, 415, 71-80; doi 10.5937/jaes 15-12396.

- 10. Stanković, B; Demirović, D. (2013) "Kompanijskopravni i poreskopravni tretman unošenja uloga u privredno društvo", Teme, Univerzitet u Nišu, čbr. 1.
- 11. Stanković M., Virijević Jovanović S., Alijević A., (2022) Pravni režim plovidbe Dunavom i dunavska strategija u kontekstu razvoja ekološki prihvatljivog turizma u Rapublici Srbiji. Horizonti menadžmenta. II (1), 143-164.
- 12. Vasiljevic, M. (1991), Responsibility of the railway in domestic and international transport of goods, Belgrade
- 13. Vasiljevic, M. (2006), Trade Law, Belgrade



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INTEGRATED RIVER BASIN MANAGEMENT WITH THE AIM OF IMPROVING ENVIRONMENTAL SECURITY

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Key Words: Environmental security, international rivers, watershed, Integrated river basin management (IRBM), the Tisza River. Abstract: he issue of sustainable use of freshwater water resources has stood out for its importance in many topics on various aspects of building a society on the principles of sustainability. The problem arose not only due to absolute (objective) water scarcity - caused by uneven territorial distribution of water, or its relative scarcity (due to low levels of purification in some parts of the world), but also due to the fact that many water resources are transboundary or international. This paper analyzes the concept of integrated river basin management on the example of the Tisza River, as the largest tributary of the Danube, whose catchment area includes the territory of five countries (Ukraine, Romania, Slovakia, Hungary and Serbia). The Tisza is exposed to constant pollution from various sources - agriculture, chemical factories, municipal wastewater and the mining industry - but accidents that lead to security risks are not uncommon. It is these facts that support the importance of applying the concept of integrated river basin management when it comes to environmental safety.

Introduction

espite the abundance of water resources (all oceans, seas, rivers and underground waters) only a small portions is immediately available for usage. Each year the precipitation of terrestrial ecosystems is about 113.000 km³ of water, but after the evaporation (72.000 km³) there is only 41.000 km³ of water that re-

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main on the land, which amounts up to the surface water layer of 30 cm (Lomborg, 2001). Around 12.500 km³ of water from this surface layer is being collected in numerous water accumulations to be used for the hydroelectric power plants, prevention of the floods, etc.

The water quality is not only important for the drinking water but for its other purposes – from food preparation, hygiene, numerous industrial processes, to agriculture. Agriculture accounts for 90% of global water consumption, while industry and households use 5% each (Goncharuk, 2008).

The quality of surface waters is primarily influenced by a set of natural processes, among which the most important are climatic, hydrological and geological. On the other hand, there are human activities such as urbanization, industry, mining, metallurgy, agriculture and the increased consumption of freshwater resources (Simeonov et al., 2003; Shrestha & Kazama, 2007; Prathumratana et al., 2008; Dragićević i dr., 2010; Nędzarek et al., 2015; Takić et al., 2017). For example, untreated wastewater from mines and metallurgical plants is one of the reasons for the high share of heavy metals in rivers. Nutrients (nitrogen and phosphorus) from agriculture represent a large part of diffuse water pollution (Gurzau, 2010; Zhang, 2015).

The subject of this paper is the research of influencing factors on water quality in the Tisza River Basin in Serbia. The Tisza River, like many other international rivers in developing countries, is polluted with pollutants from a number of sources of anthropogenic origin, including agriculture, industry, sewage, wastewater and dam systems. (Tanos et al., 2015). Although there were numerous studies conducted on the surface water quality of this basin, as presented in recent papers dealing with the issue, there is no information about the concentration and distribution of pollutants in surface waters of the Lower Tisza (Milanović et al., 2011; Josimov Dunđerski et al., 2017).

The focal point of this paper, following the recommendations of the European Water Framework Directive 2000/60/EC (WFD), refers to the eco-chemical status (determined by the physicochemical and biological parameters) of the Tisza River course through Serbia, including its tributaries in the northern part of the country.

The selected spatial framework for the water quality analysis of the surface water is in line with the adopted basin-based principle, which also



envisages the involvement of interested parties (stakeholders) in order to select the most favorable measure for resolving the water quality of surface waters (Riley & Tyson, 2006).

The European Union has been pursuing an active policy for the protection of water resources since the European Parliament and the Council of the EU adopted the Water Framework Directive (WFD) on 23rd October, 2000 (EU&WFD - 2000/60/EC). This is the most important legal instrument in the field of water and it is a precondition for the successful realization of the concept of sustainable water resources management. There are certain conditions, determined by the WFD, which should enable the implementation of water protection policies.

However, surface water is the main water supply source in Europe – on average 70% of total water sources for human needs. Nonetheless, there are significant variations in this regard in different European countries. Malta, for example, has only 70 cubic meters of water per capita per year (Velašević, 2004). The Republic of Serbia also has cause for concern in regard to this issue.

Many European countries greatly depend on large international rivers that partly flow through their territory and, thus, compensate for the shortage of available water resources. There are reasons related to the issue which are cause for concern for the Republic of Serbia, since domestic sources amount only up to 8% of the total water resources, i.e. 16 billion m³ per year (Dimkić et al., 2011:11). Considering all the above mentioned, as well as the fact that large European rivers (Sava and Tisza), in their lower courses flow through the territory of Serbia, the very subject of this research is the water quality of the Tisza in Serbia, being the largest tributary to the Danube.

Concept of Integrated Water Resource Management

The issue which stands out among a variety of aspects related to building a society by practicing sustainability, is the issue of sustainable use of freshwater resources, i.e. inland waters. The problem arose not only due to the absolute (objective) water scarcity – caused by uneven territorial water distribution, or by its relative scarcity (due to low levels of purification in some parts of the world), but also because of the fact that many water resources are transboundary or international. In total, there are 271 basins with this feature, covering almost half of the Earth's surface; out of which 71 river basins are located in Europe (Wolf et al., 1999). Considering the geographical position of Serbia, the Danube Basin is significant, which covers 19 countries, with all sub-basins. It is becoming more evident that the water crisis (mostly in developing countries) is not due to the limited water use, but to the poor management of aquatic ecosystems, which causes, among other things, that more than billion people do not have access to safe drinking water (Cosgrove & Rijsberman, 2000).

Integrated water resources management implies the involvement of economic, social and environmental factors in the planning, development, monitoring, and protection of water resources and land (World Bank, 2003). Integral management can be observed in three ways:

- (1) A unified view of the quantity and quality of water resources (which is in line with the notion of eco-chemical status);
- (2) Unified consideration of various water bodies of one basin (groundwater, surface water, wetlands and lakes), i.e. consideration of the relationship between water body, land and atmosphere; and
- (3) Consideration of water resources in relation to the social and economic dimension of development (Mitchell, 1990).

The second way of the integral management can be considered in regard to significant issues, such as water supply, waste water treatment and the water quality.

The concept of integrated water resources management is not new. It originated in the US state of Tennessee, where a special regulatory body (The US Tennessee Valley Authority, TVA) was formed in 1933. Its scope of work included production and distribution of electricity, protection against floods, navigation improvement, promotion of industrial production and employment, prevention of soil erosion, malaria control, etc. (Downs et al., 1991; Barrow, 1998).

The initial conditions for implementing the integrated river basin management on a global level were met in 1970, when the United Nations prepared the first report on integrated river basin management (United Nations, 1970). There were two gatherings in the early 1990s which largely supported this concept: (1) the International Conference on Water and the Environment, held in Dublin in 1992, organized by the World Meteorological Organization (ICWE, 1992) and (2) the UN Conference on Environment and Development, held in Rio de Janeiro the same year (UNCED, 1992).



At the Second World Water Forum, held in The Hague in 2000, Integrated Water Resources Management (IWRM) became an issue of international politics. This conference led to the creation of the Global Water Partnership (GWP) with the aim of promoting the implementation of IWRM also in the developing countries. However, GWP considers the essence of integrated water resources management as coordinated development and management of water resources, land and related resources (for example, forest ecosystems) aiming at maximizing the positive social and economic effects of equality without compromising the sustainability of vital ecosystems (Global Water Partnership, 2000).

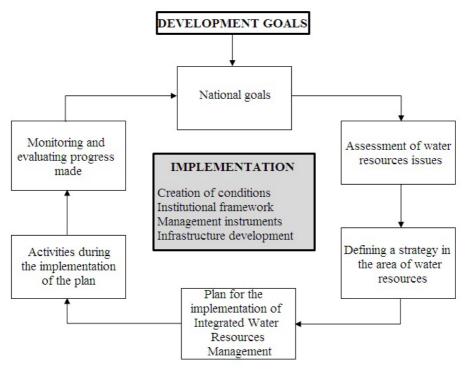
African countries have made a significant achievement when it comes to the involvement of various stakeholders, while Asian countries have stood out in terms of institutional reforms (UN-water, 2008). The efforts for implementing IWRM in developed countries are often not in proportion to the results achieved due to, as a rule, the lack of a systematic approach and the application of inappropriate techniques to address the highly complex problem of aquatic ecosystems.

The international community was invited to apply the holistic approach for considering the future development on the basis of sustainability, at the gathering in Rio de Janeiro (The United Nation Conference on Sustainable Development) in 2012. The urgency to find the balance between different needs (social, economic and environmental), in accordance with the principles of sustainability, was emphasized again, as well as the need for the revitalization of endangered ecosystems (United Nations, 2012). The goals of sustainable development for the period after 2015 were also proposed at this conference.

Integrated river basin management is based on the principle of public participation and information in the process of planning the use of water resources (Wagner et al., 2002). However, while insisting on sovereignty within national borders, countries do not pay enough attention to the natural borders of various ecosystems, including rivers, lakes, swamps and groundwater - the basic elements of any river basin. A conceptual model of integrated water resources management is graphically presented in Figure 1.

In integrated river basin management, it seems useful to distinguish among four conceptual levels, such as: (1) institutional structure, (2) operational management; (3) planning, and (4) analytical support (Mostert et al., 1999). The institutional structure basically sets the framework for the entire process of managing a particular river basin, thus, for establishing different relationships. The structure is defined by various aspects such as how to organize the river basin management, types of cooperation mechanisms, harmonization of interests of various stakeholders, the way of assigning tasks, etc.

Figure 1: Process of Integrated Water Resources Management



Source: UN-Water, 2008.

There are three different ways of river basin management organization in usage: (1) hydrogeological, (2) administrative and (3) coordinated. The first, the organizational model implies that the management area refers only to one river, i.e. its basin, and that there is only one authority. The administrative model is characterized by the fact that the jurisdiction is not overlapping with hydrogeological boundaries, therefore, the responsibility of management is distributed among different actors - states, in the case of international rivers, or cities, municipalities or regions, in the case of domestic water resources.



Finally, the coordinated organizational model is a combination of the hydrogeological and administrative principles of organization. Thus, the authority is not represented by a state, but there is a tendency to form commissions whose primary task is to create conditions for encouraging cooperation between different actors (stakeholders).

The operational management, in relation to other elements of the management process, is directly reflected in a particular river basin; for example, the construction and the infrastructure for the water supply, monitoring, providing information to the public, etc. The operational management is based on the adopted plans, either strategic or operational. The first defines long-term goals, and the second defines the desired state that can be achieved in a relatively short period. From the management point of view, it should be noted that a large number of adopted plans lead to difficult coordination and reduced transparency of the entire management process. Finally, the analytical support, by providing appropriate tools, improves not only planning but also the operational management.

In the light of the presented facts, there is a need to include political aspects in the integrated model of water resources management (Savenije & van der Zaag, 2000). The three-dimensional model of river basin management, apart from the political aspect, includes two more elements - issues of technical cooperation and the appropriate institutional structure. The political pillar is necessary in order to create conditions for encouraging cooperation in the basin area, that is, to create opportunities for cooperation and planning. The institutional-legal pillar refers to institutions and legal instruments that are being drafted or adopted both at the international level and within national borders. The central place within this framework is for organizations deliberately established for the purpose of rational management of a certain river basin. The importance of the technical pillar is especially evident in the integrated management of the international river basin when the remaining two pillars - institutional and political - do not have the necessary strength.

The order of the pillars in the management model is not random. At the very beginning, the desire is necessary, that is, the political will for management to be based on the principles of integration. Afterwards, technical cooperation can be established, and, finally, the institutions as well. The most common form of institutions, related to international basins, requires international regimes.

Watershed as a base for water management

The Water Framework Directive (WFD), that is, the adopted River Basin Management Plan (RBMP), requires every EU member state not only to prevent the deterioration of groundwater and surface water quality, but also to achieve the environmentally, chemically and quantitatively good status. These plans (six year plans) have been implemented since 2009. Apart from determining the availability (quantity) of water resources (groundwater, lakes, etc.) of a basin, it is important, perhaps even more important, to determine the movement of water within the basin, i.e. from a particular basin (Döll et al., 2012).

The scope of water management can be local, but it can also encompass the whole basin. The territorial division of a country into river basins or areas is a precondition for the implementation of the first stage - the characterization of the basin – in order to implement the WFD. The catchment area is determined on the basis of geographical and hydrological features, so the number of river basins varies from country to country. For example, the territory of England and Wales is divided into 11 river basins for which, according to WFD requirements, appropriate plans have been prepared by 2008 (DEFRA, 2006). Turkey, being the candidate country for the EU membership, already in 2004 spatially determined the borders for several river basins (six in total). Water quality control, as instructed in the WFD, is not only carried out within the national territory, but it is also implemented on the basis of obligations arising from memberships in various supranational regulatory bodies in the field of water protection.

Th e number of watersheds within the state territory can affect the efficiency and effectiveness of water resources management. It is believed that water management will be better if there are numerous but small watersheds, thus, it will be worse if there are fewer watersheds over a larger area. In the first case, it is possible to include (partially or completely), "multiple basins in a single administrative unit (assuming that this is better for the planning purposes), while in the second case, it may be necessary to divide the basin between several administrative units, which may lead to potential bureaucratic confusion" (Mitić, 2015: 13). The basin is not only a hydrological unit, but it is also regarded through social, political and economic aspects, since it represents a space that provides conditions for human life; especially in rural areas (Wani et al., 2008).



In order to achieve the objectives of the WFD, it is necessary to coordinate activities at three levels: local, regional and national. National legislation provides the general conditions necessary for the implementation of various water resources management activities – primarily, through the creation of an appropriate institutional framework. The basin as a hydrological unit is still the most acceptable level of planning and management of water resources from a technical point of view. Basin oriented water resources management usually follows the state decentralization policy.

The Directive defines all factors related to the quantity, quality and environmental status of the water body. One of the most important reasons for the adoption of this Directive was the dissatisfaction with the water resources management state, despite the long period, of almost three decades, of its institutionalization, both within national and international legal framework.

Good water body status is determined by an integral assessment that expresses qualities such as: (1) biological (e.g., fish fauna), (2) hydromorphological (e.g., hydrological regime), and (3) physicochemical (e.g., oxygen saturation, pH, etc.). The results of recent research suggest that nutrient emissions, and the associated eutrophication, with increasing hydromorphological changes in most rivers, are major obstacles to achieving a good status. Also, the emission of toxic substances contributes the most to the violation of the biological elements of water quality standards (Hein et al., 2010).

Characteristics of the Tisza River Basin

The Tisza catchment area is 157,186 km² (Lászlóffy, 1982; van Nood et al., 2011). The largest sub-basin of the Danube River Basin is inhabited by 14 million people living in five countries: Ukraine, Romania, Slovakia, Hungary and Serbia.

The Tisza springs in Ukraine, in the Carpathians in the area of Bukovina, and its basin spreads through Ukraine, Romania, Slovakia, Hungary and, finally, Serbia, where this river flows into the Danube near Stari Slankamen. Its main tributaries are: Mures/Maros, Koros/Criş, Somes/Szamos, Slana/Sajo and Bodrog (in Hungary, Slovakia and Ukraine). The largest tributary of the Tisza is the Maros River. The Tisza River catchment area is asymmetric; the left side covers 60% of the entire watershed area, and the tributaries from this area affect the entire Tisza system (Andó & Vágás, 1972). The catchment area resembles a circle which has a diameter of 520 km spreading in the north-south direction, and 460 km in the east-west direction (Vujović, 2014). The Tisza River collects the waters of the eastern Carpathian Basin region and the total length of its main course today is 966 km (166 km in Serbia) (Sakan et al., 2007). The total length of the Tisza River was 1,419 km before the regulation works, and later, it was reduced to 966 km after the completion of these works (Nádudvari & Czajka, 2014). As a result of these interventions, almost one third (32%) of the Tisza flow is artificially regulated (Martignago, 2011). Flowing from its source in the Eastern Carpathians in Ukraine to the confluence with the Danube near Titel in Serbia, the Tisza River is a very important ecosystem for all countries it passes through (Figure 2).

Figure 2: Tisza River flow, from source to confluence



Source: Istvánovics et al., 2010.

Most of the Tisza Basin - almost two-thirds - consists of mountainous parts of the Tisza Basin and tributaries in Ukraine, Romania and Eastern Slovakia, while the rest of the basin is covered by the Pannonian plain, mainly in Hungary and Serbia.



The Lower Tisza is fed from the Begej River and other tributaries indirectly through the Danube-Tisza-Danube Canal system. The Begej River originates from Stari Begej and the Begej Canal - both tributaries flow from Romania to Serbia. The Tisza River in Vojvodina has tributaries both on the Banat side (Zlatica, Galacka and Begej) and on the Backa side (Keres, Cik, the Great Canal and Jegricka). The tributaries of the Tisza River in Banat are channeled and connected to the Danube-Tisza-Danube (DTD) hydro system. The average amount of water that the Tisza brings into the Danube is 25.4 billion m³ per year (Pécsi, 1969), while the average discharge of the Tisza River at the mouth to the Danube is slightly more than 800 m³/s (van Nood et al., 2011).

Despite the small part of the Tisza River Basin that belongs to Serbia, this area has a significant impact on the groundwater regime - the main source of water supply. The catchment area of the Tisza in the territory of Vojvodina, although it covers the southern part of the Pannonian Plain, is an area where flattened geomorphological units gradually change. The altitude of the Tisza Basin in this region ranges from 74 to 143 m (Pavić, 2006).

The lives and economic activities of millions of people depend on the sustainable management of water resources in the Tisza Basin. In Hungary alone, where the Tisza (from border to border) is 594.5 km long (Pécsi, 1969), about 400 settlements and 1,500,000 inhabitants depend on its runoff and water quality (Kovács et al., 2012). More than six million people live in the area of its watershed in Romania.

A recent analysis of the ecological and chemical status of water bodies in the Tisza River Basin indicated a high share (34%) of significantly altered water bodies (ICPDR, 2011). It is interesting to mention that the proportion of surface water bodies classified as heavily modified water bodies in the Tisza River Basin (34%) is less than in the Danube River Basin (40%) (van Nood et al., 2011). Since these estimates are not final, there are certain gaps and uncertainties that will be resolved in the future. Also, significant lack of chemical status data needs to be identified.

International institutions have recorded as many as 447 potential polluters, of which 42 are very risky - in Romania 24, Ukraine 6, Slovakia 1 and Hungary 11 (IPCDR, 2009). Moreover, there are even more polluters, including the potential polluters as well, in the Tisza Basin in Serbia, also those of anthropogenic origin (agriculture, industrial wastewater, municipal wastewater) and those of natural origin - especially the climate change and more frequent periods of droughts. Surface waters are most endangered near cities that do not have municipal wastewater treatment plants, as well as near the areas with the industrial food processing plants. For example, every day the sugar factory in Senta, dumps 10,362 m³ /day, 20,991 kg COD/day, on average in the Tisza (Pavić et al., 2010: 54).

The water quality monitoring of the Tisza, over a long period of time, shows that this watercourse has a generally satisfactory status. This can be attributed to the self-purifying of the Tisza, that is, its ability to decompose large amounts of organic matter, which contributes to maintaining the good water quality. The level of self-purification of the Tisza is significantly less than of other large rivers in the Danube Basin; for example, Drina, Sava or Velika Morava.

Water quality along the Tisza (on its course through Serbia) decreases significantly during the warm period, but it still provides desirable values that, according to SWQI descriptive quality indicator, have been determined as good (72-83) and very good (84-89). Based on the presented results that were derived from the analysis of the impact of 10 parameters measured on three points during the years 2011-2016 on water quality of the Tisza, it might be concluded that anthropogenic factors (mostly agricultural pollution) significantly affect changes in water quality throughout the considered period. (Babić et al., 2019).

Variations in water quality occur mainly under the influence of dissolved salts (from natural sources) and organic substances and nutrients from various anthropogenic sources, primarily agricultural production, wastewater discharges, and similar. Therefore, it is necessary to reduce the scope of intensified agricultural activity or introduce so-called "precision agriculture" which could in some way control the deterioration of water quality in the basin (Mladenović-Ranisavljević et al., 2021).

Concluding remarks

The preconditions for adopting the Tisza Basin integrated management approach were met in 1994, when in Sofia, all the countries of Potisje region joined the countries which had already signed the Danube River Protection Convention (DRPC) - the Danube Convention. The International Commission for the Protection of the Danube River (ICPDR), which is in



charge of the implementation of the Danube Convention, already in 2002 began implementing WFD in the entire Danube catchment area.

The countries of the Tisza River Basin have been appointed to prepare a water management plan for the area by 2009. By signing the Memorandum of Understanding in 2004, five countries of the Tisza River Basin committed themselves to prepare the Integrated Tisza River Basin Management Plan (ITRBM). At the beginning of 2011, this plan was adopted and was one of the first river basin management plans in line with the objectives of the WFD, as well as with the principles of Integrated Water Resources Management (IWRM). The plan also identified a set of measures intended for achieving a good status of water bodies, according to WFD requirements, by 2015 (van Nood et al., 2011). Moreover, favorable consequences were considered not only in related to the quantity and quality of water bodies, but also to the preservation of the vital functions of aquatic ecosystems in the Tisza River Basin.

The Tisza River Basin Integrated Management Plan (ITRBM) includes: (1) the Tisza River with its tributaries (if their catchment area is more than 1,000 m³); (2) main canals, (3) natural lakes (larger than 10 km²); (4) and groundwater reservoirs larger than 1,000 m². This plan is characterized, in comparison to its respective plan for the Danube Basin, by a large number of national and transboundary groundwater sources - a total of 85.

Apart from the above mentioned cooperation related to the water resource management, the countries of the Tisza Basin also established bilateral cooperation by forming joint bodies in order to more easily resolve the issues of flood risk, water quality, hydrological issues, etc. For example, the Republic of Serbia formed a Water Management Committee with Hungary, and the Hydrotechnical Commission with Romania.

Considering the ecological richness of the Tisza River Basin and its long history of unfavorable impact on ecosystems in the Tisza River Basin - the following are also important: (1) The Convention on Wetlands of International Importance adopted in Ramsar in 1971; (2) UNECE Convention on the Trans-boundary Effects of Industrial Accidents adopted in Helsinki in 1992; (3) as well as the Framework Convention on the Protection and Sustainable Development of the Carpathians, adopted in Kiev in 2003.

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References

- 1. Andó, M., Vágás, I. (1972). The Catastrophic Flood in 1970 along the Valley of Tisza River. *Földrajzi Közlemények*, 96(1): 18.
- 2. Babić, G., Vuković, M., Voza, D., Takić, L., Mladenović-Ranisavljević, I. (2019). Assessing Surface Water Quality in the Serbian Part of the Tisa River Basin. *Polish Journal of Environmental Studies*, 28(6).
- 3. Barrow, C.J., (1998). River Basin Development Planning and Management: A critical review. *World Development*, 26(1): 171-186.
- 4. Cosgrove, W.J., Rijsberman, F.R. (2000). World Water Vision Report 2000. Making Water Everybody's Business. World Water Council (WWC).
- 5. DEFRA (2006). River Basin Planning Guidance, DEFRA, London.
- 6. Dimkić, M.A., Milovanović, M., Dimkić, D. (2011). Sustainable and Adaptive Water Management: Case Study of Water Management in Serbia. *Water Research and Management*, 1(4): 9-19.
- 7. Döll, P., Hoffmann-Dobrev, H., Portmann, F.T., Siebert, S., Eicker, A., Rodell, M., Strassberg, G., Scanlon, B.R. (2012). Impact of Water Withdrawals from Groundwater and Surface Water on Continental Water Storage Variations. *Journal of Geodynamics*, 59-60: 143-156.
- 8. Downs, P.W., Gregory, K.J., Brookers, A. (1991). How Integrated is River Basin Management. *Environmental Management*, 15(3): 299-309.
- 9. Dragićević, S., Nenadović, S., Jovanović, B., Milanović, M., Novković, I., Pavlović, D., Lješević, M. (2010). Degradation of Topčiderska River Water Quality (Belgrade). *Carpathian Journal of Earth and Environmental Sciences*, 5(2): 177-184.
- 10. Global Water Partnership (2000), Technical Advisory Committee (TAC). *Integrated Water Resources Management*. Stockholm.



- 11. Goncharuk, V.V. (2008). A New Concept of Supplying the Population with a Quality Drinking Water. *Journal of Water Chemistry and Technology*, 30(3): 129-136.
- Gurzau, A.E., Popovici, E., Pintea. A., Popa, O., Pop, C., Dumitrascu, I. (2010). Quality of Surface Water Sources from a Central Transylvanian Area as a Possible Problem for Human Security and Public Health. *Carpathian Journal of Earth and Environmental Sciences*, 5(2): 119-126.
- Hein, M., Rotter, S., Schmitt-Jansen, M., von der Ohe, P.C., Brack, W., de Deckere, E., Schmitt, C., de Zwart, D., Posthuma, L., Foekema, E.M., Muñoz, I., Sabater, S., Segner, H., Semenzin, E., Marcomini, A., van Gils, J., van Hattum, B., van Vliet, L.A. (2010). MODELKEY – Key Findings and Recommendations for Reaching the EU Water Framework Directive's Quality Objectives. *Environmental Sciences Europe*, 22(3): 217-228.
- 14. ICPDR. (2009). *Sub-Basin Level Flood Action Plan Tisza River Basin*. Flood Protection Expert Group.
- 15. ICPDR. (2011). Journey to a Balanced Tisza Basin An Introduction to the Integrated Tisza River Basin Management Plan, International Commission for the Protection of the Danube River, Vienna.
- 16. ICWE. (1992). The Dublin Statement on Water and Sustainable Development. International Conference on Water and the Environment, World Meteorological Organization, Dublin.
- 17. Istvánovics, V., Honti, M., Vörös, L., Kozma, Z. (2010). Phyto-plankton dynamics in relation to connectivity, flow dynamics and resource availability – the case of a large, lowland river, the Hungarian Tisza. *Hydrobiologia*, 637(1): 121-141.
- Josimov Dunđerski, J., Savić, R., Grabić, J., Blagojević, B. (2017). Water Quality Trends of the Tisa River along its Flow through Serbia. Annual Set The Environment Protection, *Rocznik Ochrona Śro-dowiska*, 19: 17.
- 19. Kovács, J., Tanos, P., Korponai, J., Székely, I.K., Gondár, K., Gondár-Sőregi, K., Hatvani, I.G. (2012). Analysis of Water Quality Data for Scientists. In: *Water Quality Monitoring and Assessment* (Eds.: Voudouris, K., Voutsa, D.).
- 20. ászlóffy, W. (1982). A Tisza: vízi munkálatok és vízgazdálkodás a tiszai vízrendszerben [Development and Management of Tisa Basin]. *Akadémiai kiadó*, Budapest, Hungary.

- 21. Lomborg, B. (2001). The Skeptical Environmentalist: Measuring the Real State of the World, *Cambridge University Press*, Cambridge.
- 22. Martignago, G. (2011). A comparative analysis of Sava, Tisza, Dniester transborder water river basin management agreements and cooperation policies and their impact on the enhancing of mutual understanding and the well-being of people involved (Doctoral Dissertation). University of Trieste, Italy.
- 23. Milanović, A., Milijašević, D., & Brankov, J. (2011). Assessment of Polluting Effects and Surface Water Quality Using Water Pollution Index: a Case Study of Hydro-system Danube-Tisa-Danube, Serbia. *Carpathian Journal of Earth and Environmental Sciences*, 6(2), 269-277.
- 24. Mitchell, B. (1990). Integrated Water Management. In: Integrated Water Management: International Experiences and Perspectives (Ed.: Mitchell, B.). Belhaven Press, London, 1-21.
- 25. Mitić, M. (2015). Optimal Use and Sustainable Water Resource Management in the Northern part of Kosovo and Metohija (Doctoral Dissertation), University of Priština temporarily settled in Kosovska Mitrovica [in English]
- 26. Mladenović-Ranisavljević, I., Babić, G., Vuković, M., Voza, D. (2021). Multicriteria Visual Approach to the Analysis of Water Quality - A Case Study of the Tisa River Basin in Serbia. *Water*, 13(24), 3537.
- 27. Mostert, E., van Beek, E., Bouman, N.W.M., Hey, E., Savenije, H.H.G, Thissen, W.A.H. (1999). River Basin Management and Planning. Keynote Paper for International Workshop on River Basin Management, *The Hague 27-29 October*.
- 28. Nádudvari, A., Czajka, A. (2014). Statistical Calculations of the Tisza River Channel Changes along Vezsney and Martfü (Hungary) from 1873-2010. *Carpathian Journal of Earth and Environmental Sciences*, 9(2): 57-70.
- 29. Nędzarek, A., Bonisławska, M., Tórz, A., Gajek, A., Socha, M., Harasimiuk, F.B. (2015). Water Quality in the Central Reach of the Ina River (Western Pomerania, Poland). *Polish Journal of Environmental Studies*, 24(1): 207-214
- Pavić, D. (2006). Tisza. Ecological Research on the Tisza 2005 (Pavić, D., Đorđević, A., Suđi, I., Milić-Đorđević, V., Vukov, D., Igić, R.), *Tiski cvet*, Novi Sad. [in English]
- 31. Pavić, D., Mesaroš, M., Živković, N. (2010). Water Pollution and Water Quality of the River Tisa in Serbia. *Collection of Papers Faculty of Geography at the University of Belgrade*, (58): 47-62. [in English]



- Pécsi, M. (Eds.) (1969). A tiszai Alföld [in English: The River Tisza in the Great Hungarian Plane]. *Akadémiai Kiadó*, Budapest, Hungary, p. 381.
- Prathumratana, L., Sthiannopkao, S., Woong Kim, K. (2008). The Relationship of Climatic and Hydrological Parameters to Surface Water Quality in the Lower Mekong River. *Environment International*, 34(6): 860-866.
- 34. Riley, C., Tyson, J.M. (2006). Europe's Water Framework Directive: Discovering hidden benefits. *Water Science and Technology*, 53(10): 269-276.
- 35. Sakan, S., Gržetić, I., Đorđevoć, D. (2007). Distribution and Fractionation of Heavy Metals in the Tisa (Tisza) River Sediments. *Environmental Science and Pollution Research*, 14(4): 229-236.
- 36. Savenije, H.H.G., van der Zaag, P. (2000). Conceptual Framework for the Management of Shared River Basins; with special reference to the SADC and EU. *Water Policy*, 2(1-2): 9-45.
- 37. Shrestha, S., Kazama, F. (2007). Assessment of Surface Water Quality Using Multivariate Statistical Techniques: A Case Study of the Fuji River Basin, Japan. *Environmental Modelling and Sowtware*, 22(4): 464-475.
- 38. Simeonov, V., Stratis, J.A., Samara, C., Zachariadis, G., Voutsa, D., Anthemidis, A., Sofoniou, M., Kouimtzis, Th. (2003). Assessment of the Surface Water Quality in Northern Greece. *Water Research*, 37(17): 4119-4124.
- 39. Takić, Lj., Mladenović-Ranisavljević, I., Vasović, D., Đorđević, Lj. (2017). The Assessment of the Danube River Water Pollution in Serbia. *Water, Air, & Soil Pollution,* 228(10): 380.
- 40. Tanos, P., Kovács, J., Kovács. S., Anda, A., Hatvani, I.G. (2015). Optimization of the Monitoring Network on the River Tisza (Central Europe, Hungary) using combined cluster and discriminant analysis, taking seasonality into account. *Environmental Monitoring and Assessment*, 187(9): 575.
- 41. UNCED, (1992). Agenda 21. United Nations Conference on Environment and Development, United Nations, Rio de Janeiro.
- 42. United Nations (1970). Integrated River Basin Development: Report of a Panel of Experts. UN Department of Economic and Social Affairs, New York, 44 pp.

- 43. United Nations (2012). United Nations Resolution adopted by the General Assembly: 66/288 The Future We Want. In: United Nations Conference on Sustainable development (Rio+20).
- 44. UN-Water, (2008). Status Report on IWRM and Water Efficiency Plans for CSD16.
- 45. van Nood, M., Kovács, P., Whalley, P., Heilmann, D., Milovanović, M., Kunikova, E., Jula, G., Iarochevitch, A. (2011). Integrated Tisza River Basin Management Plan. *Water Research and Management*, 1(2): 1-12.
- 46. Velašević, V. (2004). *Environment and Homo Sapiens: Essays*, J.P. Palić-Ludaš, Palić. [in English]
- 47. Vujović, S. (2014). *The Self-purification Potential of Surface Water as a Criterion for Defining the Quality of Wastewater. (Doctoral Dissertation).* University of Novi Sad. [in English]
- 48. Wagner, W., Gawel, J., Furumai, H., De Souza, M.P., Teixeira, D., Rios, L., Ohgaki, S., Zehnder, A.J.B., Hemond, H.F. (2002). Sustainable Watershed Management: An International Multi-watershed Case Study. *AMBIO: A Journal of the Human Environment*, 31(1): 2-14.
- 49. Wani, S.P., Sreedevi, T.K., Reddy, T.V., Venkateswarlu, B., Prasad, C.S., (2008). Community watersheds for improved livelihoods through consortium approach in drought prone rainfed areas. *Journal of Hydrological Research and Development*, 23: 55-77.
- 50. Wolf, A.T., Natharius, J.A., Danielson, J.J., Ward, B.S. and Pender, J.K. (1999). International River Basins of the World. *International Journal of Water Resources Development*, 15(4): 387-427.
- 51. World Bank, (2003). Water Resources and Environment. Technical Note D1. Water Quality Assessment and Protection. Series Editors Davis Hirji Rafik. Washington DC.
- 52. Zhang, S., Gao, P., Tong, Y., Norse, D., Lu, Y., Powlson, D. (2015). Overcoming nitrogen fertilizer over-use through technical and advisory approaches: A case study from Shaanxi Province northwest China. *Agriculture, Ecosystems & Environment*, 209: 89-99.



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KEY CHALLENGES TO THE STABILITY OF PUBLIC FINANCES OF THE WESTERN BALKAN COUNTRIES

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Key Words: public revenues, public expenditure, fiscal consolidation, Western Balkans Abstract: In the last two decades, the countries of the region have had a negative gap between the share of public expenditures in the gross domestic product in relation to the share of public revenues in the gross domestic product. A negative gap is not harmful per se if government expenditures are directed towards productive investment activities, implying that the component of government spending is taking on a rational character. However, this was not the case with the countries in the region. Based on the conducted research, the paper points out a statistically significant difference between the average share of public revenues and public expenditures in the gross domestic product of the analyzed Western Balkan countries for the period between 2008 and 2021. Management of public revenues and public expenditures is one of the fundamental issues and challenges of modern public finances. This primarily refers to the optimal determination of their participation in the gross domestic product aiming to achieve positive effects on the economic flows of a given country. It is possible to make economic progress and keep pace with EU member states only through healthy relations between public expenditures and public revenues.

Introduction

umerous indicators unequivocally show a tendency for constant growth of public expenditures worldwide, in both absolute and relative terms. Various factors affect the dynamics of the constant growth of public expenditures. First of all, it is quite logical that the increase in the national income of a country increases the public expenditures as well, but it also happens that public expenditures increase in situations when the national income decreases.

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There is a large number of authors who deal with the issue of what causes the constant growth of public expenditures. Several fundamental causes for the constant growth of public expenditures are identified: militarypolitical cause, state intervention in the field of economics, social cause, educational cause and construction of infrastructure facilities. The most important issue for contemporary economic theory and practice is not to determine the limit of public expenditures, but to deal with the problem of efficient distribution and rational allocation of public expenditures, as well as with socio-economic effects caused by transfer budget expenditures (Đurović-Todorović & Đorđević, 2019, p. 76).

Contemporary economic theory prioritizes public expenditure planning over public revenues, the level of which is determined according to the defined expenditures for financing society's needs. The share of public expenditures in the gross domestic product must be at an acceptable level, so that consumption would not have negative implications for economic growth (Kalash et al., 2018, p.35). In this regard, Folster and Henrikson (2001) confirm that a higher share of public expenditures contributes to the reduction of economic growth, by which their increase of 10% results in an economic slowdown of 0.8%. Similarly, Christie (2011) states that a 1% increase in public expenditures reduces real economic growth by 0.07%. Public expenditures represent a relevant category with effects manifested in consumption, economic growth, and employment (Kalash et al., 2018, p. 35). Noticeably, there is a constant tendency for public expenditures growth in the world, particularly manifested in World War II and the post-war period. Meltzer and Richard (1981) report that public spending and taxes have increased in most countries over the past thirtyplus years. The share of public expenditures exceeds 50% of the gross domestic product in certain countries, which speaks volumes about the growing significance of this indicator.

When determining the share of public expenditures, it is a prerequisite to consider the level of public expenditures in the gross domestic product. It is also necessary to synchronize the management of the revenue and expenditure sides for the state to avoid the problem of an excessive budget deficit (Fatas & Mihov, 2006). There are several theoretical positions that analyze the potential causality between public revenues and public expenditures. Almost forty years ago, Friedman (1978) defined the "tax-and-spend" hypothesis which implies that changes in public revenues lead to changes in public expenditures. Bearing in mind that in most countries of the world the structure of public revenues is dominantly focused on tax



revenues, the importance of defining the optimal tax burden is everincreasing. This hypothesis indicates that an increase in taxes can increase public expenditures, thus causing adverse effects on the budget, whereby it gained importance during the '80s of the last century with the escalation of the budget deficit in the USA (Payne, 2003).

Conversely, Peacock and Wiseman (1979) state the "spend-and-tax" hypothesis, implying that changes in public expenditures lead to changes in public revenues. This means that there is a one-way causality that moves from public expenditures to public revenues. However, there is also a thesis which suggests the absence of causality between the movements of public revenues and public expenditures.

Following these two theoretical concepts, fiscal synchronization emerged by including the two-way causality between public revenues and public expenditures (Kalash et al., 2018, p. 36). The need for fiscal consolidation intensified in the period after the Global economic and financial recession in 2008, with the aim of reducing the budget deficit and public debt while preventing the applied measures to additionally affect the slowdown of economic activities of the European Union economy (Glavaški & Becker Pucar, 2020, p. 17). Fiscal consolidation is considered successful if the share of public debt in GDP is lower two years after an episode of fiscal consolidation, compared to its value in the last year of the episode. Fiscal adjustment is higher than in the period before the episode.

Regarding the implementation of fiscal consolidation, A. Alesina, G. Azzalini, O. Favero, C. Giavezzi and A. Miano (2017) showed that regardless of whether fiscal consolidation begins in a recession or in an expansion, if based on a permanent increase in tax rates, it is more expensive in terms of short term output losses, compared to fiscal consolidation based on a permanent reduction in public spending. Fiscal consolidation implies a measure of fiscal adjustment intending to reduce the budget deficit and public debt through a reduction in public spending or an increase in taxes, taking into account the costs of economic activity slowdown. This raises the question of which strategy is better, a reduction in public spending or an increase in taxes in order to stabilize the budget deficit and public debt, thus avoiding recession? By using an ex-post analysis of fiscal consolidations, Alesina & Ardagna (2010) found that reductions in public spending aimed at reducing the budget deficit were less often associated with recessions than with expansions. These results indicate the

existence of non-Keynesian effects, i.e., the reduction of public spending aiming to reduce the budget deficit can have positive effects in the context of economic growth through specific transmission mechanisms.

Post-crisis macroeconomic balance of the Western Balkan countries

In the last two and a half centuries, industrialization, supported by the catalytic effect of the market capitalism system, has been continuously contributing to economic growth. In the period 1980-2019, the global GDP increased more than four times. Nevertheless, it turned out to be merely a shiny exterior and a very problematic interior of the system, as indicated by The Great Recession of 2008 when structural problems from the system's depths erupted to its surface. The COVID crisis only deepened the cracks in the system.

The lack of regulation of financial markets and the banking system were some of the leading causes of the global financial crisis that culminated in 2008. As the crisis basically had a built-in systematic character, the effects of the crisis were rapidly transferred to the real sector. The world financial crisis is consequential to the idea of unlimited liberalization of financial markets (Filipović, p. 79). The neoliberal trend meant minimal regulation and almost non-existent control of investment banks and funds. The slowdown in economic activity and the drop in demand in the EU countries and the region, along with the growth of currency, credit and interest rate risks, significantly limited the exporting possibilities in the economies of the observed countries of the Western Balkans (Albania, Bosnia and Herzegovina, North Macedonia, Montenegro and Serbia). In other words, the main channels of influence of the financial crisis on the real sector were the reduction of credit placements and the reduction of both export and domestic demand (Vučić, 2022).

With the spillover mechanism of the financial crisis in mind, the expected consequences for the national economy were primarily reflected in the slowdown of economic activity, depreciation of the national currency, and inflationary pressures. The financial crisis arose due to the misuse of the idea of a free and unregulated financial market. Although the free market model had been fundamentally well-conceived, the implementation was poorly executed owing to the fact that the information asymmetry and moral hazard were not taken into account. After many years, state intervention in the field of finance is relevant again, and the concept of neolibe-



ralism and rejection of the state's role has been defeated. The previous concept of organization, based on the laisser faire ideology, has been substituted by an institutionally regulated financial system that will be able to predict and prevent irresponsible behavior of financial entities.

The world has changed more in the last 20 years than during the previous three centuries. The main structural imbalances of neoliberal capitalism, such as financialization, deindustrialization and concentration of wealth, have affected sustainability, renewability and inclusiveness of the global economic system, and the planet Earth itself. The main challenge for economic theory is the financial and operational response to exponentiality (Đuričin & Vuksanović Hercog, 2022, p. 2).

According to Stojanović et al., (2019) "in an open market economy, there is a need for defining and implementing an economic policy which should maintain efficient functioning of production and exchange. The term efficiency used in this sense implies that the economy must be able to fulfill the demand for goods and services of consumers on the domestic market, to realize enough of its products abroad and to enable the realization of the target functions of market actors" (p. 148). According to Vučić (2021), "the idea that supports the foundation of the European Union is a single, integrated and competitive market. The future of the entire region of the Western Balkans (Albania, Bosnia and Herzegovina, North Macedonia, Montenegro and Serbia) is in the European Union" (p. 157). These countries, according to the World Bank, belong to the group of moderately developed countries. By European standards, the Western Balkan countries' development level is comparatively low. Once the pandemic turns into an endemic in the near future, the question will remain: how to adapt the economy to general exponentiality? Growth is a condition for survival.

In the period 2008-2021, the highest cumulative sum of GDP growth rates in the observed countries (table 1) was achieved in Albania (41.77%), followed by North Macedonia (29.31%), Serbia (28.76%), Bosnia and Herzegovina (27.88%), while Montenegro achieved the lowest cumulative sum of growth rates (27.20%). Also, Albania had the highest average GDP growth rate (2.98%), followed by North Macedonia (2.09%), Serbia (2.05%), Bosnia and Herzegovina (1.99%) and Montenegro (1.94%).

Year	Alba nia	Bosnia and Herzegovina	North Macedonia	Monte negro	Serbia
2008	7,50	5,59	5,47	7,20	5,65
2009	3,35	-0,81	-0,35	-5,80	-2,73
2010	3,71	0,76	3,35	2,70	0,73
2012	1,42	-0,70	-0,45	-2,72	-0,68
2014	1,77	1,14	3,62	1,78	-1,59
2016	3,31	3,14	2,84	2,94	3,33
2018	4,02	3,74	2,88	5,07	4,49
2019	2,08	2,83	3,91	4,06	4,33
2020 Covid-19	-3,48	-3,11	-6,11	-15,30	-0,94
2021 Covid-19	8,54	5,80	3,96	12,43	7,38
Cumulative growth	41,77	27,88	29,31	27,20	28,76
Average 2008/2021	2,98	1,99	2,09	1,94	2,05

Table 1. GDP growth rates in the Western Balkans in the period 2008-2021 (% change)

Source: International Monetary Fund, World Economic Outlook Database: April 2022, Edition

In 2021, Albania still had the lowest GDP per capita (\$6,374), as in the base year of 2008 (\$4,370), despite the highest cumulative sum of GDP growth rates in the observed period (table 2).

Table 2. BDP per capita (in \$) in the countries of the Western Balkan in the period 2008-2021

Year	Alba nia	Bosnia and Herzegovina	North Macedonia	Monte negro	Serbia
2008	4.370	4.984	4.838	7.396	7.087
2009	4.114	4.711	4.579	6.746	6.168
2010	4.097	4.633	4.576	6.694	5.673
2012	4.248	4.773	4.728	6.590	6.012
2014	4.584	5.252	5.498	7.389	6.598
2016	4.124	4.816	5.152	7.031	5.765
2018	5.257	5.773	6.111	8.854	7.252
2019	5.345	5.787	6.073	8.911	7.397
2020 Covid-19	5.268	5.721	5.867	7.688	7.699
2021 Covid-19	6.374	6.440	6.713	9.350	9.178
Index 2021/2008	146	129	139	126	130

Source: International Monetary Fund, World Economic Outlook Database: April 2022, Edition

The highest GDP per capita in 2021 was achieved in Montenegro (\$9,350), followed by Serbia (\$9,178), North Macedonia (\$6,713), with



Bosnia and Herzegovina (\$6,440) in the penultimate place. If we look at the ratio of GDP per capita in 2021 compared to the base year of 2008, the highest growth index was achieved in Albania (146), followed by North Macedonia (139), Serbia (130), Bosnia and Herzegovina (129), while the lowest index growth was achieved in Montenegro (126).

Compared to the highest GDP per capita in 2008, which was \$7,396 in Montenegro, other countries achieved the following indices that year: Albania (60), Bosnia and Herzegovina (67), North Macedonia (65) and Serbia (96). In 2021, compared to the highest GDP per capita of \$9,350 in Montenegro, the indices of other countries were: Albania (68), Bosnia and Herzegovina (69), North Macedonia (72), and Serbia (98). The above data indicate that in 2021, compared to 2008, Albania reduced the gap with Montenegro as the country with the highest GDP per capita (index 68 in 2021 compared to 60 in 2018). The same trend is present in other countries of the Western Balkans: Bosnia and Herzegovina (69/67), North Macedonia (72/65), and Serbia (98/96). In the period 2008-2021, the highest average percentage share of investments in relation to GDP (table 3) was recorded in North Macedonia (28.93%), followed by Albania (27.75%), Montenegro (26.19%), while it was significantly smaller in Bosnia and Herzegovina (20.83%) and Serbia (20.57%).

Table 3. Total	investments	in the	Western	Balkan	countries	in the period
2008-2021 (%	GDP)					

Year	Alba nia	Bosnia and Herzegovina	North Macedonia	Monte negro	Serbia
2008	33,37	26,39	26,27	41,17	26,42
2009	32,64	18,89	24,63	26,94	18,65
2010	31,31	15,91	23,04	21,77	17,60
2012	29,82	18,28	28,90	20,58	19,26
2014	27,23	18,44	30,17	20,22	16,52
2016	25,47	21,80	32,49	26,10	18,07
2018	24,11	23,72	32,27	31,91	22,65
2019	23,03	24,33	34,54	31,97	25,08
2020 Covid-19	22,79	22,66	29,00	31,18	24,19
2021 Covid-19	27,00	21,31	27,33	25,61	25,64
Index 2021/2008	81	81	104	62	97
Average 2008/21	27,75	20,83	28,93	26,19	20,57

Source: International Monetary Fund, World Economic Outlook Database: April 2022, Edition

If we observe the ratio of total investments in %GDP in 2021 compared to 2008 (table 3), only North Macedonia achieved an increase (index 104), while other countries recorded a decrease in the percentage share of total investments in GDP, namely: Serbia (97), Albania and Bosnia and Herzegovina (81), with the biggest drop in Montenegro (index 62). Looking at 2021, North Macedonia had the largest percentage share of total investments in GDP (27.33%), followed by Albania (27%), Serbia (25.64%), Montenegro (25.61%), while the lowest percentage was recorded in Bosnia and Herzegovina (21.31%).

One of the greatest challenges for the development and social policies of the Western Balkan countries is the labor market's unfavorable characteristics. Unemployment rates are high in all of the countries and much less favorable than in the EU countries (table 4).

Year	Alba nia	Bosnia and Herzegovina	North Macedonia	Monte negro	Serbia
2008	13,10	23,40	33,77	16,80	14,40
2009	13,80	24,10	32,17	19,10	16,90
2010	14,00	27,20	32,05	19,70	20,00
2012	13,40	28,00	31,00	19,70	24,60
2014	17,50	27,50	28,02	18,00	21,02
2016	15,20	25,40	23,75	17,70	16,85
2018	12,30	18,40	20,72	15,20	14,07
2019	11,47	15,70	17,25	15,10	11,58
2020 Covid-19	11,67	15,90	16,37	17,90	10,09
2021 Covid-19	10,60	15,80	15,70	16,60	10,09
Index 2021/2008	81	68	47	99	70

Table 4. Unemployment in the Western Balkan countries in the period 2008-2021

Source: International Monetary Fund, World Economic Outlook Database: April 2022, Edition

The youth unemployment rate in the Western Balkan countries is about twice as high as the general unemployment rate. The employment level by itself is not a suitable indicator, especially when one considers the magnitude of gray economy in the Western Balkans. Labor force surveys show that every fifth employee in Serbia, Macedonia, and Montenegro works in the gray economy. That rate is much higher in Albania, where every third employee works in the informal economy. Other than the level of employment, the quality of employment also presents a very important factor. The unfavorable labor market situation is additionally burdened by



the gap between the education system and the job offer on the market, the level of knowledge and skills of the unemployed people waiting for a long at the employment bureau. On the other hand, employers' lack of interest in investing in employee training and education is also characteristic. According to research by the International Monetary Fund, the leading causes for the extremely unfavorable situation in the labor market are no longer primarily institutional reasons such as rigid institutions of the labor market, but the main problems are actually structurally related to macroeconomic stability and the improvement of the investment climate (Kovtun et al., 2014).

The public sector in the Western Balkans is inefficient and provides public services that are too expensive. According to Vučić et al., (2020), "there has been a trend of increasing public expenditures in the countries of the region over a long period of time, which is in line with the ongoing trends at the global level. This implies that the movement of public expenditures is intensively increasing, to greater or lesser extent, in al-most all European countries, so that public revenues are not following the level of public expenditures. Excessive budget deficits and stressed public debt are the result of over-spending relative to collected funds from tax and non-tax forms. " (p. 45).

Dynamics of public revenues and public expenditures in the Western Balkan Countries

In order to carry out an empirical analysis of public revenues and public expenditures, it is a prerequisite to determine the trend of their percentage participation in the gross domestic product. By analyzing the trend of the given indicator, it can be noted that public revenues are over 40% of the gross domestic product in Bosnia and Herzegovina, Montenegro, and Serbia. At the same time, the lowest share of public revenues is in Albania and Macedonia, where it goes below 30% of the gross domestic product in the observed period 2008-2021.

The results have shown that the average public revenues are the highest in Bosnia and Herzegovina, where their share of the gross domestic product was 43.84%. On the other hand, Albania had the lowest average share of public revenues, with 26.29% of the gross domestic product in the observed period. The maximum value of public revenues was achieved in Montenegro in 2020 when their share was 54.35% of the gross domestic

product (table 5). The minimum value of public revenues was achieved in Albania in 2013 when their share was 23.97% of the gross domestic product. It must be emphasized that the share of public revenues increased in Albania in the observed period, while a decreasing trend was recorded in other countries (table 5).

Table 5. Share of public revenues in the GDP of the Western Balkan countries (in %)

Year	Alba nia	Bosnia and Herzegovina	North Macedonia	Montenegro	Serbia
2008	26,84	45,50	32,83	48,80	41,53
2009	26,09	43,66	30,93	44,62	39,81
2010	25,86	45,43	30,10	41,77	39,93
2012	24,78	44,24	29,45	39,86	39,35
2014	26,27	43,39	27,51	43,51	39,69
2016	27,37	42,66	28,21	41,29	41,74
2018	27,44	43,92	28,81	43,46	40,96
2019	27,32	43,89	28,91	42,56	40,97
2020 Covid-19	25,90	41,28	28,93	43,41	40,98
2021 Covid-19	27,03	42,33	30,21	42,80	43,26

Source: IMF, World Economic Outlook Database: April 2022, Edition

Table 6. Share of public expenditures in the GDP of the Western Balkan countries (in %)

Year	Alba nia	Bosnia and Herzegovina	North Macedonia	Montenegro	Serbia
2008	31,72	49,40	33,76	51,09	43,42
2009	32,67	49,00	33,56	51,33	43,44
2010	29,38	49,49	32,51	46,64	43,62
2012	28,22	46,92	33,25	45,70	46,11
2014	31,72	46,27	31,71	44,20	45,92
2016	29,13	42,31	30,89	47,51	42,93
2018	29,58	42,61	31,84	46,37	41,23
2019	29,24	43,65	32,05	44,73	41,21
2020 Covid-19	32,62	45,96	37,14	54,35	48,22
2021 Covid-19	31,56	43,04	35,57	44,41	46,57

Source: IMF, World Economic Outlook Database: April 2022, Edition

Albania and Macedonia also had a much lower average share of public expenditures in the gross domestic product (table 6). In the observed period, the average share of public expenditures in Albania was 30.23% of the gross domestic product, while in North Macedonia it was 32.83%. A



large share of public expenditures was recorded in most countries, except for Albania and Macedonia, where the share of public expenditures was close to 30% of the gross domestic product (table 6). Regarding public expenditures, the highest average share was found in Montenegro (47.29%) and Bosnia and Herzegovina (45.35%). The average share of public expenditures was above 45% in these countries, while on the other hand, the lowest average share of the gross domestic product was achieved in Albania (30.23%). As with public revenues, the maximum value of public expenditures was present in Montenegro in 2020, amounting to 54.35% of the gross domestic product. The highest value is present in Montenegro concerning the minimum and maximum values of public revenues and public expenditures. The maximum value of public expenditures was achieved in Montenegro in 2020 when their share was 54.35% of the gross domestic product. The minimum value of public expenditures was achieved in Albania, with a share of 28.22% of the gross domestic product.

Notably, the average level of public expenditures was higher than public revenues in all the countries, with the largest negative gap recorded in Montenegro (over 4% of the gross domestic product). Also, the difference between the share of public revenues and public expenditures in the period 2008-2021 was negative and above 3% in Albania. It was 2.97% in Serbia, 2.94% in North Macedonia, while the lowest negative gap was achieved in Bosnia and Herzegovina with 1.64% of the gross domestic product in the period from 2008-2021 (table 7).

od 2008-202	21 (% of G	iDP)							
Country	Albania	Bosnia and Herzegovina	North Macedonia	Montenegro	Serbia				
		PUBLIC I	REVENUES						
Average	26,29	43,55	29,34	42,38	40,52				
Minimum	23,97	41,28	27,51	38,54	37,86				
Maximum	27,48	45,50	32,83	48,80	43,26				
PUBLIC EXPENDITURES									
Average	30,23	45,35	32,83	47,29	43,83				
Minimum	28,22	41,35	30,89	44,20	41,21				

37.14

54.35

Table 7. Average value, minimum and maximum values of public revenues and public expenditures in the Western Balkan countries in the peri-1 2000 2021 (0/

49.40 Source: IMF, World Economic Outlook Database: April 2022, Edition

32.67

Maximum

48,22

Table 8. Average coverage of public expenditures by public revenues in the Western Balkan countries in the period 2008-2021

Country	Alba- nia	Bosnia and Herzegovina	North Macedonia	Monte- negro	Serbia
Public revenues/Public expenditures (index)	0,87	0,96	0,89	0,90	0,92

Source: IMF, World Economic Outlook Database: April 2022, Edition

In the observed period, based on the data in table 7, it is noticeable that public expenditures were higher in relation to realized public revenues in all of the analyzed countries. Furthermore, there is also a noticeable correlation between the given variables (table 8). The lowest average coverage of public expenditures by public revenues in the observed period from 2008-2021 was in Albania (0.87), followed by Macedonia (0.89), Montenegro (0.90), Serbia (0.93), while the highest average coverage of public expenditures by public revenues was in Bosnia and Herzegovina (0.96).

Key data and analysis

If we examine the level of public general government debt (table 9) in 2021, it had the highest value in Montenegro (86.75%), followed by Albania (74.20%), Serbia (57.17%), and North Macedonia (53.20%), while Bosnia and Herzegovina had the lowest level of public debt in the observed countries (36.51%). As one of the Maastricht criteria, public debt above 60% of the GDP was only achieved in Montenegro and Albania in 2021.

Table 9. Public debt of the Western Balkan countries in the period 2008-2021 (% of GDP)

Year	Alba- nia	Bosnia and Herzegovina	North Macedonia	Monte- negro	Serbia
2008	55,14	30,88	20,64	34,18	30,55
2009	73,71	45,53	38,07	68,76	33,92
2010	59,66	35,06	23,72	43,68	41,21
2012	59,41	39,55	27,72	48,57	54,44
2014	70,39	42,49	33,96	58,65	71,24
2016	73,30	44,08	39,81	66,39	67,58
2018	71,33	34,27	40,42	71,88	54,40
2019	68,50	32,52	40,44	78,79	52,75
2020 Covid-19	75,92	36,53	51,88	10,34	57,88
2021 Covid-19	74,20	36,51	53,20	86,75	57,17
Index 2021/2008	135	118	258	254	187

Source: IMF, World Economic Outlook Database: April 2022, Edition



In the period 2008-2021, the largest average deficit of the general government structural balance - a negative fiscal result (table 10) was present in Montenegro (5.08%), followed by North Macedonia (3.32%), Serbia (3.25%), Bosnia and Herzegovina (1.47%), while the smallest fiscal deficit was recorded in Albania (1.23%). During the COVID pandemic conditions in 2020, Montenegro had the most significant fiscal deficit (10.93%), North Macedonia (8.21%), while Serbia experienced a general government deficit (5.91%), Albania (4.62%) and Bosnia and Herzegovina (3.07%). At the end of 2021, the largest fiscal deficit was recorded in North Macedonia (5.36%), followed by Serbia (4.29%), Albania (2.63%), Montenegro (1.61%), while the smallest fiscal deficit was recorded in Bosnia and Herzegovina (0.70%).

Table 10. General government structural balance of the Western Balkan countries in the period 2008-2021 (%GDP)

Year	Alba nia	Bosnia and Herzegovina	North Macedonia	Monte negro	Serbia
2008	-1,98	-6,29	-0,92	-2,29	-4,00
2009	-3,41	-6,09	-2,62	-6,71	-3,85
2010	-0,16	-4,18	-2,41	-4,86	-4,02
2012	-0,32	-1,26	-3,80	-5,84	-5,50
2014	-2,58	-1,22	-4,19	-0,69	-4,96
2016	0,96	0,77	-2,70	-6,17	-1,16
2018	0,91	0,89	-1,75	-6,21	0,72
2019	0,13	0,37	-1,96	-1,76	-0,51
2020 Covid-19	-4,62	-3,07	-8,21	-10,93	-5,91
2021 Covid-19	-2,63	-0,70	-5,36	-1,61	-4,29
Index 2021/2008	133	11	583	70	107
Average 2008-21	-1,23	-1,47	-3,32	-5,08	-3,25

Source: IMF, World Economic Outlook Database: April 2022, Edition

In the observed Western Balkan countries in the period 2008-2021, by far the largest average current account deficit of the balance of payments (table 11) was in Montenegro (18.66%), followed by Albania (8.51%), Serbia (6.69%), Bosnia and Herzegovina (6.02%), while the smallest values were in North Macedonia (3.25%). In 2021, Montenegro had the largest negative balance of payments (9.23%), followed by Albania (7.66%), which poses a tremendous financial risk for both countries with a negative impact on the aspects of financial liquidity and solvency. At the end of 2021, Serbia achieved a negative balance of payments (4.39%), Macedonia (3.54%), while Bosnia and Herzegovina had the smallest negative balance of payments, as well as the lowest level of public debt (2.38%). The key financial vulnerability indicators of the Western Balkan countries at the end of 2021 are presented based on the conducted research and the data shown in table 12.

Table 11. Balance of payments of the Western Balkan countries in the period 2008-2021 (%GDP)

Year	Albania	Bosnia and Herzegovina	North Macedonia	Monte negro	Serbia
2008	-15,80	-14,12	-12,79	-49,47	-19,86
2009	-15,95	-6,42	-6,77	-27,73	-5,89
2010	-11,29	-6,00	-2,02	-20,31	-6,00
2012	-10,20	-8,63	-3,16	-15,28	-10,79
2014	-10,79	-7,36	-0,50	-12,41	-5,59
2016	-7,57	-4,75	-2,85	-16,23	-2,92
2018	-6,67	-3,27	-0,06	-17,00	-4,84
2019	-6,66	-2,79	-3,27	-14,26	-6,87
2020 Covid-19	-8,67	-3,76	-3,44	-26,05	-4,12
2021 Covid-19	-7,66	-2,38	-3,54	-9,23	-4,39
Index 2021/2008	48	17	28	19	22
Average 2008-21	-8,51	-6,02	-3,25	-18,66	-6,69

Source: IMF, World Economic Outlook Database: April 2022, Edition

Table 12. Financial indicators of vulnerability of the Western Balkan countries in 2021 (%GDP)

Financial indicators of vulnerability				
Country	Indicators	Value	Reference value	
	Indebtedness / Fiscal capacity			
Albania	Public debt/GDP	74,20	<60%	
	Tax revenues in % GDP	24,40	<34%	
Bosnia and	Public debt/GDP	36,51	<60%	
Herzegovina	Tax revenues in % GDP	38,40	<34%	
North	Public debt/GDP	53,20	<60%	
Macedonia	Tax revenues in % GDP	27,40	<34%	
Montenegro	Public debt/GDP	86,75	<60%	
	Tax revenues in % GDP	42,10	<34%	
Serbia	Public debt/GDP	57,17	<60%	
	Tax revenues in % GDP	38,60	<34%	

Source: IMF, Government Finance Statistics (GFS)

The anti-crisis measures of deficit financing, which have been applied in the world's key economies during the last two crises, cannot be applied in the Western Balkan countries. According to Vučić (2020), "maintaining



fiscal stability in the upcoming period is a key challenge in the implementation of the economic growth model, which should be based on increasing the level of investments, knowledge and innovations converging with the EU in terms of income levels" (p. 365). The knowledge society rests on the possibility and ability to create new knowledge which will be transformed into economic value and wealth through the innovation of products, services and processes. Therefore, measuring innovation in such a dynamic environment is of immense importance in the state and companies alike. Serbia and the observed Western Balkan countries have faster rates of economic growth compared to the EU member states' average. However, their innovation potential is below the average of this group of countries. According to Vučić et al., (2016), "innovation resources and infrastructure, i.e. human resources and a solid research system, can be cited as the main potential of this region, so in the upcoming period, adequate measures should be taken to develop this potential, which will cause an increase in the level of innovation, and consequentially the economy competitiveness" (p. 408).

A special problem for the Western Balkan countries is the industrialization that is based on direct foreign investments, which in the medium term leads to the 'middle development level trap'. One of the solutions is to, through structural policies, in addition to infrastructure, construction and ICT, more intensively enter exchangeable sectors, such as energy based on renewable sources, production in agriculture and industry based on I4.0 solutions, medical equipment, pharmacy, etc. According to Stojanović et al., (2019), "the benefits of infrastructure investment in one country can be reflected in that country as well as in neighboring countries. In this regard, it is necessary to carefully plan the future development of tourism, to create an environment that would be attractive to investors, it is necessary to improve the quality of human resources and to adopt and implement innovations in the field of transport and tourism infrastructure development" (p. 182). Industrial policies must be an ecosystem of direct foreign investments in the Western Balkan countries.

Conclusion

Based on the conducted research, the paper indicates a statistically significant difference between the average share of public revenues and public expenditures in the gross domestic product of the analyzed countries for the 2008-2021 period. The problems of disturbed relations between public expenditures and public revenues were not solved in the direction of reducing irrational consumption. Solutions were rather sought on the income side through taxes and borrowing. This undoubtedly affected the economy's private sector which was often subordinated to the public sector. Although the public sector includes a significant number of people, it is necessary to provide the economy with a suitable business environment in order to achieve positive effects in the direction of intensive growth of production and exports. Accordingly, conditions for higher rates of economic growth would be created, thus reducing the share of public expenditures in the gross domestic product and the burden on economic flows in the country.

Increasing efficiency of public spending is a prerequisite for implementing strategic decisions in the Western Balkans. The most important complementary strategy for the Western Balkan countries, independent of other possible options, is to increase efficiency of public spending, thus enabling the creation of budget space for a differently oriented state policy. Increasing the efficiency of public spending does not only mean saving irrationally spent resources but also improving the output – outcomes and the quality of public services to citizens with existing resources. Improving efficiency may also mean changing the structure of public expenditures within the state as a whole (reduction of general state spending, social transfers and increase of expenditures for investments, science, education) or within each individual state sector.

The paper indicates that the maintenance of fiscal stability based on the reduction of irrational public spending in the upcoming period is a key challenge for all the Western Balkan countries. Fixing the state of public finances is a key issue for every country in the region. Only through healthy relationships between public expenditures and public revenues can countries progress economically and keep pace with EU member states. The ultimate goal of the Western Balkan countries' economic policy should be increasing the gross domestic product, and reducing the gap in the gross domestic product per capita between the observed countries and the EU member states.



References

- 1. Alesina, A., & Ardagna, S. (2010). Large changes in fiscal policy: Taxes versus spending. Tax policy and the economy, 24, 35-68.
- 2. Alesina, A., Azzalini, G., Favero, C., Giavezzi, F., & Miano, A. (2017). Is it the "How" or the "When" that Matters in Fiscal Adjustments? IMF Economic Review, 66(1), 144-188.
- 3. Christie, T.A.L. (2011). Essays on Fiscal Policy and Economic Growth, doctoral dissertation, Georgia State University, United States.
- 4. Đuričin, D., & Vuksanović Herceg, I. (2022). Envisioning a new economic system after the transition from pandemic to endemic: Serbia's perspective. Ekonomika preduzeća, YEAR LXX, January-February 2022, 1-22.
- 5. Đurović-Todorović, J. & Đorđević, M. (2019). Javne finansije-teorija i praksa, Ekonomski fakultet Univerziteta u Nišu, 72-76.
- Fatas, A. & Mihov, I. (2006). The Macroeconimc Effects of Fiscal Rules in the United States, Journal of Public Economics, Vol. 90, No. 1-2, 108.
- 7. Filipović, S. (2010). Efekti globalne finansijske krize na finansijski sektor Srbije. Industrija, vol. 38, iss. 3, 79-94.
- Folster, S. & Henrekson, M. (2001). Growth Effects of Government Expenditure and Taxation in Rich Countries. European Economic Review, Vol. 45, No. 8, 1501-1520.
- 9. Friedman, M. (1978). The Limitations of Tax Limitation, Policy Review, 7-14.
- Glavaški, O., Emilija Beker Pucar, E. (2020). Fiskalna konsolidacija u EU-28: višegodišnje epizode versus hladan tuš. Ekonomski horizonti, Januar - April 2020, Volumen 22, Sveska 1, 17 – 30.
- 11. International Monetary Fund, World Economic Outlook Database: April 2022, Edition, https://www.imf.org/en/Publications/WEO/ weo-database/2022/April, (5 May 2022).
- 12. International Monetary Fund, Government Finance Statistics, https://data.imf.org/?sk=a0867067-d23c-4ebc-ad23-d3b015045405, (5May 2022).
- Kalaš, B., Jakšić, D. & Mijić, K. (2018). Komparativna analiza državnih prihoda i državnih rashoda u zemljama regiona, Finansije, Broj 1-6/2018, 32-44.

- Kovtun, D., Meyer Cirkel, A., Murgasova, Z., Smith, D. & Tambunlertchai, S. (2014). Boosting Job Growth in the Western Balkans. IMF.
- 15. Meltzer, A. & Richard, S. (1981). A Rational Theory of the Size of Government. Journal of Political Economy, Issue 89, 914-927.
- 16. Payne, E. (2003). A Survey of the International Empirical Evidence on the Tax-spend Debate. Public Finance Review, Issue 31, 302.
- 17. Peacock, T. & Wiseman, J. (1979). Approaches to the Analysis of Government Expenditure Growt. Public Finance Quarterly, Issue 7, 3-23.
- Stojanović, B., Ranđelović, M. & Vučić, V. (2019). Challenges of the competition policy in Serbia and other Western balkan countries. Knowledge International Journal, Vol. 34, No 1, 147-153.
- 19. Stojanović, B., Vučić, V. & Kostić, Z. (2019). Competitiveness of infrastructure in tourism in the Southeast Europe. Knowledge International Journal, Vol. 35, No 1, 181-188.
- 20. Vučić, V. (2021). Politika zaštite konkurencije i efikasnost privrede. Fakultet za pravo, bezbednost i menadžment "Konstantin Veliki" Niš Univerziteta "Union – Nikola Tesla" u Beogradu, SVEN, Niš.
- Vučić, V., Radukić, S. & Jovanović, S. (2016). Inovacije u funkciji razvoja privrede Republike Srbije. U: Nešković, S. (Ed.) Obrazovanje, pravo i bezbednost u funkciji razvoja društva, Constantin Magnus Naissus 2016, Fakultet za pravo, bezbednost i menadžment "Konstantin Veliki" Niš, Niš, 407-417.
- 22. Vučić, V., Marinović-Matović, I., & Kostić, Z. (2020). Public revenues and public expenditures analysis in Southeast European countries. Knowledge International Journal, Vol. 38, No. 1, 45-52.
- 23. Vučić, V. (2020). Struktura poreza kao determinanta stabilnosti javnih finansija Republike Srbije. U: Nešković, S. (Ed.) Društveni razvoj i bezbednost zajednice sa akcentom na grad Valjevo i Kolubarski okrug, Univerzitet "Sveti Kiril i Metodij" Veliko Trnovo, Bugarska, Internacionalni Univerzitet Travnik, BiH, Centar za strateška istraživanja nacionalne bezbednosti CESNA-B Beograd, Beograd, 363-380.
- 24. Vučić V. (2022) Srbija 2030: agenda održivog razvoja izazovi i ograničenja. Horizonti menadžmenta. II (1), 53-75.



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FOREIGN DIRECT INVESTMENTS IN THE TIME OF COVID-19 PANDEMIC

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Key Words: foreign direct investment, the covid-19 pandemic, political reactions, national borders, supply and demand

Abstract: It doesn't take long for the world to be hit by a crisis. The 2019 crisis caused by the Corona virus COVID-19 is a crisis that is still going on. It manifests its negative effects in all areas of people's lives and work. Since the topic of this paper is foreign direct investment during the COVID-19 pandemic, it is to be expected that the pandemic had a negative impact on their flows, both inflows and outflows. Pandemics are a phenomenon that has spread all over the world. Foreign direct investment flows are not exempt from this process either. The decline in foreign direct investment flows was primarily due to political reactions to the CO-VID-19 pandemic, such as the closure of national borders, which in the interaction of shocks on the supply and demand side led to a pandemic. The aim of this paper is to analyze the flows of foreign direct investment in the world and by groups of countries, and to point out the importance of measures taken at all levels in order to recover them as soon as possible.

Introduction

odern world trends are characterized by the involvement of national economies in the process of globalization, which implies the growing internationalization of companies, industries, technologies, competition, markets, production, trade and finance. "One of the most prominent features of the global

world economy is the growth of international investment and international trade, followed by the growth of international financial support, which together reflect the growth of international business" (Radević et al, 2016, p. 327). Transnational companies are a key force through which modern international trade flows, international investment flows and international business take place. The fastest growing volume of modern international production, modern international trade and modern international business is achieved through foreign direct investments. Foreign direct investment as one of the main drivers of the globalization process is responsible for the world as it

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exists today and as we know it today. Their impact on the economies of host countries is huge, especially in transition countries, which usually do not have enough of their own funds to finance economic development, so foreign direct investment is a lifeline to get out of the vicious circle of poverty.

During the previous period, we have witnessed that the flows of foreign direct investments are subject to fluctuations, i. e. declines in times of disasters, wars, epidemics, pandemics and other instabilities. Today, the world is facing a health crisis caused by the coronary virus COVID-19. In order to combat and mitigate the consequences of the pandemic, measures were taken to save human lives, which resulted in a reduction in economic activity, the negative economic effects of which could outweigh the global financial crisis of 2008-2009. years. "The interaction of shocks on the supply and demand side in combination with political reactions to the COVID-19 pandemic, such as the closure of national borders, triggers negative effects on the national and the entire world economy" (Dašić et al, 2021, p. 440). The decline in global economic activity was accompanied by a decline in investment, especially foreign direct investment.

Since the end of 2019, research on the impact of the COVID-19 pandemic on global and regional flows of foreign direct investment by many international organizations such as UNCTAD (UNCTAD, 2020a; UNCTAD, 2020b; UNCTAD, 2021a; UNCTAD, 2021b; UNCTAD, 2021c, UN-CTAD, 2022), World Bank (Saurav et al, 2020), OECD (OECD, 2020; OECD, 2021), IMF (Drabo, 2021) has been especially updated. There are a large number of papers in the world professional literature that deal with this issue (Kalotay, Sass, 2021; Nawo, Njangang, 2022; Chaudhary eta al, 2020; Camino-Morgo, Armijos, 2021; Zwolankiewicz, 2021; Vennila, 2021; Fang et al, 2021; Ajide, Osinubi, 2021; Radu et al, 2020).

Also, in Serbia, there are many scientific papers dealing with the flow of fo-reign direct investment in Serbia and the surrounding countries during the COVID-19 pandemic (Arsić, 2020; Praščević, 2020; Tomić et al, 2021; Stojanović, 2020; Radović, 2021; Dašić, Dašić, 2021; Dašić, Trklja, 2020; Živković, 2020; Radulović, 2020). All these researches deal with the issue of foreign direct investment flows as well as measures that need to be taken in order to recover them and return them to the pre-crisis level.

Analysis of foreign direct investment inflows

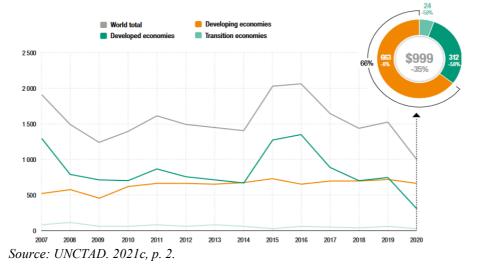
There are no accurate data on the earliest forms of foreign investments in the world, but they are assumed to date back to ancient times. In the beginning, the individuals and groups of people (traders and bankers)



exchanged goods and services across their country borders, and over time they started investing into mines and factories abroad. The early 19th century was an "early stage" of the development of foreign direct investments as they started being included in an increasing number of activities and countries, taking on a more permanent character. It is estimated that in 1914 the total global FDI stock was 40-45 billion USD, with Great Britain accounting for almost 1/2 of the stock. The USA, Germany and Great Britain together accounted for over 2/3 of the total global FDI stock, while all the countries of the Western Europe accounted for 4/5 of the total global foreign direct investments in 1914. Latin America and Asia were the major recipients of foreign direct investments (Dunning, 1993, p. 117, 118). The period after the 1980-ties was the period of the most rapid expansion of foreign direct investments. By the beginning of the 21st century their significance has increased, and they have become a crucial investment link worldwide. Global foreign direct investment flows are characterized by alternating periods of growth and decline. The decline periods were most often connected with emerging crises.

As already mentioned, many international, regional and national organizations deal with analysis of foreign direct investment flows. In this paper, I will use the most cited report on global foreign direct investment stock and flows – inflows and outflows – UNCTAD's World Investment Report that is published annually (the first UNCTAD's report was published in 1991), as well as Investment Trends Monitor from 2022. World Investment Report for 2022 has not been published yet.

Figure 1: FDI inflows, global and by group of economies, 2007–2020 (Billions of dollars and per cent)



As shown in the graph, 2016 was the year with the highest realized foreign direct investment inflow (2,065 billion USD) in the history of mankind (UNCTAD, 2021c, p. 2). After that, in 2017 and 2018, FDI inflows were on a constant downward trend. They saw a slight recovery in 2019, but due to the outbreak of coronavirus COVID-19 by the end of 2019, their downward trend continued and was particularly prominent in 2020.

Since the topic of my paper is related to foreign direct investments in the time of COVID-19 pandemic, the paper will focus on analysis of foreign direct investment inflows in the period after 2019.

	2019	2020	2021*	2020-2021
				Growth rate
				(%)
World	1.473	929	1.647	77
Developed economies	752	260	777	199
Developing economies	721	669	870	30
Least developed countries	24	24	28	19

Table 1: FDI infl¬ows, 2019–2021 (Billions of dollars)

* FDI data in this Trend Monitor are based on quarterly data derived from the (extended) directional principle. Source: UNCTAD. 2022, p. 3.

Table 1 shows that foreign direct investment inflows in 2020 dropped by over 35% compared with the same period in 2019. In 2021 FDI inflows saw a noticeable recovery, i.e. increase by 77% compared with 2020, exceeding the pre-pandemic level. Such a rapid recovery of foreign direct investment inflows disguised the increasing divergences between developed and developing countries concerning FDI flows. Developed countries have almost always had a dominant share in global FDI flows. Nevertheless, those circumstances are changing, as the developing countries are now "breathing down the neck" of developed countries and even accounting for a higher share in total FDI flows. In 2020 the developing countries accounted for the highest share (over 70% or 669 billion USD) in total realized FDI inflows in the world (929 billion USD). They were followed by the developed countries with 27% share (260 billion USD) and finally by the least developed countries with about 2% share (24 billion USD) in the total realized FDI inflows in the world.

In 2020 the FDI inflows in the developed countries declined by over 65% compared with 2019. However, in 2021 inflows increased by 199%

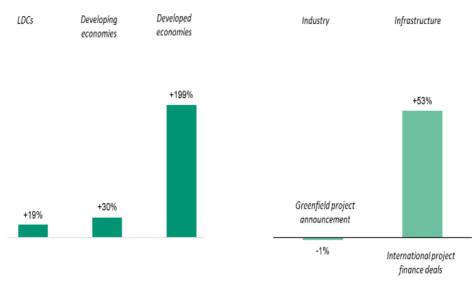


compared with 2020. As far as the developing countries are concerned, in 2020 their FDI inflows declined by slightly over 7% compared with 2019, and then in 2021 they increased by 30% compared with 2020. In 2020 the group of least developed countries accomplished the same FDI inflows as in 2019, while in 2021 they experienced a 19% growth.

"Of the total increase in global FDI flows in 2021 (\$718 bilion), more than \$500 bilion, or almost three quarters, was recorded in developed economies" (UNCTAD, 2022, p. 1). Other country groups saw a more modest recovery (Figure 2).

Figure 2: Uneven recovery growth

(Growth rates for FDI by region and for investment project by sector, 2021 vs 2020)*



* FDI data in this Trends Monitor are estimated based on partial-year quarterly data. Greenfield projects data is estimated based on eleven months.

Source: UNCTAD, 2022, p. 1.

International project finance deals increased by 53% due to strong investor confidence in infrastructure sectors, supported by favourable long-term financing conditions, recovery stimulus packages and overseas investment programs. Then again, foreign investor confidence in industry is visibly low (greenfield investment project announcements were basically negative, -1%).

Further in this paper I will look back to cross-border mergers and acquisitions flows, greenfield projects and international project finance deals.

	2019	2020	2021*	2020-2021
				Growth rate (%)
World	507	475	710	49
Developed economies	428	389	614	58
Developing economies	79	86	96	11
Least developed countries	0	0	-2	••

Source: UNCTAD. 2022, p. 3.

In 2020 global cross-border M&As declined by almost 7% compared with 2019, while they recovered in 2021 by 49% compared with 2020, thus exceeding the pre-crisis level. Expansion of cross-border M&As in 2021, compared with 2020, was accomplished in both developed countries (58%) and in developing ones (11%), while the least developed countries had a negative score.

Table 3: Announced	greenfield	projects.	2019-2021	(Number)
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	2019	2020	2021*	2020-2021
				Growth rate
				(%)
World	18.261	13.219	13.049	-1
Developed economies	10.967	8.972	8.624	-4
Developing economies	7.285	4.247	4.426	4
Least developed countries	368	190	146	-23

Source: UNCTAD. 2022, p. 3.

COVID-19 pandemic also affected the global greenfield projects as their number decreased by about 27% in 2020 compared with 2019, and then by 1% in 2021 compared with 2020. It will take more time for the number of global greenfield projects to reach the pre-crisis level. A decreased number of greenfield projects in 2021, compared with 2020, was seen in developed countries (-4%) and the least developed countries (-23%), while the developing countries saw the increase (+4%) but still remained far below their pre-crisis level.



	2019	2020	2021*	2020-2021
				Growth rate (%)
World	1.260	1.199	1.840	53
Developed economies	659	699	1.110	59
Developing economies	601	500	730	46
Least developed countries	119	74	63	-15

Table 4: Announced international project finance deals, 2019-2021 (Number)

Source: UNCTAD. 2022, p. 3.

The number of international project finance deals was least affected by COVID-19 pandemic. The number of deals in 2020 decreased by less than 5% compared with 2019. In 2021 their number increased by 53%, considerably exceeding their pre-crisis level. Developed countries (+59%) and developing countries (+46%) also saw the boost in international project finance deals, reaching considerably higher level than in the pre-crisis period. The number of international project finance deals dropped only in the least developed countries (-15%).

Sectoral distribution of foreign direct investments

The structure of foreign direct investments by sectors has evolved in time. In initial phases of FDI development, investments were mainly focussed on the primary sector, which was the consequence of increasing demand for raw materials and energy-generating products. Over time, primary sector investments came to the point of stagnation and decline, and manufacturing sector and service sector investments increased. Today, the service sector is the main target of foreign direct investments worldwide.

From the aspect of announced greenfield projects value in the period 2019-2021, service sector precedes with over 50% compared with primary sector and manufacture. All three sectors saw a decline of announced greenfield projects value compared with the pre-crisis level. Compared with 2020, all three sectors saw growth. The largest increase was accomplished in the primary sector (+18%), then in the manufacture sector (+9%) and finally in the service sector (+6%) (Table 5).

		2020-2021		
Sector/industry		Growth rate		
	2019	2020	2021	%
Total	846	569	610	7
Primary	21	11	13	18
Manufacturing	402	240	260	9
Services	422	319	337	6

Table 5: Announced greenfield projects, by sector, 2019-2021 (Billions of dollars and per cent)

Source: UNCTAD. 2022, p. 4.

As for the top 10 industries, in terms of announced greenfield projects value, the increase of their share in the total announced greenfield projects value by years has been observed. In 2019, that share accounted for about 60%, in 2020 for 73% and in 2021 for over 79%. This indicates a growing significance of these top 10 industries. Compared with 2020, the highest increase in 2021 was seen in electronics and electrical equipment (+108%), construction (+35%), pharmaceuticals (+24%), information and communication (+22%), transportation and storage (+20%), food, - and tobacco (+11%) and trade (+2%), while the decline was seen in chemicals (-31%), electricity and gas supply (-12%) and automotive industry (-5%) (UNCTAD, 2022, p. 4).

Table 6: Announced greenfield projects, by sector, 2019-2021 (Number and per cent)

		2020-2021		
Sector/industry		Growth rate		
	2019	2020	2021	%
Total	18.261	13.219	13.049	-1
Primary	151	100	91	-9
Manufacturing	8.180	5.251	4.972	-5
Services	9.930	7.868	7.987	2

Source: UNCTAD. 2022, p. 4.

In 2021, the number of announced greenfield projects in total and by sectors did not reach their precrisis level. Compared with 2020, the number of global greenfield projects in 2021 declined by 1%. By sectors, the highest decline was seen in the primary sector (-9%) and manufacture



sector (-5%), while services sector saw the increase (+2%) (Table 6). As for the top 10 industries, in 2021 only the information and communications sector managed to reach its pre-crisis level. Compared with 2020, the industries that saw the highest increase of announced greenfield projects in 2021 were information and communication (+15%), automotive industry (+12%), trade (+5%) and transportation and storage (+3%), while the industries that saw a decline included electricity and gas supply (-15%), chemicals (-10%), food, beverages and tobacco (-9%), pharmaceuticals (-6%), construction (-5%) and electronics and electrical equipment (-1%) (UNCTAD, 2022, p. 4).

		2020-2021		
Sector/industry		Growth rate		
	2019	2020	2021	%
Total	507	475	710	49
Primary	37	25	15	-41
Manufacturing	243	228	241	5
Services	227	221	454	105

Table 7: Net cross-border M&A sales, by sector, 2019-2021 (Billions of dollars and per cent)

Source: UNCTAD. 2022, p. 4.

The total value of cross-border M&As in 2021 exceeded their pre-crisis level value, while among sectors only services sector managed to accomplish that. Compared with 2020, the total growth of cross-border M&As value in 2021 was 49%. Among sectors, such increase was seen in services sector (+105%) and manufacturing sector (+5%), while primary sector saw the decline of value (-41%). As for the top 10 industries, the ones that managed to reach their pre-crisis level of cross-border M&As were information and communication, finance and insurance, trade, transportation and storage, automotive, professional services, electronics and electrical equipment and administrative and support services, while pharmaceuticals and real estate industry remained below that level. Among all aforementioned top 10 industries in cross-border M&As, only electronics and electrical equipment saw the decrease of value by 7% (UNCTAD, 2022, p. 4).

		2020-2021		
Sector/industry		Growth rate		
	2019	2020	2021	%
Total	7.118	6.201	8.054	30
Primary	433	658	610	-7
Manufacturing	1.633	1.136	1.497	32
Services	5.052	4.407	5.947	35

Table 8: Net cross-border M&A sales, by sector, 2019-2021 (Number and per cent)

Source: UNCTAD. 2022, p. 4.

The total number of cross-border M&As in 2021 exceeded their pre-crisis level. Among sectors, only manufacturing did not reach that level. Compared with 2020, the total increase of cross-border M&As number in 2021 was 30%. Among sectors, only the primary sector saw a decline by 7% (Table 8). Among the top 10 industries, automotive, real estate and administrative and support services industries did not reach the number of cross-border M&As from their pre-crisis level. Compared with 2020, pharmaceuticals industry was the only one among the top 10 industries without the increased number of cross-border M&As in 2021 (UNCTAD, 2022, p. 4).

Table 9: Announced international project finance deals, selected industries, 2019-2021 (Billions of dollars and per cent)

	X7 1		2020 2021
		2020-2021	
(Billio	ns of do	Growth rate	
2019	2020	2021	%
655	461	881	91
176	195	432	121
21	49	104	110
21	13	25	93
159	51	110	115
40	16	30	80
50	34	65	93
67	40	50	25
85	41	36	-11
18	13	17	30
6	4	4	8
	2019 655 176 21 21 159 40 50 67 85 18	2019 2020 655 461 176 195 21 49 21 13 159 51 40 16 50 34 67 40 85 41 18 13	(Billions of dollars) 2019 2020 2021 655 461 881 176 195 432 21 49 104 21 13 25 159 51 110 40 16 30 50 34 65 67 40 50 85 41 36 18 13 17

Source: UNCTAD. 2022, p. 4.



In 2021, the value of announced international project finance deals reached and exceeded their pre-crisis value. Among the specified top 10 industries, only 4 industries reached their pre-crisis level: renewable energy, industrial real estate, residential commercial real estate and energy. Compared with 2020, the total increase of announced international project finance deals in 2021 was 91%. Among specified industries, only the transportation infrastructure saw the decline (-11%).

Table 10: Announced international project finance deals, selected industries, 2019-2021 (Number and per cent)

	1	Number	2020-2021	
Sector/industry			Growth rate	
	2019	2020	2021	%
Total	1.260	1.199	1.840	53
Top 10 industries by number				
Renevable energy	704	749	1.090	46
Industrial real estate	54	45	127	182
Residential commercial real estate	65	43	119	177
Oil nad gas	84	68	92	35
Mining	80	58	88	52
Energy	105	75	87	16
Telecommunication	33	51	78	53
Transportation infrastucture	71	50	73	46
Petrochemicals	14	19	29	53
Water and sewerage	20	22	19	-14

Source: UNCTAD. 2022, p. 4.

In 2021, the number of announced international project finance deals reached their pre-crisis level and, compared with 2020, increased by 53%. Among the top 10 specified industries, only water and sewerage industry and energy did not reach the pre-crisis level. Water and sewerage industry is one of the specified top 10 industries that saw the decline in 2021 compared with 2020.

Perspectives on foreign direct investment flows in the upcoming period

Perspectives on foreign direct investment flows after COVID-19 pandemics were very pessimistic as the result of the dramatic decline of foreign direct investments caused by COVID-19 crisis in 2020. Global flows declined by 35% compared with 2019 (UNCTAD, 2021c, p. xi). According to some forecasts, the recovery of FDI flows could take several years for the pre-crisis level to be accomplished (Arsic, 2020, p. 66). However, the latest data on FDI flows in 2021 suggest that they have already recovered - not only did they reach their pre-crisis level, they even exceeded it. This is mainly due to considerable increase of international project finance deals because the investor confidence in infrastructure sectors is strong, supported by favourable long-term financing conditions, recovery stimulus packages and overseas investment programs. Most likely this growth trend of international project finance deals will continue in the upcoming period, picking up greater momentum. Recovery investment plans in most countries focus on infrastructure sectors – including physical, digital and green infrastructure (UNCTAD, 2021c, p. xiii). Renewable energy and utilities continue to be the strongest growth sectors, especialy through international project finance (UNCTAD, 2022, p. 2).

In addition to the infrastructure, the recovery of foreign direct investment flows also includes industries that are crucial for the production capacities growth. Investment in industry (both manufacture and services) was more severely affected by the COVID-19 pandemic then the investment in infrastructure. Ever since the beginning of the COVID-19 pandemic, the announcements of greenfield investment projects for industrial capacities were basically negative. Due to increased foreign investor confidence in industry, higher increase of foreign direct investment flows can be expected.

There are visible uncertainties that are hampering the recovery of the global foreign direct investment flows. The end of COVID-19 pandemic is not yet in sight. We are constantly facing the new waves of pandemic as a consequence of virus mutation. There is also the uncertainty at a global level regarding the attitude towards COVID-19 vaccines. Vaccination rates are not satisfactory. In addition to health issues, the said crisis also affected the deterioration of companies' and country's financial performance. In the conditions of crisis, companies avoid investing internationally, so they invest more into their own country. Demand recovery speed in terms of some products is uncertain, which leads to postponement of



previously planned company investments abroad. All specified uncertainties result in delayed reopening of economic sectors and in that way delayed recovery of foreign direct investment flows.

Conclusion

The crisis from 2019 caused by the Corona virus COVID-19 has completely disrupted world economic flows. The world economy is in a state of recession. Only the crises caused by the two world wars and the Great Depression that occurred during the 1930s outweighed the consequences of the COVID-19 crisis. The analysis of foreign direct investment flows in the world showed that the strongest negative impact of the crisis during the COVID-19 pandemic was on foreign direct investment flows. It is this crisis that indicates the importance of which foreign direct investments have on the functioning of both the world economy and the economies of individual countries, and what are the consequences of their reduction. Therefore, in addition to resolving the health crisis caused by the COVID-19 pandemic, the focus of economic policy should be on reforms in order to recover global economic flows, and thus the flow of foreign direct investment. (Dašić, Kostadinović, Kostadinović, 2022). The growth of foreign direct investment flows, when the pandemic is not over yet, encounters new obstacles. The emergence of a new crisis caused by the military conflict between Russia and Ukraine, has resulted in rising energy prices, which inevitably spills over into rising prices of other products, rising inflation, market instability, etc.

References

- Ajide, F., Osinubi, T. (2021). Covid-19 Pandemic And Outward Foreign Direct Investment: A Preliminary Note, Economics, Vol. 8, No. 2, 79-88. https://doi.org/0.2478/eoik-2020-0019
- 2. Arsić, M. (2020). Osvrt 2. Uticaj pandemije na spoljnu trgovinu i strane direktne investicije u svetu u 2020. godini, Kvartalni monitor ekonomskih trendova i politika u Srbiji, broj 63, FREN, Ekonomski fakultet, Beograd, 64-67.
- 3. Camino-Morgo S., Armijos, M. (2021). Short-term effects of CO-VID-19 lockdown on foreign direct investment: Evidence from Equa-

dorian firms; Journal of International Development, Special Issue Article, 1-22, https://doi.org/10.1002/jid.3598;

- Chaudhary, M. K., Ghimire R. P., Ghimire, D. M. (2020). Impact of covid -19 pandemic on foreign direct investment in Nepal from South Asian perspectives, Journal of Developing Economies, Volume 5, No. 2, 132-141. http://dx.doi.org/10.20473/jde.v5i2.21409;
- Dašić, B., Dašić, D., Trklja, R. (2021). Informal employment as a form of gray economy in the time of COVID 19 pandemics, In: (ed. Koropanovski, N.). International Scientific Conference "Archibald Reiss Days", Thematic Conference Proceedings of International Significance, University of Criminal Investigation and Police Studies Belgrade, p. 440. (439-452)
- Dašić, D., Dašić B. (2021). Branding of states and Nations in (post) COVID 19 era, In Tourism International Scientific Conference Vrnjačka Banja-TISC (Vol. 6, No. 1, pp. 162-179).
- Dašić, B., Trklja, R. (2020). Pad priliva stranih direktnih investicija uslovljen pandemijom COVID-19. Glasnik za društvene nauke. 2020, god. 12, br. 12, 88-103.;
- 8. Dašić, B., Kostadinović, S., Kostadinović, I. (2022) Shadow economy in serbiain the time of Covid 19 pandemic. Horizonti menadžmenta. II (1), 19-3
- 9. Dunning, H. J. (1993). Multinational Enterprises and the Global Economy, Addison-Wesley Publishing Company Inc., Wokingham, Berkshire, England.
- Fang, J., Collins, A., Yao, Sh. (2021). On the global COVID-19 pandemic and China's FDI. Journal of Asian Economics, Elsevier, Volume 74. https://doi.org/10.1016/j.asieco.2021.10130;
- 11. IMF (Drabo, A. (2021). IMF Working Paper, How do Climate Shocks Affect the Impact of FDI, ODA;
- 12. and Remittances on Economic Growth?, WP 21/193, Washington;
- Kalotay, K., Sass, M. 2021. Foreign direct investment in the storm of the COVID-19 pandemic and the exampel of Visegrad countries, AKJournals, Volume 71, Issue S1, 73-92;
- 14. Nawo L., Njangang H. 2022, The effect of covid-19 outbreak on foreign direct investment: do sovereign wealth funds matter?



Transnational Corporations Review, Volume 14, Issue 1, 1-17, DOI: 10.1080/19186444.2021.1964313);

- OECD. (2020). Tackling coronavirus (COVID 19) Browse OECD Contributions, Foreign direct investment flows in the time of CO-VID-19, Paris, https://read.oecd-ilibrary.org/view/?ref=132_132646g8as4msdp9&title=Foreign-direct-investment-flows-in-the-time-of-COVID-19;
- 16. OECD. (2021). FDI in figures, Paris, https://www.oecd.org/ investment/investment-policy/FDI-in-Figures-October-2021.pdf(),
- 17. Praščević, A. (2020). Ekonomski šok pandemije COVID 19 prekretnica u globalnim ekonomskim kretanjima, Ekonomske ideje I praksa, broj 37, 7-22.
- Radević B., Stojadinović Jovanović S., Dašić B., 2016, Međunarodno poslovanje i finansiranje, Departman za ekonomske nauke Državnog univerziteta u Novom Pazaru, COBISS.SR-ID 223825932, UDK 339.9, 339.7. ISBN 978-86-86893-64-2.)
- Radović, M. (2021). Kontrola stranih direktnih investicija u poravu EU u uslovima krize izazvane pandemijom, Strani pravni život, Volume 3, Godina LXV, 361-374, https://doi.org/10.5937/spz65-33936;
- 20. Radu, C., Şova, R.-A., & Popa, A. F. (2020). The impact of fdi over economic growth and how covid-19crisis can impact the CEE economies. CECCAR Business Review, 4, 64-72.
- Radulović, M. (2020). Kvalitet institucija i strane direktne investicije u zemljama Jugoistočne Evrope, U: (redaktori: Leković, V., Veselinović, P.) Institucionalne promene kao determinanta privrednog razvoja Republike Srbije, Ekonomski fakultet Kragujevac, 371-388.)
- 22. Saurav, A., Kusek, P., Kuo, R. (2020). The Impact of COVID-19 on Foreign Investors: Early Evidence from a Global Pulse Survey. World Bank, Washington, https://openknowledge.worldbank.org/ handle/10986/33774;)
- 23. Stojanović, D. (2020). Strane direktne investicije kao izvor finansiranja privrednog razvoja zemalja Jugoistočne Evrope, u aktuelnim uslovima poslovanja, Poslovna Ekonomija, Godina XIV(1):34-51, https://doi.org/10.5937/poseko17-26436;

- 24. Tomić, M., Antonijević, M., pejović, B. (2021). Uticaj pandemije COVID-19 na kretanja SDI – iskustva Srbije, Ekonomske ideje i praksa, broj 42, 47-72, https://doi.org/10.54318/eip.2021.mt.296;
- 25. UNCTAD. (2020b). World Investment Report 2020, New York and Geneva;
- 26. UNCTAD. (2021c). World Investment Report 2021, New York and Geneva;
- 27. UNCTAD. (2020a). Impact of the COVID-19 pandemic on global FDI and global value Chains: Updates Analysis, Special Issue, New York and Geneva, https://unctad.org/system/files/official-document/ diaeiainf2020d3_en.pdf;
- 28. UNCTAD. (2022). Global FDI rebounds strongly in 2021, but recovery highly uneven, Investment Trends Monitor, Issue 40, New York and Geneva. https://unctad.org/system/files/official-document/ diaeiainf2021d3_en.pdf?_x_tr_sl=en&_x_tr_tl=sr&_x_tr_hl=sr-Latn&_x_tr_pto=sc
- 29. UNCTAD: (2021b). Trade and Investment Under COVID-19, New York and Geneva, https://unctad.org/system/files/official-document/ osginf2021d1_en.pdf;
- 30. UNCTAD. (2021a). The COVID-19 Crisis in LDCs, New York and Geneva, https://unctad.org/system/files/official-document/ldcr2020_ch1_en.pdf));
- Vennila, R. (2021). Pre And Post Covid 19 Impact On Foreign Direct Investments In India, Palarch's Journal of Archaeology of Egypt/ Egyptology 18(1), 4741 – 4749;
- Zwolankiewicz, A. (2021). The Brave New World of Foreign Investment in the Wake of Covid-19 Pandemic: Current Situation and Potential Disputes. CIFILE Journal of International Law, Vol. 2, Issue. 4, 01-25 https://doi.org/10.30489/CIFJ.2021.276883.1030;
- 33. Živković J. (2020). Komparativna analiza stranih direktnih investicija u zemljama Zapadnog Balkana, U: (redaktori: Leković, V., Veselinović, P.) Institucionalne promene kao determinanta privrednog razvoja Republike Srbije, Ekonomski fakultet Kragujevac, 389-406.



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CRIMINAL LAW ASPECTS OF SOCIALLY RESPONSIBLE BUSINESS

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Key Words: law, social responsibility, ethics, laws **Abstract:** Socially responsible behaviour is a desirable long-term marketing and business orientation of a company. Its essence is in the action which is much more than what is prescribed by the law. Corporate social responsibility excludes slavery, abuse, exploitation, sexual exploitation and abuse, endangering the dignity and freedom of the human person, i.e., the whole package of basic human freedoms and rights. There are noticeable different approaches of EU member states when it comes to legal regulation of the concept of corporate social responsibility.

Introduction

rom its inception until the present day, capitalism has gone through several phases - liberal, monopoly and state capitalism. Increasingly evolving market relations are leading to economic and social differentiation and division into rich and poor. On the one hand, richer people, mostly employers, are getting richer and increasing their economic base, and on the other hand, there are more and more ordinary people, dissatisfied with the attitude of these employers towards them. Karl Marx (1958, 513) argues that this process is based on the capitalist appropriation of surplus value, the forcible seizure of the basic means of subsistence of workers. According to this theory, no company, brand can be ethically built and created. According to the author, Lenin, like Marx, is of the opinion that capitalism as a whole is immoral, with the workers in the West being reconciled by the increases obtained in higher wages and the greater number of goods they can buy with those wages.

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Other authors (De George, 2003, 175-178) point to the fact that the war between employers and workers stems from the fact that management wants to pay for work the least it can to maximize profits, and workers want to get the most out of what they deserve. There are acceptable answers to the Marxist accusation of exploitation. These answers do not satisfy Marxists, just as attempts to modernize Marx's theory do not satisfy most Western economists. The claim that the worker deserves the full value he produces is not in itself clear in accordance with Marx's own ideals of fair distribution, which dictates that everyone gives according to his abilities and receives according to his needs. Exploitation is when a worker is paid less than the marginal price of his labour. Further, these theories do not take into account the role of risk and entrepreneurial spirit. In her book No Logo, Naomi Klein (2002, 8-9) states that more and more world-famous companies are not building their brands in an ethical way. As proof of the above, she mentions her visit to Jakarta, where Indonesians in hellish conditions in factories sew beautiful stickers for multinational companies, such as Nike. The textile workers are rarely over the age of twenty-one, earning \$ 2 a day. And yet, job opportunities are greater in Jakarta than in the Indonesian archipelago, which is why many migrants come to Jakarta, and that does not lead to xenophobia of the same magnitude as in Europe. (Prnjat, 2019).

It is considered that the State Administration is responsible for the characteristics of the legal and political system of each country (Nikolić, et al, 2017), so that various rules and regulations can force companies to operate in a socially acceptable way, and the population to act responsibly towards society and natural environment and prevent the emergence and spread of social and environmental problems. In addition, by responsible behaviour of state administration bodies towards the population and responsible business of public enterprises, the state can build a model of desirable behaviour (Stanković, et al., 2012). However, in some situations, such as the business of multinational companies, the state may not be efficient enough to prevent social problems. In multinational corporations, the process of production, sales, payments ... is not completed in one country, so one state cannot control their complete business and prevent harmful effects on society that they can create (Mihajlovic, V. 2019). Figar states that many multinational companies, abusing their economic power, as well as differences in legal regulations and economic characteristics of individual countries, carried out a large number of activities in an immoral and socially unacceptable way.



The fact that people, and above all politicians and businessmen in the conditions of the crisis, to a much greater extent than in normal circumstances, call on or return to ethical principles (Prnjat, 20017). Unfortunately, as soon as the crisis begins to subside, the ethical aspects of human work move to the margins of social thought and social events (Marinković et al., 2013, 19). Corporate Social Responsibility (CSR) has become a well-known concept over the last decade and a half. It aims to alleviate the above-mentioned problems, but without the Marxist theory of revolution. Employees, government representatives, academic scholars, NGOs and international organizations have been contemplating which role they have to play in regard to CSR. Laws have been drafted that promote socially responsible behaviour by companies (Tineke, 2014). The market economy, in addition to representing one of the important turning points in history, influencing changes not only in the economy but also in lifestyle, interpersonal relations and the system of individual and social values, opened in a new way the question of morality and economy (Birnbacher, 1999). Thanks to modern media, which today transmit information almost in "real time" (Dašić, 2018), consumers often turn against companies that violate regulations, codes, pollute the environment, use child labour, are accused or convicted of harassment at work, discrimination or poor working conditions of employees. That is why more and more companies want and strive to be recognized as socially responsible (Dašić, 2014). Vasiljevic and a group of authors (2009, 56) state that there is no generally accepted definition of socially responsible behaviour, since it is a philosophical concept, not a legal institute. In principle, the understanding of socially responsible behaviour is conditioned by the affiliation of the branch in which the company operates (Trochon, Vincke, 2006, 268). For companies in the oil or chemical industry, socially responsible behaviour refers primarily to the preservation of the natural environment, in the food industry the issue of health safety and ecology is emphasized, in trade the emphasis is on ethics, in the pharmaceutical industry on health and environmental protection, with companies engaged in handicrafts, textile and toy industry, special emphasis is placed on the protection of human rights and employees' rights. Thus, the term "corporate social responsibility" is not new, at least in the academic literature, but the concept has evolved and we can identify several definitions of which we cite one (Dwight, 2021): Corporate social responsibility is a concept that integrates social and environmental issues in their business and in their interaction with stakeholders on a voluntary basis."

Development of the concept of socially responsible business.

Discussions of corporate social responsibility, corporate governance and business ethics have yielded many reports, and created many networks of organisations dedicated to improvement of thought and practice in the areas (Donaldson, Fafaliou, 2003). The European Commission defines corporate social responsibility as a concept according to which a company on a voluntary basis integrates care for social issues and environmental protection into its business activities and relations with stakeholders. The current belief that corporations have a responsibility to society is not new (Arsić, 2011). In fact, it is possible to trace companies' concern for society several centuries ago. However, it was not until the 1930s and 1940s when the role of managers and the social performance of corporations began to appear in the literature that authors began to discuss what specific corporate social responsibilities are (Mauricio et al., 2019). The view of other authors is that the origins of the social component in corporate behaviour can be traced back to ancient Roman laws and can be seen in entities such as asylums, homes for the poor and old, hospitals and orphanages. This notion of corporations as social enterprises continued with English law during the Middle Ages, later expanding to the sixteenth and seventeenth centuries with the influence of the English crown, which sees corporations as an instrument of social development (Chaffee, 2017, 349). During the eighteenth and nineteenth centuries, Christian religious philosophy and the approach to a permanent social context were seen as a response to the morals and failures of society. The religious roots of Victorian social conscience gave a high level of idealism and humanism, and by the end of the 1800s philanthropic efforts focused on the working class and creating a welfare scheme with examples seen in practice in Europe and the United States (Carroll, 2008, 22). By the 1920s and early 1930s, business managers began to take responsibility for balancing profit maximization by creating and maintaining a balance with the demands of their clients, their workforce, and the local community (Sikora, Barry, 1978). It was not until the early 1950s that the definition of responsibilities was first approached and can be understood as the beginning of the modern definition construction of corporate social responsibility. In fact, it was during the 1950s and 1960s when academic research and the theoretical focus of socially responsible business were concentrated on the social level of analysis providing it with practical implications (Lee, 2008, 59).

During the 1990s, the process of globalization increased the operations of multinational corporations that now faced different business environments



abroad. For these global corporations, this has meant new opportunities that have come along with increasing global competition for new markets, reputational risk due to growing global visibility, and emerging pressures, demands and expectations from the host country to the host country (Carroll, 2015, 90).

The findings of one study (see Mauricio et al., 2019) offer empirical evidence for the popularly accepted assumption that corporate social responsibility and its implications vary across different dimensions of national culture. In another study (Muminović, Pavlović, 2011), the effects of the application of the concept of sustainable development on the profitability of the Aquafil Italy group were analysed. Aquafil Italy has recognized the benefits of implementing sustainable development and has already achieved enviable results in the first two years.

The issue of corporate social responsibility was first legally established in German law in 1937, with the adoption of the Law on Joint Stock Companies, which incorporated the state's interest in joint stock companies. Thus, for the first time, the state was formally nominated as one of the constituents interested in the company's business. Until then, the issue of corporate social responsibility, primarily from the point of view of theory and later institutionally, it began to be discussed only with the emergence of the stock market crisis and stock market scandals, as one of the segments of corporate governance, when it was recognized that the company still has influence over the state in various forms of action (Trochon, Vincke, 2006). Although the normative framework of Serbia does not lag far behind in the field of socially responsible business behind the modern trends of this regulation in the environment, it still encounters underdeveloped business case law, especially when it comes to the responsibility of controlling shareholders, management, auditors, etc. (Rajnović, 2016, 1). Companies in Serbia are characterized by a very low level of application of certain elements of CSR, and CSR is not given strategic importance. This is also indicated by the results of a study (Arsić, Stojanović, 2020), which indicate that employees with a higher level of education are better acquainted with the concept of corporate social responsibility, which was expected. On the other hand, as many as a quarter of respondents have never heard of this concept, which is somewhat understandable because it is still not applied as such in most small and medium enterprises in Serbia. The application of this concept is characteristic of larger organizations that apply the successful business practice of foreign companies in order to better position themselves not only in the domestic

but also in the foreign market. CSR activities of most companies are reduced to periodic sponsorships and donations, and CSR is mostly understood as a marketing tool, a way to raise the reputation of society, the media and government, but above all with business partners and customers. (Ivanović-Đukić, 2011, 29).

Since the beginning of 2021, Serbia has issued more than 18,000 permits to foreign workers due to the lack of domestic workers, according to data from the National Employment Service. Most of them come organized, through intermediary agencies or the companies that employ them - but due to "legal gaps" and inconsistencies in regulations, control of living and working conditions by Serbian inspections is rare. About 400 workers from Vietnam arrived in Serbia in the spring engaged on the construction of a new car tire factory of the Chinese company Linglong. Confiscated passports, cold, beds without mattresses, tensions and a heated atmosphere - the story of living and working conditions of several hundred Vietnamese in Zrenjanin are just some of the issues that are in the focus of the Serbian public at the time of writing of this paper. The company Linglong, which is the sponsor of the Serbian Football League, is facing great ethical and moral dilemmas, i.e., regarding accusations of violating the rights of its employees (Maričić, 2021).

Naomi Klein (2002, 158) notes that wages are low everywhere, i.e., everyone's wages are high compared to wages in China, explaining that such a wage situation is led by China itself. She points out that working groups in China agree that the wages on the assembly lines will be around 87 cents per hour. As an example, she cites multinational companies that closed hundreds of textile factories in the United States and Germany, where textile workers were paid an average of 10 to 18.5 dollars per hour (see Table 1).



Company	Factory in China	Working hour	Hour in week	Working konditions
Wal-Mart Kathie Lee	Liang Shi	0,23\$	60-70	Never heard of the code, dirty dormitories, no contracts
Wal-Mart Kathie Lee	Ya Li, Ltd	0,28\$	60	Forced labor, penalties, no contracts
Wal-Mart Kathie Lee	Lee Wen	0,35\$	84	For. labor, penalties, no contracts, have not heard of the code
Wal-Mart	Tianjin Yuhua	0,23\$	60	He retreats and goes to even cheaper factories
An Taylor	Kang Yi	0,14\$	96	They haven't heard of the code, 6- 10 people in the dorm
Ralph Lauren	Iris Fashions	0,20\$	80	They don't have a union, \$ 0.06 an hour for overtime
Esprit Group	You Lii	0,13\$	93	They have not heard of the code, no overtime is paid
Liz Claiborne	Shangai	0,25\$	66	Constant termination of employment contracts
Liz Claiborne	Shangai	0,28\$	70	They have not heard of the code, no overtime is paid
J.C.Penney	Zhong Mei	0,18\$	78	There is no union, they have not heard of the code
Kmart	Shangai	0,28\$	70	There is no union, they have not heard of the code
Cherokee Jeans	Meiming Garment	0,24\$	70	There is no union, they have not heard of the code
Sears	Tianjin	0,28\$	60	He retreats and goes to even cheaper factories
Structure	Aoda G. Factory	0,32\$	70	They don't have a union
Nike	Wellco	0,16\$	84	Children employed, have not heard of the code
Nike i Adidas	Yue Yuen	0,19\$	84	Forced overtime, they haven't heard of the code
Adidas	TungTart G. Factory	0.22\$	82	Forced exercise, have not heard of the code

Table 1. Manufacturing work profile

Customized according to: Naomi Klejn, No logo, 2002., p. 356

In other words, viewed through historical retrospect and in modern times, forced and slave labour essentially differ only in the degree of slavery - from the most difficult - in chains to those somewhat milder, but by no means more humane forms. We are not talking about work as economic coercion, but about its sociological aspects, its moral and human essence and the meaning of the political-legal barrier to forced and slave labour are represented by three groups of political-legal documents:

- International legal documents and standards;
- Labour and social legislation;
- Criminal law.

In terms of their social, human rights, environmental, and economic actions, corporations are currently under more scrutiny. Corporate social responsibility has grown to be a major legal problem on a worldwide scale (Mihalovic, 2019). The legislative approaches can be divided into three categories: decision making, information disclosure, and explicit direct promotion (Zhao, 2017; Kostadinović, et.al. 2021)).

Legal regulations of corporate social responsibility

Some authors (Schaufeli, et al., 2006, 707) define work engagement as an affirmative, satisfactory mental state related to work. In reality, it is not primarily focused on any circumstance, item, or person and exists in the long run as an implicit affective-mental state rather than as a short-term distinct mental state.

The path from voluntariness to legal obligation does not mean monopolizing the principle of obligation, but maintaining the standard of voluntariness in all segments where greater flexibility and economic interest is needed, i.e., its "moving" into legal obligations in segments where greater protection of the "users of services" of the company is needed and a greater guarantee of the enforceability of the prescribed rights of the corps of social responsibility of the company. (Vasiljevic, 2013, 5). The right to dignity of employees is a complex right that encompasses various aspects, such as the prohibition of discrimination and harassment at work, the creation of a healthy working environment and favourable interpersonal relationships, respect for the personality and rights of employees (Kostadinović, 2005). The prohibition of discrimination in the European Union since 1992 has been part of the primary legislation, both the European Union. The employer is



obliged to provide a working environment in relation to all circumstances and possible dangers, regardless of who and how performs the work.

Unlike the United States, which basically does not know the universally accepted system of corporate social responsibility, the EU launched the first systemic document on this phenomenon in 2001 (European Commission). The European Commission has adopted the so-called Green Paper, which defined the phenomenon of corporate social responsibility as "a concept according to which companies on a voluntary basis integrate the care of social and environmental issues into their business activities and relations with stakeholders."

The different approach of the EU member states is noticeable when it comes to the legal regulation of the concept of corporate social responsibility. In any case, the universal trend of EU regulations is that the rules of corporate social responsibility are particularly emphasized in the area of mandatory corporate reporting and the duties of directors.

For example, in France there is no specific regulatory framework for the implementation of the company's social responsibility system, but it is mainly implemented through voluntary activities. However, in 2001, the French Parliament adopted the New Economic Regulations Act (NRE - Nouvelles regulations economiques) with the aim of introducing an "ethical" aspect to companies' operations. At that time, the obligation was introduced that companies whose shares are listed on the stock exchange, "in their annual report, also state the data on how they take into account the consequences of their business on society and the environment."

The United Kingdom is one of the countries that has relatively developed legislation on the concept of corporate social responsibility. Although many shareholder-friendly British legislation, new provisions in the 2006 Company Act (further in the text CA) indicate the UK government's determination to give the concept of social responsibility a more prominent place in economic and social flows of the country.

In the Czech Republic, there are no legal provisions or instructions for reporting on corporate social responsibility, but the decision on these issues is left to the discretion of the companies themselves. Some companies report on a voluntary basis on some of their activities, most often on issues related to the environment and employees, but such information is usually of a marketing nature. Despite intensive international engagement in the promotion of numerous initiatives, Switzerland does not have unified regulations on the concept of corporate social responsibility. Thus, the Code of Obligations (Code des Obligations or CO) does not prescribe the obligation of the director to take into account the consequences of the company's business on the interests of stakeholders, while in some countries there is a belief that there is a direct interdependence of the effects that the company reflects on society and the environment with its financial results.

When it comes to the position of Serbian law, it should be said that company regulations follow the development of regulations in relevant European countries in terms of responsibility of persons who have "special duties to society", which certainly include members of society (directors and others). Among other things, their obligation to "perform their duties conscientiously in that capacity... and to act in the best interest of society" is prescribed. When it comes to other regulations, which regulate the obligation to submit reports on the so-called non-financial issues (which certainly include reports on ethical, social and environmental aspects of the company's behaviour), the situation is quite different - such an obligation is not currently prescribed and thus remained formally in the waters of voluntariness.

Child labour is illegal in many parts of the world, but not in the whole world. Regardless of the forms of child labour, from slave child labour to child labour that mothers bring with them to work, their full-time children are denied basic children's rights such as education, and are doomed to an impoverished life. Harassment at the workplace is not a phenomenon related exclusively to the modern age, it is a permanent companion of the industrial, market mode of production. National and international labour and legal standards, including Serbian legislation, that address these issues are completely clear, unambiguous and transparent. Namely, international legislation prohibits all forms of harassment of workers in the workplace, treating some of the most radical types of harassment as a criminal offense. In international legal and political standards, primarily in the conventions and recommendations of the International Labour Organization, the European Social Charter, the European Declaration of Human Rights, in recent decades there has been a tendency to raise standards in this area, i.e., expanding the list of behaviours and attitudes, that is, expanding the list of those types of behaviour and attitudes that are treated as harassment in the workplace, as well as establishing and developing a range of legal and political mechanisms to prevent harassment of



employees in the workplace. This positive tendency was conditioned, on the one hand, by the overall democratization of society, the dynamic development of new technologies, and on the other hand, by facing the growing social cost of harassment in the workplace, paid not only by those exposed to harassment but also by society as a whole (Marinković, et al., 2013, 229).

Natural resources have long been considered inexhaustible and indestructible. Lately, people have realized that this is not the case and that there is a great danger that we will lose some non-renewable resources forever, and maybe even some renewable ones, such as drinking water. The main goal of cleaner production is the prevention or reduction of waste, as well as more efficient use of energy and resources. To achieve this, it is necessary to adopt new technologies and techniques, along with new values and ways to meet the needs of humanity. This new approach should be applied to the production process, consumption and disposal of goods and services, in order to obtain the same or higher production performance with much less energy and resources consumed. The cleaner production implies (Vuković et al., 2020,188):

- reducing the amount of waste produced or avoiding its production;
- more efficient use of energy and resources;
- production of environmentally friendly products and provision of services; as well as
- achieving a smaller amount of waste produced, lower prices and higher profits.

The regulations of the European Union concerning the protection of the environment in the broadest sense are very numerous and diverse. They include several basic categories according to which they are classified: climate change, sustainable development, waste management, air pollution, water management, nature conservation and diversity of plant and animal species, soil protection, population protection, noise protection. It would be necessary for the government and its agencies responsible for environmental protection to make concerted effort in creating awareness to the general citizenry on the need to be socially responsible to the environment (Mordi, et al., 2012).

Conclusion

In the strong economies, institutional investors, regulators, non-government organisations (NGOs) and civil society groups have generally responded by collaborating with the private sector to make corporate selfregulation more enforceable and effective (Mia Mahmudur R., 2013).

As a business philosophy that achieves long-term benefits for the organization and the society in which it operates, socially responsible business must be managed, from the definition of strategy, program and action plan, which structures the process from the very initiation to the measurement of the final effects (Vlastelica-Bakić, et al., 2012). In addition to achieving economic growth and increasing competitiveness, modern society expects from companies, communicating with employees (Prnjat, 2022) an active contribution to the sustainable development of the economy and society, as well as to the preservation of the environment (Vuković, et al., 2022). Socially responsible business as a business philosophy is aimed at achieving long-term benefits for the company and the society in which it operates. Although the concept of socially responsible business is already accepted in theory and practice, the aim of the paper is to highlight the arguments and benefits of applying the concept in the business of companies.

Bearing in mind everything that has been stated so far, it is undeniable that Serbia must make additional efforts in order for socially responsible business to become a topic that all companies, whether they are small, medium or large companies, seriously deal with, since it is another from the segments in which our country lags behind developed market economies. The concept of CSR must be concretized through legal and by-laws, both in the form of tax breaks or other benefits that companies can achieve in the short term, and in the form of imposing obligations on companies with respect for market principles and general social interest.

References

 Arsić, S. Stojanović, A. (2020) Uloga i značaj korporativne društvene odgovornosti u savremenom poslovanju organizacija u Srbiji. <u>https://konferencija.komorapirot.com/33.ULOGA%20I%20ZNAC</u> <u>AJ%20KORPORATIVNE%20DRUSTVENE%200DGOVORNOS</u> <u>TI.pdf</u>



- 2. Арсић, З., (2011) Друштвена одговорност корпорациј. Зборник радова Правног факултета у Новом Саду, 2/2011, 45-52
- 3. Birnbacher, D., (1999) Ethic and Social Science: which kind of cooperation, Ethical Theory and Moral Practice.
- 4. Carroll, A. B. (2015). Corporate social responsibility: The centerpiece of competing and complementary frameworks. Organizational Dynamics, 44(2), 87–96.
- 5. Chaffee, E. C. (2017). The origins of corporate social responsibility. University of Cincinnati Law Review, 85, 347–373.
- 6. Carroll, A., (1991) The Pyramid of Corporate Social Responsibility: Toward the Moral Management of Organizational Stakeholders. Business Horizons, Vol. 4, no. 3: 1-20.
- Carroll, A. B. (2008). A history of corporate social responsibility: concepts and practices. In A. M. Andrew Crane, D. Matten, J. Moon, & D. Siegel (Eds.), The Oxford handbook of corporate social responsibility (pp. 19–46). New York:Oxford University Press.
- 8. Dwight W. J. (2021) Corporate social responsibility: Challenges and opportunities for trade unionists; https://library.fes.de/pdffiles/gurn/00091.pdf
- 9. Di Džordž, R. (2003) Poslovna Etika, Filip Višnjić, Beograd.
- 10. Дашић, Д. (2018) Гласине као вид симболичке моћи медији између истине и манипулације, *Национални интерес*, бр.2, 2018, 61-80. DOI: https://doi.org/10.22182/ni.3222018.4
- 11. Дашић Д., (2014) "Етички аспекти маркетинг микса непрофитних организација, *Пословна економија*, год 8, бр. 2/2014-315-33-0, doi: 10.5937/PosEko1402315D
- 12. Dašić, D. R., Milojević, N. D., & Pavićević, A. M. [2020]. Ethical aspects of guerrilla and ambush marketing. *Ekonomski signali*: poslovni magazin, 15(2), 49-69. DOI: 10.5937/ekonsig2002049D
- 13. Donaldson, J., Fafaliou I. (2003) Business ethics, corporate social responsibility and corporate governance: a review and summary critique. European Research Studies Volume VI, Issue (1-2).

- Figar, N., (2010) Društvena odgovornost preduzeća od neprihvatanja do integrisanja u poslovnu strategiju. Teme, God. 34, Br. 2: 569-584.
- Ивановић-Ђукић, М. (2011) Promovisanje društveno odgovornog poslovanja preduzeća u Srbiji. Sociologija, Vol. LIII (2011), N° 1, 21-42. <u>http://www.doiserbia.nb.rs/img/doi/0038-0318/2011/0038-03181101021I.pdf</u>
- 16. Klein, N. (2002) NO LOGO: bez prostora, bez izbora, bez posla, bez logotipa, V.B.Z., Zagreb.
- Kostadinović, S., Kostadinović, I., Krasić, D., (2021). Brand and legal protection as a prerequisite for successful business, Ekonomski signali, Vol 16, 23-38. DOI: 10.5937/ekonsig2102023K
- 18. Kostadinović, S., (2005) Međunarodno privredno pravo, Treće izmenjeno i dopunjeno izdanje, Ekonomski fakultet u Subotici, Subotica.
- 19. Lee, M.-D. P. (2008). A review of the theories of corporate social responsibility: Its evolutionary path and the road ahead. International Journal of Management Reviews, 10(1), 53–73.
- 20. Marinković, V., Marinković, D., Stefanović, N. (2013) Etika kao društvena praksa. Visoka strukovna škola za preduzetništvo, Beograd.
- 21. Maričić, S. (2021) Ljudska prava i fabrika Linglong: Slučaj vijetnamskih radnika u Zrenjaninu - šta sve znamo do sada. BBC NEWS. https://www.bbc.com/serbian/lat/srbija-59324121
- 22. Mauricio A. Latapí A., Lára J. and Brynhildur D, (2019) A literature review of the history and evolution of corporate social responsibility. International Journal of Corporate Social Responsibility 4:1https://doi.org/10.1186/s40991-018-0039-y
- 23. Muminović, S., Pavlović, V. (2011) Uticaj koncepta društveno odgovornog ponašanja na rentabilnost kompanija (Studija slučaja grupacija Aquafil Italija) Industrija1/2011, 21-46
- 24. Marks, K. (1958) Kapital, Култура, Београд
- 25. Mia Mahmudur R. (2013) Legal Regulation of Corporate Social Responsibility. A Meta-Regulation Approach of Law for Raising



CSR in a Weak Economy. Springer Heidelberg New York Dordrecht London. DOI 10.1007/978-3-642-40400-9

- 26. Mordi, C., Opeyemi, S., Mordi, T., Ojo, S. (2012) Corpor. 1, 1 8 http://upg-bulletin-se.ro/old_site/archive/2012-1/1.%20Mordi_ Opeyemi_Tonbara_Ojo.pdf
- Mihajlović, M. (2019) Društveno odgovorne aktivnosti u sportu. Sport i biznis, br 5, 38-45. https://www.fzs.edu.rs/nauka/ izdavastvo/#
- 28. Mihajlović, V. (2019) Tendencije upotrebe dopinga kod vrhunskih sportista i uticaj na rad sportskih organizacija. *Sport i biznis*, br 5, 31-37. https://www.fzs.edu.rs/nauka/izdavastvo/#
- 29. Nikolić, I. A., Mandić, D. P., & Kostadinović, I. S. (2017). Stavovi nastavnika prema obrazovnoj koncepciji efikasne škole. Sociološki pregled, 51(4), 547-577. https://doi.org/10.5937/socpreg51-16200
- Прњат, А. (2017) "Етика аутентичности и секуларизација", у: А. Вранеш, Љ. Марковић (прир.), Транскултуралност и библиотеке, 2. Међународна научна конференција MELISSA, Београд, 29. септембар - 1. октобар 2017., Београд: Филолошки факултет Универзитета у Београду, 217 – 224.
- Прњат, А. (2022) "Филозофска херменеутика и хуманистика".
 У: Зоран Кнежевић, Ненад Цекић (ур.) Филозофија и наука: Зборник радова са научног скупа одржаног 21. и 22. октобра 2020. године. Београд: САНУ; Филозофски факултет, 209 – 218.
- Prnjat, A. (2019) Xenophobia and Identitarian Nationalism, in: Vladimir Milisavljević, Natalija Mićunović (eds.), Xenophobia, Identity and New Forms of Nationalism, Belgrade: Institute of Social Sciences, 240 - 251.
- Rajnović, Lj. (2016) Društveno odgovorno poslovanje u funkciji poboljšanja privrednog ambijenta u republici Srbiji, Ekonomski vidici, XXI (2016), Br. 1, str. 1 – 13
- 34. Schaufeli, W.B.; Bakker, A.B.; Salanova, M. (2006) The Measurement of Work Engagement With a Short Questionnaire. Educ. Psychol. Meas. 66, 701–716.

- 35. Stepanović, B. (2015) Lideri društvene odgovornosti, Caligraph, Business Info Group, Beograd.
- 36. Stanković, Lj., Đukić, S.,Popović A. (2012) Razvoj društveno odgovornog marketinga., Marketing, 43/3, 181-190.
- 37. Sikora R.I, Barry, B. (1978) Obligations to Future Generations. Philadelphia Temple University Press.
- Vlastelica-Bakić, T., Krstović, J., & Cicvarić-Kostić, S. (2012). Poslovna opravdanost društveno odgovornog poslovanja. Marketing, 43(3), 191-198. <u>https://doi.org/10.5937/markt1203191V</u>
- Vuković, M., Voza, D., Vuković, A. (2022) Metode posmatranja i ispitivanja u istraživanju ekološke svesti. *Horizonti menadžmenta*. II (1), 123-141
- 40. Vuković, M., Voza, D., Vuković, A. (2020), Poslovna etika. https://www.menadzment.tfbor.bg.ac.rs/wp-content/uploads/2020/ 04/Poslovna-etika_udzbenik.pdf
- 41. Васиљевић, М. (2013) Друштвена одговорност компанија (Од политике, преко морала, до права) Анали Правног факултета у Београду, година LXI, 1/2013, 5 28)
- 42. Trochon, J.Y., Vincke, F. (2006): L' entreprise face à la mondialisation: oportunités et risques. Bruylant, Bruxelles.
- 43. Trochon, J.Y., Vincke, F. (2006): L' entreprise face à la mondialisation: oportunités et risques. Bruylant, Bruxelles.
- 44. Tineke L., (2014) Legal Aspects of Corporate Social Responsibility' 30 (78) Utrecht Journal of International and European Law 1, DOI: http://dx.doi.org/10.5334/ujiel.bz
- Zhao, J (2017) Promoting More Socially Responsibly Corporations through a Corporate Law Regulatory Framework. Legal Studies, 37 (1).pp. 103-136. ISSN 0261-3875 https://doi.org/10.1111/lest.12140



SAFETY IN SPORTS

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SPORTS COMPETITIONS SAFETY MANAGEMENT

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Key Words: security, sports industry, sports market, information technology, surveillance cameras Abstract: Safety is the most important segment in the organization of sports competitions. The sports industry is turning over large amounts of money, measured in hundreds of billions of euros/dollars. The sports market cannot allow itself to be disrupted for safety or any other reason because it does not develop and lose money. In this paper, the authors made an analysis of safety aspects within the sports industry necessary for the successful organization of sports competitions. Precisely for these reasons, safety management can be divided into: 1. Safety management of sports competitions; 2. Safety management of top athletes; 3. Safety management of sports venues; 4. Security management of sports companies. Information technology today is the most efficient method of the security sector in sports. Thanks to surveillance cameras and facial recognition program, we can identify potential hooligans or terrorists who may endanger the safety of sports competition.

Introduction

he sports industry represents one of the fastest growing branches of the industry. In order to develop successfully, it is necessary that the safety aspect must be at the highest maximum level. Otherwise, the whole concept of sports competitions, audience presence, sponsors and even the media itself, as well as the entire sports industry, would be financially destroyed. Terror and anarchy would reign, which would have a very negative and disastrous effect on sports competitions. The sports industry represents one of the fastest growing branches of the industry. In order to develop successfully, it is necessary that the aspect of security be at the highest maximum level. Otherwise,

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the whole concept of sports competitions, audience presence, sponsors and even the media itself, as well as the entire sports industry, would be financially destroyed. Terror and anarchy would reign, which would have a very negative and disastrous effect on sports competitions. (Lovrinčević, 2015, 549).

The sports industry consists of four basic bearers. The first part is represented by coaches, the second place is reserved for athletes and the third place is occupied by sports managers, while the fourth place belongs to the media. (Radošević, 2020, 134). Safety belongs to the third part which includes sports managers whose mission is to organize sports competitions. Safety represents the most important aspect in the enactment of sports competitions. We are witnesses of incidental situations that occur either on sport playgrounds, sport venues or in sport associations/clubs, companies and the media. Precisely because of its value, the sports industry has become the source of conflicting situations in which we can see the interests of different groups that intersect themselves, and their roots stem within the supporters and the national ideology. Sport itself has become a profitable field that offers a possibility of earning a lot of money by selling television rights in the best sport competitions (IOC, FIFA, UEFA, NBA, NFL, NCAA) and also by negotiation with top level athletes. In this way sport has become attractive to hooligans, and members of criminal groups that try to make a profit using their own methods.

Safety within sports competitions is imperative because terrorism related to politics spreads in all segments of society and all other branches of various industries (Penezic, 2021; Turcinovic, 2021). Also, safety management helps companies to save their ideas and new technologies for their products, which have yet to appear on the sports market, from other companies that will do anything to steal and use good ideas. In the sports industry, from a safety point of view, the police have a major role to play. It is impossible to organize sports events without the consent of the Ministry of Interior Affairs, as necessary assessments must be made in tandem with the safety of sports competitions and sports venues, such as stadiums, halls, and swimming pools. There are often situations where certain sports events are declared high-risk ones, where the safety of both sports venues and the participants in the sports events is strengthened.

In the organization of a sport event or competition, the most important role is played by the safety commissioners at sports federations (Radakovic, Marinkovic, 2021). Furthe-rmore, depending on the level of



competition, cooperation with national or local authorities is necessary. In case the national team plays a quali-fying match that is of high-risk, the event will be organized by national and local authorities in the form of safety federations such as the Ministry of Interior Affairs (MUP) and the Security Intelligence Agency (BIA), who will give their own risk assessments when organizing a sporting event.

Among the riskiest sporting events concerning security, in Serbia, are football matches. These high-risk matches include the local derby between two most popular football clubs, Red Star and Partizan, as well as matches between the Serbian national team on the one side and the Croatian or Albanian national team on the other. These high-risk activities may happen within the stadium and around it while the matches are being played, as well as on the central streets of the host city. Within the preventative measures, the security services, in cooperation with the national association or club, influence citizens firstly via national and local media, warning them of items they are not permitted to carry, as well as ways to check the entrance to the stadium in the form of metal detectors and counter-diversion doors (CD doors). New challenges in the safety of sports competitions, such as the case of the "Drone" in the match between Serbia and Albania, which could have endangered the lives of the participants and the audience, forced the security services to introduce new security methods worldwide. Security today implies the deployment of snipers who would shoot down a drone that represents a potential danger because it could bring explosive devices that would cause the injury and death of a large number of people and athletes present in stadiums.

The goals and methods of research

The goal of this research is to explore the role and the influence of safety management in the sports industry. In the research, we have used historical methods, content analysis method, description method, comparison method, as well as empirical research where we asked the questions to respondents related to the reasons for attending or not attending sports matches. In this research, we have analyzed various new technologies and software in safety management.

The safety management role in the sports industry

Safety is the main condition for the development of the sports industry. Whether it is about sports competitions, sports venues, sports companies or some other sectors within the sports industry. Using historical methods, we can state that the biggest sports incident happened during the Olympic Games in Munich in 1972 when Israeli sportsmen were killed in a terrorist attack. The German Army and Police were unprepared; they were unarmed and did not have access to intelligence information and of any signs leading to such an incident. There is a lot of money to be made in the sports industry; hundreds of billions of dollars, in fact. Sports markets cannot permit themselves to be disturbed because of safety issues or any other reason as it hampers their development and makes them lose money in that way. The Government of the Republic of Serbia enacted a law to stop violence and inadequate behavior in sports events in 2003. ("Law on Prevention of Violence and Misbehavior at Sports Events", 2003). We should also mention that the police guarantee the control of the fans at the stadiums, but they have no right to interfere in certain situations. The police have all the relevant information about the leaders of the fan groups and also about their activities, either at the stadium or in their private life. When an incident happens, the police react and arrest them immediately.

Unfortunately, this is the limit of police engagement. The case is given to a public attorney, who often caused by lacks of evidence, releases arrested fans. Many hooligans were accused for dozens of criminal acts, from robbery, through distribution of narcotics, to attempted murder. The reasons of these actions can be linked to the fact that they are leaders of fan groups who control wide national masses at stadiums, and they are well connected either to the political structures or to an opposition. There is no politician who wishes to hear bad ovations which is considered to be the beginning of the end of a political career.

On the other hand, such situations have created public pressure and the state is now obliged to face the problem of hooliganism. The best example of a successful fight against hooliganism is the English model, where the smallest incidents are punishable by severe prison sentences. English fans, who were considered the leading hooligans in the world of football, were drastically reduced thanks to the Prevention of Violence Law.

The English police introduced the keeping of files of hooligan fans, a ban on travel for hooligans who have committed incidents in the past, as well



as a ban on entering stadiums which are mentioned in the article ("Hooligans and the law", 2000). Unfortunately, racism, national and ethnic intolerance can still be observed during sports matches. It is not uncommon for fans of rival athletes of different racial, religious, national or ethnic backgrounds to scornfully chant, trying to insult, belittle and deconcentrate them in all possible ways.

Leading global sports institutions (FIFA, UEFA, FIBA, NBA) have prescribed in their regulations the special conditions that clubs or federations must meet in order to be able to compete under their auspices in which safety aspects are the most important part. Clubs and federations must modernize their sports venues (stadiums, halls, swimming pools) with video surveillance cameras, fire protection systems, detailed personal searches at the entrances to the venue by using metal detectors and personal search. Due to these reasons, safety management can be divided into:

Safety management of sports competitions

Ever since the terrorist attack on the Munich Olympic Games in 1972, the safety of sports competitions has become a priority every time a sporting event is organized. The German army and police were not prepared, nor were they armed, to provide safety to athletes; they were not prepared at the Olympic Village where the terrorist attack took place, nor did they protect the sports venues where the competitions were held. Nowadays, the fundamental condition for successfully becoming an organizer of the most popular competitions such as the Olympic Games, FIFA World Cup and UEFA Cup or any other sport, is the have adequate safety from the police, the federation and the host country.

The safety of the organization of a sporting event fall under the competence of the organizer of the sports competition, the sports association (in case matches of national teams are played) or the sports club that is the organizer. The sports federation or club is responsible for the organization of the sports event, in order for the event to successfully take place. The biggest safety measures were present at the Winter Olympic Games in Sochi in 2014, where we could see how high the security was within the entire competition. Winter Olympic Games in Sochi were the best organized Games in the history from the security point of view. The safety costs amounted to three billion dollars, while the cost of organizing the entire Olympic Games cost 51 billion dollars (the Tokyo Olympics in 2021 cost 13.6 billion dollars). About 50,000 members of the security services were deployed in Sochi, along with 3,000 participating athletes. The security services installed 1,400 surveillance cameras, the skies over Sochi were secured by fighter planes (Mig, Sukhoi), drones, while warships and submarines were deployed at sea. Infantry with radars and S400 (anti-surface-to-air) missile systems were deployed on the ground around Sochi. (Radošević, 2016, 198).

The Russians used hosting position in Olympic Games to raise their infrastructure and to develop Sochi as their main city on the Black Sea shore. Using historic and comparative methods, we can clearly see that the safety measures are drastically raised after 9/11 terrorist attack. Safety measures for the Olympic Games in Sydney cost 250 million dollars while safety measures in Athens in 2004 cost 1.5 billion dollars compared to 3.2 billion dollars in Sochi in 2014. There were several attempts of terrorist attacks and all of them were successfully stopped so that no one spectator or participant could notice them.

Safety management of sports clubs

Sports clubs pay a lot of attention to safety aspects. The first aspect concerns the safety in the organization itself and the second aspect is related to the safety in the way of sports espionage. The fact that sports clubs spy each other by all means in order to discover and steal tactics, plans and strategy of adversary teams. Some of these methods are phone tapping and hacker attacks on employees' computers are forbidden.

On duty safety service members are the most important factors during sports competitions. Their role is to observe and analyze the audience, identify possible problem people and with on time reaction, cut the problem at its root. It is necessary for the safety guards to pass adequate training courses in order to know how to react in critical situations and to apply these methods to ensure the audience's safety, as well as the safety of the referees and athletes on the playground. In developed countries like Great Britain, there has been evidence of such training courses. However, in undeveloped countries, sports clubs do not provide their members protection as they do not employ security guards with the necessary theoretical knowledge and practical experience. Clubs do not pay too much attention



on counting on police engagement in full equipment. Preventing in the field of safety guards gives much better results than police officers' engagement with their equipment (helmet, shield, and stick) with irritating effects on audience provoking at the same time their physical reactions.

Nowadays, football is the most popular and most profitable sport and it is, at the same time, attractive to criminal organizations that get their money from investment illegally; namely, by washing money. There are more and more examples of football clubs led by owners with suspicious past and with criminal records in Serbia. At the same time, many sports workers lives were threatened for working in sport federations or clubs. Several club owners were murdered, and the murder case of the general secretary of the Serbian Football Federation has never been solved due to political factors. The safety of sports competitions in Serbia is not at a satisfactory level. The use of cold weapons, pyrotechnics and the conflicts of fans have occurred more and more often, both on stadiums and city streets. Hooliganism has become a part of everyday life. Fan groups leaders gather groups of young people aged from 15-25 which become like a private army. The source of financing these groups is often connected to the distribution of narcotics and racketeering. In the period from 2000 to 2010 alone, seven people in Serbia were killed due to fan violence. The number of 14 fan groups whose ban were discussed by the Constitutional Court speaks volumes about the seriousness of this problem in Serbia. (Savković, 2010, 10).

Sports espionage

Sports clubs pay a lot of attention to security aspect. The first aspect concerns to safety in the organization itself and the second aspect is related to safety in the way of possible stealth, club and coach strategies, in the other words - sports espionage. The fact that sports clubs spy each other by all means in order to discover and steal tactics, plans and strategy of adversary teams. The most important factors during the sports events are responsible safety guards. Their task is to survey and analyze cheerers in order to identify people making potential problems and to cut the problem in the root. It is necessary for the safety guards to pass adequate training courses in order to know how to react in critical situations and to apply these methods to ensure the audience's safety, as well as the safety of the referees and athletes on the playground.

Safety management of athletes

Every country that sends its athletes to the biggest sports competitions (Olympics, World Championships) provides representatives of the security services who have the task of protecting their athletes from potential terrorists. Thus, USA athletes are monitored by ISEG (interaction coordinated between CIA, NCIS, DEA, FBI) to protect American interests outside the USA, Russian athletes provided by FSB, Israeli athletes MOSAD, Chinese athletes MSS, English MI6, etc. No country wants to risk their best athletes from being attacked, abducted or publicly killed by a terrorist, and then for these horrific incidents to be broadcasted through the media to be shown to billions of people worldwide live. Such a message would be devastating for any country, would create panic that no one is safe, would damage the reputation and image of the organizing country as well as the country whose athletes were attacked because they were not adequately protected.

Protection of participants (athletes, coaches, referees)

Safety management also includes the protection of participants in sports competitions, athletes, coaches and support staff. It often happened that there was a riot at sports competitions, where fans entered the field in order to deal with the opposing fans and players, where the lives of all participants were endangered. In such situations, there must be a safety system that involves the urgent evacuation of participants to a safe location. Also, athletes have to move freely even when they are not in sports venues, which is quite difficult due to the large number of fans who want to approach them, talk to them, take their autograph or take pictures with them. Among the fans, there are often fans of rival clubs, who do not like certain athletes, who have a feeling of resentment that they play for rival clubs and make it difficult for their clubs to keep the titles.

In such situations, a physical attack can occur, which can injure the athlete, causing him minor or severe physical injuries or even endangering his life. We have the example of attempted murder on an athlete on the tennis player Monica Seles, who was stabbed in the back by the insane psychopath Guenter Parhe during a tennis tournament in Hamburg. Monica Seles physically survived the attack, but the psychological consequences remained (post-traumatic syndrome) because she could not return to playing tennis, so her career ended.



Figure 1. Attempted murder of Monika Seles



Source: Prakash, Monica Seles Stabbing Anniversary: Would the stabbing had made a difference to Serena's Path to Greatness, Tennis World, May 1, 2016 https://www.tennisworldusa.org/tennis/news/Tennis_Stories/32324/monica-seles-stabbing-anniversary-would-the-stabbing-had-made-a-difference-to-serena-s-path-to-greatness/

She still feels the consequences of this attack. The question is how lax the security measures were when a cold weapon such as a knife was brought in the sports competition and whether that means that everyone could bring their cold weapon and endanger the life of one of the athletes.

It is also necessary to look at the safety situation from the point of view of the referees, who are among the most endangered. The role of the referee is to pass judgment in contentious situations and, if necessary, sanction the participants. Fans find it difficult to accept decisions that do not benefit their team. Sports referees, the audience, players, coaches and even journalists themselves always consider referees to be the culprits on duty, and that is why they send insulting messages from the stands as well as from the media, considering them the main culprits for the defeat of their team. There is a huge amount of pressure that referees face every day. Also, it is necessary to say that referees are also people with their flaws and virtues. They are not infallible and sometimes they make a bad decision. This is the main reason why the largest sports organisations (IOC, FIFA, UEFA, NBA, NFL, NCAA) have decided to introduce new technologies that will provide referees with additional decision-making assistance.

The development of new technologies has contributed to the more effective functioning of people, but at the same time it has reduced physical activity, and has thereby contributed to the declining health status of the nation with a special emphasis on children. (Radošević, 2018, 487). In order to better acquaint the audience with the pressure that referees face on a daily basis, UEFA made the documentary "Kill the referee / Les Arbitres" during the European Football Championship in 2008, which describes in detail the pressure in controversial situations as well as the mistakes that judges make at the biggest sports competitions.

Safety management of sports venues

In Serbia, cooperation with local security authorities (MUP, BIA) is necessary for sports competitions to be enacted successfully. The safety of the organization of the sports venues falls under the competence of the management in charge of the security of the sports venues (sports centers, stadiums, halls, swimming pools) and includes securing the venue throughout the year as well as close cooperation with the police during sports competitions. In the organizational structure of each sports venue, there is a security sector which, depending on the size of the venue, involves a team of at least 20 people. The management of the sports venues has close cooperation with the sports federation as well as with the police.

The safety of sports venues is crucial question before any sports competition is held. Today, we are witnessing reports of bomb threats before every major sports competition. The police and the organizers are obliged to check every report, regardless of the fact that 99% of previous reports have been false. Checking potential bombs makes it difficult to organize a sports competition, requires emptying the stands where 50,000-100,000 spectators are, brings unrest, causes suspicion and potential panic, which can lead to stampedes that could harm innocent people.

For preventing conflicts, the presence of security guards in England is more effective than the presence of the police. The police are more in charge of order and peace outside the stadium, while in Serbia the security guards serve as marionette, while the police have all the control both in the stadiums and outside the stadiums. Moreover, in Serbia, the use of force by the police in full gear with helmets, shields and batons is a frequent phenomenon, so it often happens that innocent spectators who are not hooligans are injured during the unrest, while in England there is no need for the presence of the police in stadiums due to strict laws against hooliganism who have zero tolerance, where fans trespassing on the grass field is punishable by at least six months in prison.



In Serbia, security guards have not undergone any training for acting in crisis situations on stadiums, while in England they are obliged to undergo training on how to act and behave in critical situations. In the videos, we can see how English stewards (security guards) stop fans who try to run onto the field, while in Serbia the stewards are not too prompt in stopping fans who want to run onto the field and draw the audience's or media attention to themselves.

Digital technology in security services of venues

Digital technology has revolutionized the security system of sports competitions. When organizing sports competitions, technological means are used for the implementation of safety measures, such as: video surveillance systems, access control systems, counter-sabotage doors, co-unter-sabotage X-rays, counter-sabotage mirrors, hand-held metal detectors, fire alarm systems, and various means of communication, like stationary and mobile ones. (Radošević, 2022, 297). Today, new technologies make it easier for police officers to resolve security situations, making it easier to spot potential hooligans or terrorists and remove them from the stadium, while footage from the stadium will serve as evidence in criminal proceedings before the judicial courts. In economically regulated countries, the trails of hooligans is being held today according to an accelerated procedure. Their pictures will be published everywhere and they will be denied access to all competitions.

Figure 2. Monitoring of sports venues



Source: Goal-line technology, how does it work? AlWexo, Dec 16, 2016 https:// www.alvexo.fr/blog/technologie/technologie-sur-la-ligne-de-comment-ca-marche/

Crowd Control Management

Also, the safety estimate of the number of spectators who can stop is very important, because otherwise Heisel, one of the greatest sports tragedies, could happen again, when 39 Juventus fans were killed and 600 injured in Brussels in '85. In this incident, there was a clash of fans, where Liverpool fans broke through the fence and forced Juventus fans to pile up together, which led to the collapse of the concrete wall in which one part of the fans was killed while the other part of the fans was run over in a general stampede. The media tragedy was even greater because hundreds of millions of people around the world watched this tragedy live because Juventus and Liverpool played finals for the Football European Championship.

The clash of fans on Heisel was a kind of revenge for a year earlier, the clash between Roma and Liverpool fans in Rome, when English fans were persecuted on the streets of Rome, where dozens of Liverpool fans were injured. Heisel tragedy was the announcement of Liverpool fans for revenge, which the security forces did not recognize in time. If the security management was at the highest level, the fans would be isolated from each other, the stadium would not collapse and no one would be hurt.

Safety management of sports companies

New technologies are considered to be the main reason for the accelerated development of the sports industry, necessary for the organization and development of sports organizations. IT today is the most efficient method of the sports security sector. The largest global sports equipment companies, such as Adidas, Nike, Puma, Asics, Under Armour etc., use industrial espionage methods to discover, copy or steal technologies used by their competitors, as well as to find out the company's future strategic plans. It is not uncommon for companies to copy the products of their competitors in order to take over their market share.

Thus, we have examples where the company "Nike" filed a lawsuit against the company "Adidas", accusing it of hiring three of their workers who worked for years in the representative office of the company "Nike", who are accused of stealing the company's plans for the next four years. This way, Adidas has gained a great advantage over the competition having plans for their products yet to hit the market in the future, giving them time to prepare their adequate competing products in order to take over their consumers.



Sports media safety

The cooperation of the media with the police is very important because one article or report can provoke a fierce reaction from both the fans and the citizens. In the past, incendiary media statements and provocations before high-risk matches caused riots both in stadiums and on city streets, which resulted in physical clashes between fan groups as well as with the police. There were also verbal and physical conflicts between coaches and board members with sports journalists who were dissatisfied with the way they reported and criticized their club as well as themselves. The media image that is sent around the world is very important, which at the same time speaks a lot about the situation in the country, as well as the very ability of the state to resolutely oppose security challenges. Media records are used as evidence in the fight against hooliganism. On the other hand, from the journalistic point of view, in order to increase the number of viewers and readers, media companies try to find out the information available to their competitors and visiting competing newspapers and websites to increase the company's profits.

Research

From a historical point of view, the flow of information in the sports industry today is incomparably faster than decades ago. Today, new technologies have become necessary for the functioning of sports organizations, which include global sports organizations (IOC, FIFA, UEFA, FIBA, NBA, NFL), national sports federations, sports clubs in charge of organizing sports competitions, sports equipment companies (Adidas, Nike, Under Armor, Puma, Asics, etc.), media (transmission of the latest information and videos via sports media), entertainment industry (which includes sports video game companies like EA Sports and sport gambling).

As part of the research work, the authors conducted an empirical study, where they asked questions relating to the safety at sports competitions with a sample of 100 responders who answered the following questions: 1. Do you feel safe to go to the derby match (Red Star - Partizan)?

2. Would you take your children to the derby match (Red Star - Partizan)?

No	Respondents	YES	NO
1	100	43%	57%
2	100	24%	76%

Table 1. The respondent answers to questions 1 and 2

3. Name the reasons why you do not want take your children to the football match (Red Star - Partizan)?

Table 2. The reasons named for not taking children to sports matches.

1	Safety	82%
2	Noise	57%
3	Pirotechnics	46%
4	Crowd	39%

Research results

On the first question regarding whether they feel safe to go to the derby match, out of the 100 respondents, 43% gave an affirmative answer while 57% gave a negative answer.

On the second question regarding whether they would take their children to the derby match, out of the 100 respondents, 24% gave an affirmative answer while as many as 76% gave a negative answer.

On the third question, which asks respondents for reasons why they do not want to take children to the football matches, 82% stated safety as the main reason, 57% stated noise from cheering, 46% stated piracy committed by fans, while 39% stated crowds and pushing.

Through the above answers that we received through empirical research in the field of safety of sports competitions, we can conclude that safety management is one of the most important factors in the development of the sports industry. Without security management, the sports industry would be difficult to function today. Anarchy would reign on sports facilities (stadiums, halls, arenas, swimming pools, etc.), fans and hooligans would be decision makers, terrorists would bring fear and trepidation



among spectators who would eventually stop coming to sports competitions. Safety at sports venues was compromised and it is impossible to control because potential terrorist attacks would threaten the entire sports industry. The absence of spectators would lead to the lack of interest of the media to broadcast sports competitions and thus to the lack of interest of sponsors to advertise their products through sports. Simply put, sport would eventually go out on its own and would not exist in the format we know today.

Conclusion

The development of the sports industry is causally connected with the parallel development of security technologies. The Internet has revolutionized safety management by enabling preventive and faster security response. Safety management in the sports industry will progress more and more every year, primarily thanks to investments in new technologies, which venues and enable faster and better terrorist and potential threat prevention. Cooperation and experience exchange with other countries helps a lot in the prevention and sanctioning of hooligans from causing harmful incidents. The original goal is to prevent the loss of human lives, endangering the safety of the audience and the athletes themselves.

No incident will pass without consequences, whether it is just a negative image that the media will convey, or more people are injured or, in the worst case, fatalities during fan conflicts. Sports should be entertainment for the masses, to help spectators express their emotions by cheering for their teams and athletes, but it is often misused, causing incidents of aggressive behavior, threats of physical confrontations and often threats of death. It is illogical to do all this in the name of your beloved team that came to compete in sports and win, because athletes are not interested in anything else but competing and winning (Gavrilović, 2020). Athletes are not interested in physical confrontations with fans of opposing teams on their behalf, that someone threatens other athletes or their fans with death on their behalf.

Unfortunately, sport is often misused for political purposes because the rise of every government in Serbia begins and ends at stadiums. The question is how to deal with the fact that every weekend the two biggest stadiums in Serbia (Red star – Rajko Mitić stadium with 55,000 spectators and Partizan stadium with 35,000 spectators), with a total of 90,000

spectators chant insultingly, influencing public opinion, which in the past often led to conflicts with the police.

Also, the media image that is sent around the world is considered very important, which at the same time speaks a lot about the situation in the country, as well as the very ability of the state to resolutely oppose security challenges. The best example is England, which, thanks to its strict laws, an ideal example and model of how to deal with the problem of hooliganism in stadiums. In situations where there is a media debate, usually caused by fan incidents after high-risk matches, the media always refer to the English model of solving security problems in which increasing prison sentences for causing incidents and banning hooligan fans from entering stadiums are only part of the solution to maintain safety in sport. Although Serbia has already passed the Law on the Prevention of Violence and Misbehavior at Sports Events in order to meet the requirements for joining the EU, that law is often not applied, so we often have situations where hooligans receive light sentences or pass suspended sentences or go unpunished. The biggest paradox is that the hooligans' lawyer's fees are often paid by sports clubs, which is imaginable anywhere else in the world.

Reference

- 1. Gavrilović, A. (2020) Menadžment u sportskom turizmu i rekreaciji, Fakultet Za Sport, Univerzitet UNION- Nikola Tesla, Beograd.
- Radošević, I., Gavrilović, A., Parčina, I., Ahmić, D. (2020). Coaching Management In The Sports Industry. International scientific journal of kinesiology, University of Travnik, Vol. 13, Issue 2, p.134-141, https://sportscience.ba/pdf/br26a.pdf
- Lovrinčević, M., Glamuzina, M., Kružić, D., Radošević, I.,(2015). Who matters when crisis strikes? Identification of relevant stakeholder groups in crisis hitten companies, Dubrovnik - 3rd International OFEL Conference on Governance, Management and Entrepreneurship, Editors: Tipurić, D., Ph.d; Daraboš, M., Ph.d., p. 549-557, http://www.ciru.hr/index.php/ofel-conference/11-books/177dynamics- of-organizational-change-beyond-identity-and-reputation
- 4. Zakon o sprečavanju nasilja i nedoličnog ponašanja na sportskim priredbama. (2003). Službeni glasnik RS, br. 67/2003, www.paragraf.rs/



propisi/zakon_o_sprecavanju_nasilja_i_nedolicnog_ponasanja_na_sp ortskim_priredbama.html

- 5. Leaders section, Hooligans and the law (2000). The Economist, www.economist.com/node/4341
- Radošević, I., Gavrilović, A., Čikiriz, N. (2016). Organizaciona i bezbednosna uloga Ministarstva odbrane, Vojske Srbije i Ministarstva unutrašnjih poslova u sportskoj industriji, Vojno delo, 7/2016,.195-207, http://www.vojnodelo.mod.gov.rs/vojnodelo/387/ vd-387-2016-68-7-00-Ceo_broj_VD.pdf
- Savković, M., Đorđević, S. (2010). Na putu prevencije nasilja na sportskim priredbama: Predlog regionalnog okvira saradnje, Beogradski centar za bezbednosnu politiku, str. 10-11 https:// bezbednost.org/wp-content/uploads/2020/06/na_putu_prevencije_ nasilja_na_sportskim_priredbama.pdf
- Radošević, I. Gavrilović, A. Veselinović, J. Parčina, I. (2018). Preschool sports management: The role of basic sports in preschools. Facta Universitatis, Series Physical Education and Sport, Vol. 16, No.2/18, p.487-492, ISSN 2406-0496, https://doi.org/10.22190/ FUPES171103043R,
- 9. Radaković, M., Marinković, G. (2021) Uticaj globalizacije i komercijalizacije u sportu. *Sport i biznis*, br 7, 49-57 https://www.fzs.edu.rs/nauka/izdavastvo/
- Radošević, I. Denić, L. (2022). The use of IT technology in sports competitions. In: International Scientific Conference on information technology and data related reaserch, University Singidunum, Editorin-Chief: Stanišić, M., p.292-299, https://portal.sinteza.singidunum. ac.rs/Media/files/2022/Sinteza-2022.pdf
- 11. Penezić, S. (2021) Odnos sporta i PR-a u svremenom društvu: ciljevi i posledice. *Sport i biznis*, br 7, 39-48. https://www.fzs.edu.rs/nauka/izdavastvo/
- 12. Turčinović, Ž. (2021) Uticaj strategijskog menadžmenta u sportskoj organizaciji. Sport i biznis, br 7, 64-70. https://www.fzs.edu.rs/nauka/izdavastvo/





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SAFETY AND SECURITY IN SPORTS CORRESPONDS WITH THE STRUCTURE OF THE THEORY OF SPORTS

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Key Words: Sport, safety and security, theory of sports, management in sports.

Abstract: The subject of this paper is the theory of sport and safety and security in sport, i.e. their mutual compatibility and cause-and-effect relationships. In order to explain a certain topic, a good knowledge of the subject is necessary, and to preserve certain assets or values, exceptional knowledge and skills are necessary. This implies an objective observation of the factors, the realizations in them and between them, and the prediction of possible risks. In this sense, the structure of the theory of sport is presented in the paper, which consists of three segments: sport actors, processes in sport and conditions for the realization of sport. Types of risks in sports are indicated and safety and security in sports is considered. Then, some segments of the theory of sport were looked at in the light of safety and security settings and activities, that is, their influence. It is evident that safety and security in sports is present in all segments of the theory of sports in an appropriate way. Timely detection of possible risks in sports, and their prevention, enables the avoidance of possible consequences and indicates the inseparability of the theory sports and safety and security in sports.

Introduction

port is an integral part of social life, which occupies a certain position in parallel with the development of human society. Since the 20th century, in addition to entertainment and surpassing the previous range of sports results, a significant place in terms of production belongs to the sports industry. The sports industry represents a complex, unique, but harmonious compilation of legally based and busi-

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ness-oriented managerial sports activities, practical skills and customs (Kastratović, 2004, 58). The importance of the sports industry and its rapid progress have conditioned the development and implementation of management in sports due to the required level of organization and quality. This especially applies to its important segment – management and safety and safety in sports. Furthermore, special regulations unified in sports law, as well as other specific provisions and recommendations (health, safety and security, environmental, marketing) were systematized in order to properly implement dynamic activities in a correct framework.

The importance of sports is indicated by the development, that is, the existence of numerous national and international sports organizations. Also the existence of the European Sports Charter (adopted by the Committee of Ministers of the member states of the Council of Europe on September 24, 1992 at the 480th meeting, and revised on May 16, 2001 at the 752nd meeting) is very important. In the Charter, sport is defined as follows: Sport is all forms of physical activity that, through unorganized or organized participation, aim to express or improve physical fitness and mental well-being, create social relationships or achieve results in competitions of all levels.

As a planetary phenomenon with significant social impact and cause-andeffect connections with numerous segments of the modern world, sport is continuously developing its being and character. The concept of the theory of sports can be defined as a consciously formulated plan, a system of rules, procedures and assumptions made to achieve results in sports, which represent its practical verification and influence its further development. It can also be perceived as a scientific discipline that unites a whole series (system) of interrelated knowledge and concepts related to sports. The subject of the study of the theory of sports is the events in sports, that is, the laws and principles that explain the phenomenon of sports and improve it. The general goal of the theory of sport is to create coherent knowledge about sport that is verified in practice, and which builds on and improves sport.

Most often, sport is "divided" into three main segments: professional (competitive) sport, school sport (including university) and recreational sport (sport for everyone). Modern sports, especially professional sports, are characterized by: a high level of technology, intensive engagement of athletes and coaches, top sports fields, with the exceptional interest of a multi-million audience around the world, as well as huge capital. Unfortunately, various unwanted events occur in sports, such as: injuries of



athletes or other persons, illegal ways of achieving victory, including "fixing" results, damage to sports props or facilities, illegality in player transfers, corrupt practices... According to managerial vocabulary, certain resources may be improperly used, damaged or illegally taken. Therefore, safety and security in sports today is one of the "hardest disciplines".

Safety, as an extremely broad concept, is defined and characterized in various ways in the literature, primarily in relation to the object of observation (individual, legal entity, specific region or country), as well as to the considered activity (traffic safety, business safety, health safety, safety in sports, ...). Safety in the objective sense means the absence of threats to acquired values, and in the subjective sense the absence of fear that those values will be threatened (Wolfers, 1962).

The structure of the theory of sport

Bearing in mind that sport is a complex system, which important, one could even say, essential characteristic is that it changes all the time, it is crucial to take into consideration the understanding of concepts and the use of adequate terms. The entire multidimensional and dynamic matter, which is covered by the theory of sport, can be viewed through its structure, which is made up of three large segments, namely: sports participants, processes in sport and conditions of realization of sport (Mašić, 2006, 53). The aforementioned structure of the theory of sports has been "tested" through professional and scientific papers, and several teaching subjects at several higher education institutions. In addition, there are evident links between the theory of sport and the essential prerequisite for the successful operation of the sports industry, i.e. an important element of management in sport – resources in sport.

Sports participants are all those who directly influence or can influence the result in sports. These are *athletes, sports referees and other officials* of a sports competition (delegates, controllers), coaches (main, assistant, conditioning), *managers of sports organizations* (starting with the basic sports organizations of clubs, sports associations, and city, regional or international associations, all the way to the International Olympic Committee) and *the audience*.

Athletes, as performers of specific sports activities, have a central role in the sports system and are a key part of the resources in sports.

Sports referees and other officials lead and control a certain sports activity, i.e. maintain it within the rules allowed. In other words, they watch over the way sports activities are carried out.

Based on the knowledge of the abilities, knowledge and possibilities of the athletes, as well as the available technology, *the coaches* direct the implementation of training and competition activities in accordance with the set goals.

Managers of sports organizations essentially create conditions for the successful work of athletes and coaches in order to realize the goals of the sports organizations they lead, its members and sports in general.

The audience, as the most numerous participants of the sport - "in front of which and for whom" the sport is realized, gives a special atmosphere to the sport with its activity, cheering and suggestions. The importance and necessity of the presence of the audience in "sports arenas" was particularly evident during the first year of the Corona virus pandemic in 2020. During that period, most of the competitions in the world were held without their presence. The audience is a critic (evaluator) of sporting events, but at the same time it can also be a significant safety and security factor.

Sports participants, through their joint actions, make it possible to achieve the required quality of modern sport.

Processes in sport can essentially be classified into sports preparation or training and sports performance, i.e. competition. When talking about processes in sports, it is necessary to point out the importance of the "first part" - sports preparation. It is well known that the efficiency and effectiveness of a certain activity depends on the quality of preparation and implementation. This implies: the level of knowledge, understanding of the situation and way of thinking, and essential - real engagement in the realization of the set goals. Quality sports training makes it possible to make both small tasks and big goals achievable. This "rule" is not only valid in sports. Sports preparation is, one might say, the less visible part of the "iceberg". Sports preparations are numerous, starting with physical, technical, tactical, psychological, theoretical, and ending with integral. Sports performance can be said to represent the visible part of the "iceberg". Namely, the competition is a concrete place where athletes have the opportunity, and of course the need, to express their abilities, knowledge, preparation, as well as creativity. The significantly greater number



of competitions that athletes have today, compared to the earlier period, represents multiple burdens and risks.

The conditions for the implementation of sports include everything that makes up the mise-en-scène of sports. Starting with legal and sports regulations, sports organization – including professional and scientific institutions, professional staff, material and technical conditions, financing of sports, prohibition of illegal activities in sports, ecology and certainly safety and security in sports. Besides, as significant conditions for the realization of sports, it is necessary to mention global events, that is, the situation in the world viewed through economic, political and other relations. The conditions for the realization of sports can determine the scope of individual athletes or teams, as well as of sports as a whole. It is necessary to establish adequate regulations and organization of sports in accordance with the phenomenon of sport, its quality, and taking into account the demands of the sports industry, as well as the environment.

An unavoidable segment that should be "covered" by a good regulation and organization of sports is certainly safety and security in sports. This is because, regardless of the level, quality, uncertainty, achieved sports results or realized profits, both in a specific competition and in sports in general, a possible failure in the safety and security segment of sports can spoil the whole picture. The aforementioned becomes more important if it is taken into account that human resources represent the "essential" resource of sport. Therefore, it is necessary to continuously assess the possible risks and timely forecast and take the necessary measures and procedures in order to prevent unwanted events, i.e. to preserve resources in sports.

The structure of the theory of sports can be simply seen as three concentric circles. The central circle represents the sports participants, the second - the wider circle represents the processes in the sport, and the third the widest circle represents the conditions for the implementation of the sport.

Defining and considering safety and security in sports

In order to consider safety and security in sports, it is necessary to first refer to the concepts of safety and security. The importance of diversity and understanding of these words (concepts) is indicated by the text: Most languages use the same word to translate the English terms safety and security. This can be problematic. The first part of the book consists of comments on articles that consider this important issue on both a conceptual and a practical level (Chalmers, Frosdick, 2011).

Definition of security in the broad sense includes: "freedom from danger, freedom from fear or anxiety, freedom from the prospect of being laid off (job security), something given, deposited, or pledged to make certain the fulfilment of an obligation, measures taken to guard against espionage or sabotage, crime, attack, or escape; an organization or department whose task is security."³ Security can be understood as a sense of protection from factors that cause harm.

Safety and security can be presented as a state of relief from danger, injury or loss, which is achieved through the successful application of designed procedures, such as: operations, interventions or actions. The term safety and security is used in numerous social fields, such as: politics, health, finance, ecology, informatics, construction, sports, etc. Safety in each of the mentioned areas has its own specific goals and tasks, and accordingly procedures and methods. Also, given that there is an intertwining of the safety and security of different social areas, there are also "combinations" of safety and security. Thus, within the safety and security management system in sports, there is a health-medical aspect as an important subsystem.

According to the scope of management in sports and management of safety and security in sports, with the overlapping of certain areas, it "covers" three large entities: sports participants, processes in sports – especially sports events and sports facilities – as hardware or scene of sports activities. When looking at the security of a sports event, it is necessary to have a "project approach", which necessarily includes: safety and security knowledge and experience, possible risks in all segments, resources for solving problems and the way the event is organized. As a strategic segment of the sports industry, sports facilities are an important factor in the conditions for the realization of sports. The interactive nature of sports management includes planning, organizing, leading (including personnel) and controlling. Certain authors point to prediction as one of the processes. In the management of safety and security in sports, forecasting is extremely important.

³ http://www.merriam-webster.com/dictionary/security



The most important thing is to make a difference and mutual correlation between safety and security in the theory of sport. Under the definition of safety we mean: "the condition or state of being safe; freedom from danger or hazard; exemption from hurt, injury, or loss."⁴

In particular, safety and security in sports implies that all sports actors are in good condition when leaving the sports facility – at least as they were when they arrived at the sports event. This is regardless of the importance of the sports event, the size of the sports facility or the number of attendees. This requires the organizers of sports activities to be at the level required by the sports event. When providing safety and security in the field of sports, the appropriate services (public or private) prevent and detect criminal acts, and maintain the desired state of order and peace in the sports facility and its surroundings.

The issue of safety and security in sports is as old as the sport itself, starting with ancient games, through medieval knightly tournaments, to modern sports. Safety and security in sports can be defined as the absence of threats to the health and life of sports actors, members of the security services or part of the population, and the absence of risk of damage or loss of property and business, the cause of which is basically sports activity. According to the definition of safety and security in sports, safety management in sports includes: a) safety and security of physical or legal persons (primarily sports, but also other organizations), b) safety and security of property and c) safety and security of functioning (business).

In accordance with the complex structure of the sports industry, several aspects of safety and security in sports can be pointed out: health-medical, training-methodological, competitive-organizational and economic. Although at first glance it seems that these aspects are independent and determined by time, they are in constant interaction, i.e. they intertwine with each other.

In a broader sense, the health and safety of sports participants is understood as considering and controlling numerous factors that can negatively affect the physical integrity or health of athletes, as well as other sports actors. Bearing in mind the variety and required characteristics of sports activities (technical, physical, etc.), it is understood that their realization

⁴ http://www.brainyquote.com/words/sa/safety214955.html#ixzz1idkCCHbr

carries a certain risk, primarily in terms of sports injuries (Mašić, Kostovski, Đukanović, 2010, 551-559). This is also indicated by the definition "left" by Pierre de Coubertin, which is necessary to state in the context of this work: Sport is a voluntary and habitual cult of intense muscular exercise based on the desire for progress, which can lead to risk (Kurelić, 1967, 8). Coubertin's consideration of risk in sports confirms the importance of safety and security management in sports, which has recently taken an important place in sports management.

Risk (ital. risico, fr. risique) originally: the danger that threatened ships from cliffs and rocks (risco); later: danger, exposure to danger, daring feat; a business or stake entered into with the risk of failure; in insurance (sometimes): insured goods, insured object. To risk (fr. risiquer) to dare, to expose oneself to danger, to risk, to work or to try one's luck (Vujak-lija, 2004, 782).

The field of action of safety and security in sports can also be viewed through the following groups of risks:

- 1) Risk of inadequate selection. It refers to athletes. It can be prevented by applying adequate selection methods.
- 2) Risk during the training process. It primarily refers to athletes. It can be prevented by applying knowledge from the theory of sports, more specifically the theory of sports training, and by adequately selecting experts who implement the training process. Differently expressed by the application of adequate sports training and recovery technology (Malacko, Doder, 2008). This area is also regulated by the Law on Sports.
- 3) Risk of competitive activity. It applies to all sports participants and other persons within the sports facility. It can be prevented by the previously mentioned procedures and measures, and by consistent compliance with legal and sports regulations, with adequate application of knowledge from sports management – especially the management of sports competitions.
- 4) The risk of a sporting event. It includes the aforementioned risk 3), the sports facility in which the sports event takes place, as well as the wider area (region) and population. It can be prevented by the previously mentioned procedures and measures, and by consistent compliance with legal and sports regulations, with adequate application of knowledge from sports management especially the management of sports events.



The greatest scope of risk is during the realization of a sports event, especially those that are ranked as sports events of increased risk. Also, the Law on Prevention of Violence and Misbehavior at Sports Events establishes measures to prevent violence at sports events, as well as the obligations and powers of competent authorities in implementing those measures. Admittedly, one must point out here a rather heterogeneous approach in planning, implementing and monitoring the realization of activities related to the sports event. Precisely for this reason, in the period 2014-2016, work was done on innovating an internationally binding instrument applying an integrated approach to security and services in the process of organizing sports events. The Council of Europe adopted the Convention on the Integrated Management of Security and Services at Football Matches and Other Sports Events (Council of Europe, 2016).

Along with the risks of a competitive activity or sports event, it should be pointed out that there is also a significant scope for corrupt practices or illegitimate financial gain. This is possible during important matches especially in the most watched sports activities, awarding the organization of the most important competitions, player transfers, and the construction or purchase of sports facilities. In order to gain a true and complete insight into the real state of the level and forms of corruption in sports, the following significant facts are mentioned: the total amount, structure and types of investments, the coefficient of the ratio of invested capital and realized profit, the progression of the industrial branch of sports, expansiveness, global distribution, meaningful connection and direct and indirect participation of the world's most important multinational companies in sports, thanks to which they acquire a proportionally large part of the profits on a global scale (Teofilović, Jelačić, 2006, 134). It should also be noted that the safety and integrity of the sports system are also affected by other forms of corrupt practices, especially those related to the fixing of sports results, improper financing and politicization of sports organizations (Begović, 2022).

As the importance of the competition increases, the safety and security risks also increase, and accordingly, the biggest sporting events of the Olympic Games have required the most extensive preventive and protective procedures and measures for many years. In this sense, the amount of financial resources earmarked for safety and security increases for each subsequent Games. Also, the number of persons engaged in the safety and security sector is increasing significantly, and the latest technical means are being applied. The Covid-Sars 19 epidemic represented an unprecedented challenge for the world, sports in general, and even the organization of the Olympic Games in Tokyo, which even resulted in the postponement of the Games. There is already quite extensive literature on the impact of COVID-19 on the sports system, both at the global and local levels (Begović, 2020). As the level and intensity largely depended on the level of preparedness of the health and financial-economic potency of the country (if we are talking about the national level) or the development of the international sports authority, preventive and recovery measures as well as control were heterogeneous. In addition to the loss of jobs in the sports industry, estimates are that the financial loss from the pandemic is close to 160 billion dollars (Begović, 2021). Safety and security risks at sports events are multiplied by the presence of officials – presidents of states or governments, sovereigns, high-ranking sports officials: members of the IOC, presidents of international and national sports federations. This is particularly emphasized when they are in the stands and not in the VIP boxes!

Certain authors in the field of safety and security point to the term safety and security culture: a set of adopted attitudes, knowledge, skills and rules in the field of safety and security, manifested as behavior and process, about the need, ways and means of protecting personal, social and international values from all sources, forms and bearers of endangerment, regardless of the place or time of their manifestation (Stajić, Mijalković, Stanarević, 2004, 30).

Considering the resources in sports, it can be seen that the process of "production" is primarily oriented towards the creation and development of sports (competition) potential, i.e. athletes as direct creators of sports products – sports results, through the process of sports training. Resources in sport are classified into two basic categories: functional and logistical (supporting) resources. Functional resources, which are a prerequisite for the successful implementation of processes in sports (training and competition), are divided into human potential and physical resources. Logistical (supporting) resources include monetary resources and data as a resource (Nešić, 2006. 26-27).

The fact that safety and security in sports is an integral part of both functions of a sports organization, sports and business, indicates its exceptional importance. Also, safety and security in sports is an important segment of the organization of sports events, not only because of legal



provisions, but because of their quality, success and attendance. In the management of sports facilities, as a large area of sports management, safety and security is an important link.

Bearing in mind the characteristics of the sport phenomenon, its numerous functions, organization, material and financial resources, and especially the essential resource – people, it is evident that continuous efforts are necessary to preserve all of the above. Safety and security in sports is a significant, broad and active subject that needs to be developed every day, as well as studied at higher education institutions in the field of sports. Certainly, a good knowledge of the theory of sports and possible risks in sports facilitates action in that direction, that is, enables more effective activities related to safety and security in sports.

An unusual event that happened at the chess tournament on 21st July 2022, indicates that the range of risks in sports is not finite. Namely, a robot chess player broke the finger of a seven-year-old boy during a chess match. And this example indicates that in the management of safety and security in sports, in addition to planning, organizing, leading and controlling, forecasting is extremely important. Namely, in safety and security deliberations, everything possible should be foreseen, "and more than that", in order to preserve resources, especially human.

Consideration of safety and security in sport in relation to the structure of the theory of sport

The causes of risk during training and competition can be classified into two large groups: 1. Risks arising from the structure and characteristics of the activity itself; 2. Risks arising from the way, that is, the quality of organizing and implementing training and competition. In the context of the safety and security of athletes, as sports participants, it is important to emphasize that during the sports activity itself there are numerous factors that can lead to injury during training and competition.

Some of the important factors that can lead to an athlete's injury during training are the following: inappropriate load; incomplete concentration of training participants; insufficient knowledge of training participants; inadequate methodological procedure, its complete or partial absence; health condition of the athlete (hidden defects or previous injuries, incomplete rehabilitation, premature inclusion in the training process); excessi-

ve ambitions of training participants; application of illegal methods and procedures; incomplete "warming up" or fatigue; specific characteristics of a particular sport; inappropriate, defective or poorly adjusted devices, props and equipment; unsatisfactory conditions for training: temperature, humidity, surface, number of participants; the influence of "third parties" or "force majeure"...

Athletes may be injured in competition by: insufficient preparation for a given performance; incomplete concentration of competition participants; excessive expectations from competitors; inadequate knowledge and experience of competition participants, health condition of competitors (hidden defects, previous injuries, incomplete rehabilitation, premature involvement in the competition process; application of illegal methods and procedures; incomplete "warming up" or fatigue, specifics of a particular sport; inappropriate, faulty or poorly adjusted equipment, props and equipment; irregular conditions for the competition: temperature, level of UV radiation, humidity, surface, number and heterogeneity of participants; inadequate refereeing; criminal action; terrorist act, ...

According to the above, the risks can be prevented and the consequences reduced. In this sense, adequate selection, medical examinations, application of methodological procedures, as well as principles of sports training, as well as strict observance of sports rules and fair refereeing are necessary. It is necessary to emphasize the importance of time, as a necessary factor, both in the preparation and in the recovery of athletes, who acquire new knowledge and experiences during their careers.

Unfortunately, sometimes even with the implementation of all of the above, the most serious unwanted events occur. At the end of March this year (March 26, 2022), the young Romanian water polo player Andrei Dragichi (born in 1998) died during a match. He fell ill suddenly, and the competent medical staff, regardless of the applied resuscitation procedure, had to declare death due to the consequences of a heart attack. Dragichi played water polo for 15 years. He had regular medical check-ups with his teammates, and he was never diagnosed with a single health problem that could foreshadow this tragic event.⁵

During a sports career, through the processes of practice and competition, the athlete's body adapts to the set requirements, that is, the required level

⁵ https://total-waterpolo.com/romanian-water-polo-player-aged-23-died-during-game/



of knowledge, attitudes and anthropo-motoric abilities is reached. Given that certain activities have specific requirements, for example collision sports (Sanader & all, 2001), adaptation takes place in that direction as well. Thus, in some karate schools, for example Shohei ryu - Karate Do, specific exercises are applied to develop the strength of certain parts of the body of Atemi no - jikken practitioners. Some of them are realized independently with the help of props, and some in a pair with a fellow exerciser. Through research in that space, a new anthropo-motoric ability, dynamic strength, was established. The dynamic solidity of an actual part of the human body is defined as the ability of that part of the body to endure under dynamic conditions the effects of external fortes of greatest possible intensity, without significant harm to the actual part of the body or human organism as a whole. (Mašić, 2001, 8). This is also significant when it comes to safety and security, because the level of external forces of a dynamic character is "raised", that is, the possibility of receiving blows without causing consequences that disrupt or require the interruption of activities. This is significant in the context of the reduction of injuries, that is, the practical increase in safety and security, i.e., the physical integrity of athletes.

The risks for referees in sports are twofold: a) training risks (which are the same as those for athletes due to the requirements in terms of "fitness"), b) refereeing risks, which can be divided into those arising from the role that referees have in the "match" they referee (the place where the referee is and the activities they carry out, ...), as well as those outside the field that are the result of the "effects" of the referee's decisions. Namely, the safety and security of referees can be "threatened" due to various "reasons", such as: the elimination of a national team or club from certain qualifications or competitions, the financial consequences of their decisions on the transfer of a well-known player or odds in betting shops, ... Also, the risks that the referees exposed also depend on the sports branch or discipline itself. A drastic example happened in August 2012, when athletic referee Dieter Strike, at a local youth meeting in Düsseldorf, was hit by a spear in the throat area. Although he was taken to the hospital very quickly, he died from his injuries. The forms of violence experienced by referees are numerous: mockery, insults, humiliation; challenging and questioning their expertise, as well as provoking in different ways by athletes, coaches, parents, or fans (Bačanac, 2016, 198).

When preparing athletes, based on information regarding their capabilities and knowledge, and their own knowledge and experience, as well as on the basis of other facts and information, coaches are exposed to specific risks, which are primarily reflected through psychological stress. They also direct the implementation of sports activities, assigning tasks to themselves and the athletes, tracing results, and creating the career of the athletes, as well as their own. The stated obligations and aspirations can significantly affect the health of coaches in sports (sports experts), as well as the health of athletes. Therefore, the Law on Sports (Art. 19) stipulates: "An athlete, i.e. a sports expert, can participate in a sports competition, whose general health capacity to perform sports activities, i.e. activities, has been determined in the period of six months prior to the sports competition."⁶ Managerial syndrome is one of the consequences of long-term exposure to stress. There are numerous examples of media reporting on the health status of famous coaches, managers, ... (the best and most trophy-winning coach of Manchester United Sir Alex Ferguson: 2003, 2018, Dutch football expert Ronald Koeman 05/03/2020 ...).

The aforementioned type of workload is also present with the managers of sports organizations. The work of the members of the management of sports organizations and forums, to achieve the set goals of the organizations they lead, is very stressful, and they themselves are permanently exposed to numerous pressures (due to deadlines, travel, contacts, money, facilities for training and competition, ...).

A significant part of the population believes that safety and security in sports is oriented only towards fans and their behavior. However, it is only one of the areas of action of safety and security in sports. The audience as a sports participant can contribute, but also hinder or even harm the chosen national team or club. There are known cases that due to disagreements with the administration, e.g. certain sports organizations, there is "internal" destruction in their own stands (breaking chairs, burning inventory, disrupting competitions, ...). Riots at football matches are generally sanctioned financially, as well as by playing in front of an empty stadium, which causes direct damage to, for example, the football team or club. The results of the conducted research, in which the analysis of 338 delegates' reports from the matches played by FC "Crvena Zvezda" during two seasons, indicate that in practice the disciplinary sanctions imposed by UEFA gave better

⁶ The Law on Sports, the Official Gazette of the Republic of Serbia, no. 10/2016, Belgrade.



results compared to the sanctions imposed by the disciplinary bodies of the Football Association of Serbia (Janković & all, 2021, 47).

Taking a comprehensive look at violence at sports events, (Otašević, 2015) it points to the criminological aspect of violence, the general elements of the profile of fans in Serbia, the differences between members of fan groups and ordinary fans, and the criminal aspect of preventing violence at sports events. It also draws attention to the importance of infor-mation in suppressing violence at sports events (Otašević, 2015, 207). So far, the experiences of the most developed countries indicate that a large number of issues in the field of safety and security (hooliganism) can be successfully solved by consistent application of the law and systematic work. The practice that a certain number of police officers from participating countries travel with the football team to the World Cup, apart from practical benefits, also contributes to international safety and security cooperation.

It should be noted that sports participants, in addition to the risks in the course of their activities, are additionally "on target", because they are mostly public (famous) figures, but also because of their financial status. They are also exposed to everyday risks: traffic accident, fire or accidents that happened during recreational activities (Examples: famous golfer Tiger Woods, one of the most famous American golfers Davis Love III, legendary seven-time Formula champion Michael Schumacher, ...).

A special safety and security issue is doping in sports. The Republic of Serbia passed the Law on the Prevention of Doping in Sports and thus created the conditions for solving that problem in our area.

Seen from the point of view of sports management, it is necessary to continuously align the organization and work of sports organizations, the implementation of sports events, and the construction and functioning of sports facilities with legal and sports regulations, but also with the requirements of sports practice. This is the subject of consideration of the conditions for the realization of sports, as a very broad segment of the theory of sports. When it comes to sports in general, legal and sports regulations prescribe conditions and provide frameworks for its high-quality and safe implementation. When considering the safety and security of a sports event in the narrower sense, it is usually necessary to observe the immediate preparation for a specific sports event, that is, the plan of safety and security measures of the sports facility for its realization (Kostadinović, 2004). When considering the safety and security of a sports, 2004). to take a broader view of possible safety and security risks: within the facility itself, its immediate surroundings, but also the wider region (city, and even the country). In this case, there are also possible risks for other objects, as well as for persons who are not classified as sports participants, that is, they do not necessarily have an interest in the current sports event.

When organizing sports events, considerable attention and resources are invested in safety and security. Significant international cooperation in the field of safety and security at important sports competitions is also evident. Unfortunately, given the importance and publicity that sports events have, they are also "interesting" for possible terrorist acts (Leško, 2018). A striking example of this is the terrorist attack carried out during the Boston Marathon on April 15, 2013.

Conclusion

Safety and security management in sports, like other activities, requires the use of appropriate terminology, especially the correct understanding and application of terms such as: safety, security, resources.

The numerous challenges induced by the nature and functions of sport, as well as its worldwide popularity and viewership, require a whole spectrum of well-designed and accordingly strictly implemented activities to reduce or eliminate risks. All thinking, preparation and implementation, or in other words the entire management of safety and security in sports, is based on the characteristics of sports as a complex system and necessarily corresponds to the structure of the theory of sports. Actions in certain segments of the theory of sports are adapted to the particularities of the specific segment, as well as its subsystems, but in each of them it is necessary to carry out safety and security procedures and procedures in a planned, systematic and complete manner. In this sense, the safety and security of sports participants and processes in sports, through the management of safety and security in sports, is continuously given the necessary attention. States, by passing laws and by-laws, regulate the field of sports and thereby enable the conditions for its high-quality and safe implementation.

Safety and security management in sports is represented in all three key areas of sports management: management of sports organizations, management of sports competitions (events) and management of sports facilities. In modern sports, especially top-level ones, which require exceptional conditions in



terms of technology, organization and financial aspects, in addition to the sports component, the safety and security aspect is also extremely important, which includes the time before, during and after sports activities or events, as well as the sports facility, which refers to all sports participants.

In accordance with the international nature of sports, international sports associations pay considerable attention to the issue of safety and security in sports. This is particularly reflected in the conditions and procedures for giving the organization of the largest sports competitions, as well as monitoring their implementation.

Looking at the theory of sport and safety and security in sport, cause-andeffect relationships can be observed. It can be stated that the theory of sport and the management of safety and security in sport, through mutual agreement and cooperative action, provide a significant contribution to the development of modern sport. It is understood that, viewed from the aspect of the sports industry, protected structures represent all resources in sports.

References

- 1. Bačanac, Lj. (2016). Sport i nasilje: Empirijska analiza nasilja u sportu Srbije, Sportski savez Srbije, Beograd
- 2. Begović, M. (2022). Corruption in sports: Lessons from Montenegro. International Review for the Sociology of Sport, https://doi. org/10.1177%2F10126902221094186
- 3. Begović, M. (2020). Effects of COVID-19 on society and sport a national response. Managing Sport and Leisure, doi: 10.1080/23750472.2020.1779115
- 4. Begović, M. (2021). Sport and COVID-19: The Case of Croatia and Serbia. In A. Faganel, I. Rižnar, & A. Baruca (Eds.), Impacts and Implications for the Sports Industry in the Post-COVID-19 Era (pp. 199-208). IGI Global. http://doi:10.4018/978-1-7998-6780-7.ch0133
- 5. Chalmers, J., Frosdick, S. (2011). More Safety and Security at Sports Grounds, Publiched by Paragon Publishing, Rothersthorpe, UK.
- 6. Council of Europe, (2016). Convention on an Integrated Safety, Security and Service Approach at Football Matches and Other Sports Events CET No. 2018.
- Janković, B., Otašević, B., Mašić, Z. & Spasić, V. (2021). Fhe role of sports federations in opposing fan hooliganism - FC Red Star case study, Sport Science International Scientific Journal of Kinesiology, vol 14, issue 2, page. 43-47.

- 8. Kastratović, E. (2004). Osnove menadžmenta sa menadžmentom u sportu, Institut za razvoj malih i srednjih preduzeća, Beograd
- 9. Komitet ministara država članica Saveta Evrope, (2001). Evropska sportska povelja
- 10. Leško, L. (2018). Teroristički napadi na sportske objekte od 1970-ih do 2017. godine: od selektivne do masovne destrukcije, Polemos : časopis za interdisciplinarna istraživanja rata i mira, Vol. XXI No. 42.
- 11. Malacko, J., Doder, D. (2008). Tehnologija sportskog treninga i oporavka, Pokrajinski zavod za sport, Novi Sad
- 12. Mašić, Z. (2001). Dinamička čvrstoća osobina čoveka, Zadužbina Andrejević, Beograd.
- 13. Mašić, Z. (2006). Teorija sporta, Fakultet za menadžment u sportu, Univerziteta "Braća Karić", Beograd.
- 14. Mašić, Z. Kostovski Ž i Đukanović N. (2010). Sportske povrede i zakonska regulativa. Pravni život, (9):551-559.
- 15. Nešić, M. (2006). Resursi u sportu, DNS "Logos", Bačka Palanka
- 16. Otašević B. (2015). Nasilje na sportskim priredbama, Javno preduzeće Službeni glasnik, Beograd.
- Sanader, A. A., Petrović, J. R., Bačanac, L., Ivković, I., Petrović, I. B., & Knežević, O. M. (2021). Competitive trait anxiety and general self-esteem of athletes according to the sport type and gender. Primenjena Psihologija, 14(3), 277–307.
- 18. Stajić, Lj., Mijalković, S., Stanarević, S. (2004). Bezbednosna kultura, Draganić, Beograd
- 19. Teofilović, N., Jelačić, M. (2006). Sprečavanje, otkrivanje i dokazivanje krivičnih dela korupcije i pranja novca, Policijska akademija, Beograd.
- 20. Vujaklija, M. (2004). Leksikon stranih reči i izraza, 8. izdanje, Prosveta, Beograd
- 21. Zakon o sportu, Sl. glasnik RS, br. 10/2016, Beograd
- 22. Zakon o sprečavanju nasilja i nedoličnog ponašanja na sportskim priredbama, Sl. glasnik RS, br. 67/2003, Beograd
- 23. Zakon o sprečavanju doping u sportu, Sl. glasnik RS, br. 111/2014, Beograd.
- 24. Wolfers, A. (1962). Discord and Collaboration, The John Hopkins Press The following websites have been used in this paper:
- 25. http://www.merriam-webster.com/dictionary/security
- 26. http://www.brainyquote.com/words/sa/safety214955.html#ixzz1idkC CHbr
- 27. https://www.nedeljnik.rs/robot-slomio-prst-decaku-na-sahovskom-mecu-u-moskvi/
- 28. https://total-waterpolo.com/romanian-water-polo-player-aged-23-died-during-game/



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SAFETY AT SPORTS EVENTS AS A CONDITION FOR THE IMPLEMENTATION OF MARKETING POTENTIAL

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Key Words: Event management, security, Sports industry; COVID-19, risk management Abstract: The globalization of today's market has caused sports to become one of the biggest, if not the biggest, business today, and it means looking at the whole world as a possible market. Sport has a hidden potential for achieving additional, or synergistic, economic effects, which in national accounts will not be shown explicitly as a sport effect, but in reality will still belong to the power that sport possesses in the economic sense. For the successful application of marketing potential at sports events, it is important to emphasize the need to fulfill the first and basic condition, which is safety. COVID-19 hit all branches of industry, including sports and the sports industry.

Introduction

port is today one of the most significant and relevant social activities in the period that we live in, driven mainly by economic factors and the potential to make money more quickly, and then by a favorable influence on health. There is thus no manufacturing branch that is not interested in collaborating with the sports industry due to the growing earnings in the sports business and the attractiveness of sports on a worldwide scale. Every society recognizes the importance of sport in fostering social cohesion, eradicating discrimination, boosting the beneficial influence on public opinion, and disseminating general and ethical values. Sport is a healthy approach for people to combat stress, aggression, and drug abuse. The growth of sport must be supported and

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fostered at all societal levels in proportion to how important it is (Dašić, et al, 2021).

When we talk about the successful application of marketing potential at sports events, it is important to emphasize the need to fulfill the first and basic condition, which is safety. Although security in sports and sports entities is an integral part of the national security system, and therefore an important factor in the realization of business functions in the protection of property, persons and business, it has not yet found its rightful place in the theory and practice of security.

The concept of security should be considered as part of new forms of social and individual control, i.e. it should be shown that for the first time in history security has become a fundamental economic fact of modern society, i.e. that fear and the production of fear, and therefore the need for security, have emerged as an irreplaceable instrument politics and capital growth (Herbert Marcuse's famous work One-Dimensional Man from 1964 radically thematizes this insight).

Today, security managers are one of the most paid parts of management bodies in the world, and the most important strategic goals of system development are based on their assessments. Security focuses on identifying risk factors, risk assessments and treatments, but also on developing defense mechanisms to protect the largest systems, companies and organizations. Organizing sporting events is a complicated management procedure that relies heavily on the actions of in-house personnel. Almost every sports club arranges sporting events as one of its core operations. Even the law implies that (clubs) must operate in this field. As a result, it's rare to discover a sports club that has never held a sporting event or competition in the real world. (Nešić, 2018).

Following the terrorist attacks in New York on September 11, 2001, sport management began to place a greater emphasis on security, particularly in the area of organizing sporting events. Because they cannot exist without security, other factors including organizational theory, sport marketing, sport facility management, sport law and policy, economics and finance, gender and diversity, have been rated as less crucial.

The competition of the European selections in football at the championship in France in 2016 showed that, despite the great security measures, it is not possible to guarantee the complete safety of the fans. The cham-



pionship took place very soon after the terrorist attacks that hit France and Paris at the beginning of 2016, and in order to secure this sporting event, around 90,000 members of the army, special forces, policemen, members of the secret services in civilian clothes and many others were engaged. Regardless, there were still incidents. In addition to all the above-mentioned members of the services and guards standing at the stadium entrances, someone managed to bring in and fire a rocket during the match between Russia and England (Ratković, Dašić, 2018, 62). Full protection of persons and infrastructure at sporting events is a long-term and very complicated procedure that necessitates a large amount of data collection. Terrorism has significance to sporting events, and its potential and actual consequences on the administration of modern sporting events have been significant. (Taylor &Toohey, 2006; Toohey, K., & Taylor. T. (2008).

Events are important in today's society, particularly athletic events. Given the current situation, after only a few months, the global COVID-19 pandemic abruptly ended athletic activities. The COVID-19 epidemic forced the cancellation of activities in order to safeguard the public's health and safety. The outcome was a reduction in social and economic prospects for the service industry, which includes sport and events. Thus, there has been a substantial impact on economic activity, travel connected to it, and participation in sports. Compared to other businesses, it appears that the sport and events sectors in general were less equipped to handle the CO-VID-19 situation. Given a widespread conta gion, COVID-19 has resulted in the cancellation or postponement of sporting events around the world, from local and regional sports events to national and international competitions (Perić, et al., 2021)

Literature review

A sporting event can be described as a "social gathering that brings together a large number of people and activities on the occasion of a competition" and important part of the tourism industry. They have been important for tourism since antiquity, when locations (sanctuaries) where sporting events were staged "were also the principal 'tourist' hubs of ancient Greece. Depending mostly on their "scale of impacts" including attendance, media, profile, infrastructure, costs, and benefits, various classifications of sporting events can be made. Destinations are, therefore, always looking for ways to enrich their offer and have recognized the role of events in this process, making them an integral part of their tourism development strategies (Degen, 2004; Whitson & Horne, 2006; Giulianotti & Klauser, 2010). Sporting events are helpful in attracting new, first-time visitors, but for them to return, as discussed previously, they need to be satisfied with their experience. In other words, "in the case of sport tourism, success is an attribute of satisfied customers who intend to return to both the sporting event and the destination (Škorić, et al., 2021).

Sport venue security remains an important part of venue and event planning, with best practices frequently based on risk management principles. That strategy is just too restricted. The emphasis on limiting liability and risk in relation to people and property, both physical and intellectual, is reactive in nature. Furthermore, research on sport security has shown that, in some cases, the current approach can repress spectators' and citizens' civil liberties, thereby strengthening the police state approach to safety and security and undermining the fan experience and sense of community that sporting events are meant to generate. (Menaker, et al., 2021).

Sport mega-event security is a complex assemblage of social control systems in and of itself that is experiencing significant change, particularly in terms of expenses, personnel, the expanding influence of private security, the perceived threats of terrorism, and the focus on indigenous crime(Giulianotti & Klauser, 2010).

In one research (Đurđević, et al., 2014, 176), two reasons for the stated situation were identified: The first is that sports facilities are places where a very large group of people are concentrated in a very small space and that very often even the smallest incident has catastrophic consequences. The second is related to the very essence of sport as a factor of connecting people, their understanding and a way to express rivalry. Incidents in stadiums affect the size of the audience, as well as their satisfaction with the sporting event. Namely, if fans are disciplined, the number of visitors to sports events will potentially be higher, as well as their satisfaction. We can talk about improving satisfaction based on marketing tools only in cases where there is no hooligan behavior of fans. In other words, it is a prerequisite for creating and improving satisfaction through the use of numerous marketing instruments and processes for the audience attending a sporting event, but also for those in front of small screens (Ratković, Dašić, 2018, 65).

A major event not only benefits the host nation's economy and sports, but it also becomes a historical monument and boosts its standing and wealth.



Mega-event research has focused on issues related to human rights, political liberalization, place promotion, signaling, identity construction, and development. At a time when the world is faced with a pandemic like COVID-19, instability in many parts of the world, the question of implementing marketing actions at sports events arises (Dašić, Jović Bogdanović, 2020; Milenović, Ratković, 2021). On the other hand, numerous athletes and sports subjects are largely dependent on their sponsors, and most sports events in the world were cancelled. This is crucial given that individual athlete contracts for sponsorship pay out several times more than professional contracts in clubs, contests, etc. Another significant issue for clubs and tournaments, particularly smaller ones, was match money loss. (Dašić, et al., 2020).

With a contribution to national economies that is similar to that of forestry, agriculture, and fishing put together, sport is a significant economic sector in the EU. Sport has evolved into one of, if not the, largest industries due to the globalization of the industry today, which requires considering every potential market on the planet. Although the positive contributions of sports are numerous, it seems that there is still no completely exact method of determining the magnitude of each one of them. Sport has a hidden potential for achieving additional, i.e. synergistic, economic effects, which in national accounts will not be shown explicitly as a sport effect, but in reality will still belong to the strength that sport prssesses in an economic sense (Dašić, Dašić, 2021). By canceling or postponing almost all sports events, due to the Covid 19 Pandemic, advertisers and sponsors were in big trouble.... (Hall, 2020). Sporting event allows to extend a marketing offer to new segments, enrich the expanded sports product, set new pricing strategies and use promotion only when a viewer has a high sense of security (Sowier-Kasprzyk, Kowalski, 2019).

Travel restrictions on a global, regional, and local level immediately had an impact on national economies, which included tourism systems, such as international travel, domestic travel, day trips, and segments like air travel, cruises, public transportation, lodging, cafés and restaurants, conventions, festivals, meetings, or sporting events. International and domestic tourism fell significantly over a period of weeks as a result of the crisis, which caused international air traffic to quickly slow down and several nations to impose travel bans, close their borders, or institute quarantine periods. In the case of significant outbound markets, hundreds of thousands of individuals from all over the world were participating in the hasty efforts by nations to send visitors back home. Cruise ships soon became the worst-case scenario for anyone stuck in the global tourism system (Gössling, et al., 2020).

Security in the function of marketing activities

Unfortunately, the influence of political and economic forces cannot be isolated from sports. Sports event management is challenging since it requires constant attention from start to finish. Although safety in sports and sports entities is an integral part of the national security system, and therefore an important factor in achieving business function in the protection of property, persons and business, it has not yet found its rightful place in the theory and practice of security. The provision of all conditions and operational activities necessary for the successful development of a sporting event, including the venue, sports equipment, the precise schedule of planned activities, and more, are included in operational activities related to the organization of the competition.

Sports events have historically provided excellent platforms for host communities to accomplish their overarching objectives. Additionally, the COVID-19 situation may intensify this catalytic impact. Host towns continue to feel that athletic events will be crucial in helping to resolve the issue, whether it be for the improvement of sports, branding, social, or economic growth. When polled, residents of host cities gave athletic events a somewhat better rating for their potential to advance society.

Violence and misconduct at major sporting events has become a global phenomenon and threatens the core values of sport. Stadiums are the most important sports facilities, because they host large international or national sports competitions with the largest number of spectators. In recent years there has been a growing interest in the improvement of the security of mass events.

Threats of violence have always existed in sports arenas. However, new possibilities to improve security operations by swiftly recognizing threats and eliminating vulnerabilities become accessible as security technologies continue to grow and advance. Fans' participation at and support of numerous sporting events will probably be influenced by their perceptions of safety at sporting venues. Thus, the need for safe and effective security operations at sport events necessitates an examination into outcomes of disruptive and violent fan behavior at stadiums globally (Harte, Romano, 2021)



Sports events can attract a particularly high attendance of domestic and international spectators who come together at stadiums, pitches and fan zones but also before and after the events themselves. These might happen during gatherings of fans, public spaces, airports, on buses, trains, and other "pinch places" where a lot of people congregate.

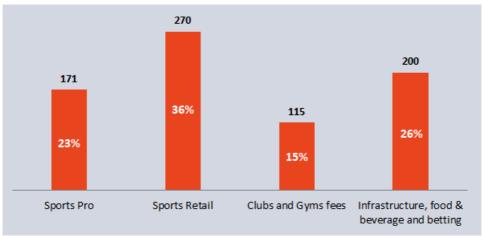
The Olympic Games are the largest international athletic event, attracting participants and spectators from over 200 nations. Sports' phenomenological characteristics, including social, political, and economic concerns, are some of the causes of its widespread appeal. Unfortunately, terrorists, other groups, and people have always been drawn to great events, seeing a chance to cruelly draw attention to themselves for goals that have nothing to do with sports but rather with politics and other causes. For these reasons the safety requirements of the Olympic Games are very important, and they are among other things one of the primary tasks of the organization of each Olympic Games (Šiljak et al., 2016).

Sporting event Travelers are particularly prone to steer clear of a place due to terrorist worries. This is partially due to the nature of mega-sports events; they are frequently held in stadiums with large seating capacities; a large number of spectators are gathered in one place; and because of the event's high visibility and its attendees' vulnerability, this could be considered a suitable terrorist target. Attending sporting events as a kind of leisure tourism is a discretionary activity, but terrorism has a considerably bigger psychologically damaging effect on potential visitors than many other calamities, including natural catastrophes. Additionally, the tourist sector is quite vulnerable to catastrophes. Given the discre tionary choice, it is plausible that many potential event goers may choose not to attend if there is a threat to their safety (Taylory, Toohey, 2006).

Sports competitions are within the umbrella of mass events. The danger associated with their organization is mostly related to the presence of a sizable crowd in a cramped space, as well as the event-related emotions. Any deviation from the established rules and the normal course of the event amplifies the danger of panic and other threats to health and life (Sowier-Kasprzyk, Kowalski, 2019; Turčinović, 2021).

To provide suitable circumstances for the organization and conduct of the entire project, high quality services aimed to protect the mass event are crucial. A mass event may be thought of as an open, dynamic, socio-technical economic system with a clear objective whose accomplishment results in the participants' pleasure owing to the conditions present. a crucial addition to the whole logistical infrastructure, which also includes a number of technology tools for managing large-scale events. The basic assumption of which should therefore remember is that the organization of mass events must begin already at the design stage and continue until the end of the entire project (Jędrzejas, 2017).

The global sports market moves US\$756 billion annually (picture 1). This is the direct value that the sector moves. Sports retail generates more than one-third of the industry's total income. Despite not being the primary source of income, professional sport unquestionably has the greatest influence on the production chain due to matchday earnings, sponsorships, TV rights, player moves, and its high media and employment nature. And undoubtedly its induced and indirect effects. Thus, a match with closed gates, the cancellation of competitions or calendar changes, directly impact the entire Industry. (Somoggi, 2020).



Picture 1. Global Revenues- Sports Industry- US\$ billion

It is impossible to overstate how COVID-19 has affected the job market for athletes. Sports properties were forced to take extraordinary steps as a result of the cancellation of athletic events and seasons, which wrecked havoc on all industry income sources. There have been many layoffs, furloughs, and compensation cutbacks in professional sports leagues as a whole.

Source: Sports Value



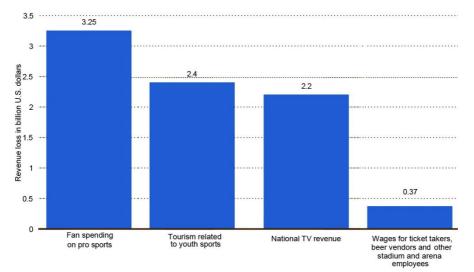
Covid 19 as a barrier to marketing campaigns

The COVID-19 coronavirus outbreak is having an impact on all nations, regardless of how big or tiny, affluent or impoverished, developed or developing they may be. The on-going COVID-19 pandemic has revealed the fragility of healthcare systems, the instability of economic structures and the vulnerability of the society (Dašić, Dašić, Trklja, 2021).

The sports sector was severely impacted by the COVID-19 outbreak in the start of 2020. The seasons of several leagues across the world were suspended, and UEFA took the extraordinary decision of moving the 2020 European Football Championship to 2021. This move cost UEFA an estimated 300 million euros, whereas cancelling the event entirely would have cost the federation around 400 million euros (Lange, 2020a). The potential loss in the Formula One season, of revenue from the combined hosting fees across the whole season, which are paid by the individual host nations, could amount to over 602 million U.S. dollars (Lange, 2020b).

Therefore, it can be said that Covid-19 has impacted every component of the ecosystem of the sports sector. The media that broadcasts and covers games, brands and sponsors that promote around them, tourism, and every other aspect of the athletic value chain has been impacted (see picture 2). In 2019, the value of just global sports sponsorship deals was close to \$46 billion. Then there is advertising for sports. Last year, marketers spent approximately \$20 billion on sports-related TV content, \$17 billion (85%) of which was spent on live athletic events. Additionally, brands invested about \$1.2 billion in digital advertising. We expect unprecedented disruption to the ecosystem over the coming months and perhaps permanent change longer term, with a break in traditional sponsorship deal-making until the true impact on the landscape is known (Sher, Bradford, 2020).

Picture 2: Loss of revenue in the sports industry due to the coronavirus (COVID-19) pandemic as of May 2020, by segment (in billion U.S. dollars)



Source: Coronavirus: impact on the sports industry worldwide. Statista. https://ncs4. usm.edu/pdf/covid-resources/statista-impact.pdf. p.2

A significant decline in foreign visitor numbers is predicted to cause the worldwide tourism industry's income to shrink by approximately 70% by 2020. As a result, COVID-19 poses a risk to human life in addition to having multiple adverse short - and long - term effects on the economy, society, and environment. It is anticipated that COVID-19 will have a much higher effect on tourism in underdeveloped nations than in rich ones. In some smaller countries where tourism accounts for more than 50% of GDP (e.g., Maldives and Seychelles) the pandemic has pushed a large part of population to poverty since the tourism is a primary source of income in these countries (Luković, Stojković, 2020, 85).

Provision of professional safety management during an event, installation of CCTV systems in sports facilities, employment of highly qualified security staff and maintenance of sport facilities, are aspects that cost organisers considerable sums of money. Insufficient funding may translate in insufficient levels of safety during a sports event and inappropriate technical conditions of sport premises. Organization of mass sports events is conditioned by the fulfilment of many administrative and legal procedures resulting from applicable legal acts which regulate the obligations



imposed on event organizers (Socha, Wiśniewski, 2019). Organization of a sports mass event carries many threats related to large concentration of people in one place. These threats include: terrorist attacks; construction disasters; natural disasters e.g. fire; pyrotechnic incidents; street riots and fights. A separate issue carrying a serious threat is organization of events on public roads. Well-planned evacuation scheme and proper placement of participants during the event can eliminate this threat. Running, triathlons, and cycling are examples of amateur participation sports that are severely impacted by the crisis. These sports rely heavily on widespread, active participation. Due to the guidelines and suggestions of the crisis headquarters, only 12 of the 66 athletic stadium races that were scheduled for Serbia in 2020 were really held, with a small number of participants. (Dašić, et al., 2020).

As the coronavirus spreads over the world, more and more important sporting events and contests (whether at an international, regional, and/or national level) are being canceled or postponed in order to safeguard the health of participants, including athletes, fans, and others. Athletes, teams, and leagues, as well as sponsorships, sport retail, hospitality, and media coverage, have all been impacted. All clubs must play with no live audience, and some have found creative ways (Picure 3) of fans still being able to support their favourite teams.



Picture 3: Cardboard fans

Source: The Impact of the Covid Crisis on the Sport Industry. https://miuc.org/impact-covid-crisis-sport-industry/

We have a rare chance to reconsider how sports fans engage in the creation of live events thanks to the COVID-19 pandemic's impact on stadium attendance. Some sports leagues have resumed play, and others will follow, but the stadium atmosphere has altered significantly since spectators cannot congregate in the galleries until the coronavirus outbreak is stopped. Sport broadcasters have had a very tough time expressing the emotional resonance of sport due to the absence of supporters from the arena. With their actions and emotions, fans animate stadiums. They are a member of a sizable group that prioritizes consuming. Their involvement increases a sporting event's drama and appeal as a historical moment and a saleable commodity. It is widely acknowledged that sports are nothing without their supporters. A sense of camaraderie and nationalism can be evoked by the picture of crowd support for a national team or player. As an illustration, an Indian corporation with interests in the US or the UK will find it far more tempting to invest in a tournament that highlights Indian supporters in both of these nations. Since they are frequently the final buyer, reaching out to these groups makes excellent financial sense. (Majumdar, Naha, 2020).

We can say with certainty that the global coronavirus pandemic has led to significant changes in spending for advertising, marketing, promotional, and media purposes. As a result, businesses and well-known brands have been forced to reconsider their current and future advertising and marketing campaigns in order to maintain a steady income stream. The coronavirus pandemic has significantly reduced advertising spending, according to several research. In Europe, advertising spending is down 9% on average, with declines of 7% and 12% in Germany and France, respectively. In the advertising sector, it is generally accepted that ad expenditure follows any change in GDP. The ad market has expanded alongside the global GDP during the past ten years, increasing by 3-6% annually to around \$646 billion in 2019. The ad industry was expected to reach \$865 billion by 2024 before to the coronavirus. (Lee, Hall, 2020).

And other research shows that, thanks to the pandemic, advertising spending will decrease for many companies in 2020 as stores close and revenues shrink. For example, 45 percent of global consumers are spending more time on social media, online video streaming has increased by 26 percent, Internet traffic has increased exponentially on one telecommunications company's servers, and the number of consumers using online food delivery and essential goods deliveries has increased dramatically. (DiResta et al., 2020)



Conclusion

For the successful application of marketing potential at sports events, it is important to emphasize the need to fulfill the first and basic condition, which is safety. Following the terrorist attacks in New York on September 11, 2001, sport management began to place a greater emphasis on security, particularly in the area of organizing sporting events. Because they cannot exist without security, other factors including organizational theory, sport marketing, sport facility management, sport law and policy, economics and finance, gender and diversity, have been rated as less crucial.

The issue of safety in the sport is a very important problem in the modern world. To all fans of the sport, the players and all those who live on the sports facilities were safe it is important that the society abound in justice, morality and culture. Safety in sport includes the safety of all resources in the sport globally and individually. It includes all the actors in sport, sports organizations and facilities, events and other segments of the sports industry.

In one study (Baklouti, Namsi, 2022), the results revealed that a successful security model in mega-sport events is based on two pillars: service excellence that depends on the time spent at the portal, the communication with customers, the kind of staff serving in the venue, and mainly on the cooperation between all security corps in charge.

The sports ecosystem is not an exception to how COVID-19 is having an impact on the world's health, educational, financial, and commercial organizations. The non-stop live sports coverage we have come to anticipate is being disrupted by the cancellation or postponement of matches and events, which affects planning by governing bodies, organizers, teams, and athletes. Host cities are in utter turmoil as a result of the corona virus epidemic, leaving them with little choice but to change their plans. More than 84% of host cities surveyed believe that COVID-19 has had a significant impact on all sports events planned for 2020 (Fallatah, 2021).

Reference

- Baklouti, M. & Namsi, M. A. Z. (2022) Security Models in Mega Sport Events between Safety and Human Rights (Case of Vancouver 2010) https://thesportjournal.org/article/security-models-in-megasport-events-between-safety-and-human-rights-case-of-vancouver-2010/
- DiResta E. A., Williford K. T., Cohen A.D. & Genn A. B. (2020) The Impact of COVID-19 on Your Advertising and Marketing Campaigns. https://www.hklaw.com/en/insights/publications/ 2020/04/the-impact-of-covid19-on-your-advertising-and-marketingcampaigns (1.5.2022).
- 3. Degen, M. (2004). Barcelona's Games: The Olympics, urban design, and global tourism. In M. Sheller & J. Urry (Eds.), Tourism mobilities: Places to play, places in play (pp. 131-142). London: Routledge.
- Dašić, D. R., Tošić, M. Z., & Deletić, V. (2020). Uticaj pandemije COVID-19 na industriju oglašavanja i sponzorstva u sportu. *Bizinfo* (Blace), 11(2), 105-116. https://doi.org/10.5937/bizinfo2002105D
- Dašić, D., Jović Bogdanović, A. (2020) Sport as a cenntral component of the country and nation branding strategy. U: Ratković M., Perić N. (eds.) *Branding of states and nations, possibilities and implications. Beograd*: Faculty of Business Studies and Law: Faculty of Strategic and Operational Management, pp. 94-113
- 6. Dašić, D., Ratković, M., & Pavlović, M. (2021). Commercial aspects of personal branding of athletes on social networks. *Marketing*, 52(2), 118-131. https://doi.org/10.5937/mkng2102118D
- Dašić D., Dašić B. (2021) Branding of states and nations in (post) era covid 19. In: Cvijanović D, et al. (eds) *Tourism challenges amid Covid-19.* Fakultet za hotelijerstvo i turizam,Vrnjačka banja, Univerzitet u Kragujevcu.162-179. DOI: https://doi.org/ 10.52370/TISC21162DD
- 8. Dašić, B., Dejan Dašić, Radmila Trklja (2021) Informal employment as a form of gray economy in the time of covid 19 pandemics. In: Nenad Koropanovski (ed) *Dani Arčibalda Rajsa*. University of Criminal Investigation and Police Studies Belgrade, 2021, 439-452. https://eskup.kpu.edu.rs/dar/issue/view/6/4



- 9. Đurđević N., Mitić D., Atanasov D. i Vujović B. (2014) Sport u jedinicama lokal-ne samouprave. Beograd: Sitopromet A.Z.
- 10. Fallatah, B.A. (2021). An overview of the impact of the COVID-19 pandemic on sports industry: Causes, implications, and options. *Journal of Human Sport and Exercise*, 16(3proc), S1094-S1103. https://doi.org/10.14198/jhse.2021.16.Proc3.26
- 11. Giulianotti, R. & Klauser, F. (2010). Security Governance and Sport Mega-events: Toward an Interdisciplinary Research Agenda; *Journal* of Sport and Social Issues, 34(1) 49 – 61, SAGE Publications.
- Gössling, S., Scott, D., & Hall, C.M. (2020): Pandemics, tourism and global change: A rapid assessment of COVID19. *Journal of Sustainable Tourism*, 29(1), 1-20. doi: 10.1080/09669582.2020. 1758708
- Giulianotti, R. & Klauser, F. (2010). Security Governance and Sport Mega-events: Toward an Interdisciplinary Research Agenda; *Journal* of Sport and Social Issues, 34(1) 49 – 61,
- Harte, B., Romano, R. (2021) Violent Spectators: Enhanced Security as a Deterrent Against Extreme Stadium Violence. International Journal of Safety and Security in Tourism/Hospitality. <u>https://www</u>. palermo.edu/Archivos_content/2021/negocios/ijssth/06-Brian-Harte.pdf
- Hall S. (2020): This is how COVID-19 is affecting the world of sports, 09 Apr 2020https://www.weforum.org/agenda/2020/04/ sports-covid19-coronavirus-excersise-specators-media-coverage (15.4.2022)
- Johnson, C. W. (2008) Using Evacuation Simulations for Contingency Planning to Enhance the Security and Safety of the 2012 Olympic Venues. Safety Science, 46 (2). pp. 302-322.
- 17. Jędrzejas N., (2017). Security management of mass events, World Scentific News, 72, 347-352. http://www.worldscientificnews. com/wp-content/uploads/2017/01/WSN-72-2017- 347-352.pdf, 2.
- 18. Li C., Hall S. (2020) This is how COVID-19 is affecting the advertising industry; https://www.weforum.org/agenda/2020/06/ coronavirus-advertising-marketing-covid19-pandemic-business/ (14.4.2022).

- 19. Majumdar, M., & Naha, S. (2020). Live sport during the COVID-19 crisis: Fans as creative broadcasters. *Sport in Society*. doi: 10.1080/17430437.2020.1776972
- 20. Menaker, B. E., Sheptak, D., Kurland, J., Tekin, D. (2021) Rethinking Sport Event Security: From Risk Management to a Community Driven Approach. *Journal of Global Sport Management* doi: 10.1080/24704067.2021.1929388
- 21. Milenović, B., Ratković, M. (2021) *Marketing*. Fakultet za poslovne studije i pravo (FPSP) Univerziteta "Union Nikola Tesla", Beograd.
- 22. Nešić, M. (2018) Bezbednost sportskog događaja i uloga klupskog menadžmenta, *Poslovna ekonomija* Godina XII, Broj 2, Str. 128 140 doi: 10.5937/poseko14-19032
- 23. Perić, M., Wise, N., Heydari, R., Keshtidar, M., Mekinc, J., (2021) Getting back to the event: Covid-19, attendance and perceived importance of protective measures. *Kinesiology* 53, 1:12-19. DOI 10.26582/k.53.1.2
- 24. Ratković, M., Dašić, D. (2018), *Marketing u sportu*, Visoka škola modernog biznisa, Sven, Niš.
- 25. Radaković, M., Marinković, G. (2021) Uticaj globalizacije i komercijalizacije u sportu. *Sport i biznis*, br 7, 49-57 https://www.fzs.edu.rs/ nauka/izdavastvo/
- Sowier-Kasprzyk, I., Kowalski, S (2019) Safety of sports mass events in the context of creating a marketing product. *CzOTO*, vol. 1, iss. 1, pp. 851-858. https://sciendo.com/es/article/10.2478/czoto-2019-0109
- 27. Somoggi, A., (2020) Coronavirus's economic impact on the Sports Industry. https://www.sportsvalue.com.br/en/coronaviruss-economicimpact-on-the-sports-industry/
- 28. Socha, R., Wiśniewski, B., (2019) Safety of mass sports events. ASEJ - *Scientific Journal of Bielsko-Biala School of Finance and Law* Volume 23, No 1, 37-41. DOI: 10.5604/01.3001.0013.2669
- Žkorić, S., Mikulić, J.; Barišić, (2021) P. The Mediating Role of Major Sport Events in Visitors' Satisfaction, Dissatisfaction, and Intention to Revisit a Destination. *Societies*, 11, 78. https:// doi.org/10.3390/soc11030078



- Šiljak, V., Vukašinović, V., Đurović, D. (2016) Security Requirements At The Olympic Games. *Sportlogia*, 12 (1), 31-40. doi:10.5550/sgia.161201.en.SVD
- 31. Taylor, T., & Toohey, K. (2006). Impacts of terrorism related safety and security measures at a major sport event, *Event Management*, 9(4), 199–209.
- 32. Toohey, K., & Taylor. T. (2008). Mega Events, Fear, and Risk: Terrorism at the Olympic Games; *Journal of Sport Management* 22 (4).
- 33. Taylory, T., Toohey, K., (2006) Security, perceived safety, and event attendee enjoyment at the 2003 rugby world cup. *Tourism Review International*, Vol. 10, pp. 257-267
- Turčinović, Ž. (2021) Uticaj strategijskog menadžmenta u sportskoj organizaciji. Sport i biznis, br 7, 64-70. https://www.fzs.edu.rs/ nauka/izdavastvo/
- 35. Whitson, D., & Horne, J. (2006). Underestimated costs and overestimated benefits? Comparing the outcomes of sports mega-events in Canada and Japan. *Sociological Review*, 54(2), 73-89.





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From PREFACE:

...The concept of security should be considered as part of new forms of social and individual control, that is, it should be shown that for the first time in history, security has become a fundamental economic fact of modern society, that is, that fear and the production of fear, and therefore the need for security, have emerged as an irreplaceable instrument, policies and capital growth. Global events like migration flows, political unrest, and infectious di-sease pandemics have all disturbed security, but the proliferation of illicit weapons that are unchecked and freely traded on underground black markets continues to have a negative impact on security. Weapons in illicit flows are used to perpetrate the majority of crimes and terrorist attacks worldwide, and they also pose the biggest danger to personal and international security. Every nation state in the world must prioritize arms control, accurate and current arms registration, and citizen weapon monitoring.

The monograph contains 28 works divided into 5 sections, by authors from 13 countries, over 35 institutions. All papers have passed two independent reviews and an anti-plagiarism check (Turnitin). Thanks to all the authors for the submitted papers, I hope we will continue our cooperation, thanks to the reviewers for a job well done, as well as to numerous colleagues, assistants and friends who helped this monograph saw the light of day.

Dejan Dašić, associate professor

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