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SADRŽAJ

CONTENTS

ORIGINALNI NAUČNI RADOVI

ORIGINAL SCIENTIFIC PAPER

UNUTRAŠNJI SUKOB ZAKONA U BOSNI I HERCEGOVINI	11
<i>INTERNAL CONFLICT OF LAWS IN BOSNIA AND HERZEGOVINA</i>	17
Branković Goran	
UTICAJ SISTEMA NAGRAĐIVANJA NA PERFORMANSE LOKALNE SAMOUPRAVE: DOKAZI IZ REPUBLIKE SRPSKE	23
<i>THE INFLUENCE OF THE REWARD SYSTEM ON LOCAL GOVERNMENT PERFORMANCE: EVIDENCE FROM THE REPUBLIC OF SRPSKA</i>	37
Zolak Poljašević Branka, Todorović Marija	
FORENZIČKA REVIZIJA U FUNKCIJI KVALITETNIJEG FINANSIJSKOG IZVJEŠTAVANJA	49
<i>FORENSIC AUDIT IN FUNCTION OF IMPROVING THE QUALITY OF FINANCIAL REPORTING</i>	63
Vuković Perduv Vedrana, Babić Zoran, Vranić Ivanka, Čeklić Jelena, Čeklić Blaž	
INFORMACIONO KOMUNIKACIONE TEHNOLOGIJE U USLOVIMA PANDEMIJE COVID-19 SA OSVRTOM NA OBRAZOVNI SISTEM I EKONOMSKA KRETANJA U BOSNI I HERCEGOVINI	77
<i>INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE CONDITIONS OF THE COVID-19 PANDEMIC WITH A REVIEW OF THE EDUCATION SYSTEM AND ECONOMIC TRENDS IN BIH</i>	89
Travar Mihajlo, Travar Dragana, Ristić Saša	

PREGLEDNI RADOVI

REVIEW

OPTIMALNA STRUKTURA KAPITALA	103
<i>OPTIMAL CAPITAL STRUCTURE</i>	111
Duvnjak Valentina	
KORPORATIVNO UPRAVLJANJE U CRNOJ GORI – EMPIRIJSKO ISTRAŽIVANJE	119
<i>CORPORATE GOVERNANCE IN MONTENEGRO - AN EMPIRICAL STUDY</i>	135
Rašović Aleksandar	

UTICAJ COVID-19 NA FINANSIJSKI POLOŽAJ MALIH I SREDNJIH PREDUZEĆA U REPUBLICI SRPSKOJ	151
<i>IMPACT OF COVID-19 ON THE FINANCIAL PERFORMANCE OF SMALL AND MEDIUM-SIZED ENTERPRISES OPERATING IN REPUBLIC OF SRPSKA</i>	161
Rakonjac Danijela, Petrović Jadranka	
INTEGRISANE MARKETING KOMUNIKACIJE KAO IZAZOV SAVREMENOG KOMUNIKACIJSKOG SISTEMA	171
<i>INTEGRATED MARKETING COMMUNICATIONS AS A CHALLENGE OF MODERN COMMUNICATION SYSTEM</i>	177
Đokić Snježana, Jovanović Srđan	
OKVIR KORISNE UPOTREBE OSTATAKA PROIZVODNJE U FABRICI GLINICE ARR – OBRADA CRVENOG MULJA	183
<i>UTILISATION FRAMEWORK OF ALUMINA REFINERY RESIDUES (ARR) – RED MUD TREATMENT</i>	199
Milunović Igor, Tomić Predrag, Ikanović Jela	
JURISPRUDENCIJA SUDA PRAVDE EVROPSKE UNIJE U SLUŽBI ZAŠTITE PRAVA NA SLOBODNO PRUŽANJE USLUGA	215
<i>JURISPRUDENCE OF THE COURT OF JUSTICE OF THE EUROPEAN UNION IN THE SERVICE OF PROTECTING THE RIGHT TO FREE PROVISION OF SERVICES</i>	229
Dragišić Radmila	
NAUČNA KRITIKA <i>SCIENTIFIC CRITIQUE</i>	
PREDUZETNIŠTVO U POST COVID USLOVIMA	245
<i>ENTREPRENEURSHIP IN POST COVID CONDITIONS</i>	253
Kojić Višnja, Lugonja Aleksandar, Vukolić Dragan	
COBISS Kooperativni online bibliografski sistem i servisi COBISS	261
BIBLIOGRAFIJA ČLANAKA (God. 12, 23-24, 2020)	
<i>BIBLIOGRAPHY OF ARTICLES (Vol.12, No.23-24, 2020)</i>	

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UNUTRAŠNJI SUKOB ZAKONA U BOSNI I HERCEGOVINI

Rezime: *Pored sukoba zakona, izazvanog evropeizacijom prava u složenim državama kao što je Bosna i Hercegovina, kao poseban problem javlja se unutrašnji sukob zakona koji sve više postaje aktuelan kao i načini njegovog rješavanja. Dejtonskim Ustavom je konstituisana Republika Bosna i Hercegovina kao složena država sa dva entiteta Republike Srpske, Federacije Bosne i Hercegovine i Distrikta Brčko.*

Ovakva situacija stvara mogućnost i za stvarnu pojavu unutrašnjeg sukoba zakona, tj. izaziva pitanje koji će od republičkih, odnosno entitetski zakona biti primijenjen u onim slučajevima u kojima se pojavljuje tzv. „element inostranosti“.

Donošenje zakona kojim bi se regulisala ova pitanja nameće se kao nužna potreba kako bi se upravo ovakvim zakonom i kolizionim normama obezbijedila puna pravna sigurnost.

Ključne riječi: *složena država, unutrašnji sukob zakona, inostranost, nadležnost, kolizione norme*

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UVOD

Pored sukoba zakona, izazvanog evropeizacijom prava u složenim državama kao što je Bosna i Hercegovina, kao poseban problem javlja se unutrašnji sukob zakona koji sve više postaje aktuelan kao i načini njegovog rješavanja. Dejtonskim Ustavom je konstituisana Republika Bosna i Hercegovina kao složena država sa dva entiteta Republike Srpske, Federacije Bosne i Hercegovine i Distrikta Brčko.

Navedenim sporazumom izvršena je u mnogim pravnim oblastima preraspodjela legislative između republike i entiteta, odnosno distrikta. Tom podjelom veliki dio pravnih oblasti regulišu entiteti, odnosno distrikt, tako da je nadležnost republike uopšte, pa shodno tome i u oblasti normativnog i zakonskog regulisanja, u odnosu na ranije stanje znatno sužena.

Pri tome je posebno značajno da je u većini upravnih oblasti nadležnost entiteta isključiva. Uz to je zakonodavna djelatnost entiteta dosta obimna i u oblastima koje su u zajedničkoj nadležnosti republike i entiteta, kao na primjer regulisanje sudske kontrole uprave, odnosno upravnog spora, koji je predmet našeg posebnog interesovanja.

Ovakvom znatno proširenom zakonodavnom djelatnošću entiteta, odnosno distrikta, naročito u oblasti upravnog prava i upravnog spora, stvorena je, odnosno znatno i kvalitetno proširena mogućnost da jedan te isti odnos bude različito regulisan na nivou republike i entiteta, odnosno distrikta.

Takvu situaciju treba očekivati i ona danas postaje sve više realnost, opravdana i nužna. U tom smilu od znatne koristi bi bilo što veće i što obimnije dogovaranje između republike, entiteta i distrikta o prihvatanju, u cjelini ili u načelu, zajedničkih materijalno-pravnih rješenja.

To dogovaranje odnosi se i na regulisanja pojedinih pitanja, odnosno pravnih oblasti i materija. Na taj način se ostvaruje dobrovoljna de fakto unifikacija materijalno-pravnih rješenja i pravnih propisa.

Dogovaranje rješenja je analogno savremenim tendencijama i pojavama u međunarodnim razmjerama i na međunarodnom planu.

Unifikacije materijalnopравnih propisa sprovodi se u mnogim pravnim oblastima pa i u oblastima u kojima zakonodavna nadležnost pripada isključivo ili u pretežnoj mjeri entitetima, odnosno distriktu.

1. SADAŠNJE STANJE

Ovakva situacija stvara mogućnost i za stvarnu pojavu unutrašnjeg sukoba zakona, tj. izaziva pitanje koji će od republičkih, odnosno entitetskih zakona biti primijenjen u onim slučajevima u kojima se pojavljuje tzv. „element inostranosti”. Element inostranosti može se pojaviti u različitom obliku - domicil ili prebivalište, mjesto izdavanja i korišćenja isprava, mjesto izricanja i izvršenja kazni, nošenje oružja i dr.

Na primjer, kada jedan subjekt pravnog odnosa ima prebivalište na teritoriji drugog entiteta, a ne onog entiteta pred čijim se sudovima, odnosno drugim organima stvar u pitanju raspravlja, rješava, odnosno reguliše ili kada jedno lice ima dozvolu za nošenje oružja izdatu od nadležnog organa jednog entiteta pa tu dozvolu želi da koristi na teritoriji drugog entiteta, kao i u mnogim drugim slučajevima kada se pojavljuje element inostranosti.

Dakle, jedan dodatni element bilo subjekta pravnog odnosa, bilo objekta pravnog odnosa, bilo samog pravnog akta.

Postojanje tog elementa izaziva pitanje da li će se u takvim slučajevima primijeniti zakon republike ili entiteta pred čijim se organom stvar rješava i raspravlja ili zakon drugog entiteta. Ovo, razumije se, ako uopšte treba primijeniti na konkretan odnos zakon drugog entiteta.

Postavlja se, dakle, pitanje u ovim i ovakvim slučajevima u kojima bi republika i entiteti mogli polagati pravo da se po odredbama njihovih zakonima reguliše pravni odnos ili neki element odnosa kod kojih se pojavljuje taj „element inostranosti”. Ovaj element može se pojaviti u vrlo različitom obliku, ali se kao posebno važno pojavljuje pitanje u kojoj će se mjeri pri rješavanju ovakvih slučajeva o njemu uopšte voditi računa.

Sva ova pitanja sukoba zakona na internom planu jedne složene države moraju se rješavati bez obzira što bi sadržinski pravne norme bile iste u entitetima, odnosno u Distriktu Brčko. Sud, odnosno nadležni organ treba da se pozove na zakon koji se ima primijeniti u konkretnom slučaju bez obzira što zakoni republike, entiteta i distrikta na identičan način regulišu konkretan pravni slučaj.

Kod ovakve situacije nužno se nameće i potreba za propisivanjem kolizionih normi za rješavanje ovakvih sukoba zakona, odnosno u krajnjoj liniji normi za određivanje nadležnog materijalnog prava za regulisanje pravnih odnosa sa elementom inostranosti, kako bi se znalo koji će se od mogućih zakona, odnosno prava primijeniti na rješavanje konkretnog upravnog spora.

Pri tome, treba napomenuti da ove kolizione norme ne sadrže materijalno rješenje za pravni odnos u pitanju, već samo određuju nadležni zakon.

One, dakle, samo određuju materijalno pravo, odnosno Zakon o upravnom sporu koji bi se imao primijeniti pri rješavanju, odnosno regulisanju pravnog odnosa kod koga se pojavljuje dodatni element inostranosti.

Ovakva situacija postoji u svim složenim državama i njen značaj bitno zavisi od konkretnog razgraničenja normativne, zakonodavne djelatnosti između republike i njenih entiteta, odnosno distrikta. Kako je normativna, zakonodavna nadležnost entiteta obimna i u načelu osnovna, pitanje internog sukoba zakona je od posebnog značaja (Jenks 1956; Steinberg 2005).

Ovo naročito kada se zna da se pri rješavanju ovog pitanja ne mogu mnogo koristiti iskustva drugih zemalja. U Sjedinjenim Američkim Državama ponekad je teže ustanoviti zakonodavnu situaciju kada je riječ o zakonima pojedinih federalnih jedinica, nego kada se radi o opštem, tj. precedentnom pravu. U ovome je, zato, od pomoći tzv. Šepardov sistem citiranja koji pokriva federalno pravo, ustave i sudska pravila.

Problematika internog sukoba zakona u mnogome podsjeća i po pravnim konstrukcijama liči na pravnu problematiku međunarodnog sukoba zakona. Zbog toga se često ukazuje na mogućnost korišćenja rješenja koja u ovoj oblasti postoje na međunarodnom planu.

Međutim, iako se neke pravne konstrukcije sukoba zakona na međunarodnom planu i u međunarodnim razmjerima mogu koristiti pri sagledavanju problematike internog sukoba zakona pa u izvjesnoj mjeri i pri rješavanju ove problematike, između međunarodnog sukoba zakona i internog sukoba zakona postoji u osnovu i u prilazu jedna bitna razlika o kojoj, naročito kada je riječ o zemlji kao što je Bosna i Hercegovina, treba posebno voditi računa.

Dok međunarodni sukob zakona dolazi kao izraz stvarnog sukoba suvereniteta država kao međunarodnih subjekata, interni sukob zakona je izraz saradnje jedinica u okviru jedne složene države, bez obzira što te jedinice imaju svoj suverenitet. To je bitna, suštinska i kvalitetna razlika između ove dve vrste sukoba zakona i to stalno treba imati u vidu.

Otuda se rješenje međunarodnog sukoba zakona zasniva na ideji zaštite svog suvereniteta od prodora stranog prava, dok se rješenje unutrašnjeg sukoba zakona mora zasnivati na saradnji suvereniteta sastavnih jedinica složene države.

Pri tome se mora poći od pretpostavke da različitost pravnih poredaka sastavnih jedinica, u našem slučaju entiteta, u jednoj složenoj državi ne može nikada imati kontradiktoran karakter.

Zbog toga se u internom sukobu zakona ne može nikada primijeniti ustanova „javnog poretka” (ordre public), koja je inače vrlo bitna i nužna u okviru međunarodnog sukoba zakona.

S obzirom na to i zakoni kojima se imaju regulisati ove dvije vrste sukoba zakona treba da budu potpuno odvojeni, jer oni uz sve analogije, treba da regulišu dve potpuno različite i dve kvalitetno drugačije situacije.

2. PRIJEDLOG MOGUĆIH RJEŠENJA

Rješavanje unutrašnjih sukoba zakona u složenim državama predstavlja ustavnu materiju i rješava se preko republičkih organa. Donošenje zakona kojim bi se regulisala ova pitanja nameće se kao nužna potreba kako bi se upravo ovakvim zakonom i kolizionim normama obezbijedila puna pravna sigurnost.

Naime, kretanje ljudi i roba u našem unutrašnjem saobraćaju i prometu je znatno, tako da svaka neizvjesnost u pogledu nadležnog zakona može da ima ne samo pravne, nego i političke posljedice.

Posebno bi te posljedice mogle biti teške ako bi sudska praksa, u nedostatku zakonske regulative, počela da se služi analogijom rješenja iz međunarodnog privatnog prava, što bi svakako bilo i pogrešno i štetno.

Osim toga svakako je potrebno da svi pojedinci i sva pravna lica u Bosni i Hercegovini unaprijed znaju po kojem će se pravu republike, entiteta ili distrikta raspravljati, odnosno rješavati pravni odnosi kod kojih se pojavljuje „inostrani elemenat” unutrašnjeg karaktera.

Postojanje navedenog elemenata izaziva i nameće kao predhodno pitanje rješavanje sukoba zakona na unutrašnjem planu.

Postavlja se pitanje da li odmah treba pristupiti donošenju zakonskih propisa (Longobardo 2020) koji bi rješavali unutrašnji sukob zakona ili bi bilo bolje i cjelishodnije sačekati da republika, entiteti i distrikt donesu svoje zakone u oblastima koji spadaju u njihovu zakonodavnu nadležnost (Branković 2011).

Naime, iznosi se mišljenje da bi bilo preuranjeno donositi propise o unutrašnjim kolizionim normama dok predhodno ne budu donijeti materijalni propisi na osnovu kojih bi trebalo izgraditi unutrašnje kolizione norme.

Međutim, i ako bi u izvjesnoj mjeri, radi što boljeg sagledavanja odnosa i problema, bilo korisno da u vrijeme izrade unutrašnjih kolizionih normi već postoje republički, entitetski i materijalni propisi distrikta u odgovarajućim oblastima, neophodno je odmah prići izradi propisa o kolizionim normama. Ovo iz razloga što su kolizione norme sasvim posebna i nezavisna kategorija od materijalnopравnih normi i nisu nikakav njihov derivat niti s njima stoje u neposrednoj vezi.

Kolizione norme moraju postojati i primjenjivati se čak i u slučaju da u najvećem mogućem obimu dođe do de fakto saglasne unifikacije odnosnih materijalno pravnih normi republike, entiteta i distrikta.

Kolizionim normama se obezbjeđuje jedna izvjesnost o tome koji zakon je nadležan za rješavanje pojedinih pitanja i pravnih odnosa.

Imajući sve ovo u vidu, svakako da je bolje odmah donijeti propise o kolizionim normama, bar za određenu pravnu oblast. Usvojena rješenja bi se tokom vremena mogla i dopunjavati, odnosno mijenjati ukoliko iskustvo i praksa pokažu da bi to bilo potrebno.

Bolje je imati u ovoj materiji, u kojoj nemamo ni mi ni drugi dovoljno iskustva, zakonske propise koji bi bili podložni izmjenama u budućnosti, što je, uostalom, slučaj za zakonima koji regulišu tzv. klasične pravne materije, nego ostaviti neizvjesnosti i prepustiti sudskoj praksi pravna lutanja.

Svaka sporna situacija u ovom domenu prava može da ima, kao što smo već naglasili, ne samo pravne, već što je za ovu zemlju naročito važno i političke posljedice.

Ovo je posebna oblast gdje nepostojanje jasnih zakonskih rješenja može izazvati naročito štetne posljedice.

Široka zakonodavna nadležnost (Abbott 1999; Sivakumaran 2011) republike, entiteta i distrikta u ne samo mnogim, nego i u vrlo različitim pravnim oblastima izaziva mogućnost sukoba zakona kod velikog broja pravnih odnosa vrlo različite prirode i strukture.

To je svakako vrlo bitna i odlučujuća činjenica pri formulisanoj koalicioni normi za te različite pravne odnose, o čemu svakako treba posebno voditi računa. Otuda mislimo da ne bi bila, bar ne u ovom momentu i u jednom doglednom vremenu, ni moguća, ni oportuna bilo kakva kodifikacija cjeline unutrašnjih kolizionih normi.

Postoji više načina donošenja kolizionih normi i rješavanja unutrašnjih sukoba zakona. Jedan od načina je da se donese jedan glavni zakon o kolizionim normama koji bi sadržavao dio u kome bi bile regulisane opšte i zajedničke institucije unutrašnjeg kolizionog prava.

Ta zakonska pravila bi važile za sve slučajeve sukoba zakona i to po pravilu kod bilo koje vrste pravnog odnosa. Ovo pod uslovom da nekim drugim propisom o kolizionom pravu ne bi bila isključena njihova primjena za određene slučajeve pravnih odnosa.

Unutrašnji sukob može se riješiti i na način da republika u zakonima u kojima reguliše samo načela ili samo pojedine dijelove izvjesnih pravnih materija unese koalicione norme. Te norme bi se odnosile na oblasti koje će biti regulisane zakonima entiteta i distrikta i kod kojih se mogu pojaviti unutrašnji sukobi zakona.

Ove materije najčešće predstavljaju značajne cjeline, tako da bi ove koalicione norme predstavljale cjeline za ove oblasti prava, pri čemu će svakako biti potrebno, u ovim slučajevima prihvatiti i specifične tačke vezivanja koje će odgovarati svakoj od ovih vrsta pravnih odnosa.

Za ostale oblasti u kojima se pojavljuju sukobi zakona donosili bi se po potrebi posebni zakoni o kolizionim normama, s tim da ovi zakoni mogu obuhvatati bilo izvjesne grupe srodnih pravnih odnosa ili samo pojedine pravne odnose.

Ovakvim načinom regulisanja sukoba, odnosno propisivanjem unutrašnjih koalicioni normi putem zakona, može se postići brzo donošenje ovih zakona, a i obezbijediti prihvatanje upravo najcjelishodnijih i najpravičnijih rješenja imajući u vidu karakter i prirodu pravnog odnosa za koje se te koalicione norme donose.

Time bi se obezbijedili i otklonili svaki apriorizam i dogmatizam u ovoj materiji, koja je inače po svojoj prirodi i iskustvu na međunarodnom planu vuče na rješenja apstraktnog i kategorijalnog karaktera. Ovo zahtijeva posebnu zaštitu, jer postoji stalna opasnost za korišćenjem analogije sa međunarodnim pravom.

Svakako da je još nemoguće u punoj mjeri sagledati ovu problematiku, tako da treba prepustiti praksi da ona sagleda probleme i ponudi rješenje. Na taj način bi se u jednom kasnijem vremenu, upravo na bazi iskustva iz te prakse, pokušao postaviti sistem kolizionih normi za sukobe zakona. Pri tome, svakako da će se tada postaviti i prethodno pitanje ko bi bio pozvan i nadležan da donese ovakve kolizione norme.

Da li te norme treba da budu donesene na republičkom ili entitetskim nivoima. No, to su sve pitanja na koja će biti moguće dati odgovor tek u budućnosti i na osnovu daljnje izgradnje pravnog sistema. U vezi sa sistemom unutrašnjih kolizionih normi treba naglasiti da se pitanje sukoba zakona ne bi moglo postaviti u onim materijama za čije je zakonsko regulisanje, u cjelini, nadležna republika. Ukoliko bi do tog došlo, onda se u suštini može postaviti pitanje ustavnosti takvih republičkih zakona. Ovo, iz razloga što bi na taj način republika svojim zakonom regulisala više od onoga što spada u njenu nadležnost, odnosno što republika nije u potpunosti i punoj mjeri regulisala materiju koja spada u njenu nadležnost. Republika ima samo ona i onoliko prava koja joj je Ustav stavio u nadležnost, ali i dužnost da te odnose reguliše.

ZAKLJUČAK

Pored sukoba zakona izazvanog evropeizacijom prava u složenim državama kao što je Bosna i Hercegovina kao poseban problem javlja se unutrašnji sukob zakona koji sve više postaje aktuelan kao i načini njegovog rješavanja. Dejtonskim Ustavom je konstituisana Republika Bosna i Hercegovina kao složena država sa dva entiteta Republike Srpske, Federacije Bosne i Hercegovine i Distrikta Brčko.

Osim toga, svakako je potrebno da svi pojedinci i sva pravna lica u Bosni i Hercegovini unaprijed znaju po kojem će se pravu republike, entiteta ili distrikta raspravljati, odnosno rješavati pravni odnosi kod kojih se pojavljuje „inostrani elemenat” unutrašnjeg karaktera.

Donošenje zakona kojim bi se regulisala ova pitanja nameće se kao nužna potreba kako bi se upravo ovakvim zakonom i kolizionim normama obezbijedila puna pravna sigurnost.

Ovakva situacija postoji u svim složenim državama i njen značaj bitno zavisi od konkretnog razgraničenja normativne, zakonodavne djelatnosti između republike i njenih entiteta odnosno distrikta.

Kako je normativna, zakonodavna nadležnost entiteta obimna i u načelu osnovna, pitanje internog sukoba zakona je od posebnog značaja. Ovo, naročito kada se zna da se pri rješavanju ovog pitanja ne mogu mnogo koristiti iskustvo drugih zemalja.

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INTERNAL CONFLICT OF LAWS IN BOSNIA AND HERZEGOVINA

Summary: *In addition to the conflict of laws caused by the Europeanization of law in complex countries such as Bosnia and Herzegovina, a special problem is the internal conflict of laws that is becoming increasingly relevant as well as ways to resolve it. The Dayton Constitution constituted the Republic of Bosnia and Herzegovina as a complex state with two entities, i.e. the Republic of Srpska and the Federation of Bosnia and Herzegovina and District Brčko.*

This situation creates the possibility for the actual occurrence of an internal conflict of laws, i.e. raises the question of which of the republican or entity laws will be applied in those cases in which there is the so-called "element of foreignness".

The enactment of a law that would regulate these issues imposes itself as a necessary need in order to provide full legal certainty with such a law and conflict of law norms.

Key words: *complex state, internal conflict of laws, foreignness, jurisdiction, conflict norms*

JEL classification: K23

INTRODUCTION

In addition to the conflict of laws caused by the Europeanization of law in complex countries such as Bosnia and Herzegovina, a special problem is the internal conflict of laws that is becoming increasingly relevant as well as ways to resolve it. The Dayton Constitution constituted the Republic of Bosnia and Herzegovina as a complex state with two entities, i.e. the Republic of Srpska and the Federation of Bosnia and Herzegovina and District Brčko.

The mentioned agreement redistributed the legislation between the republic and the entities, i.e. the district, in many legal areas. With this division, a large part of the legal areas are regulated by the entities, i.e. the district, so that the competence of the republic in general, and consequently in the area of normative and legal regulation in relation to the previous situation, is significantly narrowed. It is especially important that in most administrative areas the competence of the entities is exclusive. In addition, the legislative activity of the entities is quite extensive in areas that are under the joint jurisdiction of the republic and the entities, such as the regulation of judicial control of the administration or administrative dispute, which is the subject of our special interest.

This significantly expanded legislative activity of the entities or districts, especially in the field of administrative law and administrative disputes, has created, i.e. significantly and qualitatively expanded the possibility for the same relationship to be regulated differently at the level of the republic and the entity or district.

Such a situation should be expected, justified and necessary, since, nowadays, it is becoming more and more a reality. In this sense, it would be of considerable benefit to have as large and extensive an agreement as possible between the republic, the entities and the district on the acceptance, in whole or in principle, of common substantive legal solutions.

This agreement also refers to the regulation of certain issues, i.e. legal areas and matters. In that way, voluntary de facto unification of substantive legal solutions and legal regulations is achieved. Negotiating a solution is analogous to modern tendencies and phenomena on an international scale and at the international level.

Unification of substantive law regulations is carried out in many areas of law, even in areas where legislative competence belongs exclusively or predominantly to the entities or the district.

1. CURRENT SITUATION

This situation creates the possibility for the actual occurrence of an internal conflict of laws, i.e. it raises the question of which of the republican or entity laws will be applied in those cases in which the so-called "element of foreignness" appears. The element of foreignness can appear in different forms - domicile or residence, place of issuance and use of documents, place of imposition and execution of sentences, carrying weapons, etc.

For example, when a subject of legal relationship has a residence in the territory of another entity and not the entity before whose courts or other bodies the matter is discussed, resolved or regulated, or when a person has a permit to carry a weapon issued by the competent authority of one entity wants to use it in the territory of another entity, as well as in many other cases when an element of foreignness appears.

Thus, one additional element is either the subject of the legal relationship, or the object of the legal relationship, or the legal act itself.

The existence of this element raises the question of whether in such cases the law of the republic or entity before whose body the matter is resolved and discussed or the law of another entity will apply.

This, of course, in case the law of another entity is to be applied to a particular relationship at all.

Therefore, the question arises in these and similar cases in which the republic and the entities could claim the right to regulate the legal relationship or some element of the relationship in which that "element of foreignness appears" according to the provisions of their laws. This element can appear in a very different form, but the question of the extent to which it will be taken into account in resolving such cases arises as particularly important.

All these issues of conflict of laws at the internal level of a complex state must be resolved regardless of the fact that the content of legal norms would be the same in the entities and in the Brčko District. The court or competent body should refer to the law that is to be applied in a particular case, regardless of the fact that the laws of the republic, entity and district regulate a specific legal case in an identical manner.

In such a situation, there is necessarily a need to prescribe conflicting norms for resolving such conflicts of law, or ultimately norms for determining the competent substantive law to regulate legal relations with the element of foreignness, in order to know which of the possible laws or rights will be applied to resolve a specific administrative dispute.

It should be noted that these conflicting norms do not contain a material solution for the legal relationship in question, but only determine the competent law.

Therefore, they only determine the substantive law, i.e. the Law on Administrative Dispute, which should be applied in resolving or regulating the legal relationship in which an additional element of foreignness appears.

This situation exists in all complex states and its significance largely depends on the specific demarcation of normative, legislative activity between the republic and its entities or districts. As the normative, legislative competence of the entities is extensive and in principle fundamental, the issue of internal conflict of laws is of particular importance (Jenks 1956; Steinberg 2005).

This is especially true when it is known that the experience of other countries cannot be used much in resolving this issue. In the United States, it is sometimes more difficult to establish a legislative situation when it comes to the laws of individual federal units than when it comes to general, i.e. case law. In this, therefore, the so-called Shepard's citation system that covers federal law, constitutions, and court rules is of great help.

The issue of internal conflict of laws in many ways, also in terms of legal constructions, resembles the legal issues of international conflict of laws. Therefore, the possibility of using solutions that exist in this area at the international level is often pointed out.

However, although some legal constructions of conflicts of law at the international level and on an international scale can be used in considering the issue of internal conflict of laws, and to some extent in resolving this issue, between international conflict of law and internal conflict of law there is an important difference in essence and approach, especially when it comes to a country like Bosnia and Herzegovina, which needs special attention.

While the international conflict of laws comes as an expression of the actual conflict of sovereignty of states as international entities, the internal conflict of laws is an expression of the cooperation of units within a complex state, regardless of the fact that those units have their own sovereignty. This is an important, essential and qualitative difference between these two types of conflict of laws, and it should be constantly kept in mind.

Hence, the solution to the international conflict of laws is based on the idea of protecting one's sovereignty from the penetration of foreign law, while the solution to the internal conflict of laws must be based on the cooperation of the sovereignty of the constituent units of a complex state.

In doing so, one must start from the assumption that the diversity of legal orders of constituent units, in our case entities, in one complex state can never have a contradictory character.

Therefore, in an internal conflict of laws, the institution of "public order" (*ordre public*), which is otherwise very important and necessary in the context of an international conflict of laws, can never be applied.

Given this, the laws that are supposed to regulate these two types of conflict of laws should be completely separated, because they, by all analogies, should regulate two completely different and two qualitatively different situations.

2. PROPOSAL OF POSSIBLE SOLUTIONS

Resolving internal conflicts of law in complex states is a constitutional affair and is resolved through republican bodies. The enactment of a law that would regulate these issues imposes itself as a necessary need in order to provide full legal certainty with such a law and conflict of law norms.

Namely, the movement of people and goods in our internal traffic is significant, so that any uncertainty regarding the competent law can have not only legal but also political consequences. These consequences could be particularly severe if the case law, in the absence of legislation, began to use the analogy of a solution from private international law, which would certainly be both wrong and harmful.

In addition, it is certainly necessary that all individuals and all legal entities in Bosnia and Herzegovina know in advance which law of the republic, entity or district will be discussed or resolved legal relations in which there is a "foreign element" of internal character.

The existence of this element provokes and imposes as a preliminary issue the resolution of conflicts of law at the domestic level.

The question is whether the enactment of legal regulations (Longobardo 2020) that would resolve the internal conflict of laws should be started immediately, or it would be better and more expedient to wait for the republic, entities and the district to pass their laws in areas within their legislative competence (Brankovic 2011).

Namely, the opinion is expressed that it would be premature to adopt regulations on internal conflict norms until the material regulations on the basis of which internal conflict norms should be built are adopted.

However, even if to a certain extent, in order to better understand the relationship and problems, it would be useful to already have republic, entity and material regulations of the district in the relevant areas at the time of drafting internal conflict norms, it is necessary to immediately start drafting regulations on conflict norms.

This is due to the fact that conflict-of-law norms are a completely special and independent category from substantive legal norms and are not a derivative of them nor are they directly related to them. Conflict norms must exist and be applied even in the case that the *de facto* agreed unification of the respective material legal norms of the republic, entities and districts takes place to the greatest possible extent.

Conflict norms provide a certainty as to which law is competent to resolve certain issues and legal relations.

Having all this in mind, it is certainly better to immediately adopt regulations on conflict of law norms, at least for a certain legal area. The adopted solutions could be supplemented or changed over time if experience and practice show that it would be necessary.

It is better to have in this matter, in which neither we nor others have enough experience, legal regulations that would be subject to changes in the future, which is, after all, the case for the laws that regulate so called classical legal matters, than to leave uncertainties and leave legal wanderings to court practice.

Any disputed situation in this domain of law can have, as we have already emphasized, not only legal but also political consequences for this country.

This is a special area where the lack of clear legal solutions can cause particularly damaging consequences.

The broad legislative competence (Abbott 1999; Sivakumaran 2011) of the republic, entities and districts in not only many but also in very different legal areas causes the possibility of conflict of laws in a large number of legal relations of very different nature and structure.

This is certainly a very important and decisive fact in formulating coalition norms for these various legal relations, which should certainly be taken into account. Hence, we think that any codification of the whole of internal conflict norms would not be possible or opportune, at least not at this moment and in the foreseeable future.

There are several ways to enact conflict rules and resolve internal conflicts of law. One of the ways is to pass a main law on conflict-of-law rules, which would contain a part that would regulate general and common institutions of internal conflict-of-law law.

These legal rules would apply to all cases of conflict of laws, as a rule in any type of legal relationship. This is provided that some other regulation on conflict of law would not exclude their application for certain cases of legal relations.

Internal conflict can also be resolved by the Republic introducing coalition norms in laws that regulate only principles or only certain parts of certain legal matters. These norms would refer to areas that will be regulated by entity and district laws and where internal conflicts of law may arise.

These matters usually represent significant units, so that these coalition norms would represent units for these areas of law, and it will certainly be necessary, in these cases, to accept specific points of attachment that will correspond to each of these types of legal relations.

For other areas where conflicts of law occur, special laws on conflict-of-law rules would be enacted, as appropriate, but these laws may include either certain groups of related legal relationships or only individual legal relationships.

This way of regulating conflicts, i.e. prescribing internal coalition norms through laws, fast adoption of these laws can be achieved, and also acceptance of the most expedient and correct solutions ensured, having in mind the character and nature of the legal relationship for which these coalition norms are adopted.

This would provide and eliminate any *a priori* and dogmatism in this matter, which, by its nature and experience at the international level, draws it to solutions of an abstract and categorical character. This requires special protection because there is a constant danger of using an analogy with international law.

Of course, it is still impossible to see this problem to the full extent, so it should be left to practice to look at the problems and offer a solution. In this way, at a later time, based on the experience from that practice, an attempt would be made to set up a system of conflicting norms for conflicts of law.

At the same time, there will certainly be a preliminary question as to who would be invited and authorized to adopt such conflict norms.

Should these norms be adopted at the republican or entity levels remains a question. However, these are all questions that will be possible to answer only in the future and on the basis of further construction of the legal system.

With regard to the system of internal conflict of law norms, it should be emphasized that the issue of conflict of laws could not be raised in those matters for which legal regulation is, as a whole, the competent republic. If that were to happen, then, in essence, the question of the constitutionality of such republican laws could be raised.

This is due to the fact that in such a way the republic would regulate by its law more than what falls within its competence, that is, because the republic did not fully and totally regulate the matter that falls within its competence. The Republic has only that and as many rights that the Constitution has placed in its competence, but also the duty to regulate those relations.

CONCLUSION

In addition to the conflict of laws caused by the Europeanization of law in complex countries such as Bosnia and Herzegovina, a special problem is the internal conflict of laws that is becoming increasingly relevant as well as ways to resolve it. The Dayton Constitution constituted the Republic of Bosnia and Herzegovina as a complex state with two entities of the Republic of Srpska, the Federation of Bosnia and Herzegovina and District Brčko.

In addition, it is certainly necessary that all individuals and all legal entities in Bosnia and Herzegovina know in advance according to which law of the republic, entity or district legal relations in which there is a "foreign element" of internal character will be discussed or resolved.

The enactment of a law that would regulate these issues imposes itself as a necessary need in order to provide full legal certainty with such a law and conflict of law norms.

This situation exists in all complex states and its significance greatly depends on the specific demarcation of normative, legislative activity between the republic and its entities or district.

As the normative, legislative competence of the entities is extensive and in principle basic, the issue of internal conflict of laws is of special importance. This is especially true when it is known that the experience of other countries cannot be used much in resolving this issue.

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UTICAJ SISTEMA NAGRAĐIVANJA NA PERFORMANSE LOKALNE SAMOUPRAVE: DOKAZI IZ REPUBLIKE SRPSKE

Rezime: *Kako je osnovni problem u ovom istraživanju sagledavanje uticaja sistema nagrađivanja zasnovanog na osnovnoj plati kao dominantnom obliku materijalnih kompenzacija na uspješnost lokalnih samouprava, u ovom radu najviše pažnje je posvećeno specifičnostima lokalne samouprave u kontekstu menadžmenta ljudskih resursa, a naročito sistemu nagrađivanja u lokalnoj samoupravi. Predmet empirijskog istraživanja u ovom radu bile su lokalne samouprave u Republici Srpskoj, a istraživanje je provedeno u periodu od 2015. do 2019. godine. U obradi prikupljenih podataka koristile su se primjerene statističke metode, dok je testiranje hipoteza postavljenih u ovom radu izvršeno uz pomoć korelacione i regresione analize. Primjenom navedenih statističkih metoda nije pronađeno dovoljno dokaza o uticaju postojećeg sistema nagrađivanja, koji je zasnovan na osnovnoj plati, kao dominantnom obliku materijalnih kompenzacija na uspješnost lokalne samouprave. U radu je ponuđen set smjernica za modeliranje sistema nagrađivanja u lokalnoj samoupravi, koji uvažava principe meritornosti i daje preporuke za otklanjanje uočenih nedostataka postojećeg sistema nagrađivanja. Rezultati ovog istraživanja daju doprinos daljem napretku naučne oblasti menadžmenta ljudskih resursa u neprofitnim organizacijama, posebno u oblasti sistema nagrađivanja. Takođe, rezultati ovog istraživanja imaju i pragmatičnu vrijednost, koja se ogleda u praktičnoj koristi koju lokalne samouprave mogu imati prilikom kreiranja sistema nagrađivanja.*

Ključne riječi: *menadžment neprofitnih organizacija, upravljanje ljudskim resursima, sistem nagrađivanja, lokalna samouprava*

JEL klasifikacija: *J59, L39, M54*

UVOD

Savremene, profitno orijentisane, organizacije prepoznaju značaj upravljanja ljudskim resursima. Kreiranjem podsticajnog sistema nagrađivanja, one nastoje da ponašanje i rezultate zaposlenih usmjere ka ostvarenju poslovnih ciljeva (Duvnjak 2018). Međutim, neprofitne organizacije kao što su lokalne samouprave veoma sporo usvajaju savremene principe menadžmenta ljudskih resursa.

Lokalne samouprave su osnovane sa ciljem zadovoljavanja potreba građana i potreba od opšteg interesa. Za ostvarenje ovih potreba neophodno je obezbijediti značajna finansijska sredstva. Lokalne samouprave se finansiraju iz vlastitih prihoda i ostalih prihoda. Kako zaposleni u lokalnoj samoupravi ne mogu uticati na ostvarenje ostalih prihoda, lokalne

samouprave treba da adekvatnim sistemom nagrađivanja podstaknu zaposlene ka ostvarenju vlastitih prihoda.

Na osnovu pregleda dostupne literature može se konstatovati da ne postoje naučno zasnovana saznanja o uticaju sistema nagrađivanja zaposlenih na uspješnost lokalne samouprave iskazanu kroz sposobnost generisanja vlastitih (neporeskih) prihoda u svrhu ostvarenja ciljeva lokalne samouprave i povećanja zadovoljstva korisnika lokalne samouprave. Stoga, glavni naučni problem u ovom radu može se definisati kroz pitanje: Da li sistem nagrađivanja zaposlenih zasnovan na osnovnoj plati, kao dominantnom obliku materijalnih kompenzacija, ima pozitivan uticaj na uspješnost lokalne samouprave?

Naučni ciljevi istraživanja usmjereni su na dobijanje novih naučnih činjenica i spoznaja o stepena povezanosti nagrađivanja u lokalnoj samoupravi i ostvarivanja vlastitih prihoda. U glavnoj hipotezi se tvrdi da sistem nagrađivanja u lokalnoj samoupravi zasnovan na osnovnoj plati, kao dominantnom obliku materijalnih kompenzacija, nema značajan uticaj na uspješnost lokalnih samouprava. U skladu sa istraživačkim pitanjem i postavljenim hipotezama, identifikovani su odgovarajući indikatori uspješnosti lokalne samouprave. Predmet empirijskog istraživanja u ovom radu bile su sve lokalne samouprave u Republici Srpskoj, a istraživanje je provedeno u periodu od 2015. do 2019. godine. Empirijski podaci su prikupljeni iz izvještaja o izvršenju budžeta jedinica lokalne samouprave i podataka o njihovom broju zaposlenih.

1. TEORIJSKI ASPEKTI ISTRAŽIVANJA

1.1. Upravljanje performansama u lokalnoj samoupravi

Sistem za upravljanje performansama u lokalnoj samoupravi ima dva zadatka (Kent i Haldma 2019). Prvi, pomaže rukovodstvu lokalne samouprave da preduzimaju racionalne akcije po principu efikasnosti i efektivnosti. Drugo, zadovoljava različite vrijednosti za građane i ostale zainteresovane strane, a koje se odnose na iskorjenjenja siromaštva, adekvatni ruralni i ekonomski razvoj lokalne samouprave i otvaranje novih radnih mjesta.

Pregledom literature utvrdilo se da problem efikasnosti i efektivnosti sistema za mjerenje performansi u lokalnoj samoupravi nije dovoljno izučavan i publikovan (Kent i Haldma 2019; Alam i Alam 2020; Mättö i drugi 2020; Rajala i Laihonon i Haapala 2018). Rukovodstvo lokalne samouprave bi trebala biti u mogućnosti da koristi upravljanje učinkom kao alat za ostvarivanje ciljeva (Johanson i Almqvist i Skoog 2019), smanjivanje lošeg učinka radnika i poboljšanje pružanja usluga.

Sistem za mjerenje performansi treba jasno svakom službeniku da da informacije o tome šta se od njega očekuje, da ta očekivanja trebaju biti relevantna za posao za koji je zaposleni primljen ili imenovan (Aleksandrov i Bourmistrov i Grossi 2020). Očekivanja o učinku, odnosno o očekivanim ciljevima i zadacima, treba da budu jasna svim zaposlenima od najvišeg rukovodstva, odjeljenja i timova do pojedinačnog nivoa. Očekivanja od učinaka trebaju biti navedena mjerljivo i standardizovana.

Sistem za mjerenje performansi treba da obezbijedi povratne informacije o učinku kako bi lako otkrio probleme neusaglašenosti koje zahtijevaju korektivne mjere (Soomro i Shah 2019). Rukovodioci i zaposleni moraju biti obučeni za ostvarivanje rezultata. Sistem za mjerenje performansi treba biti implementiran na svim nivoima, tako da on postavne dio organizacione kulture.

Sistem za mjerenje performansi potrebno je integrisati sa drugim procesima u lokalnoj samoupravi (Kaye-Essien 2020; Kloot 1999), kao što su sektori lokalne samouprave, zakonodavstvo, norme, standardi, veličina, zrelost i struktura lokalne samouprave te kultura

poslovanja. Upravljanje sistemom mjerenja performansi treba obuhvatiti strategijom upravljanja ljudskim resursima, a politiku upravljanja sistemom mjerenja performansama treba usaglasiti sa zainteresovanim stranama.

Rukovodioci bi trebali strategiju razvoja lokale zajednice podijeliti na izvodljive akcione planove i poslove (očekivanja od učinaka) po različitim nivoima u lokalnoj samoupravi i pratiti i nadgledati sistem upravljanja (Ferreira i Carvalho i Pinho 2020).

Posebno je važno da rukovodstvo obezbijedi resurse za efikasno obavljanje zadataka, učešće u obukama i za motivaciju zaposlenih.

1.2. Sistem nagrađivanja u lokalnoj samoupravi

Mnogi su izazovi sa kojima se suočava menadžment lokalne samouprave, a jedan od njih predstavlja uspostavljanje odgovarajućeg sistema nagrađivanja zaposlenih koji bi bio u funkciji poboljšanja uspjehnosti lokalne samouprave (Suwaidi i Rahman 2019). Nagrađivanje zaposlenika jedan je od najefikasnijih motivatora za rad (Mickson i Anlesinya 2020). Sistem nagrađivanja u lokalnoj samoupravi je bitna aktivnost u upravljanju ljudskim resursima, koja se odnosi na određivanje novca, dobara i usluga koje zaposleni dobivaju za obavljeni rad.

Nagrađivanje zaposlenih u lokalnoj samoupravi ima ograničenja u propisima koji regulišu ovu oblast, za razliku od privatnog sektora, gdje menadžment ima znatno više mogućnosti da nagrađuje zaposlene u skladu sa ostvarenim rezultatima. Sistem nagrađivanja u lokalnoj samoupravi zasnovan je na osnovnoj plati, kao dominantnom obliku materijalnih kompenzacija, a visina osnovne plate zaposlenih u lokalnoj samoupravi određuje se u skladu sa zakonskim i podzakonskim propisima.

Lokalne samouprave se finansiraju iz poreskih prihoda, neporeskih prihoda, grantova i transfera. Zaposleni u jedinici lokalne samouprave ne mogu uticati na ostvarenje poreskih prihoda, jer iznos ovih sredstava zavisi od viših nivoa vlasti. Poreski prihodi se, uglavnom smanjuju, tako da se jedinice lokalne samouprave moraju usmjeriti na ostvarenje vlastitih prihoda, kako bi mogli ispunjavati zadatke koji su propisani zakonskom i podzakonskom regulativom.

Postoji mnogo klasifikacija komponenti sistema nagrađivanja, a jedna od najopštijih podjela je na materijalne i nematerijalne komponente sistema nagrađivanja. Kada su u pitanju materijalne nagrade, Bahtijarević-Šiber ih razlaže u dvije osnovne grupe i to: direktne i indirektne materijalne nagrade. U direktne materijalne nagrade spada sistem plata i drugih materijalnih davanja zaposlenima, odnosno bonusa vezanih sa individualnim ili grupnim radom, dok u indirektne materijalne nagrade spada čitav niz materijalnih beneficija koje se stiču samim zapošljavanjem u određenoj organizaciji (Bahtijarević-Šiber 1999).

Pored materijalnih nagrada, organizacije svojim zaposlenima često omogućavaju ostvarenje nematerijalnih nagrada. Nematerijalne nagrade utiču na motivaciju zaposlenih kroz zadovoljavanje njihovih potreba koje nisu vezane za novac, kao što su: zadovoljavanje potreba višeg reda, potreba za uvažavanjem, poštovanjem, potvrđivanjem i razvojem ličnih sposobnosti i druge potrebe.

U praksi lokalnih uprava, uglavnom, je zastupljen sistem nagrađivanja zasnovan na osnovnoj plati. Poslovi iste ili slične složenosti grupišu se u iste platne razrede, bez obzira na ostvarene rezultate rada.

Materijalne kompenzacije koje se najčešće koriste u lokalnoj samoupravi su: plata, penziono osiguranje, zdravstveno osiguranje, odmori, praznici, plaćena odsustva, prevoz, različite nagrade za rad, staž i druge prilike, neplaćena odsustva zbog porodičnih razloga, itd.

Iako su materijalne kompenzacije osnova motivacionog sistema u lokalnoj samoupravi, za većinu zaposlenih podjednako su bitne potrebe višeg reda, kao što su razvoj i potvrđivanje, uvažavanje i status.

Na osnovu analize sistema nagrađivanja u lokalnim samoupravama nekoliko evropskih zemalja, može se zaključiti da se plate zaposlenima, uglavnom, određuju na osnovu propisanih opisa poslova, koji predstavljaju osnovicu za određivanje plata (Kuhlmann i Bogumil 2017). Vidljivo je da u lokalnim samoupravama nisu definisane norme za obavljanje poslova, kako bi se utvrdilo ko je od zaposlenih uradio više nego što je trebao, kako bi mu se odredila adekvatna nagrada.

Lokalna samouprava treba da uvede nadzor nad radom zaposlenih, kako bi se na kvalitetan i jasan način definisali ciljevi i radni zadaci zaposlenih te kako bi se kvalitetno vršilo praćenje izvršenja postavljenih zadataka. Međutim, da bi zaposleni mogao da obavlja zadate poslove na kvalitetan način, potrebno je da mu se obezbijedi kontinuirana edukacija. Takođe, potrebno je obezbijediti transparentno ocjenjivanje zaposlenih, na osnovu definisanih kriterijuma koji će se koristiti, a koji nisu subjektivne prirode. Nagrađivanja radnika u lokalnoj samoupravi treba biti usaglašeno sa finansijskim mogućnostima i planiranim sredstvima u budžetu (Mikulić 2009).

2. METODE ISTRAŽIVANJA

Iz postavljenog problema istraživanja ovog rada mogu se identifikovati dvije osnovne varijable istraživanja. Nezavisnu varijablu predstavlja sistem nagrađivanja, dok uspješnost lokalnih samouprava čini zavisnu varijablu.

Ne postoji definicija uspješnosti lokalne samouprave na osnovu koje bi se odredili univerzalni parametri za poređenje uspješnosti lokalnih samouprava. Da bi se došlo do pokazatelja uspješnosti lokalne samouprave, mora se početi od zadataka, tj. poslova lokalne samouprave, a to su: Poslovi na planu regulatornih radnji i upravljanja opštinom i Poslovi na planu pružanja usluga. Međutim, da bi jedinice lokalne samouprave mogle da obavljaju poslove koji su definisani zakonskim propisima, potrebno je da obezbijede finansijska sredstva kroz ostvarene prihode u budžetu. Dakle, lokalne samouprave pored ciljeva koje postavljaju da bi korisnici usluga bili zadovoljni, moraju postavljati i ciljeve koji se odnose na povećanje vlastitih prihoda. Budžetski prihodi lokalne samouprave se sastoje od: poreskih prihoda, neporeskih prihoda, grantova i transfera. Zaposleni u lokalnoj samoupravi ne mogu direktno uticati na ostvarenje poreskih prihoda, grantove i transfere, već samo na ostvarenje neporeskih prihoda koji obuhvataju: prihode od finansijske i nefinansijske imovine i pozitivnih kursnih razlika, naknade, takse i prihode od pružanja javnih usluga, novčane kazne i ostale neporeske prihode. Iz tog razloga, kao pokazatelj uspješnosti lokalne samouprave u ovom radu posmatraće se sposobnost lokalne samouprave da kroz efikasan rad zaposlenih generiše vlastite (neporeske) prihode. Od četiri grupe vlastitih prihoda, zaposleni u lokalnoj samoupravi najviše uticaja mogu imati na ostvarenje prihoda koji obuhvataju: prihode od finansijske i nefinansijske imovine i pozitivnih kursnih razlika i naknade, takse i prihode od pružanja javnih usluga. Drugim riječima, ove dvije grupe vlastitih prihoda predstavljaju indikatore zavisne varijable. Budžet jedinice lokalne samouprave, pored budžetskih prihoda sastoji se i od budžetskih rashoda. Budžetski rashodi predstavljaju sredstva koja jedinice lokalne samouprave troše, a sastoje se od tekućih rashoda i budžetske rezerve. U tekuće rashode ubrajaju se: rashodi za lična primanja (rashodi za bruto plate i rashodi za bruto naknade troškova i ostalih ličnih primanja zaposlenih), rashode za korišćenje roba i usluga, rashode finansiranja i drugih finansijskih troškova, subvencija, tekućih kapitalnih grantova, itd. S obzirom na problem

istraživanja, rashodi za lična primanja, tačnije rashodi za bruto plate i rashodi za bruto naknade troškova i ostalih ličnih primanja zaposlenih predstavljaju indikatore nezavisne varijable.

U sagledavanju i analizi odnosa između definisanih varijabli istraživanja pošlo se od pretpostavke izražene osnovnom hipotezom (H), koja glasi: Sistem nagrađivanja zasnovan na osnovnoj plati, kao dominantnom obliku materijalnih kompenzacija, nema značajan uticaj na uspješnost lokalnih samouprava. U radu su postavljene i dvije pomoćne hipoteze.

Prva pomoćna hipoteza vezuje se za prvi indikator nezavisne varijable, a to je osnovna plata zaposlenih u lokalnoj samoupravi. Prva pomoćna hipoteza (H_1) glasi: Povećanje plata zaposlenima u lokalnoj samoupravi ne utiče na efikasnost i efektivnost upravljanja sopstvenom imovinom lokalne samouprave i pružanje javnih usluga, što se odražava na visinu ostvarenih vlastitih prihoda. Ova hipoteza je testirana na bazi sagledavanja statističke veze između posmatranih indikatora, izražene sljedećim relacijama: uticaj plata po zaposlenom u lokalnoj samoupravi na prihode po zaposlenom, ostvarene po osnovu finansijske i nefinansijske imovine i pozitivnih kursnih razlika ($H_{1.1}$) i uticaj plata po zaposlenom u lokalnoj samoupravi na prihode po zaposlenom ostvarene po osnovu naknada, taksi i pružanja javnih usluga ($H_{1.2}$).

Druga pomoćna hipoteza vezuje se za drugi indikator nezavisne varijable, odnosno za naknade zaposlenima u lokalnoj samoupravi. Druga pomoćna hipoteza (H_2) glasi: Povećanje naknada zaposlenima u lokalnoj samoupravi ne utiče na efikasnost i efektivnost upravljanja sopstvenom imovinom lokalne samouprave i pružanje javnih usluga, što se odražava na visinu ostvarenih vlastitih prihoda. Ova hipoteza je, takođe, testirana na bazi sagledavanja statističke veze između posmatranih indikatora, izražene sljedećim relacijama: uticaj naknada po zaposlenom u lokalnoj samoupravi na prihode po zaposlenom, ostvarene po osnovu finansijske i nefinansijske imovine i pozitivnih kursnih razlika ($H_{2.1}$) i uticaj naknada po zaposlenom u lokalnoj samoupravi na prihode po zaposlenom ostvarene po osnovu naknada, taksi i pružanja javnih usluga ($H_{2.2}$).

U svrhu testiranja postavljenih hipoteza izvršeno je prikupljanje empirijskih podataka za jedinice lokalne samouprave u Republici Srpskoj u periodu od 2015. do 2019. godine. Empirijski podaci su prikupljeni preuzimanjem izvještaja o izvršenju budžeta jedinica lokalne samouprave, koji su dobijeni direktnim zahtjevima za pristup informacijama ili koji se nalaze na službenim internet stranicama jedinica lokalne samouprave, kao i preuzimanjem podataka od Agencije za posredničke, informatičke i finansijske usluge (APIF). Od 64 jedinice lokalne samouprave u Republici Srpskoj, koje su predmet istraživanja, prikupljeni su podaci za 54, dok za deset jedinica lokalne samouprave nisu bili dostupni potpuni podaci te su isključene iz dalje analize.

U cilju testiranja postavljenih hipoteza primijenjeno je nekoliko statističkih metoda. Prije svega, urađena je deskriptivna analiza podataka, koja uključuje aritmetičku sredinu vrijednosti posmatranih indikatora, ali i standardnu devijaciju koja pokazuje relativna odstupanja vrijednosti posmatranih podataka. Prosta korelaciona analiza je korišćena da bi se ispitalo da li između varijacija posmatranih pojava postoji kvantitativno slaganje i, ukoliko postoji, u kom stepenu je ono prisutno. U tu svrhu primijenjen je Pirsonov koeficijent korelacije. Kako bi se odredio oblik veze između sistema nagrađivanja zaposlenih u lokalnoj samoupravi i uspješnosti lokalne samouprave, primijenjena je regresiona analiza. Statistička obrada podataka izvršena je uz pomoć statističkog programskog paketa SPSS.

3. REZULTATI ISTRAŽIVANJA I DISKUSIJA

Kao što je istaknuto u prethodnoj cjelini rada, period istraživanja obuhvata pet godina te se na samom početku obrade podataka javila dilema da li vršiti testiranje hipoteza pojedinačno za svaku posmatranu godinu ili zbirno za cijeli posmatrani period. U cilju rješenja ove dileme urađena je deskriptivna analiza, koja uključuje aritmetičku sredinu vrijednosti posmatranih indikatora, ali i standardnu devijaciju koja pokazuje relativna odstupanja vrijednosti posmatranih podataka. Rezultati deskriptivne obrade podataka pokazali su da se u većini slučajeva javljaju velika relativna odstupanja podataka. Razlog je što je period posmatranja samo pet godina, što povećava vjerovatnoću velikog odstupanja standardne devijacije od aritmetičke sredine. Iako se takvi slučajevi mogu isključiti iz dalje analize, njihova brojnost bi znatno umanjila broj jedinica lokalnih samouprava koje se mogu analizirati. Iz tog razloga testiranje hipoteza je izvršeno na osnovu pojedinačnih podataka po godinama, umjesto prosječnih podataka za cjelokupni posmatrani period. Rezultati testiranja hipoteza prikazani su u nastavku.

Prva pomoćna hipoteza vezuje se za rashode za bruto plate zaposlenih u lokalnoj samoupravi. U postupku testiranja prve pomoćne hipoteze (H_1) sagledan je prvi odnos između posmatranih indikatora zavisne i nezavisne varijable, izražen sljedećom pretpostavkom: Povećanje rashoda za bruto plate iskazane po zaposlenom u lokalnoj samoupravi ne utiče na povećanje prihoda po zaposlenom ostvarenih po osnovu finansijske i nefinansijske imovine i pozitivnih kursnih razlika ($H_{1.1}$). Kako bi se ustanovio stepen, oblik i smjer povezanosti posmatranih varijabli primijenjene su korelaciona i regresiona analiza, a rezultati ovih analiza prikazani su u narednoj tabeli.

Tabela 1. Korelaciona i regresiona analiza po godinama za indikatore troškovi plata po zaposlenom i prihodi od imovine po zaposlenom (Izlaz iz programskog paketa SPSS)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
Model Summary - 2015									
1	.298 ^a	.089	.071	1716.84162	.089	5.061	1	52	.029 ^b
a. Dependent Variable: PI2015									
b. Predictors: (Constant), TP2015									
Model Summary - 2016									
1	.469 ^a	.220	.205	1738.23930	.220	14.629	1	52	.000 ^b
a. Dependent Variable: PI2016									
b. Predictors: (Constant), TP2016									
Model Summary - 2017									
1	.486 ^a	.236	.221	1416.06938	.236	16.058	1	52	.000 ^b
a. Dependent Variable: PI2017									
b. Predictors: (Constant), TP2017									
Model Summary - 2018									
1	.398 ^a	.158	.142	1510.88835	.158	9.771	1	52	.003 ^b
a. Dependent Variable: PI2018									
b. Predictors: (Constant), TP2018									
Model Summary - 2019									
1	.369 ^a	.136	.120	1942.83530	.136	8.201	1	52	.006 ^b

a. Dependent Variable: PI2019
b. Predictors: (Constant), TP2019

U slučaju svih posmatranih godina veza između posmatranih varijabli nije izražena, odnosno Pirsonov koeficijent korelacije je veoma nizak (2015: $r = .298$, $r < 0.50$; 2016: $r = .469$, $r < 0.50$; 2017: $r = .486$, $r < 0.50$; 2018: $r = .398$, $r < 0.50$; 2019: $r = .369$, $r < 0.50$). Nadalje, koeficijenti determinacije (r^2), kao i korigovani koeficijenti determinacije su izrazito niski u svim posmatranim godinama. Najveći koeficijent determinacije je ustanovljen u 2017. godini ($r^2 = .236$), što znači da troškovi plata po zaposlenom determinišu prihode od imovine po zaposlenom samo sa 23,6%. Takođe, u 2017. godini je ustanovljen i najveći korigovani koeficijent determinacije i to u visini $r^2 = .221$. Koeficijent determinacije bi trebao da bude relativno visok ($r^2 > 0.50$) da bi regresioni model predstavljao adekvatnu sliku stohastičkog odnosa između posmatranih indikatora zavisne i nezavisne varijable. Na osnovu urađenih analiza može se konstatovati da nije pronađeno dovoljno dokaza koji ukazuju na značajnu povezanost posmatranih varijabli, odnosno nije pronađeno dovoljno dokaza koji potvrđuju uticaj plata na prihode od finansijske i nefinansijske imovine i pozitivnih kursnih razlika. Dakle, može se konstatovati da je hipoteza $H_{1.1}$ potvrđena.

U okviru prve pomoćne hipoteze (H_1) sagledan je i drugi odnos među posmatranim indikatorima, koji je izražen u obliku sljedeće pretpostavke: Povećanje rashoda za bruto plate iskazane po zaposlenom u lokalnoj samoupravi ne utiče na povećanje prihoda po zaposlenom, koji su ostvareni po osnovu naknada, taksi i pružanja javnih usluga ($H_{1.2}$). U nastavku je urađena korelaciona i regresiona analiza, a rezultati ovih analiza prikazani su u narednoj tabeli.

Tabela 2. Korelaciona i regresiona analiza po godinama za indikatore troškovi plata po zaposlenom i prihodi od usluga po zaposlenom (Izlaz iz programskog paketa SPSS)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
Model Summary - 2015									
1	.388 ^a	.151	.134	9863.26701	.151	9.221	1	52	.004 ^b
a. Dependent Variable: PU2015									
b. Predictors: (Constant), TP2015									
Model Summary - 2016									
1	.312 ^a	.097	.080	9282.12881	.097	5.614	1	52	.022 ^b
a. Dependent Variable: PU2016									
b. Predictors: (Constant), TP2016									
Model Summary - 2017									
1	.248 ^a	.061	.043	9192.62938	.061	3.401	1	52	.071 ^b
a. Dependent Variable: PU2017									
b. Predictors: (Constant), TP2017									
Model Summary - 2018									
1	.262 ^a	.069	.051	9448.39812	.069	3.844	1	52	.055 ^b
a. Dependent Variable: PU2018									
b. Predictors: (Constant), TP2018									
Model Summary - 2019									
1	.316 ^a	.100	.082	10335.38826	.100	5.751	1	52	.020 ^b

a. Dependent Variable: PU2019
b. Predictors: (Constant), TP2019

U svim posmatranim godinama veza između varijabli nije izražena, o čemu govori visina Pirsonovog koeficijent korelacije (2015: $r = .388$, $r < 0.50$; 2016: $r = .312$, $r < 0.50$; 2017: $r = .248$, $r < 0.50$; 2018: $r = .262$, $r < 0.50$; 2019: $r = .316$, $r < 0.50$). Kao i kod prethodno testirane hipoteze, koeficijenti determinacije (r^2) i korigovani koeficijenti determinacije su izrazito niski u svim posmatranim godinama. Najviši koeficijent determinacije je utvrđen u 2015. godini. Tako, u 2015. godini, koeficijent determinacije iznosi $r^2 = .388$, a korigovani koeficijent determinacije je $r^2 = .134$. To znači da su u 2015. godini troškovi plata determinisali prihode od usluga sa svega 38,8%. Dakle, i u slučaju ove hipoteze, koeficijenti determinacije nisu dovoljno visoki da bi se moglo tvrditi da ustanovljeni regresioni modeli predstavljaju adekvatnu sliku stohastičkog odnosa između posmatranih indikatora zavisne i nezavisne varijable. Na osnovu izloženih rezultata može se konstatovati da nije pronađeno dovoljno dokaza koji ukazuju na povezanost posmatranih varijabli, u smislu da rashodi za bruto plate po zaposlenom utiču na prihode ostvarene po osnovu naknada, taksi i prihoda od pružanja javnih usluga. Time je i hipoteza $H_{1.2}$ potvrđena.

Objekte testirane relacije ($H_{1.1}$ i $H_{1.2}$) su pokazale odsustvo uticaja posmatranih indikatora nezavisne varijable na posmatrane indikatore zavisne varijable. Time je prva pomoćna hipoteza (H_1) potvrđena, jer nije pronađeno dovoljno dokaza koji govore da povećanje plata po zaposlenom u lokalnoj samoupravi utiče na efikasnost i efektivnost upravljanja sopstvenom imovinom lokalne samouprave i pružanje javnih usluga, što se odražava na visinu ostvarenih vlastitih prihoda.

Druga pomoćna hipoteza (H_2) vezuje se za rashode za bruto naknade troškova i ostalih ličnih primanja zaposlenih (u daljoj analizi troškovi naknada) u lokalnoj samoupravi. U okviru druge pomoćne hipoteze testiran je prvi odnos između definisanih indikatora zavisne i nezavisne varijable izražen sljedećom pretpostavkom: Povećanje rashoda za bruto naknade troškova i ostalih ličnih primanja zaposlenih u lokalnoj samoupravi ne utiče na prihode po zaposlenom ostvarene po osnovu finansijske i nefinansijske imovine i pozitivnih kursnih razlika ($H_{2.1}$). Rezultati korelacione i regresione analize prikazani su u narednoj tabeli.

Tabela 3. Korelaciona i regresiona analiza po godinama za indikatore troškovi naknada po zaposlenom i prihodi od imovine po zaposlenom (Izlaz iz programskog paketa SPSS)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
Model Summary - 2015									
1	.229 ^a	.053	.034	1750.51256	.053	2.887	1	52	.095 ^b
a. Dependent Variable: PI2015									
b. Predictors: (Constant), TN2015									
Model Summary - 2016									
1	.117 ^a	.014	.005	1954.17085	.014	.718	1	52	.401 ^b
a. Dependent Variable: PI2016									
b. Predictors: (Constant), TN2016									
Model Summary - 2017									
1	.280 ^a	.078	.061	1555.24295	.078	4.422	1	52	.040 ^b

a. Dependent Variable: PI2017									
b. Predictors: (Constant), TN2017									
Model Summary - 2018									
1	.208 ^a	.043	.025	1610.87793	.043	2.341	1	52	.132 ^b
a. Dependent Variable: PI2018									
b. Predictors: (Constant), TN2018									
Model Summary - 2019									
1	.095 ^a	.009	.010	2081.01820	.009	.472	1	52	.495 ^b
a. Dependent Variable: PI2019									
b. Predictors: (Constant), TN2019									

Rezultati ovih testiranja su slični prethodnim. U slučaju svih posmatranih godina veza između posmatranih varijabli nije izražena, odnosno Pirsonov koeficijent korelacije je veoma nizak (2015: $r = .229$, $r < 0.50$; 2016: $r = .117$, $r < 0.50$; 2017: $r = .280$, $r < 0.50$; 2018: $r = .208$, $r < 0.50$; 2019: $r = .095$, $r < 0.50$). Takođe, koeficijenti determinacije (r^2), kao i korigovani koeficijenti determinacije su izrazito niski u svim posmatranim godinama. Najviši koeficijent determinacije je utvrđen u 2017. godini. U 2017. godini koeficijent determinacije iznosi $r^2 = .078$, a korigovani koeficijent determinacije je $r^2 = .061$. To znači da su u 2017. godini troškovi naknada determinisali prihode od imovine sa svega 7,8%. Dakle, ustanovljeni koeficijenti determinacije nisu dovoljno visoki da bi se moglo tvrditi da ustanovljeni regresioni modeli predstavljaju adekvatnu sliku stohastičkog odnosa između posmatranih indikatora zavisne i nezavisne varijable. Na osnovu prethodno urađenih analiza, može se konstatovati da nije pronađeno dovoljno dokaza koji ukazuju na povezanost posmatranih varijabli, u smislu da povećanje rashoda za bruto naknade troškova i ostalih ličnih primanja po zaposlenom u lokalnoj samoupravi utiče na prihode po zaposlenom, ostvarene po osnovu finansijske i nefinansijske imovine i pozitivnih kursnih razlika. Time je hipoteza $H_{2.1}$ potvrđena.

U okviru druge pomoćne hipoteze (H_2) sagledan je drugi odnos između definisanih indikatora zavisne i nezavisne varijable, koji je izražen sljedećom pretpostavkom: Povećanje rashoda za bruto naknade troškova i ostalih ličnih primanja po zaposlenom u lokalnoj samoupravi ne utiče na prihode po zaposlenom, koji su ostvareni po osnovu naknada, taksi i pružanja javnih usluga ($H_{2.2}$). Analogno primijenjenom postupku testiranja prethodnih hipoteza, urađena je korelaciona i regresiona analiza. Rezultati ovih analiza prikazani su u narednoj tabeli.

Tabela 4. Rezultati korelacione i regresione analize po godinama za indikatore troškovi naknada po zaposlenom i prihodi od usluga po zaposlenom (Izlaz iz programskog paketa SPSS)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
Model Summary – 2015									
1	.643 ^a	.414	.402	8195.74097	.414	36.667	1	52	.000 ^b
a. Dependent Variable: PU2015									
b. Predictors: (Constant), TN2015									
Model Summary - 2016									
1	.258 ^a	.067	.049	9438.48262	.067	3.721	1	52	.059 ^b
a. Dependent Variable: PU2016									
b. Predictors: (Constant), TN2016									

Model Summary - 2017									
1	.473 ^a	.224	.209	8359.56613	.224	14.993	1	52	.000 ^b
a. Dependent Variable: PU2017									
b. Predictors: (Constant), TN2017									
Model Summary - 2018									
1	.525 ^a	.275	.261	8335.27415	.275	19.755	1	52	.000 ^b
a. Dependent Variable: PU2018									
b. Predictors: (Constant), TN2018									
Model Summary - 2019									
1	.491 ^a	.241	.226	9490.65436	.241	16.489	1	52	.000 ^b
a. Dependent Variable: PU2019									
b. Predictors: (Constant), TN2019									

U slučaju tri posmatrane godine, korelaciona analiza ukazuje na nizak stepen povezanosti među posmatranim varijablama (2016: $r = .258$, $r < 0.50$; 2017: $r = .473$, $r < 0.50$; 2019: $r = .491$, $r < 0.50$). Ta veza je umjerena u slučaju 2015. godine ($r = .643$, $r > 0.50$) i 2018. godine ($r = .525$, $r > 0.50$). S obzirom na nešto veći koeficijent korelacije, u 2015. godini se javlja i najveći koeficijent determinacije, odnosno korigovani koeficijent determinacija. Tako, u 2015. godini koeficijent determinacije iznosi $r^2 = .414$, a korigovani koeficijent determinacije je $r^2 = .404$. To znači da su u 2015. godini troškovi naknada determinisali prihode od usluga sa 41,4%. U svim ostalim posmatranim godinama koeficijenti determinacije, kao i korigovani koeficijenti determinacije su znatno niži. Ukupno posmatrano, ustanovljeni koeficijenti determinacije nisu visoki, odnosno može se reći da nisu dovoljno visoki da bi se moglo tvrditi da ustanovljeni regresioni modeli predstavljaju adekvatnu sliku stohastičkog odnosa između posmatranih indikatora zavisne i nezavisne varijable. Dakle, i u ovom slučaju nisu pronađeni dovoljni dokazi da bi se sa sigurnošću mogao potvrditi uticaj troškova naknada po zaposlenom na prihode od usluga po zaposlenom. Stoga se i hipoteza $H_{2.2}$ prihvata.

Objektirane relacije ($H_{2.1}$ i $H_{2.2}$) nisu ponudile dovoljno dokaza o uticaju nezavisne varijable na posmatrane indikatore zavisne varijable. Stoga se i druga pomoćna hipoteza (H_2) prihvata, jer nije pronađeno dovoljno dokaza da povećanje naknada zaposlenima u lokalnoj samoupravi utiče na efikasnost i efektivnost upravljanja sopstvenom imovinom lokalne samouprave i pružanje javnih usluga, što se odražava na visinu ostvarenih vlastitih prihoda. U cjelini posmatrano, u 18 od 20 testiranih modela koeficijenti korelacije veoma su niski ($r < 0.50$). Takođe, koeficijenti determinacije su izrazito niski u svim posmatranim relacijama. Najveći koeficijent determinacije, ustanovljen je u 2015. godini za hipotezu $H_{2.2}$ i iznosi $r^2 = .414$. Dakle, možemo zaključiti da na ostvarenje prihoda od imovine po zaposlenom i prihoda od javnih usluga po zaposlenom, u manjoj mjeri utiču troškovi plata po zaposlenom i troškovi naknada po zaposlenom, dok ostali faktori utiču sa skoro 60%.

Na osnovu izloženih rezultata testiranja, može se konstatovati da su obje pomoćne hipoteze (H_1 i H_2) prihvaćene. S obzirom na ovakav ishod testiranja pomoćnih hipoteza može se konstatovati prihvatanje i glavne hipoteze (H). Drugim riječima, može se prihvatiti stav da sistem nagrađivanja zasnovan na osnovnoj plati, kao dominantnom obliku materijalnih kompenzacija, nema značajan uticaj na uspješnost lokalnih samouprava.

4. ZAKLJUČAK

U sistemu nagrađivanja u kome osnovna plata čini okosnicu materijalnog nagrađivanja zaposlenih, menadžment lokalne samouprave ima ograničene mogućnosti za primjenu

stimulacija, koje čine dodatke na osnovnu platu. Ponekad normativna akta ne predstavljaju osnovnu prepreku za ovaj vid nagrađivanja zaposlenih. Na primjer, u Republici Srpskoj, formalno, postoji mogućnost nagrađivanja zaposlenog koji svoje poslove obavlja u skladu sa zahtjevima menadžmenta i koji je pozitivno ocijenjen za svoj rad. Međutim, iako je normativnim aktima propisano da se plata zaposlenih uvećava, između ostalog, do 15% po osnovu posebnih rezultata rada, u praksi se najčešće ova sredstva ne planiraju u budžetu jedinice lokalne samouprave, zbog nedostatka finansijskih sredstava. U slučajevima kada postoje planirana finansijska sredstva za ovu namjenu, stimulacije nisu vezane za učinak, odnosno stvarne rezultate zaposlenih, već se nagrađivanje pojedinih zaposlenih često vrši na osnovu subjektivne ocjene. Takav način stimulacije negativno utiče na motivaciju zaposlenih koji dobro obavljaju svoje radne zadatke.

Najveći nedostatak tradicionalnog sistema nagrađivanja zasnovanog isključivo na osnovnoj plati, koja je zagarantovana svim zaposlenima bez obzira na njihov radni učinak, ogleda se u potpunom odsustvu odgovornosti zaposlenih za loše radne rezultate i uspješnost lokalne samouprave posmatrano u cjelini. Tome pridonosi i postupak ocjenjivanja uspješnosti zaposlenih, koji se odvija isključivo radi zadovoljenja formalnih procedura, a ne radi usmjeravanja ponašanja i rezultata zaposlenih ka ostvarenju ciljeva lokalne samouprave. Sa druge strane, primjena različitih modaliteta sistema nagrađivanja zaposlenih baziranog na učinku u velikom broju zapadnih zemalja nije dala očekivane rezultate. Osnovni nedostatak ovog sistema nagrađivanja ogleda se u tome što dovodi do nesrazmjerno većeg porasta troškova za plate i naknade zaposlenima u odnosu na koristi koje stvara. Naročito se ističe sumnja da bi uvođenje ovakvog sistema nagrađivanja u lokalnim samoupravama postsocijalističkih zemalja kreiralo pozitivne efekte na uspješnost lokalnih samouprava.

Razmatranje optimalnog modela sistema nagrađivanja dodatno usložnjava činjenica da ne postoji univerzalni model sistema nagrađivanja koji bi primjenjivale sve lokalne samouprave, jer zastupljenost pojedinih oblika materijalnih i nematerijalnih nagrada treba da bude u skladu sa politikama lokalne samouprave i raspoloživim sredstvima u budžetu.

Dobijeni rezultati istraživanja mogu pružiti značajan doprinos empirijskim saznanjima u ovoj oblasti. Ovim istraživanjem analizirano je postojanje uzročno-posljedične veze između sistema nagrađivanja i uspješnosti lokalnih samouprava, što predstavlja potpuno novi način pristupa definisanju uspješnosti lokalne samouprave. Saznanja do kojih se došlo u ovom radu, proširiće teorijska znanja o uticaju sistema nagrađivanja na uspješnost lokalne samouprave te će predstavljati osnovu za dalja istraživanja u ovoj oblasti. Ovaj model istraživanja može poslužiti za ponavljanje istraživanja u Republici Srpskoj, u svrhu kontinuiranog praćenja odnosa između sistema nagrađivanja i uspješnosti lokalne samouprave. Takođe, ovaj model istraživanja može poslužiti za provođenje komparativnih istraživanja u Federaciji Bosne i Hercegovine, ali i u drugim zemljama u užem i širem okruženju.

Analizom prikupljenih podataka, koji su se koristili u ovom istraživanju, došlo se do rezultata koji predstavljaju nove činjenice i saznanja o uticaju sistema nagrađivanja na uspješnost lokalne samouprave u Republici Srpskoj.

Pragmatični ciljevi ogledaju se u praktičnoj koristi koju lokalne samouprave, ali i akademska zajednica mogu imati od ovog rada. Kada su u pitanju lokalne samouprave pragmatična korist ovog rada se ogleda u mogućnosti korišćenja saznanja do kojih se došlo u ovom radu pri donošenju konkretnih odluka, koje se odnose na uspostavljanje adekvatnijeg sistema nagrađivanja. Akademska zajednica, takođe, može imati koristi od ovog rada, jer dobijeni rezultati predstavljaju polaznu osnovu za dalja istraživanja u oblasti menadžmenta ljudskih resursa u lokalnim samoupravama. Takođe, ovaj rad doprinosi promociji jednog izuzetno aktuelnog pitanja, a to je profesionalizacija lokalnih samouprava, i to ne samo u domenu nagrađivanja zaposlenih, već i u ostalim segmentima menadžmenta ljudskih resursa.

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THE INFLUENCE OF THE REWARD SYSTEM ON LOCAL GOVERNMENT PERFORMANCE: EVIDENCE FROM THE REPUBLIC OF SRPSKA

Summary: *As the main problem to consider in this research is the impact of the reward system based on the basic salary as the dominant form of material compensation on the success of local governments, this paper places the highest emphasis on the specifics of local government in the context of human resource management. The subject of empirical research in this paper were local governments in the Republic of Srpska, and the research was conducted in the period from 2015 to 2019. Appropriate statistical methods were used in the processing of the collected data, while the testing of the hypotheses set forth in this paper was performed with the help of correlation and regression analysis. By applying the above statistical methods, there was not sufficient evidence that was found on the impact of the existing reward system, which is based on the basic salary as the dominant form of material compensation on the success of local self-government. The paper offers a set of guidelines for modeling the reward system in local self-government, which respects the principles of merits and provides recommendations for eliminating the identified shortcomings of the existing reward system. The results of this research contribute to the further progress of the scientific field of human resource management in non-profit organizations, especially in the field of reward systems. Also, the results of this research have a pragmatic value, which is reflected in the practical benefits that local governments can have when creating a reward system.*

Key words: *management of non - profit organizations, human resources management, reward system, local self - government*

JEL classification: *J59, L39, M54*

INTRODUCTION

Modern, profit-oriented organizations recognize the importance of human resource management. By creating an incentive system of rewards, they try to direct the employee behavior and results towards achieving business goals (Duvnjak 2018). However, non-profit organizations such as local governments are very slow to adopt modern principles of human resource management.

Local governments were established with the aim of meeting the needs of citizens and the needs of general interest. To meet these needs, it is necessary to provide significant financial resources. Local governments are financed from their own revenues and other revenues. As employees in local self-government cannot influence the realization of other revenues, local

self-governments should encourage employees to generate their own revenues through an adequate reward system.

Based on the review of available literature, it can be concluded that there is no scientifically based knowledge about the impact of employee remuneration system on the success of local government expressed through the ability to generate own (non-tax) revenues to achieve local government goals and increase local government satisfaction. Therefore, the main scientific problem in this paper can be defined through the question: Does the system of rewarding employees based on the basic salary, as the dominant form of material compensation, have a positive impact on the success of local self-government?

The scientific goals of the research are aimed at gaining new scientific facts and knowledge about the degree of connection between rewarding in local self-government and the realization of one's own income. The main hypothesis claims that the system of remuneration in local self-government based on the basic salary, as the dominant form of material compensation, does not have a significant impact on the success of local self-governments. In accordance with the research question and the set hypotheses, appropriate indicators of local self-government success were identified. The subject of empirical research in this paper were all the local governments in the Republic of Srpska, and the research was conducted in the period from 2015 to 2019. Empirical data were collected from the report on the execution of the budget of local self-government units and data on their number of employees.

1. THEORETICAL ASPECTS OF RESEARCH

1.1. Performance management in local government

The local government performance management system has two tasks (Kent and Haldma 2019). First, it helps local government leadership to take rational action on the principle of efficiency and effectiveness. Second, it meets different values for citizens and other stakeholders, relating to poverty eradication, adequate rural and economic development of local self-government and job creation.

A review of the literature found that the problem of efficiency and effectiveness of performance measurement systems in local government has not been sufficiently studied and published (Kent and Haldma 2019; Alam and Alam 2020; Mättö and others 2020; Rajala and Laihonon and Haapala 2018). Local government leadership should be able to use performance management as a tool to achieve goals (Johanson and Almqvist and Skoog 2019), reduce poor employee performance, and improve service delivery.

The performance measurement system should make it clear to each employee what is expected of him/her, that these expectations should be relevant to the job for which the employee was hired or appointed (Aleksandrov and Bourmistrov and Grossi 2020). Performance expectations, i.e., the expected goals and tasks, should be clear to all employees from the top management, departments and teams to the individual level. Expectations of effects should be stated measurably and standardized.

The performance measurement system should provide performance feedback to easily detect non-compliance problems that require corrective action (Soomro and Shah 2019). Managers and employees must be trained to achieve results. The performance measurement system should be implemented at all levels so that it is part of the organizational culture.

The performance measurement system needs to be integrated with other local government processes (Kaye-Essien 2020; Kloot 1999), such as local government sectors, legislation, norms, standards, size, maturity and structure of local government, and business culture. Performance measurement system management should include a human resource management

strategy, and performance measurement system management policy should be agreed with stakeholders.

Managers should divide the local community development strategy into feasible action plans and tasks (performance expectations) at different levels in the local government and monitor and oversee the management system (Ferreira and Carvalho and Pinho 2020).

It is especially important that management provides resources for efficient performance of tasks, participation in trainings and for motivating employees.

1.2. Reward system in local self-government

There are many challenges faced by local government management, and one of them is the establishment of an appropriate system of rewarding employees that would be in the function of improving the performance of local government (Suwaidi and Rahman 2019). Employee rewarding is one of the most effective motivators for work (Mickson and Anlesinya 2020). The reward system in local self-government is an important activity in human resource management that refers to the determination of money, goods and services that employees receive for the work performed.

Remuneration of local government employees has limitations in the regulations governing this area, in contrast to the private sector, where management has significantly more opportunities to reward employees in accordance with the results achieved. The system of remuneration in local self-government is based on the basic salary, as the dominant form of material compensations, and the amount of the basic salary of employees in local self-government is determined in accordance with laws and bylaws.

Local governments are financed from tax revenues, non-tax revenues, grants and transfers. Employees in a local self-government unit cannot influence the realization of tax revenues, because the amount of these funds depends on higher levels of government. Tax revenues are generally reduced, so that local self-government units must focus on generating their own revenues, in order to be able to fulfill the tasks prescribed by law and bylaws.

There are many classifications of components of the reward system, and one of the most general divisions is into tangible and intangible components of the reward system. When it comes to material rewards, Bahtijarević-Šiber divides them into two basic groups, namely: direct and indirect material rewards. Direct material rewards include a system of salaries and other material benefits to employees, ie bonuses related to individual or group work, while indirect material rewards include a number of material benefits that are obtained by employment in a particular organization (Bahtijarević-Šiber 1999).

In addition to tangible rewards, organizations often allow their employees to receive intangible rewards. Intangible rewards affect the motivation of employees through meeting their needs that are not related to money, such as: meeting the needs of a higher order, the need to respect, respect, confirm and develop personal abilities and other needs.

In the practice of local governments, the system of remuneration based on the basic salary is mainly represented. Jobs of the same or similar complexity are grouped into the same pay grades, regardless of the work results achieved.

Material compensations that are most often used in local self-government are: salary, pension insurance, health insurance, vacations, holidays, paid leave, transportation, various rewards for work, seniority and other occasions, unpaid leave due to family reasons, etc.

Although material compensations are the basis of the motivational system in local self-government, for most employees, higher-order needs, such as development and confirmation, respect and status, are equally important.

Based on the analysis of the reward system in local governments of several European countries, it can be concluded that salaries to employees are mainly determined on the basis of prescribed

job descriptions, which represent the basis for determining salaries (Kuhlmann and Bogumil 2017). It is evident that the local self-governments have not defined norms for performing work, in order to determine which of the employees has done more than they should, in order to determine an adequate reward.

The local self-government should introduce supervision over the work of employees, in order to define the goals and work tasks of employees in a quality and clear way, and in order to monitor the execution of the set tasks in a quality manner. However, in order for the employee to be able to perform the assigned tasks in a quality manner, it is necessary to provide him with continuous education. Also, it is necessary to provide transparent evaluation of employees, based on defined criteria that will be used, which are not subjective in nature. Remuneration of workers in local self-government should be harmonized with financial possibilities and planned funds in the budget (Mikulić 2009).

2. RESEARCH METHODS

From the posed research problem of this paper, two basic research variables can be identified. The independent variable is the reward system, while the success of local governments is the dependent variable.

There is no definition of local government performance on the basis of which universal parameters for comparing local government performance would be determined. In order to get an indicator of the success of local self-government, one must start from the tasks, i.e., affairs of local self-government, namely: Jobs in terms of regulatory actions and management of the municipality and Jobs in terms of providing services. However, in order for local self-government units to be able to perform the tasks defined by legal regulations, it is necessary to provide financial resources through the realized revenues in the budget. Therefore, local governments, in addition to the goals they set in order for service users to be satisfied, must also set goals related to increasing their own revenues. Local government budget revenues consist of: tax revenues, non-tax revenues, grants and transfers. Employees in local self-government cannot directly influence the realization of tax revenues, grants and transfers, but only the realization of non-tax revenues. These tax revenues include: revenues from financial and non-financial assets and foreign exchange gains, fees, taxes and revenues from public services, fines and other non-tax revenues. For that reason, as an indicator of the success of local self-government in this paper, the ability of local self-government to generate its own (non-tax) revenues through efficient work of employees will be observed. Of the four groups of own revenues, employees in local self-government can have the greatest impact on the realization of revenues, which include: revenues from financial and non-financial assets and foreign exchange gains and fees, fees and revenues from the provision of public services. In other words, these two groups of own source revenues represent indicators of the dependent variable.

The budget of the local self-government unit, in addition to budget revenues, also consists of budget expenditures. Budget expenditures are funds spent by local self-government units and consist of current expenditures and budget reserves. Current expenditures include: expenditures for personal income (expenditures for gross salaries and expenditures for gross compensation of expenses and other personal incomes of employees), expenditures for the use of goods and services, expenditures for financing and other financial expenses, subsidies, current capital grants, etc. Given the research problem, expenditures for personal income, more precisely expenditures for gross salaries and expenditures for gross compensation of expenses and other personal incomes of employees are indicators of the independent variable.

In considering and analyzing the relationship between the defined research variables, we started from the assumption expressed by the basic hypothesis (H), which reads: The reward system

based on the basic salary, as the dominant form of material compensation, has no significant impact on local government performance. Two auxiliary hypotheses are set in the paper.

The first auxiliary hypothesis is related to the first indicator of the independent variable, which is the basic salary of employees in local self-government. The first auxiliary hypothesis ($H_{1.1}$) reads: The increase in salaries of employees in local self-government does not affect the efficiency and effectiveness of local self-government property management and the provision of public services, which is reflected in the amount of own revenues. This hypothesis was tested on the basis of the statistical relationship between the observed indicators, expressed by the following relations: the impact of salaries per employee in local government on income per employee, realized on the basis of financial and nonfinancial assets and foreign exchange gains ($H_{1.1.1}$) and the impact of salaries in local self-government on revenues per employee generated on the basis of compensations, fees and provision of public services ($H_{1.1.2}$).

The second auxiliary hypothesis is related to the second indicator of the independent variable, ie to the compensation of employees in local self-government. The second auxiliary hypothesis (H_2) reads: The increase in compensation of employees in local self-government does not affect the efficiency and effectiveness of local self-government property management and the provision of public services, which is reflected in the amount of own revenues. This hypothesis was also tested on the basis of the statistical relationship between the observed indicators, expressed by the following relations: the impact of compensation per employee in local government on income per employee, realized on the basis of financial and nonfinancial assets and foreign exchange gains ($H_{2.1}$) and the impact compensation per employee in local self-government on revenues per employee generated on the basis of compensations, fees and provision of public services ($H_{2.2}$).

For the purpose of testing the set hypotheses, empirical data were collected for local self-government units in the Republic of Srpska in the period from 2015 to 2019. Empirical data were collected by downloading the report on the execution of the budget of local self-government units, that were obtained by direct requests for access to information or located on the official websites of local self-government units, as well as by downloading data from the Agency for Intermediary, Information and Financial Services (*in Serbian: Agencije za posredničke, informatičke i finansijske usluge APIF*). Out of 64 local self-government units in the Republic of Srpska, which are the subject of the research, data were collected for 54, while complete data were not available for ten local self-government units, and they were excluded from further analysis.

In order to test the hypotheses, several statistical methods were applied. First of all, a descriptive analysis of the data was performed, which includes the arithmetic mean of the values of the observed indicators, but also the standard deviation that shows the relative deviations of the values of the observed data. A simple correlation analysis was used to examine whether there was a quantitative agreement between the variations of the observed phenomena and, if so, to what extent it was present. For this purpose, the Pearson correlation coefficient was applied. In order to determine the form of the relationship between the system of rewarding employees in local self-government and the success of local self-government, regression analysis was applied. Statistical data processing was performed with the help of the statistical software package SPSS.

3. RESEARCH RESULTS AND DISCUSSION

As pointed out in the previous part of the paper, the research period covers five years, so at the very beginning of data processing there was a dilemma present on whether to test hypotheses individually for each observed year, or collectively for the entire observed period. In order to solve this dilemma, a descriptive analysis was performed, which includes the arithmetic mean

of the values of the observed indicators, but also the standard deviation that shows the relative deviations of the values of the observed data. The results of descriptive data processing showed that in most cases there are large relative deviations of the data. The reason is that the observation period is only five years, which increases the probability of a large deviation of the standard deviation from the arithmetic mean. Although such cases can be excluded from further analysis, their number would significantly reduce the number of local governments that can be analyzed. For this reason, hypothesis testing was performed on the basis of individual data by years, instead of average data for the entire observed period. The results of the hypothesis testing are presented below.

The first auxiliary hypothesis is related to expenditures for gross salaries of employees in local self-government. In the procedure of testing the first auxiliary hypothesis (H_1), the first relationship between the observed indicators of the dependent and independent variable was considered, expressed by the following assumption: and positive exchange rate differences ($H_{1.1}$). In order to establish the degree, shape and direction of correlation of the observed variables, correlation and regression analysis were applied, and the results of these analyzes are shown in the following table.

Table 1. Correlation and regression analysis by years for indicators salary costs per employee and property income per employee (SPSS software package)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
Model Summary - 2015									
1	.298 ^a	.089	.071	1716.84162	.089	5.061	1	52	.029 ^b
a. Dependent Variable: PI2015									
b. Predictors: (Constant), TP2015									
Model Summary - 2016									
1	.469 ^a	.220	.205	1738.23930	.220	14.629	1	52	.000 ^b
a. Dependent Variable: PI2016									
b. Predictors: (Constant), TP2016									
Model Summary - 2017									
1	.486 ^a	.236	.221	1416.06938	.236	16.058	1	52	.000 ^b
a. Dependent Variable: PI2017									
b. Predictors: (Constant), TP2017									
Model Summary - 2018									
1	.398 ^a	.158	.142	1510.88835	.158	9.771	1	52	.003 ^b
a. Dependent Variable: PI2018									
b. Predictors: (Constant), TP2018									
Model Summary - 2019									
1	.369 ^a	.136	.120	1942.83530	.136	8.201	1	52	.006 ^b
a. Dependent Variable: PI2019									
b. Predictors: (Constant), TP2019									

In the case of all observed years, the relationship between the observed variables is not pronounced, meaning that the Pearson's correlation coefficient is very low (2015: $r = .298$, $r < 0.50$; 2016: $r = .469$, $r < 0.50$; 2017: $r = .486$, $r < 0.50$; 2018: $p = .398$, $p < 0.50$; 2019: $p = .369$, $p < 0.50$). Furthermore, the coefficients of determination (r^2), as well as the corrected coefficients of determination are extremely low in all observed years. The highest coefficient

of determination was established in 2017 ($r^2 = .236$), which means that salary costs per employee determine property income per employee with only 23.6%. Also, in 2017, the largest corrected coefficient of determination was established, in the amount of $r^2 = .221$. The coefficient of determination should be relatively high ($r^2 > 0.50$) for the regression model to present an adequate picture of the stochastic relationship between the observed indicators of the dependent and independent variable. Based on the performed analyzes, it can be stated that not enough evidence was found that indicates a significant connection between the observed variables, i.e., not enough evidence was found that confirms the impact of salaries on income from financial and non-financial assets and positive exchange rate differences. Thus, it can be stated that hypothesis $H_{1.1}$ has been confirmed.

Within the first auxiliary hypothesis (H_1), the second relationship between the observed indicators was considered, which is expressed in the form of the following assumption: , fees and public service provision ($H_{1.2}$). Correlation and regression analysis were performed below, and the results of these analyzes are shown in the following table.

Table 2. Correlation and regression analysis by years for indicators wage costs per employee and revenues from services per employee (SPSS software package)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
Model Summary - 2015									
1	.388 ^a	.151	.134	9863.26701	.151	9.221	1	52	.004 ^b
a. Dependent Variable: PU2015									
b. Predictors: (Constant), TP2015									
Model Summary - 2016									
1	.312 ^a	.097	.080	9282.12881	.097	5.614	1	52	.022 ^b
a. Dependent Variable: PU2016									
b. Predictors: (Constant), TP2016									
Model Summary - 2017									
1	.248 ^a	.061	.043	9192.62938	.061	3.401	1	52	.071 ^b
a. Dependent Variable: PU2017									
b. Predictors: (Constant), TP2017									
Model Summary - 2018									
1	.262 ^a	.069	.051	9448.39812	.069	3.844	1	52	.055 ^b
a. Dependent Variable: PU2018									
b. Predictors: (Constant), TP2018									
Model Summary - 2019									
1	.316 ^a	.100	.082	10335.38826	.100	5.751	1	52	.020 ^b
a. Dependent Variable: PU2019									
b. Predictors: (Constant), TP2019									

In all observed years, the relationship between the variables is not pronounced, as evidenced by the height of Pearson's correlation coefficient (2015: $r = .388$, $r < 0.50$; 2016: $r = .312$, $r < 0.50$; 2017: $r = .248$, $r < 0.50$; 2018: $r = .262$, $r < 0.50$; 2019: $r = .316$, $r < 0.50$). As with the previously tested hypothesis, the coefficients of determination (r^2) and the corrected coefficients of determination are extremely low in all observed years. The highest coefficient of determination was determined in 2015. Thus, in 2015, the coefficient of determination is $r^2 = .388$, and the corrected coefficient of determination is $r^2 = .134$. This means that in 2015,

salary costs determined revenues from services with only 38.8%. Thus, even in the case of this hypothesis, the coefficients of determination are not high enough to be able to claim that the established regression models represent an adequate picture of the stochastic relationship between the observed indicators of the dependent and independent variable. Based on the presented results, it can be concluded that not enough evidence has been found that indicates the connection of the observed variables, in the sense that expenditures for gross wages per employee affect revenues generated from fees, taxes and revenues from public services. Thus, hypothesis $H_{1.2}$ was confirmed.

Both tested relations ($H_{1.1}$ and $H_{1.2}$) showed the absence of the influence of the observed indicators of the independent variable on the observed indicators of the dependent variable. Thus, the first auxiliary hypothesis (H_1) was confirmed, because not enough evidence was found that the increase in salaries per employee in local self-government affects the efficiency and effectiveness of local self-government property management and provision of public services, which reflects the amount of own revenues.

The second auxiliary hypothesis (H_2) is related to expenditures for gross compensation of expenses and other personal incomes of employees (in further analysis, compensation costs) in local self-government. Within the second auxiliary hypothesis, the first relationship between the defined indicators of the dependent and independent variable was tested, expressed by the following assumption: Increase in expenditures for gross compensation of expenses and other personal incomes of employees in local self-government does not affect income per employee difference ($H_{2.1}$). The results of the correlation and regression analysis are shown in the following table.

Table 3 Correlation and regression analysis by years for indicators costs of employee benefits and property income per employee (SPSS software package)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
Model Summary - 2015									
1	.229 ^a	.053	.034	1750.51256	.053	2.887	1	52	.095 ^b
a. Dependent Variable: PI2015									
b. Predictors: (Constant), TN2015									
Model Summary - 2016									
1	.117 ^a	.014	.005	1954.17085	.014	.718	1	52	.401 ^b
a. Dependent Variable: PI2016									
b. Predictors: (Constant), TN2016									
Model Summary - 2017									
1	.280 ^a	.078	.061	1555.24295	.078	4.422	1	52	.040 ^b
a. Dependent Variable: PI2017									
b. Predictors: (Constant), TN2017									
Model Summary - 2018									
1	.208 ^a	.043	.025	1610.87793	.043	2.341	1	52	.132 ^b
a. Dependent Variable: PI2018									
b. Predictors: (Constant), TN2018									
Model Summary - 2019									
1	.095 ^a	.009	.010	2081.01820	.009	.472	1	52	.495 ^b
a. Dependent Variable: PI2019									
b. Predictors: (Constant), TN2019									

The results of these tests are similar to the previous ones. In the case of all observed years, the relationship between the observed variables is not pronounced, ie Pearson's correlation coefficient is very low (2015: $r = .229$, $r < 0.50$; 2016: $r = .117$, $r < 0.50$; 2017: $r = .280$, $r < 0.50$; 2018: $r = .208$, $r < 0.50$; 2019: $r = .095$, $r < 0.50$). Also, the coefficients of determination (r^2), as well as the corrected coefficients of determination are extremely low in all observed years. The highest coefficient of determination was determined in 2017. In 2017, the coefficient of determination is $r^2 = .078$, and the corrected coefficient of determination is $r^2 = .061$. This means that in 2017, fee costs determined property income with only 7.8%. Thus, the established coefficients of determination are not high enough to be able to claim that the established regression models represent an adequate picture of the stochastic relationship between the observed indicators of the dependent and independent variable. Based on previous analyzes, it can be concluded that not enough evidence has been found that indicates the relationship of the observed variables, in the sense that the increase in expenditures for gross compensation of expenses and other personal income per employee in local government affects income per employee, generated on financial and non-financial assets and foreign exchange gains. This confirmed hypothesis $H_{2.1}$.

Within the second auxiliary hypothesis (H_2), another relationship between the defined indicators of the dependent and independent variable was considered, which is expressed by the following assumption: realized on the basis of fees, charges and provision of public services ($H_{2.2}$). Analogous to the applied procedure of testing the previous hypotheses, correlation and regression analysis was performed. The results of these analyzes are shown in the following table.

Table 4 Results of correlation and regression analysis by years for the indicators costs of employee benefits and revenues from services per employee (SPSS software package)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
Model Summary – 2015									
1	.643 ^a	.414	.402	8195.74097	.414	36.667	1	52	.000 ^b
a. Dependent Variable: PU2015									
b. Predictors: (Constant), TN2015									
Model Summary - 2016									
1	.258 ^a	.067	.049	9438.48262	.067	3.721	1	52	.059 ^b
a. Dependent Variable: PU2016									
b. Predictors: (Constant), TN2016									
Model Summary - 2017									
1	.473 ^a	.224	.209	8359.56613	.224	14.993	1	52	.000 ^b
a. Dependent Variable: PU2017									
b. Predictors: (Constant), TN2017									
Model Summary - 2018									
1	.525 ^a	.275	.261	8335.27415	.275	19.755	1	52	.000 ^b
a. Dependent Variable: PU2018									
b. Predictors: (Constant), TN2018									
Model Summary - 2019									
1	.491 ^a	.241	.226	9490.65436	.241	16.489	1	52	.000 ^b
a. Dependent Variable: PU2019									
b. Predictors: (Constant), TN2019									

In the case of all three observed years, correlation analysis indicates a low degree of correlation between the observed variables (2016: $r = .258$, $r < 0.50$; 2017: $r = .473$, $r < 0.50$; 2019: $r = .491$, $r < 0.50$). This relationship is moderate in the case of 2015 ($r = .643$, $r > 0.50$) and 2018 ($r = .525$, $r > 0.50$). Given the slightly higher correlation coefficient, in 2015 the highest coefficient of determination appeared, i.e., the corrected coefficient of determination. Thus, in 2015, the coefficient of determination is $r^2 = .414$, and the corrected coefficient of determination is $r^2 = .404$. This means that in 2015, the cost of fees determined revenues from services with 41.4%. In all other observed years, the coefficients of determination, as well as the corrected coefficients of determination are significantly lower. Overall, the established coefficients of determination are not high, i.e., it can be said that they are not high enough to claim that the established regression models represent an adequate picture of the stochastic relationship between the observed indicators of the dependent and independent variable. Therefore, even in this case, sufficient evidence was not found to be able to confirm with certainty the impact of the cost of compensation per employee on income from services per employee. Therefore, hypothesis $H_{2.2}$ is accepted.

Both tested relations ($H_{2.1}$ and $H_{2.2}$) did not offer sufficient evidence of the influence of the independent variable on the observed indicators of the dependent variable. Therefore, the second auxiliary hypothesis (H_2) is accepted, because not enough evidence has been found that the increase in compensation of employees in local self-government affects the efficiency and effectiveness of local self-government property management and provision of public services, which reflects the amount of own revenues.

Overall, in 18 of the 20 models tested, the correlation coefficients were very low ($r < 0.50$). Also, the coefficients of determination are extremely low in all observed relations. The highest coefficient of determination was established in 2015 for hypothesis $H_{2.2}$ and is $r^2 = .414$. Thus, we can conclude that the realization of income from property per employee and income from public services per employee is less affected by the cost of wages per employee and the cost of benefits per employee, while other factors affect almost 60%.

Based on the presented test results, it can be concluded that both auxiliary hypotheses (H_1 and H_2) were accepted. Given this outcome of testing auxiliary hypotheses, it can be stated that the main hypothesis (H) is also accepted. In other words, one can accept the view that the system of remuneration based on the basic salary, as the dominant form of material compensation, does not have a significant impact on the success of local governments.

CONCLUSION

In the system of remuneration in which the basic salary is the backbone of the material remuneration of employees, the management of the local self-government has limited possibilities for the application of incentives, which are supplements to the basic salary. Sometimes normative acts do not represent the main obstacle for this type of rewarding employees. For example, in the Republic of Srpska, formally, there is a possibility of rewarding an employee who performs his duties in accordance with the requirements of management and who is positively evaluated for his work. However, although the normative acts prescribe that the salary of employees is increased, among other things, up to 15% based on special work results, in practice these funds are usually not planned in the budget of the local self-government unit, due to lack of funds. In cases where there are planned financial resources for this purpose, incentives are not related to the performance, i.e., the actual results of employees, but the rewarding of individual employees is often done on the basis of subjective evaluation. This way of stimulation negatively affects the motivation of employees who perform their work tasks well.

The biggest shortcoming of the traditional reward system based exclusively on the basic salary, which is guaranteed to all employees regardless of their work performance, is reflected in the complete absence of responsibility of employees for poor performance and success of local government as a whole. The process of evaluating the performance of employees also contributes to this, which takes place exclusively in order to satisfy formal procedures, and not in order to direct the behavior and results of employees towards achieving the goals of local self-government. On the other hand, the application of different modalities of the performance-based reward system in a large number of Western countries has not yielded the expected results. The main disadvantage of this reward system is that it leads to a disproportionately higher increase in the cost of salaries and benefits to employees in relation to the benefits it generates. The suspicion that the introduction of such a reward system in the local self-governments of post-socialist countries would create positive effects on the success of local self-governments is especially emphasized.

Consideration of the optimal model of the reward system is further complicated by the fact that there is no universal model of the reward system applied by all local governments, because the representation of certain forms of tangible and intangible rewards should be in line with local government policies and available budget funds.

The obtained research results can provide a significant contribution to empirical knowledge in this area. This research analyzes the existence of a cause-and-effect relationship between the reward system and the success of local governments, which is a completely new way of defining the success of local government. The knowledge gained in this paper will expand the theoretical knowledge about the impact of the reward system on the success of local self-government and will be the basis for further research in this area. This research model can be used to repeat research in the Republic of Srpska, for the purpose of continuous monitoring of the relationship between the reward system and the success of local self-government. Also, this research model can be used to conduct comparative research in the Federation of Bosnia and Herzegovina, but also in other countries in the immediate and wider environment.

The analysis of the collected data, which were used in this research, yielded results that represent new facts and knowledge about the impact of the reward system on the success of local self-government in the Republic of Srpska.

Pragmatic goals are reflected in the practical benefits that local governments, as well as the academic community, can benefit from this work. When it comes to local self-government, the pragmatic benefit of this paper is reflected in the possibility of using the knowledge gained in this paper in making specific decisions, which relate to the establishment of a more adequate reward system. The academic community can also benefit from this paper because the obtained results represent the starting point for further research in the field of human resource management in local governments. Also, this paper contributes to the promotion of an extremely current issue, and that is the professionalization of local governments, not only in the field of rewarding employees, but also in other segments of human resource management.

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FORENZIČKA REVIZIJA U FUNKCIJI KVALITETNIJEG FINANSIJSKOG IZVJEŠTAVANJA

Rezime: *Ovim radom želi se ukazati kolika je uloga forenzičke revizije na kvalitet finansijskog izvještaja. Korišćene metode prilikom istraživanja su: deskriptivna metoda i anketni upitnik.*

Radom se želi prikazati potreba za razvojem forenzičke revizije i njen uticaj na kvalitetnije finansijsko izvještavanje privrednih subjekata. U radu se nastoji dati teorijski doprinos, te proširiti postojeća fundamentalan saznanja iz naveden oblasti, te prikazati koji su pozitivni efekti razvoja i primjene forenzičke revizije u kontroli finansijskih izvještaja privrednih subjekata.

Forenzička revizija je nova praktična disciplina u okviru revizije i kao takva još nije dobila sveobuhvatnu i jedinstveno prihvaćenu definiciju u svijetu. Ipak, veliki broj teoretičara, kao i mnogobrojne nacionalne i međunarodne organizacije i udruženja, dali su polaznu osnovu za pravilno definisanje forenzičke revizije, opisujući njeno mjesto i ulogu u revizorskoj teoriji i praksi. U toku istraživanja izvršeno je naučno prikupljanje, obrada, sintetizovanje odgovarajućih teorijskih i praktičnih podataka.

Ključne riječi: *forenzička revizija, revizija finansijskih izvještaja, finansijski izvještaji i forenzičko računovodstvo*

JEL klasifikacija: *M41, M42, M49*

UVOD

Relevantnost i pouzdanost finansijskog izvještavanja došla je u prvi plan pojavom globalne finansijske, a zatim i ekonomske krize, kao i usljed ogromnih gubitaka koje su investitorima prouzrokovali finansijski skandali nastali krajem 20. i početkom 21. vijeka. Jedan od ključnih faktora u procesu donošenja odluka o ulaganjima investitora (domaćih i inostranih) predstavljaju finansijski izvještaji, zbog čega i moraju da budu sastavljeni na razumljiv način, realni i objektivni, istiniti i fer prikazani. Korisnici finansijskih izvještaja moraju imati finansijske izvještaje koji na fer način prikazuju finansijski položaj, finansijsku uspješnost i tokove gotovine posmatranog privrednog subjekta, odnosno one finansijske izvještaje koji na pošten (fer) način prikazuju efekte transakcija i ostalih događaja u skladu sa definicijama i kriterijumima za priznavanje sredstava, obaveza, prihoda i rashoda, definisanih Okvirom za pripremanje i prikazivanje finansijskih izvještaja. Sa razvojem svjetskog tržišta dolazi do naglog rasta finansijskih prevara, što umanjuje objektivnost i pouzdanost finansijskog izvještavanja. U cilju uspješnog suprostavljanja prevarama i povrata povjerenja u finansijske izvještaje razvoj forenzičke revizije, kao nove discipline u reviziji, podrazumijeva ispitivanje i

interpretiranje dokaza i činjenica i davanje određenog mišljenja. Uloga forenzičke revizije koja se sprovodi kako bi se spriječilo prikazivanje manipulativnih radnji i uticalo na kvalitetnije finansijsko izvještavanje i efikasnije poslovno odlučivanje je tema koja je u današnje vrijeme aktuelna, ali i nedovoljno razvijena i izučena na našim prostorima.

1. POJAM I CILJEVI FORENZIČKE REVIZIJE

Forenzička revizija je nova praktična disciplina u okviru revizije i kao takva još nije dobila sveobuhvatnu i jedinstveno prihvaćenu definiciju u svijetu. Ipak, veliki broj teoretičara, kao i mnogobrojne nacionalne i međunarodne organizacije i udruženja, dali su polaznu osnovu za pravilno definisanje forenzičke revizije, opisujući njeno mjesto i ulogu u revizorskoj teoriji i praksi.

Institut forenzičkih revizora (Institute of forensic auditors – IFA), neprofitna organizacija forenzičkih revizora u Belgiji, forenzičku reviziju određuje kao „aktivnost prikupljanja, verifikovanja, obrade, analiziranja i izvještavanja o podacima s ciljem dobijanja činjenica i dokaza koji mogu biti iskorišćeni u sudsko-finansijskim sporovima nastalim usljed kriminalnih radnji u finansijskim izvještajima i davanja preventivnih savjeta”.

Prema *Paulu Thangamu*, forenzička revizija predstavlja „primjenu računovodstvenih metoda u praćenju i prikupljanju forenzičkog dokaza, obično za istragu i krivični progon kriminalnih radnji poput pronevjere i prevare”.

Forenzička revizija treba da ukaže na izvršioca kriminalne radnje i na njegovo radno mjesto u organizaciji, odnosno koji je položaj zauzimao u vrijeme izvršenja kriminalne radnje, kao i da ustanovi da li je radnju izvršio samostalno ili povezano sa drugim licima zaposlenim u okviru ili van pravnog lica.

Forenzička revizija fokusirana je na identifikaciju, tumačenje i saopštavanje dokaza osnovne strateške ekonomije i izvještavanje o događajima. Forenzičke revizije lako se prilagođavaju na računovodstveno okruženje zasnovano na principima sa širokim smjernicama koje se primjenjuju na razne računovodstvene istrage bez korišćenja revizijskih pristupa zasnovanih na pravilima (Stevenson i Crumbley 2009, 62).

Osnovni cilj forenzičke revizije jeste otkrivanje kriminalne radnje u finansijskim izvještajima, bez obzira na to kakva su mišljenja revizori donosili. Da bi se ovaj cilj ispunio forenzički revizor mora da otkrije ko je izvršio kriminalnu radnju, gdje se kriminalna radnja izvršila, u koje vrijeme i kakva je šteta nastala. Da bi u cjelini ispunio osnovni cilj forenzičke revizije, forenzički revizor bi, u mjeri u kojoj je to moguće, trebalo da otkrije i imenuje izvršioca kriminalne radnje, odredi mjesto i vrijeme njenog izvršenja, izračuna i iskaže materijalnu štetu nastalu usljed kriminalne radnje i, na kraju, opiše način njenog izvršenja.

Forenzička revizija proizlazi iz integracije računovodstva, istražne revizije, kriminologije i parnične usluge (Dada i Owolabi i Okwu 2013, 788).

Neophodno je odrediti i mjesto izvršenja kriminalne radnje u forenzičkoj reviziji, zbog toga što će nalaz i mišljenje forenzičke revizije za posljedicu, između ostalog, imati i sudski postupak. Od određivanja mjesta izvršenja kriminalne radnje zavisi prostorno važenje krivičnog zakonodavstva, kao i određivanje mjesne nadležnosti suda. Forenzičkom revizijom je, takođe, potrebno utvrditi i vrijeme izvršenja kriminalne radnje, jer od te činjenice, kao i kod određivanja mjesta izvršenja, zavisi rješavanje brojnih pitanja koja se tiču vremenskog važenja krivičnog zakona, pitanja zastarjelosti, utvrđivanja krivice učinioca i slično.

Za forenzičku reviziju i samog forenzičkog revizora od izuzetne važnosti je utvrđivanje načina, odnosno tehnike izvršenja kriminalne radnje. Ovim putem klijent forenzičke revizije otkriva slabosti u sistemu internih kontrola i mehanizme pomoću kojih su one od strane počinioca zaobiđene. Na osnovu toga, oštećeno pravno lice može u budućnosti preduzeti radnje u pogledu jačanja sistema internih kontrola i sprečavanja pojava novih sličnih nezakonitosti. Otkrivanje tehnike izvršenja kriminalne radnje će omogućiti pravosudnim organima da lakše odrede da li

je izvršena radnja krivično djelo i o kom je krivičnom djelu riječ. Odnosno, pravosudni organi će, u slučaju sudske postupke, izvršiti kvalifikaciju krivičnog djela.

Ciljevi razvoja forenzičke revizije su:

- Detektovanje područja mogućih nepravilnosti ili prevara - podrazumijeva sužavanje polja traženja određenih nepravilnosti, odnosno lociranje područja gdje je nepravilnost ili prevara;
- Detektovanje konkretnih nepravilnosti ili prevara - podrazumijeva otkrivanje konkretne nepravilnosti ili prevare i utvrđivanje načina na koji je izvedena;
- Ocjena visine rizika od utvrđenih nepravilnosti (namjerno, nenamjerno, visok ili nizak nivo nepravilnosti, velika ili mala opasnost od izvedene prevare, itd.) - podrazumijeva ocjenu opasnosti izvedenog zlodjela (namjerno, nenamjerno, visok ili nizak nivo nepravilnosti, velika ili mala opasnost od izvedene prevare, itd.);
- Izvođenje dokaza - podrazumijeva osiguranje materijalnih i drugih dokaza da je nedjelo izvedeno i način na koji je izvedeno.

U zavisnosti od svrhe kojoj je forenzička revizija namijenjena i koju definiše naručilac, zavisi i izbor ciljeva. Za neku svrhu kao što je ocjena potencijalnog partnera, dovoljna je npr. ocjena forenzičara o mogućim velikim nepravilnostima i velikom stepenu rizika od prevare. Za preduzimanje kaznenih radnji potreban je dokaz o nepravilnostima.

2. PRIMJENA FORENZIČKE REVIZIJE

Forenzička revizija se javlja i kao sredstvo za izvođenje dokaza u sudskim procesima u oblasti privrednog poslovanja. U toj funkciji ona se uključuje kada su već nastali konfliktni sporovi, dakle, kada treba sagledati posljedice pa je tu samo dio dokaznih aktivnosti. Po svom karakteru, ona je, prije svega, u funkciji dokazivanja ili otkrivanja istine, što za mnoge profesionalne forenzičare, bilo da su računovođe ili revizori, predstavlja veliku praktičnu teškoću. U javnom sektoru, primjena i značaj forenzičke revizije predstavlja veliku pomoć sudovima i tužilaštvu u procesuiranju zloupotrebe i trošenja budžetskih sredstva. U privatnom sektoru, vještine vezane za forenzičko računovodstvo i forenzičku reviziju su od koristi za većinu slučajeva privrednog kriminala, kao što su pronevjera, kriminalne radnje prema bankama, stečajne kriminalne radnje, raspodjela nelegalno stečene dobiti, prevare izvršene pomoću kompjutera i slično. Prema navodima KPMG-a, situacije kada je potrebna primjena forenzičke revizije su sljedeće:

- Sumanjate da su vaši podaci izgubljeni ili ukradeni;
- Sumnjate u kriminalne aktivnosti unutar preduzeća ili ste žrtva vanjskih napada (cyber kriminal) i na sudu vam je potreban backup digitalnog dokaza;
- Vi ste u parnici ili je pokrenuta istraga protiv Vas, a morate pripremiti dokumenta koja sadrže činjenice koje će pomoći rješavanju slučaja;
- Vi želite analizirati velike količine podataka prema određenim kriterijumima.

Primjena forenzičke revizije ogleda se u otkrivanju kriminalnih radnji u finansijskim izvještajima osumnjičenog ili kontrolisanog subjekta analize, bez obzira na to da li je u pitanju samo sitno dotjerivanje rezultata u cilju postizanja nekog privremenog cilja (korekcije bilansa radi izbjegavanja statusa gubitaka) ili sistematsko lažiranje podataka u cilju izbjegavanja plaćanja poreza ili izvlačenje kapitala preduzeća u korist pojedinaca. Iz osnovnog, granaju se pojedinačne uloge forenzičke revizije:

- Otkrivanje i imenovanje počilaca kriminalne radnje;
- Otkrivanje načina, mjesta i vremena njenog izvršenja;
- Utvrđivanje materijalne štete i uticaj kriminalne radnje na poslovanje organizacije;
- Obezbeđivanje dokaza za sudski ili disciplinski postupak.

Autori, Enofe i Omagbon u svojim istraživanjima su pokušali dati odgovor na pitanja (Enofe i Omagbon 2015, 2):

1. Može li forenzička revizija značajno otkriti prevare u firmama?
2. Može li forenzička revizija značajno spriječiti lažne aktivnosti u firmama?

3. Može li forenzička revizija značajno smanjiti prevare u firmama?

Osnovna karakteristika forenzičke revizije sadržana je u njenom glavnom cilju, a to je da se detaljno ispita postojanje potencijalnih kriminalnih radnji, kao i da se u slučaju otkrivanja obezbijedi jednoznačni materijalni dokazi za te radnje.

U svijetu postoji mali broj onih koji su specijalno obučeni i iskusni za oblast forenzičkog računovodstva i forenzičke revizije, ali u današnjem svijetu poslovanja svaka organizacija bi trebala imati forenzičkog računovođu i forenzičkog revizora.

Istraživanja potvrđuje potrebu uvođenja forenzičke revizije u okviru angažmana revizije finansijskih izvještaja te navodi da revizori trebaju steći dodatne kvalifikacije u području vještina koje su inače svojstvene forenzičkim revizorima (DiGabriele 2009).

Prema Generalnom uredu za računovodstvo Sjedinjenih Američkih Država (GAO) postoji snažan naglasak na prevenciji i otkrivanju prevara tokom zakonskih revizija. U stvari, Sjedinjene Američke Države i međunarodni postavljajući standarda povećali su odgovornost revizora da razmatraju rizik od prevare dok sprovode reviziju finansijskih izvještaja. Čak i poziv za jaču forenzičku vještinu kod onih koji obavljaju ove revizije. Sve normalne statutarne revizije treba da sadrže neke elemente za forenzičku istragu, jer se dokazi o prevarama mogu lako otkriti ako se detaljno procijeni adekvatnost i usklađenost mehanizama kontrole. (Eme 2011, 27).

Forenzička revizija povezana s prevarnim finansijskim izvještavanjem provodi se prvenstveno u korist investitora i ostalih interesno-uticajnih grupa, čije odluke zavise o objavljenim finansijskim izvještajima posmatranog subjekta (Tušek i Klikovac 2013, 110). Ako u takvim izvještajima postoje netačne informacije nastale usljed prevare, korisnici će donijeti pogrešne poslovne odluke, što može izazvati negativne posljedice. Jedno od rješenja kojim se može povećati broj slučajeva otkrivene prevare jeste i mogućnost korišćenja usluga forenzičke revizije (Tušek i Klikovac 2013, 110).

Owojori i Asaolu, posmatraju forenzičko računovodstvo u kontekstu prakse korišćenja računovodstvenih, revizorskih i istražnih vještina u pravnim pitanjima i primjeni posebnih znanja u dokazivanju ekonomskih transakcija (Owojori and Asaolu 2009, 184).

Mnogi istraživači su pokušali da prouče razlike, odnos i uticaj između koncepata forenzičko računovodstvo i forenzička revizija i oni koji jesu zainteresovani za računovodstvenu profesiju vjeruju da su dva koncepta „forenzičko računovodstvo i forenzička revizija“ sinonimi, ali nisu potpuno isti. Revizor koji vrši reviziju finansijskih prevara je zaista iskusni računovođa, vješt iskusni računovođa u procesu revizije kako bi se otkrile prevare (varanje) i prevare u podacima i dokumentima i da bi se podjednako smanjili i spriječili (Matarneh i Moneim i Al-Nimer 2015, 140). Fokus forenzičkog računovodstva je da identifikuje i pregleda lažne transakcije kako bi se utvrdila stvarna namjera kompanije izvršioca. Takav pregled može imati oblik pregleda dokumenata, intervjui, ispitivanje elektronskih dokumenata, itd. (Peterson 2015, 63).

3. KARAKTERISTIKE FORENZIČKE REVIZIJE

Forenzička revizija se usmjerava na područja gdje se pojave simptomi prevare, vršeci detaljno ispitivanje svake pojedinačne transakcije tog segmenta poslovanja. Ova vrsta revizije se provodi kao ciljane revizija na bazi sumnje rukovodstva entiteta ili eksterne revizije da postoje indikacije da je počinjena kriminalna radnja. Koncept materijalnosti kod forenzičke revizije nema veliki značaj. Forenzički revizori u toku procesa obavljanja revizije nisu usmjereni na otkrivanje materijalno značajnih nepravilnosti, već otkrivaju svaku kriminalnu radnju bez obzira na nivo njene značajnosti i veličine.

Karakteristike forenzičke revizije se ogledaju u:

- Ispitivanju većine ili svih transakcija u preduzeću gdje su se pojavili nagovještaji prevare;

- Usmjerenosti na otkrivanje kriminalnih radnji i manipulacija finansijskih izvještaja bez obzira na materijalnost;
- Provjeravanju dužeg vremenskog perioda od poslovne godine;
- Izvještaji moraju biti prihvatljivi za sudski postupak.

Razvoj i primjena forenzičke revizije u kontroli finansijskih izvještaja, a u cilju kvalitetnijeg korporativnog upravljanja ima određene prednosti:

1. Forenzička revizija jača mehanizme kontrole, sa ciljem zaštite poslovanja od finansijskog kriminala, bilo da se radi o potencijalnom katastrofalnom događaju koji može da ugrozi stabilnost poslovanja ili da se radi o manjim događajima koji ugrožavaju imovinu preduzeća u dužem vremenskom periodu.
2. Forenzička revizija može igrati važnu ulogu za preduzeća koja su pod kontrolom od strane regulatornih organa i može biti od neprocjenjive vrijednosti kako bi se obezbijedilo poštovanje pravila i propisa. Na primjer, forenzička revizija može biti korisna u pomaganju kompanijama da obezbijede efikasne postupke u borbi protiv „pranja novca“.
3. Forenzička revizija može da doprinese efikasnom identifikovanju područja gubitka.
4. Forenzička revizija pruža dobre činjenične informacije koje se mogu koristiti da pomognu rješavanju sudskih sporova.
5. Forenzička revizija pomaže u otkrivanju i snimanju potencijalnih sukoba interesa rukovodioca kroz unapređenje transparentnosti i provjerenosti na koji način su resursi korišćeni, bilo u privatnim ili javnim preduzećima.

Huber ističe da forenzička revizija posjeduje brojne karakteristike potrebne za njeno priznavanje kao samostalne profesije, a ne kao podvrste unutar računovodstvene profesije (Huber 2012). Zato on navodi da se forenzička revizija trenutno nalazi na putu da postane profesija.

Proces provođenja forenzičke revizije ima i određene nedostatke, kao što su:

1. Loše provođenje forenzičke revizije moglo bi da troši prekomjerne količine vremena rukovodstva i moglo bi da postane nepoželjna smetnja za poslovanje.
2. Forenzička revizija može da obuhvati veliki obim ispitivanja prevara i do najsitnijih detalja. Pod određenim okolnostima, forenzički revizor može tražiti da obim revizije bude povećan, što će uzrokovati i povećanje naknade za obavljanje procesa revizije.
3. Neki zaposlenici proaktivnu forenzičku reviziju vide kao omalovažavanje njihovog integriteta, prije nego kao sredstvo za poboljšanje kontrolne procedure za dobrobit poslovanja. Forenzička revizija može da obuhvati veliki obim ispitivanja prevara i do najsitnijih detalja. Pod određenim okolnostima, forenzički revizor može tražiti da obim revizije bude povećan, što će uzrokovati i povećanje naknade za obavljanje procesa revizije.

Neki zaposlenici proaktivnu forenzičku reviziju vide kao omalovažavanje njihovog integriteta, prije nego kao sredstvo za poboljšanje kontrolne procedure za dobrobit poslovanja.

Razmatrajući potrebu za sprovođenjem forenzičke revizije, u pojedinim radovima se tvrdi da je forenzička revizija, koja se bazira na praksi forenzičkog računovodstva, najbolji izbor za smanjenje nezakonitosti u oblasti finansija i računovodstva (Vukadinović i Damjanović 2016, 57). Forenzičko računovodstvo u sadašnjem stanju može biti široko klasifikovano u dvije kategorije koje obuhvataju parničnu podršku i istražno računovodstvo (Zachariah i drugi 2014, 17).

4. RAZLIKE IZMEĐU FORENZIČKE REVIZIJE I REVIZIJE FINANSIJSKIH IZVJEŠTAJA

Cilj tradicionalne nezavisne revizije finansijskih izvještaja je da obezbijedi mišljenje da li su finansijski izvještaji u saglasnosti sa opšteprihvaćenim računovodstvenim principima i da li predstavljaju u svim materijalnim aspektima fer finansijsku poziciju klijenta.

Međutim, kada je riječ o forenzičkoj reviziji, tanka je linija koja razdvaja standardnu reviziju od forenzičke revizije. Naime, kada revizor u okviru standardnog revizijskog angažmana, bilo u svojstvu internog ili eksternog revizora, posumnja ili otkrije sumnjivu ili kriminalnu radnju, tada nije riječ o forenzičkoj reviziji. Sa druge strane, ukoliko se na osnovu sumnje angažuje revizor, koji u okviru tog posebnog angažmana otkrije ili opovrgne početnu premisu, tada je riječ o forenzičkoj reviziji.

S obzirom na to da su osnovni i pojedinačni ciljevi forenzičke revizije specifični, forenzički revizori imaju umnogome drugačiji pristup verifikaciji finansijskih izvještaja od tradicionalnih revizora, kako, kada je u pitanju materijalnost i obuhvat provjera, tako i kada je u pitanju način izvještavanja o rezultatima svoga rada. Nesumnjivo, kao novi oblik revizije finansijskih izvještaja, forenzička revizija ima i svoje posebne karakteristike. Prije svega, tradicionalna revizija stavlja težište na uočavanje grešaka i prevenciju kao rezultat djelovanja sistema interne kontrole, pri čemu revizor provjerava njihovu djelotvornost putem uzorkovanja, a ne putem cjelokupnog pregleda svih transakcija. Sa druge strane, forenzički revizor ima sasvim drugačiji pristup. On u područjima poslovanja u kojima se pojave simptomi ili nagovještaji kriminalnih radnji detaljno ispituje većinu ili čak svaku pojedinačnu transakciju. Shodno tome, i pitanje materijalnosti kod forenzičke revizije značajno se razlikuje u odnosu na tradicionalnu reviziju finansijskih izvještaja. Materijalnost suštinski predstavlja način označavanja ili imenovanja značaja transakcije ili događaja. Ako je transakcija ili događaj materijalan, onda je i značajan. U određivanju vjerovatnoće da li će ili neće biti materijalne greške, tradicionalni revizori koriste statistiku, ocjenjuju sistem internih kontrola i, ako ocjene da je taj sistem djelotvoran, materijalne greške neće biti vjerovatne (Grujić-Kalkan 2013, 283).

Forenzičko računovodstvo često se poistovjećuje s ispitivanjem prevara ili revizijom prevara u finansijskim izvještajima.

Međutim, forenzičko računovodstvo je izazovna disciplina koja suštinski komunicira sa revizijom, ekonomijom, finansijama, informacionim sistemima i zakonom (DiGabriele and Huber 2014, 100).

Kod revizije finansijskih izvještaja, materijalnost suštinski predstavlja način označavanja ili imenovanja značaja transakcije ili događaja. Ako je transakcija ili događaj materijalan, onda je i značajan. U određivanju vjerovatnoće da li će ili neće biti materijalna greška, tradicionalni revizori koriste statistiku, ocjenjuju sistem internih kontrola i, ako ocijene da je taj sistem djelotvoran, materijalne greške neće biti vjerovatne. Suprotno tome, forenzički revizor u svom radu nije usmjeren na otkrivanje materijalno značajnih nepravilnosti, već otkriva svaku kriminalnu radnju, bez obzira na stepen njenog značaja i veličine (Bologna and Linquist 2006, 47). Jack G. Bologna i Robert J. Lindquist ističu da je: „Nivo materijalnosti angažmana forenzičke revizije mnogo niži i više usmjeren od redovnog angažmana nezavisne revizije”. Po ovim autorima: „Ni jedan trag, niti djelić dokaza nije toliko mali da ne bi bio značajan, tj. materijalan”. Osim onog što je gore navedeno, potrebno je istaći da nezavisna revizija usmjerava pažnju na sadašnjost, tj. na tekuću godinu za koju se sprovodi revizija finansijskih izvještaja i to u smislu primjerenosti internih kontrola, kao i pouzdanosti, valjanosti i matematičke tačnosti knjiženja. Međutim, tako uzak pristup, zbog činjenice da se kriminalne radnje mogu godinama skrivati u finansijskim izvještajima, ne pruža istorijsku perspektivu, tako bitnu za otkrivanje nezakonitog postupanja. Prilikom sprovođenja forenzičke revizije, revizor ne vrši verifikaciju seta finansijskih izvještaja za određenu poslovnu godinu, već, rukovođen simptomima i nagovještajima nezakonitog postupanja, prati trag kriminalne radnje sve do njenog korijena ili početka, bez obzira na vrijeme kada je ona izvršena.

Na kraju, nezavisna revizija, kao rezultat svog rada, sačinjava izvještaj u kojem izražava svoje mišljenje o tome da li su finansijski izvještaji sačinjeni u skladu sa opšteprihvaćenim okvirom za finansijsko izvještavanje, pri čemu su osnovni elementi izvještaja tradicionalne revizije propisani međunarodnim standardima. Sa druge strane, polazeći od činjenice da forenzička revizija ima specifičan cilj i sam njen izvještaj, iako za sada nema opšteprihvaćenu i međunarodnim standardima propisanu formu, svojim sadržajem mora zadovoljiti određene

osnovne kriterijume, koji se, prije svega, odnose na njegovu primjerenost i upotrebljivost za mogući sudski postupak.

Forenzički revizor, zbog navedenih specifičnosti forenzičke revizije, mora imati sasvim drugačiji pristup verifikaciji finansijskih izvještaja. Postupci forenzičke revizije su mnogo intuitivniji procesi od formalne analitičke metodologije koja se sprovodi u tradicionalnoj nezavisnoj reviziji finansijskih izvještaja. Zbog toga pojedini teoretičari forenzičku reviziju smatraju manje naukom, a više umjetnošću pa ju je teško i naučiti. Uspješan forenzički revizor mora biti znatiželjan, istrajan, kreativan, otvoren da razmotri sve mogućnosti, ispita sitne detalje i istovremeno vidi širu sliku.

Prema dr Petkoviću razlika između nezavisne revizije i forenzičke revizije mogla bi se rezimirati na sljedeći način:

Tabela 1: Razlike između revizije finansijskih izvještaja i forenzičke revizije (Petković 2010, 194)

<i>Karakteristike</i>	<i>Nezavisna revizija</i>	<i>Forenzička revizija</i>
Cilj	Izražavanje mišljenja o istinitoj i „fer“ prezentaciji finansijskih izvještaja.	Utvrđivanje i otkrivanje kriminalnih radnji u finansijskim izvještajima.
Tehnike	Metode uzorkovanja i izvođenje kontrolnih i suštinski testova.	Suštinsko, detaljno i dubinsko provjeravanje svih ili tačno odabranih transakcija u sumnjivim područjima poslovanja.
Period	Ispitivanje finansijskih izvještaja, transakcija i računa za određeni vremenski period.	Izvještaji, transakcije i računi mogu po potrebi biti ispitani od početka, „od korjena“ bez obzira na datum događaja.
Izvještaj i mišljenje	Izražavanje mišljenja sa ili bez rezerve, uzdržavajućeg mišljenja ili negativnog mišljenja.	Izražavanje mišljenja u pogledu mjesta, vremena i načina izvršenja kriminalne radnje, obračunavanja štete i imenovanje počinioca.

5. MJERE UTICAJA FORENZIČKE REVIZIJE NA KVALITET FINANSIJSKIH IZVJEŠTAJA

Cilj svakog preduzeća, odnosno svakog pravnog lica, jeste da uspješno posluje. Uspješnost poslovanja se najbolje može sagledati iz prezentiranih finansijskih izvještaja, pod uslovom da finansijski izvještaji predstavljaju vjerodostojnu sliku prinostnog položaja i imovinske situacije preduzeća. Podaci o poslovanju će, kako internim, tako i eksternim korisnicima informacija poslužiti kao dobra osnova za donošenje ekonomskih odluka, odnosno preduzimanje odgovarajućih akcija (Vuković Perduv i Ćeklić i Ćeklić 2018, 110).

Određivanje izvršioca prevare je najvažniji korak u forenzičkoj reviziji. Izvršioци prevare mogu biti zaposleni, ali i menadžment preduzeća. Određivanje mjesta i načina kojim je izvršena manipulacija u finansijskim izvještajima zahtijeva iskustvo u reviziji, računovodstvu, oporezivanju i drugim povezanim oblastima. Otkrivanje i dokazivanje prevara u finansijskim izvještajima je istraživački posao sa komponentama rada revizora i rada kriminalnog istražioca. Forenzički revizori rade sa velikim skupom informacija i njihovih izvora te putem eliminisanja neodgovarajućih informacija i sužavanjem izbora, potvrđuju prevaru.

Preventivne mjere zloupotrebe kreativnog računovodstva obuhvataju procjenu rizika prevara, testiranje kontrola koje su u funkciji sprečavanja manipulacija i provođenja revizije. Uvođenjem vlastitog kodeksa etike preduzeća mogu djelovati na smanjenje motiva za manipulacije i kriminalne radnje. Da bi se menadžment efikasno suprostavljao greškama i manipulacijama koje se mogu pojaviti u finansijskim izvještajima potrebno je obezbijediti:

a) Efikasan sistem interne kontrole;

- b) Adekvatan ljudski potencijal;
- v) Kvalitetan etički kodeks;
- g) Kontinuiranu obuku zaposlenih u preduzeću u vezi detekcije grešaka i manipulacija;
- d) Jasna pisana pravila ponašanja;
- đ) Suzbijanje lošeg ponašanje i sl.

Uspostavljanje mjera za sprečavanje i otkrivanje prevara i manipulacija je bitno za stabilnost privrede u državi. Nije dovoljno samo usvojiti kodeks etike u preduzeću, nego ga provoditi i u praksi. Do prevare može doći i ako preduzeće ima efikasan sistem interne kontrole. Sistem internih kontrola u preduzećima je neophodno kontinuirano unapređivati i štititi od potencijalnih prevaranata. Iako je nemoguće u potpunosti eliminisati rizik pojave grešaka, prevara i manipulacija u preduzećima, pravovremenim preduzimanjem mjera za sprečavanje i otkrivanje prevara rizik prevare se može umanjiti. Mjere uticaja na efikasnije i vjerodostojnije sastavljanje finansijskih izvještaja usmjerene su na sljedeće:

- Usavršavanje zakonske regulative i propisa koji će suziti prostor za djelovanje prevaranata i djelovati na efikasniju djelatnost svih koji kontrolišu poslovne aktivnosti;
- Organizovanjem efikasnih sistema interne kontrole i internih revizija, naročito u većim preduzećima;
- Motivisati menadžment i zaposlene preduzeća na planu preventivnih mjera i aktivnosti na smanjivanju mogućnosti za prevare (edukacije, materijali o poslovnoj i računovodstvenoj politici, organizovanje redovnih kontrola i sl).

Uvođenje forenzičke revizije kao profesije efikasna je mjera za sprečavanje i otkrivanje grešaka, prevara i manipulacija u finansijskim izvještajima preduzeća i većeg povjerenja javnosti i korisnika finansijskih izvještaja. Kako je u razvijenim državama svijeta već uviđena korist od informacija koje pruža forenzička revizija, realno je očekivati da će se i na našim prostorima razviti potreba za ovom djelatnošću. Povezivanje nauke, sektora naprednih tehnologija, visokoškolskih ustanova i javne uprave bi trebao biti jedan od prioriteta onih koji kreiraju ekonomsku strategiju u BiH.

Forenzički revizori, primjenjujući računovodstvena načela, vještine i istraživačke postupke, istražuju, prikupljaju dokaze i dokumentuju prevare i manipulacije u finansijskim izvještajima. Da bi se menadžment preduzeća suprostavljao greškama i prevarama koje se mogu pojaviti u finansijskim izvještajima uveliko pomaže: pouzdan računovodstveni sistem, odgovarajući kontrolni postupci, kao i jasno definisanje politike računovodstva i finansijskih izvještaja. Potreban je i adekvatan ljudski potencijal, razumljiv etički kodeks, kao i obezbjeđenje kontinuirane obuke za zaposlene u vezi računovodstvenih grešaka i manipulacija finansijskim izvještajima.

Forenzički revizori moraju da posjeduju jake veštine pismene i usmene komunikacije. Važno je da forenzički revizori posjeduju sposobnost da vode razgovore i efikasno prikupljaju informacije od ljudi koji možda nisu spremni da daju istinite odgovore (Nunn i drugi 2006, 2).

6. REZULTATI EMPIRIJSKOG ISTRAŽIVANJA

Informacije do kojih se došlo, kao rezultat empirijskog istraživanja, dobijene su anketnim upitnikom među internim revizorima, rukovodiocima finansijskih odjeljenja i službenicima u finansijsko-računovodstvenom sektoru. Većina pitanja je zatvorenog tipa: direktna pitanja, pitanja sa ponuđenim odgovorima nabrojavanja te pitanja sa ponuđenim odgovorima intenziteta. Od ispitanika je zatraženo da iznesu svoje mišljenje o potencijalnim razlozima koji negativno utiču na korporativno upravljanje u kompanijama, ulozi forenzičkog računovodstva i forenzičke revizije u otkrivanju prevara i kriminalnih radnji, potrebi njegovog uvođenja i uticaju na obim i učestalost pojave finansijskih prevara i kriminalnih radnji u Republici Srpskoj.

Empirijsko istraživanje je sprovedeno putem anketnog upitnika, koji je koncipiran kao segment istraživanja potreba i mogućnosti kvalitetnijeg finansijskog izvještavanja privrednih subjekata u Republici Srpskoj.

Za ostvarenje ciljeva istraživanja prikupljanje podataka je izvršeno iz primarnih izvora (terensko istraživanje) i sekundarnih izvora (istraživanje za desk stolom). Prikupljanje primarnih podataka izvršeno je metodom ispitivanja primjenom anketnog upitnika.

Anketni upitnik je sastavljen od pitanja pomoću kojih se došlo do saznanja o stavovima pojedinaca o ključnim problemima u javnom sektoru.

U istraživanja su bili uključeni:

1. Profesionalni revizori koji su popunili anketni list i čiji stavovi su predmet istraživanja;
2. Profesionalne računovođe koji su popunjavajući anketni list izrazili svoje stavove koji su predmet istraživanja;
3. Lica zaposlena u privrednim subjektima i institucijama na drugim poslovima.

Rezultati ispitivanja do kojih se došlo anketnim putem prikazani su tabelarno i preko grafikona. Na pitanje: „Da li je rukovodstvo organizacije upoznato sa principima forenzičke revizije?“ rezultati su prikazani na sljedećem grafikonu:



Grafikon 1. Upoznavanje rukovodstva kompanije sa principima forenzičkog računovodstva i forenzičke revizije (Autori)

Prema prikazanim podacima rezultata istraživanja, samo 17,50% ispitanika smatra da je rukovodstvo kompanije upoznato sa principima forenzičke revizije, dok je 43,90% ispitanika mišljenja da je rukovodstvo kompanije djelimično upoznato sa navedenim principima, što ukazuje na nerasprostranjenost i nedovoljnu edukaciju iz oblasti forenzičke revizije.

Nije zanemariv ni rezultat istraživanja od 38,60% koji ukazuje da rukovodstvo kompanije uopšte nije upoznato sa principima razvoja i primjene forenzičkog računovodstva i forenzičke revizije.

U sljedećoj tabeli data su mišljenja ispitanika o stavovima razvijenosti forenzičke revizije u Republici Srpskoj/BiH:

Tabela 2. Prikaz mišljenja ispitanika o razvijenosti forenzičke revizije u Republici Srpskoj (Autori 2021)

Po Vašem mišljenju, da li postoje u RS	Ne	Uopšte ne postoje	Nisam siguran/a	Da, ali nedovoljni	Da
Zakonska i podzakonska akta koja definišu postupak sprovođenja forenzičkog računovodstva i forenzičke revizije?	10,53%	12,28%	64,91%	8,77%	3,51%
Načini mjerenja, otkrivanja i sprečavanja prevara u finansijskim izvještajima?	5,26%	8,77%	47,37%	33,33%	5,26%

Edukacije iz oblasti forenzičkog računovodstva i forenzičke revizije?	5,26%	5,26%	40,35%	45,61%	3,51%
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Rezultati istraživanja sprovedenog putem anketnog upitnika pokazuju da ispitanici nisu sigurni da li u Republici Srpskoj, odnosno u BiH postoje zakonska i podzakonska akta koja definišu postupak sprovođenja forenzičke revizije, što potvrđuju i odgovori ispitanika od 64,91%. Kada su u pitanju načini mjerenja, otkrivanja i sprečavanja prevara u finansijskim izvještajima, 33,33% ispitanika smatra da postoje, ali su nedovoljni. Znatno broj ispitanika, 45,61% smatra da su edukacije iz oblasti forenzičke revizije nedovoljne, što utiče i na neprimjenljivost datih oblasti u kontroli finansijskih izvještaja. Ispitanika 40,35% nije sigurno da li postoje edukacije iz oblasti forenzičke revizije, što govori da se o oblasti forenzičke revizije nedovoljno piše i potencira njihova primjena u praksi, u kontroli finansijskih izvještaja. Jako mali broj ispitanika 3,51% je potvrdio da postoje zakonska i podzakonska akta koja definišu postupak sprovođenja forenzičke revizije, zatim 5,26% je upoznato sa načinima mjerenja, otkrivanja i sprečavanja prevara u finansijskim izvještajima te 3,51% ispitanika ima stav da postoje edukacije iz oblasti forenzičke revizije.

Na pitanje: „Ukoliko se zakonski propišu uslovi i stručne kvalifikacije potrebne za obavljanje poslova forenzičke revizije, smatrate li da će se time povećati kvalitet finansijskog izvještavanja?“ rezultati potvrde ili negiranja mišljenja ispitanika, kao i postojanja nesigurnosti u svoje mišljenje, prikazani su u sljedećoj tabeli:

Tabela 3. Mišljenje ispitanika o načinu povećanja kvaliteta finansijskog izvještavanja (Autori 2021)

Odgovor	Broj ispitanika	% ispitanika
ДА	48	84,20%
НЕ	5	8,80%
НЕ ЗНАМ	4	7,00%
Укупно:	57	100,00%

Ukoliko bi se zakonski propisali uslovi i stručne kvalifikacije potrebne za obavljanje poslova forenzičke revizije, 84,20% ispitanika anketnog upitnika smatra da bi se time mogao povećati kvalitet finansijskog izvještavanja, a 8,80% ispitanika smatra da zakonsko propisivanje uslova ne bi imalo pozitivne efekte na kvalitet finansijskog izvještavanja. Određeni broj ispitanika, 7,00% ne zna da li bi zakonsko propisivanje uslova i stručnih kvalifikacija za obavljanje poslova forenzičke revizije moglo uticati na kvalitet finansijskog izvještavanja.

Da li u organizacijama, u kojima su angažovani ispitanici, postoji potreba za sprovođenjem forenzičke revizije? Rezultati istraživanja dati su u tabeli br.4.

Tabela 4. Pregled rezultata istraživanja – potreba sprovođenja forenzičke revizije u organizacijama ispitanika (Autori 2021)

Pitanje	Uopšte se ne slažem	Ne slažem se	Nesiguran sam	Slažem se	Potpuno se slažem
Da li smatrate da u Vašoj organizaciji postoji potreba za sprovođenjem forenzičkog računovodstva i forenzičke revizije?	10,50%	26,30%	43,90%	15,80%	3,5%

Najveći broj ispitanika, 43,90% nije siguran da li postoji potreba za sprovođenjem forenzičke revizije u organizacijama u kojima su angažovani, dok se 26,30% ispitanika ne slaže da postoji potreba za sprovođenjem forenzičke revizije u organizacijama, a 10,50% se uopšte ne slaže sa navedenom potrebom uvođenja u organizaciju.

Jako mali broj ispitanika, 15,80% se slaže da bi se oblast forenzičke revizije trebala sprovoditi u radu organizacija, a 3,50% se potpuno slaže sa primjenom forenzičke revizije u radu organizacija.

Prepreke za uvođenje forenzičke revizije u sastavljanju i kontroli finansijskih izvještaja mogu se posmatrati sa različitih aspekata, a rezultati istraživanja pokazuju sljedeće podatke:

Tabela 5. Prepreke za uvođenje forenzičke revizije (Autori 2021)

Prepreke	Uopšte se ne slažem	Ne slažem se	Nesiguran sam	Slažem se	Potpuno se slažem
Zakonske	7,02%	12,28%	24,56%	50,88%	5,26%
Institucionalne	1,75%	17,54%	24,56%	45,62%	10,53%
Obrazovne	5,26%	12,28%	22,81%	50,88%	8,77%
Računovodstvene	5,26%	17,54%	29,82%	47,37%	0,00%
Drugo	7,02%	7,02%	64,91%	15,79%	5,26%

Rezultati istraživanja anketnog upitnika pokazuju da se najveći broj ispitanika slaže sa tvrdnjom da su prepreke za uvođenje forenzičkog računovodstva i forenzičke revizije zakonske, institucionalne, obrazovne i računovodstvene prirode. Ispitanika 50,88% je mišljenja da su prepreke zakonske prirode, 45,62% ispitanika misli da su institucionalne, dok 50,88% ispitanika smatra da su prepreke obrazovne, a 47,37% ispitanika je mišljenja da su prepreke za uvođenje forenzičkog računovodstva i forenzičke revizije računovodstvene prirode. Određeni broj ispitanika, 12,28% se ne slaže sa stavom da su prepreke zakonske prirode, 17,54% da su institucionalne, 12,28% da su obrazovne i 17,54% da su računovodstvene prirode za uvođenje forenzičkog računovodstva i forenzičke revizije u sastavljanju i kontroli finansijskih izvještaja. Na tvrdnju „drugo“, 64,91% ispitanika je stava „nisam siguran“, što ukazuju da ispitanici smatraju da ne postoje neke druge prepreke u odnosu na prethodno navedene, a koje bi mogle uticati na uvođenje forenzičkog računovodstva i forenzičke revizije u sastavljanju i kontroli finansijskih izvještaja.

Ciljeve uvođenja forenzičke revizije različiti autori i praktičari definišu na razne načine. Neki od ciljeva uvođenja forenzičke revizije su sastavni dio pitanja anketnog upitnika, čiji su rezultati istraživanja dati u sljedećoj tabeli.

Tabela 6. Ciljevi uvođenja forenzičke revizije (Autori 2021)

Ciljevi	Uopšte se ne slažem	Ne slažem se	Nesiguran sam	Slažem se	Potpuno se slažem
Ocjena usklađenosti poslovanja organizacije sa zakonima, politikama i procedurama	5,26%	8,77%	17,55%	52,63%	15,79%
Otkrivanje i sprečavanje grešaka i nelegalnih radnji	0,00%	1,75%	7,02%	49,12%	42,11%
Blagovremeno sastavljanje kvalitetnih finansijskih izvještaja	1,75%	12,28%	15,79%	50,88%	19,30%

Ocjena uspješnosti računovodstvenih sistema	1,75%	10,53%	19,30%	47,37%	21,05%
Uvid u finansijske pokazatelje poslovanja organizacije	1,75%	8,78%	15,79%	52,63%	21,05%
Unapređenje poslovnih procesa	5,26%	3,51%	15,79%	50,88%	24,56%
Drugo	7,02%	3,51%	50,88%	21,05%	17,54%

Rezultati istraživanja pokazuju da se preko 50% ispitanika anketnog upitnika slaže da su navedene tvrdnje ciljevi uvođenja forenzičke revizije. Najveći broj ispitanika potpuno se slaže da je cilj uvođenja forenzičke revizije otkrivanje i sprečavanje grešaka i nelegalnih radnji, što potvrđuje i podatak istraživanja od 42,11%. Mali broj ispitanika se ne slaže ili uopšte se ne slaže sa navedenim ciljevima forenzičke revizije.

Aktivnosti, kako forenzičkog računovodstva, tako i forenzičke revizije mogu uticati na povećanje istinitosti, vjerodostojnosti i objektivnosti informacija u finansijskim izvještajima. Mišljenja ispitanika na navedu konstataciju prikazana su u tabeli broj 7.

Tabela 7. Pregled mišljenja ispitanika o ulozi forenzičke revizije na povećanja istinitosti, vjerodostojnosti i objektivnosti informacija u finansijskim izvještajima (Autori 2021)

Opcija	Broj ispitanika	% ispitanika
Uopšte se ne slažem	0	0,00%
Ne slažem se	1	1,80%
Nesiguran sam	11	19,30%
Slažem se	35	61,40%
Potpuno se slažem	10	17,50%
Ukupno:	57	100,00%

Prikazani rezultati istraživanja pokazuju da se 61,40% ispitanika slaže da aktivnosti forenzičke revizije mogu doprinijeti povećanju istinitosti, vjerodostojnosti i objektivnosti informacija u finansijskim izvještajima privrednih subjekata u RS, a 17,50% ispitanika se u potpunosti slaže sa navedenom konstatacijom. Ispitanika 19,30% je prihvatilo opciju „nisam siguran“, što pokazuje da nisu dovoljno upućeni u datu oblast pa ne mogu dati preciznije mišljenje. Dok se za opciju „ne slažem se“ sa datom konstatacijom izjasnilo samo 1,80% ispitanika.

Rezultati istraživanja pokazuju da je veliki broj ispitanika mišljenja da bi se uvođenjem forenzičke revizije u kontroli finansijskih izvještaja postigla veća objektivnost, transparentnost i tačnost iznesenih podataka u finansijskim izvještajima te veća odgovornost i profesionalnost u radu, mogućnost da se vlasnik privrednog subjekta upozna sa nepravilnostima, ukoliko postoje, kvalitetnije donošenje odluka i povećanje kvaliteta u računovodstveno-finansijskom dijelu poslova. Prema rezultatima istraživanja oko 53,00% ispitanika je mišljenja da je jedan od ciljeva uvođenja forenzičkog računovodstva i forenzičke revizije uvid u finansijske pokazatelje poslovanja organizacije.

ZAKLJUČAK

Uvođenje forenzičke revizije kao profesije efikasna je mjera za sprečavanje i otkrivanje grešaka, prevara i manipulacija u finansijskim izvještajima preduzeća i postizanja većeg povjerenja javnosti i korisnika finansijskih izvještaja. Praksa finansijskog izvještavanja

umnogome je opterećena primjenom nedozvoljenih računovodstvenih tehnika s ciljem friziranja finansijskih pozicija u skladu sa interesima računovođa/menadžera/vlasnika izvještajnog subjekta. Značaj forenzičke revizije se povećava sa činjenicom da su finansijske manipulacije u stalnom porastu. Uloga forenzičke revizije se ogleda u otkrivanju kriminalnih radnji u finansijskim izvještajima klijenata, bez obzira na veličinu njene materijalnosti, odnosno na stepen njenog uticaja na istinitost i objektivnost finansijskih izvještaja. Da bi ona u cjelini ostvarila svoju ulogu, forenzički revizor bi trebao otkriti i imenovati izvršioca kriminalne radnje, odrediti vrijeme i mjesto izvršenja, izračunati i iskazati materijalnu štetu koja je nastala usljed kriminalne radnje i, na kraju, opisati način njenog izvršenja. Da bi pomogli u procesu identifikacije osumnjičenih i kriminalaca, forenzički revizori upotrebljavaju fizičke dokaze, dokaze svjedoka, dokumentovane dokaze i pokazne dokaze. Simptomi prevare se istražuju analizom dokumenata i isprava u vezi finansijskih izvještaja. Izvještaji predstavljaju osnovu za donošenje poslovne i finansijske odluke. Na kraju, treba naglasiti, da je poznavanje pojavnih oblika lažiranja finansijskih izvještaja potrebno svim korisnicima (bankama, investitorima, poslovnim partnerima, finansijskim institucijama) kao i kontrolnim/inspekcijskim organima kako bi ove postupke mogli prepoznati i otkriti u finansijskim izvještajima, a sve u cilju sprečavanja računovodstvenih manipulacija i efikasnijeg finansijskog izvještavanja.

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FORENSIC AUDIT IN FUNCTION OF IMPROVING THE QUALITY OF FINANCIAL REPORTING

Summary: *This paper aims to indicate the role of forensic audit in the quality of financial statements. The methods used in the research are: descriptive method and survey questionnaire. The paper aims to show the need for the development of forensic audit and its impact on better financial reporting of economic entities. The paper seeks to make a theoretical contribution, expand the existing fundamental knowledge in this area and show the positive effects of the development and application of forensic audit in the control of financial statements of economic entities.*

Forensic auditing is a new practical discipline within auditing and as such it has not yet received a comprehensive and uniquely accepted definition in the world. Nevertheless, a large number of theorists, as well as numerous national and international organizations and associations, have provided a starting point for the proper definition of forensic audit, describing its place and role in audit theory and practice. During the research, scientific collection, processing, synthesis of appropriate theoretical and practical data were performed.

Key words: *forensic audit, financial statements audit, financial statements and forensic accounting*

JEL classification: *M41, M42, M49*

INTRODUCTION

The relevance and reliability of financial reporting came to the fore with the emergence of the global financial and then economic crisis, as well as due to the huge losses caused to investors by financial scandals that occurred in the late 20th and early 21st century. One of the key factors in the investment decision-making process of investors (domestic and foreign) are the financial statements. This is why they must be prepared in an understandable way, realistic and objective, true and fair. Users of financial statements must have financial statements that fairly present the financial position, financial performance and cash flows of the observed entity, or those financial statements that fairly show the effects of transactions and other events in accordance with the definitions and criteria for recognizing assets, liabilities, income and expenses, defined by the Framework for the preparation and presentation of financial statements. With the development of the world market, there is a sharp increase in financial fraud, which reduces the objectivity and reliability of financial reporting. In order to successfully counter fraud and restore confidence in the financial statements, the development of forensic audit as a new discipline in auditing involves examining and interpreting evidence and facts and giving a

particular opinion. The role of forensic audit, which is conducted in order to prevent the presentation of manipulative actions and influence better financial reporting and more efficient business decision-making, is a topic that is current today, but also insufficiently developed and studied in our area.

1. CONCEPT AND OBJECTIVES OF FORENSIC AUDIT

Forensic auditing is a new practical discipline within auditing and as such has not yet received a comprehensive and uniquely accepted definition in the world. Nevertheless, a large number of theorists, as well as numerous national and international organizations and associations, have provided a starting point for the proper definition of forensic audit, describing its place and role in audit theory and practice.

The Institute of Forensic Auditors (IFA), a non-profit organization of forensic auditors in Belgium, defines forensic auditing as “the activity of collecting, verifying, processing, analyzing and reporting data in order to obtain facts and evidence that can be used in forensic financial matters disputes arising from criminal acts in the financial statements and the provision of preventive advice”.

According to *Paul Thangam*, forensic audit is “the application of accounting methods in monitoring and gathering forensic evidence, usually for the investigation and prosecution of criminal acts such as embezzlement and fraud”.

The forensic audit should indicate the perpetrator of the criminal act and his/her position in the organization, regarding position he/she held at the time of the commission of the criminal act, as well as to establish whether he/she committed the act independently or in connection with other persons employed within or outside the legal entity.

Forensic audit focuses on identifying, interpreting, and communicating evidence of basic strategic economics and event reporting. Forensic audits are easy to adapt to an accounting environment based on principles with broad guidelines that apply to various accounting investigations without the use of rule-based audit approaches (Stevenson and Crumbley 2009, 62).

The primary objective of forensic audit is to detect criminal activity in the financial statements, regardless of the opinions of the auditors. In order to meet this goal, the forensic auditor must find out who committed the criminal act, where the criminal act was committed, at what time and what kind of damage occurred. In order to fully fulfill the basic goal of forensic audit, the forensic auditor should, as far as possible, identify and appoint the perpetrator of the criminal act, determine the place and time of its execution, calculate and report the material damage caused by the criminal act and, on finally, describe the manner of its execution.

Forensic audit arises from the integration of accounting, investigative audit, criminology, and litigation services (Dada and Owolabi and Okwu 2013, 788).

It is necessary to determine the place of execution of the criminal act in the forensic audit, because the finding and opinion of the forensic audit will result, among other things, in court proceedings. The spatial validity of criminal legislation, as well as the determination of the territorial jurisdiction of the court, depends on the determination of the place where the criminal act was committed. Forensic audit also needs to determine the time of committing a criminal act, because from that fact, as in determining the place of execution, depends on resolving numerous issues concerning the temporal validity of the criminal law, the issue of obsolescence, determining the guilt of the perpetrator and the like.

For forensic audit and the forensic auditor, it is extremely important to determine the manner or technique of committing a criminal act. In this way, the forensic audit client reveals weaknesses in the system of internal controls and the mechanisms by which they are circumvented by the perpetrator. Based on that, the injured legal entity may take actions in the future to strengthen the system of internal controls and prevent the emergence of new similar illegalities. Discovering the technique of committing a criminal act will enable the judicial

authorities to more easily determine whether the committed act is a criminal offense and which criminal offense is in question. That is, the judicial authorities will, in the case of court proceedings, qualify the criminal offense.

The goals of forensic audit development are:

- detection of areas of possible irregularities or fraud - implies narrowing the field of search for certain irregularities or locating areas where there is an irregularity or fraud;
- detection of specific irregularities or fraud - means detecting a specific irregularity or fraud and determining the manner in which it was performed,
- assessment of the level of risk of identified irregularities (intentional, unintentional, high or low level of irregularities, high or low risk of fraud, etc.) - means the assessment of the danger of the committed crime (intentional, unintentional, high or low level of irregularities, high or low risk of fraud, etc.), and
- presentation of evidence - implies the provision of material and other evidence that the offense was committed and the manner in which it was performed.

Depending on the purpose for which the forensic audit is intended and which is defined by the client, the choice of objectives also depends. For some purpose such as the assessment of a potential partner, it is sufficient e.g. forensic assessment of possible major irregularities and a high degree of risk of fraud. Proof of irregularities is required to take criminal action.

2. APPLICATION OF FORENSIC AUDIT

Forensic audit reports as a means of presenting evidence in court proceedings in commercial operations. It is included in this function when conflict disputes have already arisen, that is, when the consequences need to be considered, so there is only a part of the evidentiary activities. By its nature, it is primarily a function of proving or revealing the truth, which for many professional forensic scientists, whether accountants or auditors, is a great practical difficulty. In the public sector, the application and importance of forensic audit is a great help to courts and prosecutors in prosecuting the misuse and spending of budget funds. In the private sector, skills related to forensic accounting and forensic auditing are useful for most cases of economic crime, such as embezzlement, criminal acts against banks, bankruptcy criminal acts, distribution of illegally obtained profits, computer fraud and the like. According to KPMG, situations where forensic audit is required are as follows:

- You suspect that your data has been lost or stolen.
- You suspect criminal activities within the company or you are a victim of external attacks (cyber-crime) and in court you need a backup of digital evidence.
- You are in litigation or an investigation has been launched against you, and you must prepare documents that contain facts that will help resolve the case.
- You want to analyze large amounts of data according to certain criteria.

The application of forensic audit is reflected in the detection of criminal acts in the financial statements of the suspect or controlled subject of analysis, regardless of whether it is only a minor refinement of results in order to achieve a temporary goal (balance sheet adjustment to avoid losing status) or systematic falsification of data in order to avoid paying taxes or extracting company capital for the benefit of individuals. From the basic, the individual roles of forensic audit are branched:

- detection and naming of perpetrators of criminal acts,
- discovery of the manner, place and time of its execution,
- determination of material damage and the impact of criminal activity on the business of the organization,
- providing evidence for judicial or disciplinary proceedings.

The authors, Enofe and Omagbon in their research tried to answer the questions (Enofe and Omagbon 2015, 2):

1. Can forensic audit significantly detect fraud in companies?

2. Can forensic audit significantly prevent fraudulent activities in firms?
3. Can forensic audit significantly reduce fraud in firms?

The basic characteristic of forensic audit is contained in its main goal, which is to examine in detail the existence of potential criminal acts, as well as to provide unambiguous material evidence for those actions in case of detection.

There are few people in the world who are specially trained and experienced in the field of forensic accounting and forensic auditing, but in today's business world every organization should have a forensic accountant and a forensic auditor.

Research confirms the need to introduce forensic auditing as part of the audit of financial statements and states that auditors should acquire additional qualifications in the field of skills that are otherwise characteristic of forensic auditors (DiGabriele 2009).

According to the United States General Accounting Office (GAO), there is a strong emphasis on fraud prevention and detection during statutory audits. In fact, the United States and international standard setters increase the auditor's responsibility to consider fraud risk while conducting an audit of financial statements. Even a call for stronger forensic skill in those who perform these audits. All normal statutory audits should contain some elements for forensic investigation, as evidence of fraud can be easily detected if the adequacy and consistency of control mechanisms are assessed in detail. (Eme 2011, 27).

Forensic audit related to fraudulent financial reporting is conducted primarily for the benefit of investors and other interest groups whose decisions depend on the published financial statements of the observed entity (Tusek and Klikovac 2013, 110). If there is inaccurate fraud information in such reports, users will make wrong business decisions, which can have negative consequences. One of the solutions that can increase the number of detected cases of fraud is the possibility of using forensic audit services (Tusek and Klikovac 2013, 110).

Owojori and Asaolu, look at forensic accounting in the context of the practice of using accounting, auditing, and investigative skills in legal matters and applying special knowledge in proving economic transactions (Owojori and Asaolu 2009, 184).

Many researchers have tried to study the differences, relationship, and impact between the concepts of forensic accounting and forensic auditing, and those interested in the accounting profession believe that the two concepts of "forensic accounting and forensic auditing" are synonymous, but not exactly the same. The auditor who audits financial fraud is a truly experienced accountant, a skilled experienced accountant in the audit process to detect fraud (fraud) and fraud in data and documents and to reduce and prevent both equally (Matarneh and Moneim and Al-Nimer 2015, 140). The focus of forensic accounting is to identify and review the fraudulent transactions in order to determine the real intention of the executor company. Such a review may take the form of a document review, interviews, examination of electronic documents, etc. (Peterson 2015, 63).

3. CHARACTERISTICS OF FORENSIC AUDIT

Forensic audit focuses on areas where symptoms of fraud occur by conducting a detailed examination of each individual transaction of that business segment. This type of audit is conducted as a targeted audit based on the suspicion of the entity management or an external audit that there are indications that a criminal act has been committed. The concept of materiality in forensic audit is not of great importance. Forensic auditors during the audit process are not focused on detecting material irregularities, but detect any criminal act regardless of its level of significance and size.

The characteristics of forensic audit are reflected in:

- examining most or all of the transactions in the company where there are indications of fraud,

- focus on detecting criminal acts and manipulating financial statements regardless of materiality,
- checking for a longer period of time than the business year,
- reports must be admissible for court proceedings.

Development and application of forensic audit in the control of financial statements, in order to improve corporate governance has certain advantages:

1. Forensic audit strengthens control mechanisms, with the aim of protecting business from financial crime, whether it is a potential catastrophic event that may jeopardize the stability of business or minor events that threaten the assets of the company in the long run.
2. Forensic audit can play an important role for companies that are controlled by regulatory authorities and can be invaluable to ensure compliance with rules and regulations. For example, forensic auditing can be useful in helping companies provide effective anti-money laundering procedures.
3. Forensic audit can contribute to the effective identification of areas of loss.
4. Forensic audit provides good factual information that can be used to assist in resolving litigation.
5. Forensic audit helps to identify and record potential conflicts of interest of managers by improving transparency and verification of how resources have been used, whether in private or public enterprises.

Huber points out that forensic auditing possesses a number of characteristics necessary for its recognition as an independent profession rather than as a subspecies within the accounting profession (Huber 2012). He therefore states that forensic auditing is currently on its way to becoming a profession.

The process of conducting a forensic audit also has certain shortcomings, such as:

1. Poor forensic audit conduct could waste excessive management time and could become an undesirable business hindrance.
2. Forensic audit can cover a large scope of fraud investigation down to the smallest detail. Under certain circumstances, the forensic auditor may request that the scope of the audit be increased, which will also cause an increase in the fee for performing the audit process.
3. Some employees see proactive forensic audit as belittling their integrity, rather than as a means of improving the control procedure for the benefit of the business.

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Considering the need to conduct forensic audit, some papers claim that forensic audit based on the practice of forensic accounting is the best choice for reducing illegalities in the field of finance and accounting (Vukadinovic and Damjanovic 2016, 57). Forensic accounting in its current state can be broadly classified into two categories that include litigation support and investigative accounting (Zachariah et al. 2014, 17).

4. DIFFERENCES BETWEEN FORENSIC AUDIT AND FINANCIAL AUDIT REPORTS

The objective of the traditional independent audit of financial statements is to provide an opinion on whether the financial statements are in accordance with generally accepted accounting principles and whether they represent in all material aspects the fair financial position of the client.

However, when it comes to forensic audit, there is a thin line that separates standard audit from forensic audit. Namely, when an auditor within a standard audit engagement, either in the capacity of internal or external auditor, suspects or detects a suspicious or criminal act, then it

is not a forensic audit. From the other point of view, if, on the basis of suspicion, an auditor is hired, who within that special engagement discovers or refutes the initial premise, then it is a forensic audit.

Because the basic and individual objectives of forensic audit are specific, forensic auditors have a much different approach to verifying financial statements than traditional auditors, both when it comes to the materiality and scope of audits, and when it comes to reporting on the results of their work. Undoubtedly, as a new form of audit of financial statements, forensic audit has its own special characteristics. First of all, traditional audit focuses on the detection of errors and prevention as a result of the operation of the internal control system, where the auditor checks their effectiveness through sampling, and not through a comprehensive review of all transactions. On the other hand, the forensic auditor has a completely different approach. He examines most or even every single transaction in detail in areas of business where symptoms or indications of criminal activity occur. Consequently, the issue of materiality in forensic audit differs significantly from the traditional audit of financial statements. Materiality is essentially a way of marking or naming the significance of a transaction or event. If the transaction or event is material, then it is also significant. In determining the probability of whether or not there will be material errors, traditional auditors use statistics, evaluate the system of internal controls and, if they assess that the system is effective, material errors will not be likely (Grujić-Kalkan 2013, 283).

Forensic accounting is often equated with examining fraud or auditing fraud in the financial statements.

However, forensic accounting is a challenging discipline that essentially communicates with auditing, economics, finance, information systems, and law (DiGabriele and Huber 2014, 100). When auditing financial statements, materiality is essentially a way of marking or naming the significance of a transaction or event. If the transaction or event is material, then it is also significant. In determining the probability of whether or not there will be a material error, traditional auditors use statistics, evaluate the system of internal controls and, if they assess that the system is effective, material errors will not be probable. In contrast, the forensic auditor in his work is not focused on detecting materially significant irregularities, but detects any criminal act, regardless of the degree of its significance and size (Bologna and Linquist, 2006, 47). Jack G. Bologna and Robert J. Lindquist point out that “the level of materiality of forensic audit engagement is much lower and more focused than regular independent audit engagement”. According to these authors, “not a single trace or piece of evidence is so small that it would not be significant, i.e. material”. In addition to the above, it should be noted that independent audit focuses on the present, i.e. for the current year for which the financial statements are audited, in terms of the adequacy of internal controls, as well as the reliability, validity and mathematical accuracy of accounting. However, such a narrow approach, due to the fact that criminal acts can be hidden in financial statements for years, does not provide a historical perspective, so important for detecting illegal conduct. When conducting a forensic audit, the auditor does not verify a set of financial statements for a particular business year, but, guided by the symptoms and indications of illegal conduct, monitors the trace of a criminal act to its root or beginning, regardless of when it was performed.

Finally, the independent audit, as a result of its work, prepares a report in which it expresses its opinion on whether the financial statements have been prepared in accordance with the generally accepted financial reporting framework, with the basic elements of traditional audit reports prescribed by international standards. On the other hand, starting from the fact that forensic audit has a specific goal, its report itself, although it does not currently have a generally accepted and prescribed by international standards form, must meet certain basic criteria, which primarily relate to its adequacy and usability. for possible court proceedings.

Due to the stated specifics of forensic audit, the forensic auditor must have a completely different approach to the verification of financial statements. Forensic audit procedures are much more intuitive processes than the formal analytical methodology implemented in

traditional independent audit of financial statements. That is why some theorists consider forensic audit to be less a science and more an art, so it is difficult to learn. A successful forensic auditor must be curious, persistent, creative, open to consider all possibilities, examine small details and at the same time see the bigger picture.

According to dr. Petkovic, the difference between independent audit and forensic audit could be summarized as follows:

Table 1. Differences between audit of financial statements and forensic audit (Petkovic 2010, 194)

<i>Characteristics</i>	<i>Independent audit</i>	<i>Forensic audit</i>
The goal	Expressing an opinion on the true and fair presentation of financial statements.	Identification and detection of criminal acts in the financial statements
Techniques	Sampling methods and performing control and essential tests.	Substantial, detailed and in-depth verification of all, or correctly selected transactions in suspicious - business areas.
Period of time	Examination of financial statements, transactions and accounts for a certain period of time.	Reports, transactions and accounts can be examined from the beginning, "from the root" as needed regardless of the date of the event.
Report and opinion	Expressing an opinion with or without reservation, a restraining opinion or a negative opinion.	Expressing opinions regarding the place, time and manner of committing a criminal act, calculating the damage and naming of the perpetrator.

5. MEASURES OF INFLUENCE OF FORENSIC AUDIT ON THE QUALITY OF FINANCIAL REPORTS

The goal of every company and every legal entity, is to operate successfully. The success of the business can be best seen from the presented financial statements, provided that the financial statements represent a credible picture of the yield position and the material situation of the company. Business data will serve both internal and external users of information as a good basis for making economic decisions, i.e. taking appropriate actions (Vukovic Perduv and Ceklic and Ceklic 2018, 110).

Determining the perpetrator of the fraud is the most important step in forensic audit. The perpetrators of fraud can be employees but also the management of the company. Determining the location and manner in which financial statements are manipulated requires experience in auditing, accounting, taxation, and other related areas. Detecting and proving fraud in financial statements is a research job with components of the work of an auditor and the work of a criminal investigator. Forensic auditors work with a large set of information and their sources, and by eliminating inappropriate information and narrowing choices, they confirm fraud.

Preventive measures of creative accounting abuse include fraud risk assessment, testing of controls that are in the function of preventing manipulation and conducting audits. By introducing their own code of ethics, companies can act to reduce the motives for manipulation and criminal activity. In order for management to effectively counter errors and manipulations that may occur in the financial statements, it is necessary to provide:

- a) efficient internal control system,
- b) adequate human potential,
- c) quality code of ethics,
- g) continuous training of employees in the company regarding error detection and manipulation,

- d) clear written rules of conduct,
- f) suppression of bad behavior, etc.

Establishing measures to prevent and detect fraud and manipulation is essential for the stability of the country's economy. It is not enough just to adopt a code of ethics in the company but also to implement it in practice. Fraud can also occur if the company has an effective internal control system. The system of internal controls in companies needs to be continuously improved and protected from potential fraudsters. Although it is impossible to completely eliminate the risk of errors, fraud and manipulation in companies, by taking timely measures to prevent and detect fraud, the risk of fraud can be reduced. Measures to influence the more efficient and credible preparation of financial statements are aimed at the following:

- improvement of legal regulations and regulations that will narrow the space for fraudsters to act and act on a more efficient activity of all those who control business activities;
- organizing efficient systems of internal control and internal audits, especially in larger companies;
- motivate the management and employees of the company in terms of preventive measures and activities to reduce opportunities for fraud (education, materials on business and accounting policies, organizing regular controls, etc.).

The introduction of forensic auditing as a profession is an effective measure to prevent and detect errors, fraud and manipulation in the financial statements of companies and greater trust of the public and users of financial statements. As the developed countries of the world have already recognized the benefits of the information provided by forensic audit, it is realistic to expect that the need for this activity will develop in our region as well. Connecting science, the advanced technology sector, higher education institutions and public administration should be one of the priorities of those creating an economic strategy in BiH.

Forensic auditors, applying accounting principles, skills and research procedures, investigate, collect evidence and document fraud and manipulation in financial statements.

In order for the company's management to counteract the errors and frauds that may occur in the financial statements, it helps a lot: a reliable accounting system, appropriate control procedures, as well as a clear definition of accounting policies and financial statements. Adequate human resources, an understandable code of ethics as well as the provision of continuous training for employees regarding accounting errors and manipulation of financial statements are also needed.

Forensic auditors must have strong skills in writing and oral communication. It is important that forensic auditors have the ability to conduct interviews and effectively gather information from people who may not be willing to give truthful answers (Nunn et al. 2006, 2).

6. RESULTS OF EMPIRICAL RESEARCH

The information obtained as a result of the empirical research was obtained through a questionnaire among internal auditors, managers of financial departments and officials in the financial and accounting sector. Most of the questions are closed: direct questions, questions with offered enumeration answers, and questions with offered intensity answers. Respondents were asked to express their opinion on potential reasons that negatively affect corporate governance in companies, the role of forensic accounting and forensic audit in detecting fraud and criminal activity, the need for its introduction and the impact on the scope and frequency of financial fraud and criminal activity in the Republic Serbian.

The empirical research was conducted through a survey questionnaire which was conceived as a segment of research on the needs and possibilities of better financial reporting of economic entities in the Republic of Srpska .

To achieve the objectives of the research, data collection was performed from primary sources (field research) and secondary sources (desk research). The collection of primary data was performed by the method of testing using a survey questionnaire.

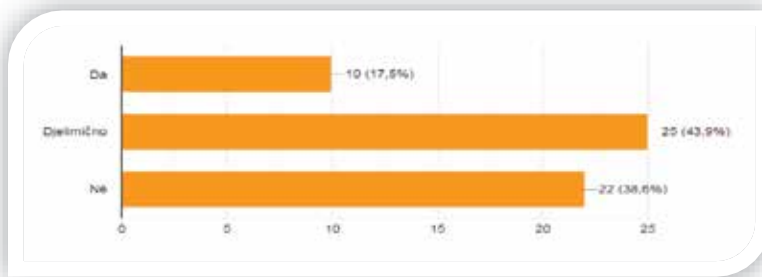
The survey questionnaire was composed of questions that provided information on the attitudes of individuals about key issues in the public sector.

The research included:

1. professional auditors who have completed the questionnaire and whose views are the subject of the research;
 2. professional accountants who, by filling in the questionnaire, expressed their views subject of research;
- persons employed in economic entities and institutions in other jobs.

The results of tests obtained during an Ketna through are shown in tables and through charts .

To the question: "Is the management of the organization familiar with the principles of forensic audit", the results are shown in the following chart:



Graph 1. Introducing the company's management to the principles of forensic accounting and forensic audits (Authors)

According to the presented data from the research results, only 17.50% of respondents believe that the company's management is familiar with the principles of forensic audit, while 43.90% of respondents believe that the company's management is partially familiar with these principles, which indicates lack of education and insufficient education. forensic audits.

The result of the survey of 38.60% is not negligible, which indicates that the company's management is not at all familiar with the principles of development and application of forensic accounting and forensic audit.

In the following table shows the respondents' opinions on the attitudes of the development of forensic audit in the Republic of Srpska / BiH :

Table 2. Overview of respondents' opinions on the development of forensic audit in the Republic of Srpska BiH (Authors 2021)

In your opinion, do they exist in RS	No	Not at all	Not sure	Yes, but not enough	Yes
Laws and bylaws that define the procedure for conducting forensic accounting and forensic audit?	10.53%	12.28%	64.91%	8.77%	3.51%
Ways to measure, detect and prevent fraud in financial statements?	5.26%	8.77%	47.37%	33.33%	5.26%
Education in the field of forensic accounting and forensic audit?					

	5.26%	5.26%	40.35%	45.61%	3.51%
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The results of the research conducted through the survey questionnaire show that the respondents are not sure whether there are laws and bylaws in the Republic of Srpska or BiH that define the procedure of conducting a forensic audit, which is confirmed by the answers of 64.91%. When it comes to ways to measure, detect and prevent fraud in the financial statements, 33.33% of respondents believe that they exist, but they are insufficient. A significant number of respondents, 45.61% believe that training in the field of forensic audit is insufficient, which affects the inapplicability of these areas in the control of financial statements. Respondents 40.35% are not sure whether there are trainings in the field of forensic audit, which means that the field of forensic audit is insufficiently written and emphasizes their application in practice, in the control of financial statements. A very small number of respondents 3.51% confirmed that there are laws and bylaws that define the procedure of conducting forensic audit, then 5.26% are familiar with the methods of measuring, detecting and preventing fraud in financial statements, and 3.51% of respondents have attitude that there are educations in the field of forensic audit.

To the question: "If the conditions and professional qualifications required for performing forensic audit are legally prescribed, do you think that this will increase the quality of financial reporting?" The results of confirming or denying the opinion of the respondents, as well as the existence of uncertainty in their opinion, are shown in the following table:

Table 3. Opinion of respondents on how to increase the quality of financial reporting (Authors 2021)

The answer	Number of respondents	% of respondents
YES	48	84.20%
NO	5	8.80%
I DO NOT KNOW	4	7.00%
Total:	57	100.00%

If the conditions and professional qualifications required to perform forensic audit activities were legally prescribed, 84.20% of the respondents to the survey questionnaire believe that this could increase the quality of financial reporting, and 8.80% of respondents believe that legally prescribing the conditions would not have positive effects. on the quality of financial reporting. A certain number of respondents, 7.00%, do not know whether the legal prescribing of conditions and professional qualifications for performing forensic audit activities could affect the quality of financial reporting.

Whether the organizations in which the respondents are engaged need to conduct a forensic audit? The results of the research are given in table no.4.

Table 4. Review of research results - the need to conduct forensic audit in the organizations of respondents (Authors 2021)

Question	I do not agree at all	I do not agree	I'm insecure	I agree	I totally agree
Do you think that in your organization there is a need to conduct forensic accounting and forensic audit?	10.50%	26.30%	43.90%	15.80%	3.5%

The largest number of respondents, 43.90% are not sure whether there is a need for forensic audit in the organizations in which they are engaged, while 26.30% of respondents do not agree that there is a need for forensic audit in organizations, and 10.50% I do not agree at all with the stated need for introduction to the organization.

A very small number of respondents, 15.80% agree that the area of forensic audit should be conducted in the work of organizations, and 3.50% completely agree with the application of forensic audit in the work of organizations.

Obstacles to the introduction of forensic audit in the preparation and control of financial statements can be viewed from different aspects, and the results of the research show the following data:

Table 5. Obstacles to the introduction of forensic audit (Authors 2021)

Impediments	I do not agree at all	I do not agree	I'm insecure	I agree	I totally agree
Legal	7.02%	12.28%	24.56%	50.88%	5.26%
Institutional	1.75%	17.54%	24.56%	45.62%	10.53%
Educational	5.26%	12.28%	22.81%	50.88%	8.77%
Accounting	5.26%	17.54%	29.82%	47.37%	0.00%
Other	7.02%	7.02%	64.91%	15.79%	5.26%

The results of the survey questionnaire show that the majority of respondents agree with the statement that the obstacles to the introduction of forensic accounting and forensic audit are of a legal, institutional, educational and accounting nature. Respondents, 50.88% think that the obstacles are legal in nature, 45.62% of respondents think they are institutional, while 50.88% of respondents think that the obstacles are educational, and 47.37% of respondents think that the obstacles to the introduction of forensic accounting and forensic audits of an accounting nature. A number of respondents, 12.28% disagree with the view that the obstacles are legal in nature, 17.54% that they are institutional, 12.28% that they are educational and 17.54% that they are accounting in nature for the introduction of forensic accounting and forensic audit in compiling and controlling financial statements. To the statement "other", 64.91% of respondents have the attitude "I'm not sure", which indicates that respondents believe that there are no other obstacles in relation to the above, which could affect the introduction of forensic accounting and forensic audit in compiling and control of financial statements.

Different authors and practitioners define the goals of introducing forensic audit in various ways. Some of the objectives of the introduction of forensic audit are an integral part of the survey questionnaire, the results of which are given in the following table.

Table 6. Objectives of the introduction of forensic audit (Authors 2021)

Goals	I do not agree at all	I do not agree	I'm insecure	I agree	I totally agree
Assess the compliance of the organization's operations with laws, policies and procedures	5.26%	8.77%	17.55%	52.63%	15.79%
Detection and prevention of errors and illegal actions	0.00%	1.75%	7.02%	49.12%	42.11%
Timely preparation of quality financial reports	1.75%	12.28%	15.79%	50.88%	19.30%
Performance evaluation of accounting and management systems	1.75%	10.53%	19.30%	47.37%	21.05%

Insight into the financial performance of the organization	1.75%	8.78%	15.79%	52.63%	21.05%
Business process improvement	5.26%	3.51%	15.79%	50.88%	24.56%
Other	7.02%	3.51%	50.88%	21.05%	17.54%

The results of the research show that over 50% of the respondents to the survey questionnaire agree that the stated statements are the goals of the introduction of forensic audit. Most of the respondents completely agree that the goal of introducing forensic audit is to detect and prevent errors and illegal actions, which is confirmed by the research data of 42.11%. A small number of respondents disagree or do not agree at all with the stated goals of forensic audit.

Both forensic accounting and forensic auditing activities can increase the truthfulness, credibility and objectivity of information in financial statements. Respondents' opinions on this statement are shown in the following table number 7.

Table 7. Overview of respondents' opinions on the role of forensic audit on increase truthfulness, credibility and objectivity of information in financial statements (Authors 2021)

Option	Number of respondents	% of respondents
I do not agree at all	0	0.00%
I do not agree	1	1.80%
I'm insecure	11	19.30%
I agree	35	61.40%
I totally agree	10	17.50%
Total:	57	100.00%

The presented research results show that 61.40% of respondents agree that forensic audit activities can contribute to increasing the truthfulness, credibility and objectivity of information in the financial statements of economic entities in RS, and 17.50% of respondents fully agree with this statement. Respondents, 19.30% accepted the option "I'm not sure", which shows that they are not sufficiently familiar with the area, so they can't give a more precise opinion. While only 1.80% of respondents voted for the option "I do not agree" with the given statement.

The results of the research show that a large number of respondents are of the opinion that the introduction of forensic audit in the control of financial statements would achieve greater objectivity, transparency and accuracy of data presented in financial statements, and greater responsibility and professionalism, the ability to inform the business owner about irregularities, if any, better decision making and increased quality in the accounting and financial part of the business. According to the results of the research, about 53.00% of respondents are of the opinion that one of the goals of the introduction of forensic accounting and forensic audit is insight into the financial indicators of the organization.

CONCLUSION

The introduction of forensic auditing as a profession is an effective measure to prevent and detect errors, fraud and manipulation in the financial statements of companies and to achieve greater trust of the public and users of financial statements. The practice of financial reporting is largely burdened by the application of unauthorized accounting techniques with the aim of styling financial positions in accordance with the interests of the accountant / manager / owner of the reporting entity. The importance of forensic audit increases with the fact that financial

manipulations are increasing constantly. The role of forensic audit is reflected in the detection of criminal acts in the financial statements of clients, regardless of the size of its materiality, or the degree of its impact on the truthfulness and objectivity of financial statements. In order for it to fully fulfill its role, the forensic auditor should identify and appoint the perpetrator of the criminal act, determine the time and place of execution, calculate and state the material damage caused by the criminal act and, finally, describe the manner of its execution. To assist in the process of identifying suspects and criminals, forensic auditors use physical evidence, witness evidence, documented evidence, and demonstrative evidence. The symptoms of fraud are investigated by analyzing documents and documents related to financial statements. Reports are the basis for making business and financial decisions. Finally, it should be emphasized that knowledge of emerging forms of falsification of financial statements is necessary for all users (banks, investors, business partners and financial institutions) as well as control/inspection bodies in order to be able to identify and disclose these procedures in financial statements, all with the aim of more efficient financial reporting and preventing accounting manipulations.

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INFORMACIONO KOMUNIKACIONE TEHNOLOGIJE U USLOVIMA PANDEMIJE COVID-19 SA OSVRTOM NA OBRAZOVNI SISTEM I EKONOMSKA KRETANJA U BOSNI I HERCEGOVINI

Rezime: *COVID-19 je uticao na sve segmente društva, a naročito na obrazovanje i ekonomiju, što je u ovom radu i posebno naglašeno. Bez obzira na to gdje u svijetu nas je zateklo izbijanje pandemije, uvedena su ograničenja koja nismo mogli ni zamisliti da će nam se ikada desiti. Svako je osjetio uticaj preduzetih mjera protiv pandemije. Ipak, neke djelatnosti su pogođene tim ograničenjima više od drugih. U Bosni i Hercegovini je brzo postalo jasno da su restriktivne mjere i njihove posljedice - kao što je policijski sat, obustava javnog prevoza, obustava nastave na svim nivoima, nezaposlenost – nesrazmjerno uticale na različite segmente našeg društva. Jedan od uspješnijih načina unapređenja kvaliteta obrazovanja je osavremenjivanje nastave pomoću informaciono-komunikacionih tehnologija (IKT), multimedijalnih sadržaja i interneta. Analizirajući period od godinu dana unazad, možemo zaključiti da su ona privredna društva i javne ustanove koje su imale mogućnost primjene informaciono-komunikacionih tehnologija, odlučno se upustila u borbu sa posljedicama pandemije i ostvarile dobre rezultate u ovoj vanrednoj situaciji. Ova složena situacija nalaže svima, a naročito se misli na stručnjake, eksperte i akademsku zajednicu da nastave sarađivati, bilježiti, analizirati i učiti iz iskustva kroz koje prolazi BiH. Nadamo se da ćemo ovim radom doprinijeti povećanju svijesti u BiH o važnosti primjene informaciono-komunikacionih tehnologija u obrazovanju i ekonomiji i što bi zasigurno za cijelo društvo dalo bolje rezultate u odgovoru na pandemiju.*

Ključne riječi: *Informaciono-komunikacione tehnologije, COVID 19, obrazovanje, ekonomija*

JEL klasifikacija: *A029, I29*

UVOD

U proljeće 2020. zemlje Zapadnog Balkana su – kao i većina ostatka svijeta – bile prisiljene nametnuti stroga ograničenja ekonomskih aktivnosti kako bi suzbile pandemiju COVID-19. U prvoj polovini 2020. godine svijet se suočio sa eksplozivnim širenjem infekcije smrtonosnog, novog virusa. Kako su zemlje jedna za drugom bile prisiljene nametati ograničenja u brojnim područjima društvenog i ekonomskog života kako bi usporile zarazu, ni Zapadni Balkan nije bio pošteđen. Prvi slučajevi su zabilježeni već u prvoj sedmici marta. Centar Johns Hopkins navodi da je do 27. aprila 2020. godine u šest zemalja regije bilo potvrđeno oko 11.000 slučajeva bolesti. Kao odgovor, svih šest zemalja je uvelo ograničenja i stroge mjere socijalnog distanciranja. Međunarodni aerodromi u svih šest zemalja su zatvoreni za putnički saobraćaj. Trajanje početnih ograničenja je produženo. Ključni ekonomski sektori, kao ugostiteljstvo, maloprodaja koja ne uključuje osnovne proizvode neophodne za život, zatvoreni su. Putovanja i društvena okupljanja su ograničena ili zabranjena, a škole i fakulteti su zatvoreni.

Glavni okidač negativnih reperkusija izazvale su globalne mjere za sprječavanje širenje virusa, koje su zahtijevale privremene obustave ili limitirani rad mahom uslužnih djelatnosti. Kako se pandemija širila, tako se širio i broj sektora na koje je ona negativno uticala. Inicijalni šok na strani agregatne ponude, ali i opšti strah od širenja virusa u društvu, su skupa proizveli lančane negativne efekte na ekonomiju. Došlo je do smanjenja agregatne tražnje te usporavanja globalnog lanca ponude (trgovine), što je smanjilo zaposlenost, investicije te proizvodnju i produktivnost. Iako trajanje pandemije još uvijek nije izvjesno, analize međunarodnih institucija ukazuju da će posljedice biti velike i dalekosežne. Ipak, neće svi sektori i dijelovi društva biti jednako pogođeni krizom. Pojedini sektori djelatnosti koji su najviše obuhvaćeni mjerama, poput sektora trgovine i djelatnosti vezanih za turizam pretrpeće veću štetu od drugih djelatnosti. Svijet će zbog povećanja nezaposlenosti dobiti milione novih siromašnih, a zbog otežanog obrazovanja tokom pandemije kriza će se negativno odraziti na kvalitet ljudskog kapitala. Oporavak vrlo vjerovatno neće biti jednako brz i jednostavan za sve djelatnosti. Društva sa integrisanom primjenom informaciono-komunikacionih tehnologija imaće veće šanse za rast od drugih, zbog tehnološkog razvoja i robotizacije koji su obilježili raniji period s jedne strane, ali i povećane potrebe ovih djelatnosti u periodu krize sa druge strane. Savremeno poslovno okruženje karakteriše digitalizacija, razvoj internet stvari, korisnička podrška, upravljanje rizikom i primjenom sofisticirane tehnologije. Stoga se postavlja sve više pitanja kako odgovoriti na izazove koji slijede i kako tehnologija utiče na poslovanje (Travar i Dugonjić i Ristić 2019, 119).

Tokom posljednjih godinu dana formalni sistem obrazovanja je doživio mnogo promjena. Jedan od uspješnijih načina za borbu sa posljedicama pandemije i unapređenja kvaliteta nastave je osavremenjivanje nastave pomoću informaciono-komunikacionih tehnologija (IKT), multimedijalnih sadržaja i interneta. Primjenom informaciono-komunikacionih i multimedijalnih tehnologija, uz dodatak interneta, nastavni sadržaji koje je potrebno obraditi se mogu prilagoditi različitim nivoima znanja učenika. Nastavnici imaju značajnu ulogu u tom procesu, jer od njih najviše zavisi koliko će učenici usvojiti znanja. Samim tim, postaje izuzetno važno i aktuelno pitanje konkretnih oblasti stručnog usavršavanja nastavnika u IKT području. Nastava uz pomoć IKT, multimedijalnih tehnologija i interneta mora se posmatrati kao savremeni nastavni sistem koji ima velike potencijale i perspektivu u budućnosti, bez obzira da na dalji razvoj situacije u vezi sa pandemijom.

1. ULOGA I ZNAČAJ INFORMACIONO – KOMUNIKACIONIH TEHNOLOGIJA U OBRAZOVNOM SEKTORU

Informaciono-komunikacione tehnologije uvele su značajne promjene u gotovo svim aspektima naših života posljednjih godina. U relativno kratkom vremenskom periodu, IKT su podstakle transformaciju svakodnevnih aktivnosti poput: kupovine, putovanja, obrazovanja, liječenja. Savremeni razvoj tehnologije doveo je do toga da je internet prisutan u svim domenima ljudskih života. Internetu se pristupa pomoću računara, mobilnih telefona, televizora, tableta, kuhinjskih aparata. Ovaj proces, u velikoj mjeri omogućen informaciono-komunikacionim tehnologijama (IKT), značajno utiče na razvoj ljudskih potencijala i uzrokuje promjene u svim aspektima života i posebno obrazovnih procesa. Pojam informaciono-komunikacione tehnologije (eng. Information and Communications Technology - ICT) predstavlja prenos i upotrebu svih vrsta informacija, kao i sva tehnička sredstva koja omogućavaju osobama da komuniciraju i upravljaju informacijama. IKT obuhvata informacione tehnologije, telefoniju, elektronske medije, sve tipove obrade i prenosa audio i video signala kao i sve funkcije kontrole i nadgledanja, baziranih na mrežnim tehnologijama.

Unapređenjem tehnologije zahtijevaju se i novi načini učenja i podučavanja. Opremanje škola savremenom računarskom opremom i informatičko opismenjavanje predstavlja jedan od prioriteta reforme obrazovnog sistema. Razvoj komunikacionih tehnologija donio je promjene

u obrazovanju. Promjena interaktivnog oblika komunikacije putem interneta dovela je do potrebe za aktivnijim i produktivnijim obrazovanjem (Su-Jeong i Byung-Man 2021, 576). Očekivani efekti intenzivnijeg uvođenja IKT u nastavu obuhvataju uspješniju prezentaciju nastavnog sadržaja učenicima i poboljšanje kvaliteta nastave. Primjenom informaciono-komunikacionih i multimedijalnih tehnologija, uz dodatak interneta, nastavni sadržaji koje je potrebno obraditi se mogu prilagoditi različitim nivoima znanja učenika te ih učenici mogu mnogo uspješnije usvojiti. Nastavnicima koji realizuju stručnu podršku usmjerenu ka unapređivanju i održavanju online nastave i korišćenju IKT okruženja, potrebno je da škole obezbijede adekvatne edukacije, vebinare i kurseve koji postepeno uvode nastavnika u oblast online učenja, interneta, multimedije i IKT okruženja. Suština koncepta primjene IKT u obrazovnom procesu jeste u tome što IKT omogućava nastavnicima i učenicima lakši pristup informacijama potrebnim za izradu školskih zadataka, povećava se vidljivost nastavnih sadržaja, korišćenje računarskih programa i razvijanje specifičnih vještina u korišćenju istih. Učenik se postavlja u poziciju da aktivno uči, istražuje i procjenjuje informacije do kojih dolazi uz pomoć alata IKT, koje kasnije koristi u praktičnom radu, vježbama i eksperimentima. Ako se učenicima omogući da sami otkrivaju znanje, umjesto da slušaju i pasivno primaju puno sadržaja, postiže se veća motivacija za učenje. To im pomaže da budu nezavisni i kreativni, a upravo korišćenjem IKT u učenju to se može i postići. Obrazovni softver prikazuje sadržaj u raznovrsnim medijskim formatima (zvuk, tekst, video, grafika) omogućavajući tako učenicima da uče angažujući različite vidove inteligencije. Dakle, tehnologija pomaže učenicima da uče na individualizovan način, u skladu sa njihovim sposobnostima.

Višestruke su prednosti koje se mogu postići primjenom IKT u obrazovanju:

- Podrška studentima u efikasnom i efektivnom pristupu digitalnim informacijama;
- Podrška učenju usmjerenom na samostalni rad;
- Stvaranje kreativnog okruženja za učenje;
- Podrška za kolaborativno učenje i učenje na daljinu;
- Mogućnosti za razvijanje vještina kritičkog razmišljanja;
- Povećanje motivacije učenika;
- Svaki učenik usvaja znanje prema svojim predispozicijama;
- Interaktivni materijal pospješuje bolju pažnju učenika;
- Obrazovni programi koji se koriste u nastavi mogu da sadrži kratke testove poslije svake nastavne jedinice, tako da učenici mogu brzo da dobiju povratnu informaciju koja ih dodatno stimuliše;
- Koncipirani programi omogućavaju vizualizaciju gradiva predviđenog za usvajanje, koji pozitivno utiče na učenika;
- Učenici brže i lakše stiču novo znanje;
- Daje se mogućnost učenicima da rješavaju domaći zadatak ili da učestvuju u vannastavnim aktivnostima;
- Korišćenje interneta učenicima omogućava pristup za usvajanje novih znanja;
- Nastavnici imaju mogućnost kvalitetnog prezentovanja datih nastavnih jedinica;
- Podstiče bolju i bržu saradnju nastavnika i učenika;
- Poboljšanje kvaliteta predavanja i učenja;
- Podrška nastavi kroz olakšan pristup sadržaju kurseva;
- Nastavnici imaju pregled povratnih informacija o usvojenom gradivu i stečenom znanju.

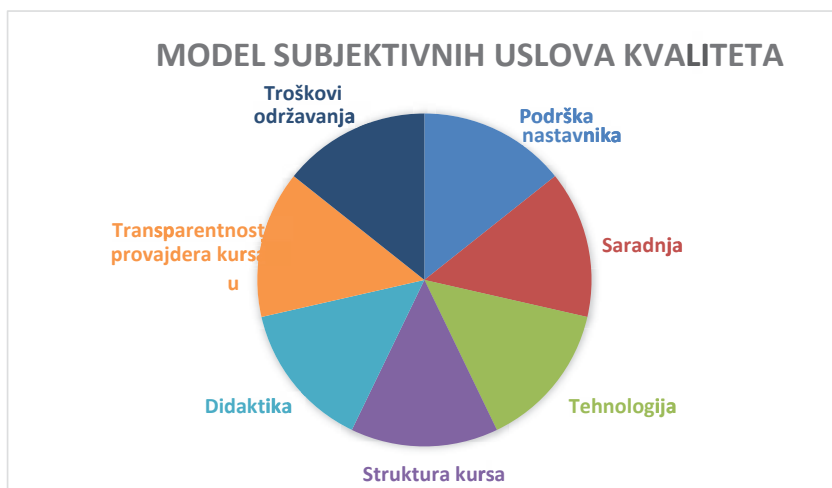
Postoji širok dijapazon IKT alata za promovisanje kolaborativnog učenja, kao što su elektronska pošta, časkanje na mreži, video konferencije, blogovi, zajednički radni prostori. Kada se govori o oblicima obrazovanja u kojima je uključena primjena IKT, zavisno od intenziteta i načina upotrebe u obrazovnom procesu mogu se prepoznati četiri načina obrazovanja:

- Klasična nastava u kojoj samo nastavnik koristi računar za prikaz slajdova koji prezentuju obrazovni sadržaj.

- Nastava uz pomoć IKT u računarskim učionicama u kojima nastavnik uz pomoć elektronske table i ekrana održava nastavu, realizuje ispite putem mreže računara (najčešće u obliku testova), preko računarske mreže zadaje zadatke svojim učenicima, nadgleda i pomaže u njihovom rješavanju.
- Hibridna nastava koja se dijelom odvija u pravoj učionici, a dijelom učenici učestvuju u nastavi od kuće, učeći iz obrazovnih materijala koji se distribuiraju preko računarske mreže i učestvuju u obrazovnom radu preko IKT, što se naziva i virtuelnom učionicom.
- Online obrazovanje, takozvano e-obrazovanje ili obrazovanje koje se odvija isključivo elektronskim putem, preko računara, računarskih i telekomunikacionih mreža, mobilnih telefona i sl.

Analizirajući važnost procesa elektronskog učenja i upotrebe sistema za upravljanje učenjem, veoma je važno da se obrati pažnja na kvalitet procesa učenja. To znači da ishod obrazovnog procesa nije isključivo rezultat procesa obrazovne institucije, već kvalitet ima veze sa unapređenjem i omogućavanjem učenja i pružanjem raznih mogućnosti obučavanja. Pronalaženje odgovora na pitanja o kvalitetu elektronskog učenja je jedan od glavnih izazova za teoriju i praksu, jer elektronsko učenje je jednako važno kao i tradicionalni metod učenja. Koncept kvaliteta učenja mora da bude sveobuhvatan i fokusiran na aspekte nastavnog i tehničkog dizajna interfejsa. Shodno tome, subjektivni zahtjevi kvaliteta mogu biti struktuirani u sedam oblasti kvaliteta (Dijagram 1):

- Tehnologija;
- Saradnja;
- Podrška nastavnika;
- Struktura kursa;
- Transparentnost provajdera kursa;
- Didaktika;
- Troškovi održavanja.



Dijagram 1. Model subjektivnih uslova kvaliteta (Autori)

2. UTICAJ PANDEMIJE COVID-19 NA OBRAZOVNI PROCES U BIH

U toku posljednjih dvadeset godina klasični sistem obrazovanja je doživio mnogo promjena. Nastava uz pomoć IKT, multimedijalnih tehnologija i interneta mora se posmatrati kao savremeni nastavni sistem koji ima velike potencijale i perspektivu u budućnosti. U

obrazovnom sistemu, nivo obrazovanja u vrijeme COVID-19, mora biti zasnovan na konceptima IKT, što će povećati efikasnost načina izvođenja nastave i obrazovnog sistema uopšteno (Fahrurrozi i drugi 2021, 108).

Jedan od ciljeva ovoga rada obuhvata saznanja o korišćenju informaciono-komunikacionih i multimedijalnih tehnologija i interneta u nastavi u osnovnim i srednjim školama te univerzitetima u Bosni i Hercegovini. To se naročito manifestovalo tokom pandemije koronavirusne bolesti (COVID-19) koja je izazvala najveći prekid obrazovanja u istoriji. Ovim prekidom pogođeno je 94% učenika širom svijeta, što predstavlja 1,58 milijardi djece i mladih od predškolskog do visokog obrazovanja u 200 zemalja. Oko 500.000 djece i mladih u Bosni i Hercegovini bilo je pogođeno zatvaranjem ustanova predškolskog, školskog i univerzitetskog obrazovanja širom zemlje. Iako se negativni učinci zatvaranja škola na život djece i mladih svakodnevno dokumentuju na globalnom nivou, temeljna procjena dugoročnih posljedica pandemije tek predstoji. BiH je, kao i mnoge druge zemlje, na ovaj prekid u učenju odgovorila uvođenjem različitih modaliteta izvođenja nastave na daljinu i putem interneta. Ali, uprkos tome, u BiH i dalje postoje djeca i mladi bez adekvatnog pristupa informaciono-komunikacionim tehnologijama (IKT) i internetu. U BiH odgovor na pandemiju COVID-19 u oblasti obrazovanja bio je decentralizovan, u skladu s administrativnim uređenjem zemlje. U BiH za obrazovanje je nadležno 15 organa vlasti i to – Ministarstvo prosvjete i kulture Republike Srpske i Ministarstvo za naučnotehnoški razvoj, visoko obrazovanje i informaciono društvo Republike Srpske, deset kantonalnih ministarstava obrazovanja u Federaciji Bosne i Hercegovine (FBiH) i Odjeljenje za obrazovanje Vlade Brčko Distrikta BiH. Nadalje, postoje dva ministarstva koja imaju koordinacionu ulogu – Federalno ministarstvo obrazovanja i nauke, koje koordinira deset kantonalnih ministarstava u FBiH i Ministarstvo civilnih poslova BiH, koje je zaduženo za koordinaciju na državnom nivou. U zemlji postoji 326 predškolskih ustanova (ISCED 0) koje pohađa 30.587 djece, 1.785 osnovnih škola (ISCED 1, ISCED 3) koje pohađa 273.795 djece, 315 srednjih škola (ISCED 3) koje pohađa 112.933 djece te 31 visokoškolska ustanova (ISCED 5, ISCED 6, ISCED 7) s ukupno 79.886 studenata. Obrazovne vlasti i škole su se prilikom primjene online učenja odlučile za različite softverske/komunikacione alate. Neke jedinice su razvile i koristile web platforme, kao što su e-Nastava u Republici Srpskoj, e-Škola u Hercegovačko-neretvanskom kantonu i škole.sum u Zapadnohercegovačkom kantonu, Posavskom kantonu i Kantonu 10. Obrazovne vlasti Unsko-sanskog kantona pilotirale su sopstvenu novorazvijenu platformu u manjem broju škola. Na dijagramu 2 prikazani su softverski i komunikacioni alati koji su najčešće korišćeni u obrazovanju tokom pandemije COVID-19. Šколе su najčešće koristile Viber – komunikacionu platformu koja omogućava razmjenu poruka i (video) pozive, dok su se složeniji alati kao što su Google Classroom i MS Office koristili u manjoj mjeri. To implicira da mnoga djeca i nastavnici nisu primjenjivali online učenje i nastavu u punom obimu u smislu korištenja svih dostupnih IKT

Tabela 1. Pregled softverskih alata/društvenih mreža korišćenih za obrazovanje tokom pandemije u BiH po broju administrativnih jedinica (Autori)

Aplikacija	Stepen korišćenja
Viber	Visok
Facebook	Visok
Web platform	Srednji
Google	Srednji
Moodle	Nizak
MS Teams	Nizak
Zoom	Nizak

3. UTICAJ COVID-19 NA EKONOMSKA KRETANJA

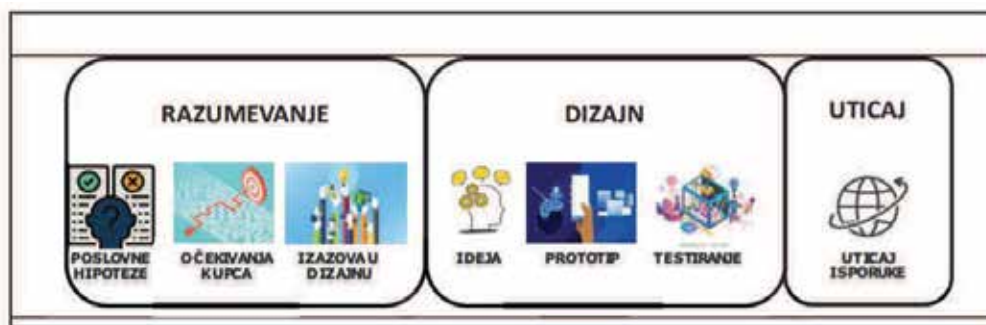
Tržišna ekonomije, koja djeluje kroz mehanizam interakcije između ponude i tražnje, podložna je ekonomskim usponima i padovima. U raspravama o pitanjima uzroka i posljedica ekonomskih šokova koji dovode do recesije te načina njihovog ublažavanja, postoje brojne studije. Istorijski posmatrano, kako se čovječanstvo razvijalo tako su i uzroci postajali sve složeniji. Nekada su ratni sukobi ili prirodne katastrofe bili glavni uzročnici ekonomskih šokova. Danas je situacija bitno drugačija i složenija, razvoj privrede, medicine i sve veća ekspanzija IKT industrije nametnuli su drugačije životne standarde i probleme sa kojima se čovječanstvo suočava pa tako i rješenja zahtijevaju mulidisciplinarnan pristup. Makroekonomski posmatrano, čest razlog za privredne fluktuacije je uslovljen promjenama agregatne ponude ili agregatne tražnje, a sve češće se raspravlja i o političkim uticajima koji generišu ciklične fluktuacije.

Prva globalna recesija desila se početkom 20. vijeka kada se svijet suočio sa Velikom depresijom. Došlo je do sloma nacionalnih ekonomija, što je za rezultat imalo masovnu nezaposlenost i deflaciju. Posljedice Velike depresije u ekonomskom, sociološkom i posebno političkom smislu su bila dalekosežne i ostavile nesagledive negativne posljedice čiji efekti bi se mogli i danas pronaći. Sljedeća globalna kriza – Finansijska kriza desila se početkom 2007. i trajala je do kraja 2008. godine. Finansijska kriza je nastala u SAD kao posljedica krize na tržištu nekretnina, a zatim se proširila na ostale kontinente i pretvorila u najveću recesiju još od Velike depresije. Zajedničko navedenim krizama je da su nastale pod uticajem ekonomskih politika koje nisu pravovremeno reagovale. Nakon krize, poučeni ranijim iskustvima, političko rukovodstvo vodećih država svijeta, zajedno sa najznačajnijim ekonomskim i finansijskim globalnim institucijama, su relativno brzo utvrdili razloge pojave ovih kriza, a zatim se usmjerili na kreiranje regulatornih politika kako bi prevazišli recesiju i spriječili slične pojave u budućnosti.

Za razliku od navedenih, recesija uzrokovana pandemijom virusom COVID-19 predstavlja ekonomski šok na koji se globalni svijet nije mogao pripremiti. Korona virus ili skraćeno COVID-19 koji se pojavio prvo u Kini krajem 2019. godine, nagovijestio je uticaj ove pojave na ekonomska kretanja i mogućnost pojave ekonomske recesije koja bi svakako djelovala globalno i nepredvidivo, s obzirom na to da se radi o faktoru koji ranije nije poznat. Postoje brojna objašnjenja nastanka ekonomske krize i svakako da je krajnji zaključak potrebno donijeti nakon određene vremenske distance i po završetku pandemije. Iz današnje perspektive suština ekonomske krize je u tome da države, usljed zdravstvenog šoka koji je nastao, donose mjere koje za cilj imaju zdravstvenu zaštitu populacije dok je ekonomija u drugom planu. Najveći dio privrednih aktivnosti se prekida, bilo da se radi o proizvodnji, lancu snadbijevanja ili bilo kojim drugim aktivnostima koje zahtijevaju neposrednu komunikaciju. Sa druge strane dolazi do većeg trošenja zaliha i veće potražnje pojedinih (prvenstveno prehrambenih) proizvoda usljed nepredviđenih okolnosti koje mogu nastati. Kako cijenu diktira odnos između ponude i tražnje, ukoliko ne bi postojala jasna regulatorna politika, vrlo brzo bi došlo do poskupljenja određenih dobara. Dalje, drugi oblici tražnje poput investicija u nekretnine ili tražnje za sekundarnim dobrima padaju u dugi plan s obzirom na to da se ne radi o primarnim dobrima. U situaciji kada nema privredne aktivnosti, a potrošnja stanovništva je svedena na daleko manju od uobičajene, privredna društva koja ne generišu prihode ili su prihodi znatno smanjeni, nemaju mnogo manevarskog prostora, osim da smanjuju svoje troškove. Prvi korak na ovom putu je otpuštanje radnika što dovodi do rasta nezaposlenosti i dodatnih socijalnih problema. Veća nezaposlenost stanovništva prouzrokuje dodatni pad kupovne moći i dodatno smanjenje ionako smanjene tražnje. Na kraju, kako se kriza sve više širi i utiče na sve veći dio populacije, situacija postaje sve teža, što dovodi do nastanka novog kruga krize.

Pandemija COVID-19 je u prvom redu medicinski problem, dok se u ekonomskom smislu može posmatrati kao negativni egzogeni šok koji će doprinijeti padu ekonomskih aktivnosti i u krajnjoj liniji stvaranju recesije. Kriza u preduzeću se mora na vrijeme prepoznati, tačnije uzroci krize, kako bi se na vrijeme reagovalo, jer u suprotnom dolazi do galopirajućeg širenja krize po svim segmentima poslovanja te negativnih posljedica na privredu kao cjelinu (Duvnjak 2020, 53). U ovom trenutku je nezahvalno govoriti o razmjerama uticaja COVIDA-19 na ekonomiju i intenzitetu šoka s obzirom na to da je faktor COVID-19 još uvijek aktuelan i nije moguće sa sigurnošću predvidjeti njegovo trajanje u budućnosti. Procjene ekonomskih kretanja u budućnosti se svakodnevno mijenjaju u zavisnosti od medicinske situacije u različitim zemljama, odnosno restriktivnih mjera koje pojedine države donose, a što ima direktan uticaj na ekonomiju. Postoje svakako različita predviđanja od kojih najpesimističnija govore u negativnom uticaju sličnom Velikoj depresiji te mogućnosti da pored zdravstvene i ekonomske krize dođemo u političku i društvenu krizu.

Posmatrajući ekonomski aspekt, odnosno uticaj pandemije na ekonomska kretanja, vidljive su nove poslovne strategije koje su ad hoc primjenjivane u cilju odgovora na novonastale situacije. Kako bi se spriječio potpuni sunovrat privrede i obustavili svi poslovni procesi, brojne kompanije su bile prisiljene promijeniti tradicionalne načine rada i premjestiti svoje poslovanje iz tradicionalnih kancelarija, odnosno radnici su svoje aktivnosti, gdje god je to bilo moguće, obavljali od kuće. Ovakva situacija je ubrzala proces digitalne transformacije koji je u razvijenom svijetu odavno otpočeo, dok je na našim prostorima još uvijek u zamahu. Digitalna transformacija je preko noći postala stvar prioriteta i više nije pitanje da li će se u svakodnevnom poslovanju koristiti tehnologija već je pitanje njenog obima korišćenja i brzine usvajanja novih načina rada (Travar i Šušić i Ristić 2021, 25). Jedna od najčešće korišćenih metodologija za definisanje digitalne transformacije preduzeća je metodologija promišljanja dizajna. Osnovni koraci kroz koje definišemo i strukturiramo digitalnu transformaciju preduzeća po ovoj metodologiji dati su u prikazu (Simić i Marković i Mujanović 2020, 130).



Slika 1. Koraci digitalne transformacije (Simić i Marković i Mujanović 2020, 130)

4. PRIMJENA IKT U PRIVREDNIM DUŠTVIMA U USLOVIMA PANDEMIJE COVID-19

Digitalna transformacija kao proces novog oblika poslovanja na našim prostorima započeo je prije nekoliko godina, a zdravstvena kriza je ovaj proces dodatno ubrzala, što je ujedno predstavljao i odgovor na novonastalu situaciju. U različitim industrijskim granama otpočela je masovna primjena IKT tehnologija, finansijski sektor je prvi prepoznao značaj transformacije poslovanja, a na ruku im je išla i činjenica da je priroda posla u mnogome omogućila drugačiji vid rada. S obzirom na to da nije izvjesno do kad će kriza trajati, razvoj digitalnih platformi će u mnogome doprinijeti razmjeni informacija i tehnologija. Analize koje su rađene tokom 2020.

godine pokazuju da su manja privredna društva u većoj mjeri bila izložena negativnom uticaju pandemije COVID-19, a samim time i resursi koji su im bili na raspolaganju su ograničeni. Veća privredna društva su bila u znatno boljoj poziciji, s tim da su oni nailazili na drugu vrstu problema koja se tiče prekida lanaca distribucije pa su tako sa standardnim problemom ponude i tražnje imali problem i sa uvozom sirovina, odnosno plasiranjem proizvoda na druga tržišta. Dalje, ukoliko posmatramo uticaj COVID-19 na radnu snagu možemo zaključiti da je negativni efekat najvećim dijelom pogađa one radnike koji imaju najmanji nivo formalnog obrazovanja i mlade ljude koji su na početku svog profesionalnog razvoja. Imajući u vidu nepredvidivost globalne recesije, uzrokovane posljedicama, fokus ekonomske politike u narednom periodu treba da bude usmjeren ka ciljanom paketu pomoći privredi. Strukturna analiza performansi privrede detektovala je ključne (stare) probleme i uzroke niske konkurentnosti. Prioritetne reformske aktivnosti treba da obezbijede ambijent koji je povoljan za razvoj domaćeg preduzetništva i rast privatnih investicija, kako bi se povećalo povjerenje na relaciji preduzetništvo-institucije. U tom kontekstu, neophodno je institucionalno objedinjavanje ključnih strukturnih reformi, koje doprinose privrednom rastu, što uključuje transformisanje javnih preduzeća i podsticanje bržeg razvoja domaćeg preduzetništva (Jakopin 2021, 20-22). Digitalna transformacija je omogućila prevazilaženja barijera, a njeni najveći efekti su vidljivi u sektoru usluga. Transformacija je omogućila zajednički rad ljudi koji se često nalaze u različitim zemljama hiljadama kilometara daleko. Jedna od grana privrede koja je pretrpila najmanje gubitke su IT usluge, a druge grane poput elektronske trgovine su zabilježili rast upravo zahvaljujući IT tehnologijama. Tokom pandemije poslovni procesi i društveni život gotovo da je u potpunosti zavisio od IKT dostignuća.

Kao što je u vrijeme industrijske privrede razvijenost i ekonomska aktivnost uopšteno posmatrano zavisila od infrastrukture, danas će ekonomija u mnogome zavisiti od razvijenosti IKT. Danas je pandemijom pogođeno više od 200 različitih zemalja, a mogućnosti za pružanje usluga putem IKT su različite. U različitim zemljama nivo razvijenosti infrastrukture nije jednak, regulative koje propisuju ovu oblast nisu jednake te postoje manji ili veći broj pružalaca usluga poput finansija, logistike, osiguranja ili IT usluga. Pandemija će primorati kompanije da sve više koriste rad na daljinu, što bi u budućnosti moglo u potpunosti promijeniti način rada kakav danas poznajemo. Zanimljivo je da mnoga istraživanja govore o pozitivnom efektu ovakvog vida rada koji u prvi plan stavlja zadovoljstvo radnika i kreće od pretpostavke da rad od kuće pruža dodatni benefit za radnike. Isto tako, u razvijenim ekonomijama poput Francuske ili Finske ovakvi vidovi rada su odavno razmatrani i ove oblasti su regulisane i odgovarajućim zakonskim propisima. Rad na daljinu ili rad od kuće predviđen je i direktivom Evropske unije o transparentnim uslovima rada (Directive EU 2019/1152 of the European Parliament and of the Council of 20 June 2019 on transparent and predictable working conditions in the European Union, PE/43/2019/ REV/1). Takođe, Evropski okvirni sporazum o radu na daljinu (the European Framework Agreement on Telework of 2002), u čl. 2, definisao je da je rad na daljinu obavljanje posla pomoću informacionih tehnologija, kao i u prostorijama poslodavca.

Tokom pandemije vrlo jasno je uočljivo da postoji spremnost i prilagodljivost, kako privatnih kompanija, tako i državnog aparata da pronađe nova rješenja i prežive na tržištu. Ovdje bi se dalo izdvojiti nekoliko značajnih činjenica:

- U vrijeme krize se pokazalo da rad na daljinu funkcioniše, da je zakonodavna vlast spremna urediti oblasti koje se odnose na ovakve vidove rada te da postoji spremnost svih zainteresovanih strana da se poslovni procesi nesmetano odvijaju.
- Tradicionalni oblici organizovanja moraću da modifikuju svoj rad i prihvate rad pomoću IKT tehnologija.
- Percepcija radnika se mijenja u smislu da fleksibilno radno vrijeme ili rad na daljinu nudi bolju ravnotežu između posla i privatnog života.
- Pojavili su se free lenseri u mnogo većem broju čija suština je da ne postoji bilo kakva geografska migracija, već da se poslovni procesi obavljaju na daljinu.

Da bi privredna društva opstala na tržištu u vrijeme pandemije i postpandemijskom periodu moraće najmanje da ostvare sljedeće:

- Transiciju prema što većoj primjeni IKT dostignuća – osnova ovog koraka je da privredni subjekti implementiraju, odnosno trenutnu infrastrukturu nadgrade savremenim IKT dostignućima. Ovdje se prvenstveno misli na novi način korišćenja softverskih i hardverskih komponenti koje nudi Cloud poslovanje i SaaS model distribucije. Veliki broj operacija u poslovanju se prilagođavaju kontroli podataka među različitim uređajima za komuniciranje, a za njihovu isporuku se koristi upravo Cloud (Sushil i drugi 2021, 598).
- Online prodaja postaje standardni model prodaje kako bi se osigurao opstanak privrednog društva. U malim i srednjim privrednim društvima integracija digitalizacije prodaje je vrlo popularna. Cilj online ili digitalizacije prodaje, kako je neki nazivaju, je stvaranje prihoda na kreativniji i povoljniji način u vremenu trajanja pandmije kada je standardni poslovni model prodaje neodrživ.
- Pronalazak online partnera – digitalna transformacija promijenila je ponašanje privrednih subjekata, što je uticalo na transformaciju modela poslovanja i kontakt sa partnerima.

Kako će izgledati poslovni svijet nakon pandemije uzrokovane virusom COVID-19? Svijet nakon COVID-19 vjerojatno se neće vratiti u svijet koji je bio prije pandemije. Mnogi trendovi koji su već u toku ubrzavaju se pod uticajem pandemije. Rad na daljinu će se formalizovati kroz fleksibilne ugovore. Cloud computing podrazumijeva model plaćanja – korišćenje, što znači da korisnik može koristiti usluge sve dok ih iznajmljuje. Ovakav model omogućava jednostavan pristup internetu i resursima. Ti se resursi mogu brzo razmjestiti i zahtijevaju malo upravljanja ili interakcije s pružaocem usluga. Na temelju virtuelizacije resursa, Cloud computing korisnicima pruža brze usluge (Tian 2021, 523).

Za razliku od ranijih kriza koje su naše prostore pogodile na neposredan način, recesija izazvana pandemijom COVID-19 je potpuno drugačija. Ekonomija na prostoru Bosne i Hercegovine je nerazvijena i opterećena brojnim problemima. Uticaj COVID-19 je samo dodatno razotkrio sve slabosti sistema. Na površinu su isplivali strukturalni problemi domaće ekonomije, koja nije u stanju da se nosi sa naglim padom privrednih aktivnosti i masovnim otpuštanjima. Krizom je posebno bio pogođen uslužni sektor ili one djelatnosti koje u osnovi imaju neposredan kontakt. Mjere koje su donesene u cilju sprečavanja daljeg širenja virusa imale su veliki pritisak na javne budžete po različitim osnovama. Očekivani javni prihodi koji su trebali biti ostvareni po osnovu direktnih i indirektnih poreza bili su na minimumu. Zdravstveni sistem, zavod za zapošljavanje i rashodi namijenjeni saniranju šteta zahtijevali su enormna izdvajanja, što je ekonomsko stanje privrede i uopšte zemlje dovelo u težak i nezavidan položaj. U ovim situacijama intervencija država je neminovna i to samo pod uslovom da kroz programe finansiranja uspije da vrati povoljan ekonomski ambijent.

S obzirom na decentralizovanu strukturu Bosne i Hercegovine, za prevazilaženje krize biće potreban sinhronizovani efekat i koordinacija svih nivoa vlasti u cilju prevazilaženja krize i stabilizacije ekonomije. Kroz niz ekonomskih, ali i političkih mjera i odluka potrebno je održati tekuću likvidnost i očuvati radna mjesta kako ne bi došlo do društveno negativnih posljedica. Najveća šansa koja Bosnu i Hercegovinu donekle izjednačava sa drugim zemljama EU je mogućnost korišćenja benefita digitalne transformacije. Modeli rada koji su ranije elaborirani mogu se primijeniti i na prosotru Bosne i Hercegovine.

ZAKLJUČAK

Globalni trend razvoja novih tehnologija i primjene IKT podstakao je pojavu novih kategorija poslova i zanimanja, za koje možemo očekivati da će djelimično ili u potpunosti zamijeniti postojeće. Na izazove poput pandemije COVID-19 mora se brzo reagovati kako bi se izbjegli ogromni ekonomski i socijalni troškovi za pojedince, preduzeća i privredu. Informaciono-

komunikacione tehnologije daju dobre temelje za kreativnu i djelotvornu upotrebu u kreiranju odgovora na vanredne situacije. Uopšteno govoreći i prije pojave pandemije možemo reći da je primjena tehnologija dovela društvo u takav stadijum da se IKT vještine uz znanje čitanja, pisanja i računanja počinju smatrati elementarnom pismenošću. U radu je ukazano da je neophodno integrisanje novih tehnologija u sve aspekte obrazovnog procesa, sa ciljem efektivnijeg i efikasnijeg obrazovanja.

Pandemija COVID-19 nastavlja se nekontrolisano širiti svijetom i vrlo je teško predvidjeti kako će se zaustaviti i kada. Zdravstveni sistemi, humanitarna i socijalno-ekonomska politika pokušavaju odrediti brzinu i snagu oporavka, ali za sada bezuspješno. Poslovni svijet u manjoj mjeri se bavi transformacijom poslovnih modela dok pokušavaju sticati marginalnu korist u automatizaciji, promjenama procesa ili operativnim modelima. Prilagođavanje pandemiji COVID-19 transformišući poslovne modele, uz podršku informaciono-komunikacionih tehnologija, postaje indikator uspjeha. Međutim i u tom procesu puno je izazova, a neki od ključnih su osigurati zdravlje i bezbjednost radnika, kupaca i dobavljača, alocirati finansijska sredstva za identifikaciju i upravljanje rizicima. Kako bi povećali otpornost na uticaje uzrokovane virusom COVID-19 i odgovorili na gore navedene izazove, korporativni, politički i akademski donosioci odluka pokušavaju transformisati poslovne modele uz pomoć inovacija i digitalne transformacije. Izgradnja veće otpornosti operativnog poslovanja, procesa donošenja odluka, poslovnih modela i načina rada postali su ključni indikatori uspjeha i života s virusom COVID-19.

Trendovi koji su se pojavili u toku pandemije postaće standard poput učenja i rada na daljinu, telemedicine, usluge dostave, e-trgovine, itd. Iskustvo i promjene u toku ove krize mogu oblikovati svijet za sljedeće desetljeće i poslužiti za preispitivanje nekih uvjerenja, stavova i dilema. Stoga ostaju neka ključna pitanja za daljnja istraživanja: treba li se fokusirati na efikasnost ili otpornost na nepredviđene situacije, treba li se mijenjati uloga vlada, privrede i akademske zajednice? Istorija nas uči da tržišta i društva postaju bolja, jača i uspješnija nakon globalnih kriza. Tako će vjerovatno biti i ovaj put.

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INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE CONDITIONS OF THE COVID-19 PANDEMIC WITH A REVIEW OF THE EDUCATION SYSTEM AND ECONOMIC TRENDS IN BIH

Summary: *COVID-19 has influenced all segments of society, particularly education and economy. No matter where in the world we were caught up in a pandemic outbreak, the restrictions we could not even imagine have been introduced. Everyone felt the impact of the measures taken against the pandemic. However, some activities have been affected by these restrictions more than others. In Bosnia and Herzegovina, it quickly became clear that restrictive measures and their consequences - such as curfews, suspension of public transport, suspension of classes at all levels, unemployment - disproportionately affected different segments of our society. One of the most successful ways to improve the quality of education is to modernize teaching with the help of information and communication technologies (ICT), multimedia content and the Internet. Analyzing the period from one year ago, we can conclude that those companies and public institutions that had the opportunity to apply information and communication technologies, resolutely engaged in the fight against the consequences of the pandemic and achieved good results in this emergency situation. This complex situation requires everyone, especially experts and the academic community to continue to collaborate, record, analyze and learn from the experience that BiH is going through. We hope that this paper will contribute to raising awareness in BiH about the importance of the application of information and communication technologies in education and economy, which would certainly give better results for the whole society in response to the pandemic.*

Key words: *Information and communication technologies, COVID 19, education, economics*

JEL classification: *A029, I29*

INTRODUCTION

In the spring of 2020, the countries of the Western Balkans - like most of the rest of the world - were forced to impose strict restrictions on economic activity to combat the COVID-19 pandemic. In the first half of 2020, the world faced an explosive spread of infection with a deadly new virus. As countries one after another were forced to impose restrictions in numerous areas of social and economic life in order to slow down the infection, the Western Balkans were not spared either. The first cases were recorded in the first week of March. The Johns Hopkins Center states that by April 27, 2020, about 11,000 cases of the disease had been confirmed in six countries in the region. In response, all six countries introduced restrictions and strict measures of social distancing. International airports in all six countries are closed to passenger traffic. The duration of the initial restrictions has been extended. Key economic sectors, such as catering, retail-which does not include basic necessities, were closed. Travel and social gatherings are restricted or banned, and schools and colleges were closed.

The main trigger for the negative repercussions was caused by global measures that were taken to prevent the spread of the virus, which required temporary suspensions or limited operation of mostly service activities, while in some countries there was a suspension of production activities. As the pandemic spread, so did the number of sectors that were negatively affected by that. The initial shock on the side of the aggregate supply, but also the general fear of the spread of the virus in society, together produced negative chain effects on the economy. There was a decrease in aggregate demand and a slowdown in the global chain supply (trade), which decreased employment, investment, and production and productivity. Although, duration of the pandemic is still uncertain, analyzes by international institutions indicate that the consequences will be large and far-reaching. However, not all sectors and sections of society will be equally affected by the crisis. Some sectors, that are most affected by the measures, such as the trade sector and tourism-related activities, will suffer more damage than other. The world will get millions of new poor due to increased unemployment, and due to difficulties in education during the pandemic, the crisis will have a negative impact on the quality of human capital. Recovery is very likely not to be equally quick and easy for all businesses. Companies with integrated application of information and communication technologies will have higher chances for growth than others, due to technological development and robotization that marked the earlier period on the one hand, but also the increased needs of these activities during the crisis on the other hand. The modern business environment is characterized by digitalization, development of the Internet, customer support, risk management and the application of sophisticated technology. Therefore, more and more questions are being asked about how to respond to the challenges that follow and how technology affects business (Travar and Dugonjić and Ristić 2019, 119).

Over the last year, the formal education system has undergone many changes. One of the most successful ways to combat the consequences of the pandemic and improve the quality of teaching is to modernize teaching with the help of information and communication technologies (ICT), multimedia content and the Internet. By applying information-communication and multimedia technologies, with the addition of the Internet, the teaching content that needs to be processed can be adapted to different levels of students' knowledge. Teachers have a significant role in that process, because it most depends on them how much students will gain knowledge. Therefore, it becomes extremely important and ongoing issue in specific area of professional development of teachers in the field of ICT. Teaching with the help of ICT, multimedia technologies and the Internet must be viewed as a modern teaching system that has great potential and perspective in the future, regardless of the further development of the situation related to the pandemic.

1. THE ROLE AND IMPORTANCE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE EDUCATION SECTOR

Information and communication technologies have introduced significant changes in almost all aspects of our lives in recent years. In a relatively short period of time, ICTs have stimulated the transformation of everyday activities such as: shopping, travel, education, treatment. Modern development of technology has led to the fact that the Internet is present in all domains of human life. The Internet is accessed by computers, mobile phones, televisions, tablets, kitchen appliances. This process, largely enabled by information and communication technologies (ICT), significantly affects the development of human resources and causes changes in all aspects of life, especially educational processes. The term Information and Communications Technology (ICT) represents the transmission and use of all types of information, as well as all technical means that enable people to communicate and manage information. ICT includes information technology, telephony, electronic media, all types of processing and transmission of audio and video signals as well as all control and monitoring functions, based on network technologies. The expected effects of more intensive introduction

of ICT in teaching include more successful presentation of teaching content to students and improvement of the quality of teaching. By applying information-communication and multimedia technologies, with the addition of the Internet, the teaching content that needs to be processed can be adapted to different levels of students' knowledge, and students can adopt them much more successfully (Su-Jeong and Byung-Man 2021, 576).

Teachers who implement professional support focused at improving and maintaining online teaching and the use of ICT environment, need schools to provide adequate education, webinars and courses that gradually introduce teachers to the field of online learning, Internet, multimedia and ICT environment. The essence of the concept of applying ICT in the educational process is that ICT enables teachers and students easier access to information needed to create school assignments, increases the visibility of teaching content, the use of computer programs and the development of specific skills in their use. The student is placed in a position to actively learn, research and evaluate the information obtained with the help of ICT tools, which he later uses in practical work, exercises and experiments. If students are allowed to discover knowledge on their own, instead of listening and passively receiving a lot of content, greater motivation to learn is achieved. This helps them to be independent and creative, and just by using ICT in learning this can be achieved. Educational software displays content in a variety of media formats (sound, text, video, graphics) enabling students to learn through different forms of intelligence. Therefore, technology helps students to learn in an individualized way, in accordance with their abilities.

There are multiple advantages that can be achieved by applying ICT in education:

- students support for efficient and effective access to digital information;
- learning support focused on independent work;
- building a creative learning environment;
- support for collaborative and distance learning;
- opportunities for developing critical thinking skills;
- increasing student motivation,
- each student acquires knowledge according to their predispositions,
- interactive material promotes better student attention,
- educational programs used in teaching can contain short tests after each teaching unit, so that students can quickly get feedback that further stimulates them,
- educational programs which enable the visualization of the material intended for adoption, which has a positive effect on the student,
- students acquire new knowledge faster and easier,
- students are given the opportunity to solve homework or participate in extracurricular activities,
- the use of the Internet provides students with access to gain new knowledge,
- teachers have the possibility for quality presentation of teaching units,
- encourages better and faster cooperation between teachers and students,
- improving the quality of teaching and learning,
- support teaching through easier access to course content
- teachers have an overview of feedback on the accepted material and acquired knowledge.

There is a wide range of ICT tools to promote collaborative learning, such as email, online chat, video conferencing, blogs, shared workspaces. When it comes to forms of education that include usage of ICT, depending on the intensity and way of use in the educational process, four ways of education can be identified:

- Classical teaching in which only the teacher uses a computer to display slides that present educational content.
- Teaching with the help of ICT in computer classrooms where the teacher with the help of electronic boards and screens holds classes, performs exams via a computer network

(usually in the form of tests), assigns tasks to its students via a computer network, monitors and helps to solve them.

- Hybrid teaching that takes place partly in a real classroom, and partly students participate in classes from home, learning from educational materials distributed through a computer network, and participate in educational work through ICT, which is also called a virtual classroom.
- Online education, so-called e-education or education that takes place exclusively electronically, via computers, computer and telecommunication networks, mobile phones, etc.

Analyzing the importance of e-learning process and the use of learning management systems, it is very important to pay attention to the quality of the learning process. This means that the outcome of the educational process is not exclusively result of the process of the educational institution, but the quality has to do with improving and enabling learning, and providing various training opportunities. Finding answers to questions about the quality of e-learning is one of the main challenges for theory and practice, because e-learning is just as important as the traditional method of learning. The concept of quality learning must be comprehensive and focused on aspects of the teaching and technical design of the interface. Accordingly, subjective quality requirements can be structured in seven quality areas (Diagram 1):

- Technology,
- Cooperation,
- Teacher support,
- Course structure,
- Transparency of the course provider,
- Didactics,
- Maintenance costs.

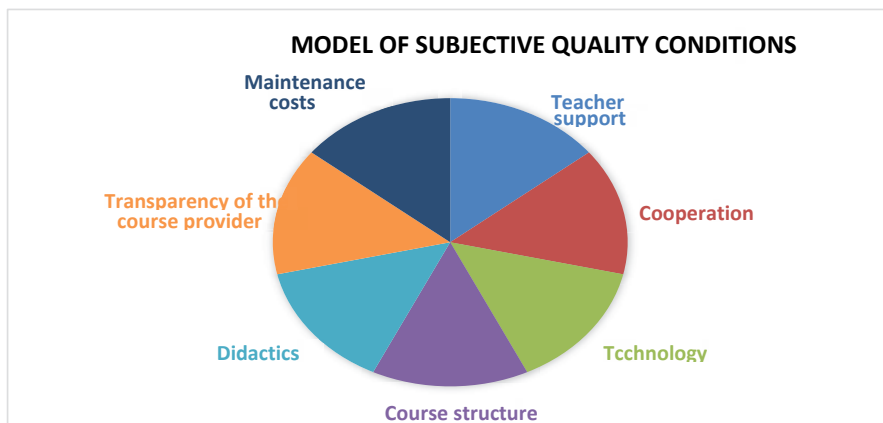


Diagram 1. Model of subjective quality conditions (Authors)

2. THE IMPACT OF THE COVID 19 PANDEMIC ON THE EDUCATIONAL PROCESS IN BIH

Over the last twenty years, the classical education system has undergone many changes. Teaching with the help of ICT. One of the goals of this paper includes knowledge about the use of information and communication, multimedia technologies, and the Internet in teaching in primary and secondary schools and universities in Bosnia and Herzegovina. However, in an efficient school system, along with the quality of education during the COVID-19 pandemic,

the literature must be effective and the focus must be on concepts from education management. (Fahrurrozi et.al. 2021, 108).

The mentioned properties have an important role in the circulation of properties. This was especially manifested during the coronavirus disease pandemic (COVID-19), which caused the largest drop in education in history. This disruption affected 94% of students worldwide, what makes 1.58 billion children and youth from pre-school to higher education in 200 countries. About 500,000 children and youth in Bosnia and Herzegovina have been affected by the closure of pre-school, school and university institutions across the country. Although the negative effects of school closures on the lives of children and young people are being documented daily on a global basis, a thorough assessment of the long-term consequences of the pandemic is yet to come. BiH, like many other countries, has responded to this learning disruption by introducing different modalities for distance and online teaching. Nevertheless, there are still children and young people in BiH without adequate access to information and communication technologies (ICT) and the Internet. In BiH, the response to the COVID-19 pandemic in the field of education has been decentralized, in accordance with the administrative regulation of the country. In BiH, 15 authorities are responsible for education, namely - the Ministry of Education and Culture of the Republic of Srpska and the Ministry of Scientific and Technological Development, Higher Education and Information Society of the Republic of Srpska, ten cantonal ministries of education in the Federation of Bosnia and Herzegovina (FBiH) and the Government Education Department Brčko District of BiH. Furthermore, there are two ministries that have a coordinating role - the Federal Ministry of Education and Science, which coordinates ten cantonal ministries in the FBiH, and the BiH Ministry of Civil Affairs, which is in charge of state-level coordination. There are 326 pre-school institutions in the country (ISCED 0) attended by 30.587 children, 1.785 primary schools (ISCED 1, ISCED 3) attended by 273.795 children, 315 secondary schools (ISCED 3) attended by 112.933 children and 31 higher education institutions (ISCED 5, ISCED 6, ISCED 7) with a total of 79.886 students. When applying online learning, education authorities and schools have opted for various software / communication tools. Some units have developed and used web platforms, such as e-Teaching in Republic of Srpska, e-School in Herzegovina-Neretva Canton and skole.sum in West Herzegovina Canton, Posavina Canton and Canton 10. Una-Sana Canton Education Authorities piloted their own newly developed platform in a smaller number of schools. Diagram 2. shows the software and communication tools most commonly used in education during the COVID-19 pandemic. Schools most often used Viber - communication platform that allows messaging and (video) calls, while more complex tools such as Google Classroom and MS Office were less used. This implies that many children and teachers have not applied online learning and teaching to the full extent in terms of using all available ICT resources.

Tabela 1. Overview of software tools / social networks used for education during the pandemic in BiH by number of administrative units (Authors)

Application	Degree of use
Viber	High
Facebook	High
Web platform	Medium
Google	Medium
Moodle	Low
MS Teams	Low
Zoom	Low

IMPACT OF COVID 19 ON ECONOMIC TRENDS

A market economy that operates through a mechanism of interaction between demand and supply, that further determines the price of goods, is subject to economic ups and downs. In discussions of the causes and consequences of economic shocks that leads to recession, and ways to mitigate them, there are numerous studies. Historically, as humanity has evolved, so have the causes. In the past, war conflicts or natural disasters were the main causes of economic shocks. Today, the situation is significantly different and more complex, the development of the economy, medicine and the growing expansion of the ICT industry have imposed different living standards and problems facing humanity, and so solutions require a multidisciplinary approach. From macroeconomical point of view, a common reason for economic fluctuations is conditioned by changes in aggregate demand or aggregate supply, and the political influences that generate cyclical fluctuations are increasingly being discussed.

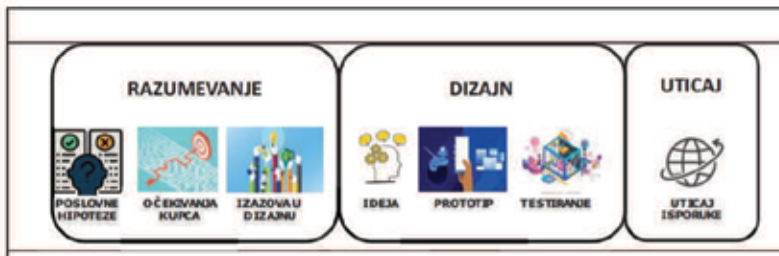
The first global recession occurred in the early 20th century when the world faced the Great Depression, and there was a collapse of national economies which resulted in mass unemployment and deflation. The consequences of the Great Depression in economic, sociological and especially political terms were far-reaching and left unforeseeable negative consequences whose effects could still be found today. The next global crisis - The financial crisis occurred in early 2007 and lasted until the end of 2008. The financial crisis originated in the United States as a result of the real estate crisis and then spread to other continents and turned into the biggest recession since the Great Depression. Common to these crises is that they arose under the influence of economic policies that did not respond in a timely manner. After the crisis, taught by previous experiences, the political leadership of the world's leading countries together with the most important economic and financial global institutions relatively quickly determined the reasons for these crises and then focused on creating regulatory policies to overcome the recession and prevent similar phenomena in the future.

In contrast, the recession caused by the COVID-19 virus pandemic represents an economic shock to which the global world could not prepare. The corona virus, or abbreviated COVID-19, first appeared in China at the end of 2019, hinted the impact of this phenomenon on economic trends and the possibility of an economic recession which would certainly act globally and unpredictably, considering that it is a factor previously unknown. There are numerous explanations for the emergence of the economic crisis and certainly a final conclusion has to be drawn after a certain distance in time and after the end of the pandemic. From today's perspective, the essence of the economic crisis is that the states, due to the health shock that has arisen, are adopting measures aimed at protecting the population while the economy is in the background. Most economic activities are interrupted, whether it is production, the supply chain or any other activities that require direct communication. On the other hand, there is a greater consumption of stocks and higher demand for certain (primarily food) products due to unforeseen circumstances that may arise. As the price is dictated by the relation between supply and demand, if there were no clear regulatory policy, certain goods would rise in price very quickly. Furthermore, other forms of demand such as investment in real estate or demand for secondary goods fall into the long run since they are not primary goods. In a situation where there is no economic activity and the consumption of the population is reduced to far less than usual, companies that do not generate income or income is significantly reduced, do not have much room for maneuver except to reduce their costs. The first step on this path is the dismissal of workers, which leads to rising unemployment and additional social problems. Higher unemployment will cause a decline in purchasing power and a further reduction in the already declining demand. Finally, as the crisis spreads and affects an increasing part of the population, the situation becomes increasingly difficult, leading to a new round of crisis.

The COVID 19 pandemic is primarily a medical problem while in economic terms it can be viewed as a negative exogenous shock that will contribute to a decline in economic activity and ultimately the creation of a recession. The crisis in the company must be recognized in time,

more precisely it causes crises, in order to react in time, because otherwise the crisis spreads across all segments of business with negative consequences for the economy as a whole (Duvnjak 2020, 53). At this point, it is ungrateful to talk about the extent of COVID-19's impact on the economy and the intensity of the shock given, considering that the COVID factor is still relevant and it is not possible to predict with certainty its duration in the future. Estimates of economic trends will change daily, depending on the medical situation in different countries, i.e. restrictive measures adopted by individual countries, which has a direct impact on the economy. There are certainly different predictions, from which most pessimistic speaks of a negative impact similar to the Great Depression, and the possibility that in addition to the health and economic crisis, we may end up in a political and social crisis.

Observing the economic aspects and impact of the pandemic on economic trends, new business strategies have been applied to respond to the new situation. In order to prevent a complete economic downturn and suspend all business processes, many companies were forced to change the traditional way of working and relocate their business from traditional offices, i.e. workers carried out their activities from their homes wherever it was a possible. Such a situation have accelerated the process of digital transformation that began long ago in the developed world, while in our region it is still in full swing. Digital transformation has become a priority overnight, and it is no longer a question of whether technology will be used in everyday business, but a question of its scope, and speed of adoption of new ways of working (Travar and Šušić and Ristić 2021, 25). One of the most commonly used methodologies for defining the digital transformation of a company is the design thinking methodology. The basic steps through which we define and structure the digital transformation of the company according to this methodology are given in the presentation (Simić and Marković and Mujanović 2020, 130).



Picture 1. Steps of digital transformation (Simić i Marković i Mujanović 2020, 130)

3. APPLICATION OF ICT IN COMPANIES IN THE CONDITIONS OF THE COVID-19 PANDEMIC

Digital transformation as a process of a new form of business in our area began several years ago, and the health crisis has further accelerated this process, which was a kind of solution to the new situation. In various industries, it has begun mass application of the ICT technology, and the financial sector was the first to recognize the importance of business transformation, and the fact that the nature of business has largely enabled a different kind of work has helped them in that. Seeing that it is not certain how long the crisis will last, the development of digital platforms will greatly contribute to the exchange of information and technology. Analyzes conducted during 2020 show that smaller companies were more exposed to the negative impact of the COVID-19 pandemic, and thus the resources available to them were limited. Larger companies were in a much better position, but that they encountered another type of problem concerning the interruption of distribution chains, so with a standard problem of supply and demand they had also a problem with import of raw materials or placing products on other

markets. Given the unpredictability of the global recession, caused by the consequences of COVID-19 (Guerrieri et.al. 2020, 34), the focus of economic policy in the coming period should be directed towards a targeted package of assistance to the economy and health. Structural analysis of the performance of the economy detected key (old) problems and causes of low competitiveness. Priority reform activities should provide an environment conducive to the development of domestic entrepreneurship and the growth of private investment, in order to increase trust between entrepreneurship and institutions. In this context, it is necessary to institutionally unite key structural reforms, which contribute to economic growth, which includes the transformation of public enterprises and encouraging faster development of domestic entrepreneurship (Jakopin 2021, 20-22).

Digital transformation has made possible to overcome barriers, and its greatest effects are visible in the services sector. The transformation has enabled people, who are often in different countries thousands of kilometers away, to work together. One of the branches of the economy that has suffered the least losses are IT services, and other branches such as e-commerce have grown precisely thanks to IT technologies. During the pandemic, business processes and social life were almost entirely dependent on ICT achievements.

As in the time of the industrial economy, development and economic activity in general depended on infrastructure, today the economy will largely depend on the development of ICT. Today, the pandemic has affected more than 200 different countries, and the possibilities for providing services through ICT are different. In different countries, the level of infrastructure development is not the same, and the regulations governing this area of work are not the same, and there are fewer or more providers of services such as finance, logistics, insurance or IT services. The pandemic will force companies to increasingly use telecommuting, which in the future could completely change the way we work today. It is interesting that many studies speak of the positive effect of this type of work, which puts the satisfaction of workers in the foreground and starts from the assumption that working from home provides additional benefits for workers. Also, in developed economies such as France or Finland, these types of work have long been considered and these areas are regulated by appropriate legislation. Teleworking or working from home is also predicted by the European Union directive on transparent working conditions (Directive (EU) 2019/1152 of the European Parliament and of the Council of 20 June 2019 on transparent and predictable working conditions in the European Union, PE / 43/2019 / REV / 1). Also, the European Framework Agreement on Telework of 2002, in Art. 2, defined that teleworking is the performance of work using information technology as well in the premises of the employer.

During the pandemic, it is very clear that there is a willingness and adaptability of both private companies and the state apparatus to find new solutions and survive in the market. Here are a few important facts:

- In times of crisis, it has been shown that teleworking works, that the legislature is ready to regulate areas related to these types of work, and that there is a willingness of all stakeholders to keep business processes running smoothly.
- Traditional forms of organization will have to modify their work and accept work using ICT technologies.
- The perception of workers is changing in the sense that flexible working hours or part-time work offer a better balance between work and private life.
- Freelancers have appeared in a much larger number, which essence is that there is no geographical migration, but that business processes are performed remotely.

In order for companies to survive in the market during the pandemic and post-pandemic period, they will have to achieve at least the following:

- Transition towards the greatest possible application of ICT achievements - the basis of this step is that economic entities implement or upgrade the current infrastructure with modern ICT achievements. This primarily refers to the new way of using software and hardware components offered by the Cloud business and the SaaS distribution model.

A large number of business operations are adapted to the control of data between different communication devices, and Cloud. is used for their delivery. (Sushil and others 2021, 598).

- Online sales are becoming a standard sales model to ensure the survival of the company. In small and medium-sized companies, the integration of sales digitalization is very popular. The goal of online or digital sales, as some call it, is to generate revenue in a more creative and cost-effective way during a pandemic when the standard business sales model is unsustainable.
- Finding an online partner - Digital transformation has changed the behavior of economic entities, which has influenced the transformation of business models and contact with partners.

What will the business world look like after a pandemic caused by the COVID-19 virus? The world after COVID-19 is unlikely to return to the world it was before the pandemic. Many trends that are already underway are accelerating under the influence of the pandemic. Teleworking will be formalized through flexible contracts. Cloud computing means a payment model - use which means that the user can use the services as long as they rent. This model allows easy access to the Internet and resources. These resources can be deployed quickly and require little management or interaction with the service provider. Based on resource virtualization, Cloud computing provides customers with fast services (Tian 2021, 523).

Unlike previous crises that hit our area in an immediate way, the recession caused by the COVID-19 pandemic is completely different. The economy in our area and especially in Bosnia and Herzegovina is underdeveloped and burdened with numerous problems. The impact of COVID-19 further revealed all the weaknesses of the system. The structural problems of the domestic economy, which is not able to cope with the sudden decline in economic activities and mass layoffs, have surfaced. The crisis particularly affected the service sector or those activities that basically have direct contact. Measures taken to prevent further spread of the virus have put great pressure on public budgets on various grounds. The expected public revenues that have to be generated on the basis of direct and indirect taxes were at a minimum, the health system, the employment office and expenditures intended for repairing damages required enormous allocations, which put the economic situation and the country in a difficult and unenviable position. In these situations, state intervention is inevitable, and only under the condition that through financial programs restore a favorable economic environment.

With regard to the decentralized structure of Bosnia and Herzegovina, overcoming the crisis will require a synchronized effect and coordination of all levels of government in order to overcome the crisis and stabilize the the economy. Through a series of economic and political measures and decisions, it is necessary to maintain current liquidity and preserve jobs in order to avoid socially negative consequences. The greatest chance that somewhat equates Bosnia and Herzegovina with other EU countries is the possibility of using the benefits of digital transformation. Models of work that were previously elaborated can be applied in the area of Bosnia and Herzegovina

CONCLUSION

The global trend of development of new technologies and application of ICT has encouraged the emergence of new categories of jobs and occupations, which we can expect to partially or completely replace existing ones. Challenges such as the COVID-19 pandemic must be responded rapidly to avoid huge economic and social costs for individuals, businesses and the economy. Information and communication technologies provide a good foundation for creative and effective use in creating responses to emergencies. Generally speaking, even before the pandemic, we can say that the application of technology has brought society to such a stage that ICT skills with the knowledge of reading, writing and arithmetic are beginning to be considered

elementary literacy. The paper points out that it is necessary to integrate new technologies into all aspects of the educational process, with the aim of more effective and efficient education. The COVID-19 pandemic continues to spread uncontrollably around the world and it is very difficult to predict how to stop it and when. Health systems, humanitarian and socio-economic policies are trying to determine the speed and strength of recovery, but so far without success. The business world is less dealing with transforming business models, as they try to gain marginal benefits in automation, process changes, or operational models. Adapting to the COVID-19 pandemic by transforming business models with the support of information and communication technologies is becoming an indicator of success. However, there are many challenges in this process as well, and some of the key ones are to ensure the health and safety of workers, customers and suppliers, to allocate financial resources for identification and risk management. To increase resilience to the impacts caused by the COVID-19 virus and respond to the above challenges, corporate, political and academic decision makers are trying to transform business models through innovation and digital transformation. Building greater resilience of operational business, decision-making processes, business models and ways of working, have become key indicators of success and life with the COVID-19 virus. Trends that emerged during the pandemic will become the standard, such as distance learning and work, telemedicine, delivery services, e-commerce, etc. Experience and change during this crisis can shape the world for the next decade and serve to rethink some beliefs, attitudes, and dilemmas. Therefore, some key questions remain for further research: should we focus on efficiency or resilience to unforeseen situations, should the role of governments, economy and academia change? History teaches us that markets and society become better, stronger and more successful after global crises. So it probably will be this time as well.

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OPTIMALNA STRUKTURA KAPITALA

Rezime: *U procesu finansiranja poslovnih aktivnosti značajno mjesto zauzima struktura kapitala. Postoji otvoreno pitanje kakva treba biti struktura kapitala, odnosno u kojim okolnostima je više opravdano zaduživanje, a u kojim korišćenje vlastitih izvora? Prilikom traženja odgovora na ovo pitanje potrebno je uvijek polaziti od temeljnog zadatka poslovanja, a to je povećanje vrijednosti preduzeća. U tu svrhu predstaviće se istraživanja autora koji su dali fundamentalni i teorijski doprinos te nastojati proširiti postojeća saznanja o optimalnosti strukture kapitala.*

Ključne riječi: *struktura kapitala, zaduženost, vlastita sredstva, preduzeće, vrijednost*

JEL klasifikacija: G32

UVOD

Politika strukture kapitala podrazumijeva odluku o najpovoljnijoj strukturi kapitala. To bi trebala biti ona struktura kapitala koja će osigurati najveću vrijednost preduzeća uz najniže troškove kapitala.

Poslovni procesi predstavljaju dinamičku kategoriju, a poslovno okruženje preduzeća podložno je stalnim promjenama, tako da kriteriji za stepen optimalnosti strukture kapitala su relativni. Iz tih razloga je potrebno prilikom definisanja politike strukture kapitala voditi računa i o drugim aspektima poslovne politike preduzeća i nizom drugih poslovnih odluka.

1. TRADICIONALNA TEORIJA STRUKTURE KAPITALA

Tržišna vrijednost hartija od vrijednosti i drugih prava na novčane tokove preduzeća, koje su u vlasništvu investitora, određuju ekonomsku vrijednost preduzeća na tržištu. Novčana sredstva preduzeća se usmjeravaju na poslovnu i investicionu aktivnost preduzeća. Što je veći rizik, investitor traži i veći prinos na uloženi kapital.

Kad posmatramo tradicionalnu teoriju strukture kapitala, polazi se od pitanja da li postoji struktura kapitala pri kojoj preduzeće može da postigne svoju najveću tržišnu vrijednost i daje se odgovor da postoji kombinacija duga i akcijskog kapitala koja minimizira prosječnu cijenu kapitala, odnosno maksimizira njegovu tržišnu vrijednost. Kada se poveća učešće pozajmljenog kapitala povećaje se i vrijednost preduzeća, jer se sopstveni kapital (veća cijena) zamjenjuje pozajmljenim kapitalom (niža cijena), što smanjuje prosječnu cijenu kapitala preduzeća i povećava njegovu tržišnu vrijednost. Dalje, kada se zaduženost pretjerano poveća dovodi se u pitanje ostvarivanje dobitka, a povjerioci i akcionari traže više stope prinosa, a tržišna vrijednost opada. Prema ovoj teoriji strukture kapitala osnovni problem je ponašanje investitora, akcionara i povjerilaca koji, kada učešće pozajmljenog kapitala u strukturi kapitala poraste do određenog nivoa, u skladu sa rastom rizika, oni krenu da traže veće prinose, tako da dolazi do opadanja tržišne vrijednosti preduzeća.

2. MODIGLIANI-MILLEROVE TEORIJE STRUKTURE KAPITALA

Modigliani-Milerova (MM) teorija strukture kapitala ima dva polazišta. Jedan je o irelevantnosti, a drugi o optimalnosti strukture kapitala. Prema Modigliani-Milerovoj (MM) teoriji strukture kapitala odnos pozajmljenog i sopstvenog kapitala je nebitan (Miller 1958). Prema ovoj teoriji vrijednost preduzeća je određena visinom i rizikom novčanih tokova koji zavise od investiranja, a ne finansijskih odluka preduzeća. U uslovima savršenog tržišta kapitala vrijednost kapitala je nezavisna od strukture kapitala, odnosno irelevantna. Dopuna ove teorije u analizu uvodi poreza na dobitak preduzeća. Kako su kamate priznate kao rashodi za poreske svrhe, preduzeće će sa rastom učešća zaduženosti u strukturi kapitala povećavati preostale novčane tokove za investitore za iznos poreskih ušteda na kamatnim plaćanjima. Odnosno, pošto se porez plaća na bruto dobitak, kamate kao rashodi umanjuju vrijednost bruto dobitka, a samim tim se smanjuje osnovica za porez. Postojanje poreskih odbitaka na kamatna plaćanja uzrokuje da vrijednost preduzeća raste sa rastom rizika za iznos kapitalizovane vrijednosti poreskih odbitaka po osnovu kamata (Modigliani 1988; Miller 1988). Tako da nova postavka MM teoreme mijenja stav, smatrajući da korist zamjene dividendnih plaćanja koja nisu priznata kao rashodi za poreske svrhe, kamatnim plaćanjima priznatim kao poreske svrhe, čine da optimalna struktura kapitala kojom se maksimizira vrijednost preduzeća bude ona u kojoj je učešće zaduženosti 100 procenata. Zaključci teoreme MM o irelevantnosti strukture kapitala i o optimalnosti strukture kapitala nisu tačni (Arnold and Hatzopoulos 2000).

U MM teoremi je zanemareno da su poreske uštede po osnovi kamata neizvjesne. Rast rizika stavlja upitnim ostvarivanje pozitivnog dobitka prije oporezivanja. Korišćenjem i drugih poreskih oslobođanja preduzeće može da umanju svoju poresku osnovicu kroz: oslobođanje po osnovu dodatnih investicija u preduzeću, prestankom zapošljavanja suvišnih radnika, degresivnim otpisivanjem fiksnih sredstava, smanjenjem stope poreza na dobitak preduzeća, pronalaženjem povoljnijih dobavljača, itd. Poreski efekti kamata nestaju ako preduzeće uđe u stečaj, a njegova vjerovatnoća ulaska u stečaj je veća ako je zaduženost veća. Rizik ostvarivanja kamatnih poreskih efekata raste, a njihov mogući uticaj na vrijednost preduzeća slabi.

Poslije uvođenja poreza na dobitak preduzeća kao dopuna teorije MM uveden je i porez na lični dobitak akcionara i povjerilaca. Uvođenje ličnih poreza nije značajno promijenilo postavku teorije da korišćenjem dugova preduzeća vrijednost se može povećati za iznos koji je direktno proporcionalan učešću dugova u strukturi kapitala. Međutim, iznos povećanja vrijednosti preduzeća po osnovu zajedničkih kompanijsko-ličnih poreskih ušteda razlikuje se u odnosu na proizvod marginalne i prosječne poreske stope preduzeća i tržišne vrijednosti dugova (Myers and Nicholas 1984).

Kao dopunjena MM teorija strukture kapitala razvila se teorija statičkog kompromisa i teorija statičkog optimuma. Teorija statičkog kompromisa i teorija statičkog optimum razvile su uvođenje troškova finansijskih poteškoća i svođenje poreskih efekata na realan iznos. U skladu sa ovom teorijom, preduzeća nastoje da nivo zaduženosti održavaju relativno nepromijenjenim u odnosu na unaprijed određenu tačku statičkog optimuma koja reprezentuje kompromis ili balans između propuštenih poreskih ušteda, na jednoj strani, i troškova finansijskih poteškoća na drugoj strani. Sa rastom stepena zaduženosti vrijednost preduzeća raste za iznos sadašnje vrijednosti kamatnih poreskih efekata, ali sa rastom stepena zaduženosti raste i diskontovana vrijednost očekivanih troškova finansijskih poteškoća (Milton 1991). Ipak, ova teorija nema vrijednost za potrebe poslovnog odlučivanja. Rijetko upotrebljiva praktična poruka jeste da se preduzeće umjereno zadužuje. Od strukture sredstava zavisi u kojoj mjeri će se preduzeće zadužiti. U skladu sa stavovima kritičara, MM teorema i na nju nadovezane teorije statičkog kompromisa su neodgovarajuće, jer u odsustvu poreskih odbitaka, a usljed postojanja troškova finansijskih poteškoća, zaduženost neće biti od koristi. Dovodi se u pitanje i postojanje optimalne strukture kapitala, jer pomijeranje strukture kapitala nezavisno u kom smjeru, od strane tržišta bude protumačeno padom cijena akcija i vrijednosti preduzeća. Sa današnjom

teorijom strukture kapitala to je kontradiktorno, jer tržišno reagovanje treba da zavisi od toga da li se struktura kapitala kreće prema tački optimuma ili se udaljava od nje. Druga kontraindikacija teorije jeste ta da se tumačenjem teorije statičkog kompromisa dolazi do zaključka da bi se više trebala zaduživati ona preduzeća koja su više profitabilna u grani zbog većih mogućnosti da se servisiraju dugovi i veće oporezive dobiti koju treba zaštititi (Myers 1993). Ipak, najprofitabilnija preduzeća u grani su manje zadužena u odnosu na ona koja su manje profitabilna.

3. TEORIJA IZBORA - AGENCIJSKA TEORIJA I MODERNIJA SHVATANJA TEORIJE STRUKTURE KAPITALA

Tradicionalna teorija o strukturi kapitala i MM teorija danas se smatraju osporenom, ali dopunjena MM teorija dala je finansijsku teoriju o strukturi kapitala, odnosno teoriju statičkog kompromisa. Uporedo sa razvojem ove teorije razvili su se i stavovi agencijske teorije i drugih teorija o uticaju strukture kapitala na vrijednost preduzeća, ali još uvijek nisu zaokruženi u posebnu teoriju strukture kapitala (Miglo 2021).

3.1. Troškovi agencije vezani za strukturu vlasništva i kontrolu

Današnja finansijska teorija strukture kapitala je nekompetentna, jer ne razmatra uticaj strukture vlasništva na vrijednost preduzeća. Vrijednost preduzeća raste sa rastom koncentracije vlasništva u onoj mjeri u kojoj promjena u vlasništvu dovodi do smanjenja agencijskih troškova, odnosno boljem poravnanju interesa menadžera i akcionara. Kod preduzeća koja su identična, a koja se samo razlikuju po stepenu koncentracije vlasništva, ona koja imaju više koncentrisanu strukturu vlasništva imaju veću profitabilnost i veću vrijednost, jer je veće interesovanje vlasnika da vrši monitoring i kontrolu i uradi potrebne promjene u menadžmentu. Zbog toga što su kompanije meta napada za preuzimanje od strane učesnika na tržištu, značajno je i razmatranje vlasništva u strukturi kapitala. Veća zaduženost smanjuje mogućnost neprijateljskog preuzimanja. Rast stepena zaduženosti povećava stepen koncentracije vlasništva i kontrole, što vodi povećanju vrijednosti preduzeća (Dawar 2014).

3.2. Troškovi agencije usljed investicionog ulaganja menadžera

Menadžeri, ulažući raspoložive viškove gotovine u investicione projekte koji nisu rentabilni, uništavaju vrijednost preduzeća. Slobodni novčani tokovi su ono što ostane od poslovnog neto novčanog toka nakon što se iz njega podmire izdavanja u sve investicione projekte sa pozitivnom neto sadašnjom vrijednosti. Kod zrelih preduzeća jako je izražen problem slobodnih novčanih tokova, jer se nekontrolisano crpe u poslovnim aktivnostima, umjesto da se usmjeravaju u profitabilne investicione aktivnosti. Kontrola agencijskih troškova, vezana za slobodne novčane tokove, može se vršiti pored mehanizma kompanijske kontrole tržišta i upotrebom zaduženog kapitala, jer dugovi disciplinuju menadžere. Veća zaduženost ima disciplinujuće efekte na menadžment preduzeća sa pozitivnim slobodnim novčanim tokovima zbog smanjenja rizika reinvestiranja sredstava u nepovoljne projekte i veće angažovanje menadžmenta da se osiguraju sredstva za otplatu duga (Berger and Pattic di Bonaccorsi 2006).

3.3. Agencijski troškovi zaduživanja

Agencijski troškovi zaduživanja vezuju se za konflikte na relaciji akcionar/menadžer-povjerilac i dovode do pada vrijednosti preduzeća. Osnovni izvori konflikata interesa akcionara i povjerioca po obveznicama su: politika dividendi (novo zaduživanje smanjuje vrijednost obveznica); razvodnjavanje prava (vrijednost prava povjerilaca smanjuje se zaduživanjem); problem supstitucije sredstava (kada preduzeće supstituiše manje rizična sredstva sredstvima

koja su više rizična, vrijednost prava povjerilaca će se smanjiti, a vrijednost vlastitog kapitala rasti); problem nedovoljnog investiranja. Povjerioci će, zavisno od inteziteta agencijskih troškova dugova, zahtijevati premiju na kamatne stope, čime će snošenje ovih troškova ex-ante prebaciti na akcionare. Akcionari će preferirati da snose dodatne agencijske troškovnovih dugova sve dok nove investicije povećavaju njihovo blagostanje.

3.4. Asimetrična informisanost i Myersova teorija strukture kapitala

Kapacitet zaduživanja je iznos zaduženosti u strukturi kapitala koji je optimalan sa stanovišta maksimizacije vrijednosti preduzeća za akcionare. To je iznos zaduženosti koje preduzeće treba da ima. U praksi se koncept zaduživanja vezuje za procjene povjerilaca o sigurnosti ulaganja i mogućnosti dužnika da založi sredstva za preuzete dugove. Kapacitet za zaduživanje je veći ako postoji aktivno tržište za sredstva kojima raspolaže preduzeće i ako sredstva nisu podložna zastarijevanju. Kapacitet zaduživanja je manji ako preduzeće ima visoke poreze u poređenju sa novčanim tokovima koje generiše. Ukoliko vrijednost preduzeća potiče u velikoj mjeri odsredstava koja su već u funkciji, imaće veće kapacitete zaduživanja, nego preduzeća čija budućnost zavisi od budućih investicionih prilika. Kapacitet zaduživanja je veći ako u strukturi sredstava više učestvuju materijalna sredstva.

Da li se zadužiti ili emitovati akcije? Pošto je zaduživanje u skladu sa optimističkim prognozama menadžera u odnosu na poslovanje, doći će do rasta cijena akcija. Menadžer koji radi za interes akcionara emitovaće akcije samo ako je njihova vrijednost realna ili precijenjena, dok ako ne radi za interes akcionara emitovaće akcije kada je njihova vrijednost potcjenjena. Investitori interpretiraju svaku emisiju akcija kao pokazatelj da su akcije precijenjene i redukuju iznos ulaganja koji su spremni da plate za akcije. Emisija akcija za investitore je loša vijest, što znači da emisija akcija dovodi do pada cijene akcije.

Prema Myers teoriji (Myers 1984), uz pretpostavku da je politika dividendi podešena na dugi rok i nema promjena na kratki rok, preduzeće će preferirati interne, a ne eksterne izvore finansiranja te će tek po iscrpljenju internih izvora koristiti eksterne i to one najmanje rizične izvore finansiranja. Ukoliko preduzeće preferira da ima više kapitala poslije konvencionalnih zaduživanja, preći će na rizična zaduživanja emisijom obveznica, zatim emisijom konvertibilnih hartija od vrijednosti i varanata pa poslije emisijom preferencijalnih akcija i tek poslije svih iscrpljenja zaduživanja emitovaće obične akcije. U ovoj teoriji je vidljiva uloga asimetrične informisanosti. Korišćenje sredstava iz akumulacije dobitaka ne traži novu emisiju hartija od vrijednosti, tako da nije pod uticajem problema asimetrične informisanosti i prema tome, ovi izvori će uvijek imati prednost u odnosu na eksterne izvore finansiranja. Cijene preferencijalnih akcija i obveznica su manje osjetljive na promjene u perspektivi preduzeća tako da ovi izvori nisu pod jakim uticajem problema asimetrične informisanosti. Obične akcije pri svakoj svojoj novoj emisiji su pod provjerom i ispitivanjem cijene od strane investitora u odnosu na poslovnu perspektivu i vrijednost sredstava preduzeća, tako da predstavljaju više rizičan izvor finansiranja sa izraženim problemom asimetrične informisanosti. Kako je ranije rečeno, menadžeri emituju akcije kad su precijenjene, tako da investitori neće htjeti da plate punu cijenu za akcije koje bi menadžeri emitovali, nego bi ih kupili samo uz diskont. Tako da menadžeri, ako rade u interesu akcionara, neće emitovati akcije, nego kapital obezbijediti iz izvora zaduživanja. Potcijenjene akcije menadžer, ako radi u interesu akcionara, neće emitovati, nego će ponovo kapital nabaviti iz zaduživanja. Stoga, menadžment prvo provlači kapital zaduživanjem. Samo u slučajevima gdje je zaduženost preduzeća toliko visoka da su potrošeni svi kapaciteti zaduživanja preduzeće će emitovati akcije.

Prema Myers teoriji (Myers 1993) finansijske rezerve su nekorisćeni kapaciteti zaduživanja i viškovi gotovine, kao i hartije od vrijednosti i realna sredstva, koja se mogu brzo prodati. Preduzeće, čekajući povoljne investicione prilike, često ne iskoristi kapacitete zaduživanja do kraja, tako da ako je preduzeće visoko zaduženo teško da će privući nove izvore zaduživanja. Briga za menadžment da će propustiti investicionu priliku je i situacija gdje se nove akcije

moгу emitovati samo uz značajne diskonte, rezerve gotovine, hartija od vrijednosti i realnih sredstava koja se mogu brzo prodati. Prema ovoj teoriji jasna je razlika između internog i eksternog kapitala. Optimalna struktura kapitala prema ovoj teoriji ne postoji. Prema teoriji statičkog kompromisa preduzeća se pridržavaju tačke statičkog optimuma, dok prema Myers teoriji ratio zaduženosti preduzeća može se pomijerati relativno često i sa visokim amplitudama, a u skladu sa dinamikom iscrpljivanja izvora prema determinisanom hijerarhijskom redoslijedu. Prema ovoj teoriji rizik se mijenja kod nesklada internih novčanih tokova i investicionih odluka. Stoga će preduzeća visoke profitabilnosti i ograničene investicione mogućnosti imati nizak stepen zaduženosti, dok će se preduzeća niske profitabilnosti i prosječne investicione mogućnosti zadužiti da bi finansirala investicije.

U ovoj teoriji, iako je dosta približena poslovnoj praksi, ipak su prisutna odstupanja, jer postoje mnoga preduzeća koja emituju akcije iako bi mogla da emituju obveznice. U ovoj teoriji se ne razmatra uticaj koji proizilazi iz kamatnih poreskih efekata, troškova finansijskih poteškoća, promjene u strukturi vlasništva i promjene agencijskih troškova slobodnih novčanih tokova. Prema tome, ova teorija više bi se mogla nazvati stav o finansijskim politikama preduzeća kako bi se zadovoljila nedostajuća finansijska sredstva.

4. STRUKTURA KAPITALA U USLOVIMA KRIZE

Globalna finansijska kriza 2008. godine je pokrenula mnoga pitanja o tome kako finansijska i makroekonomska nestabilnost mogu uticati na strukturu kapitala u malim, srednjim i velikim preduzećima (Demirgüç-Kunt i drugi 2020). Finansijska kriza može uticati na strukturu kapitala preduzeća na različite načine. U uslovima krize, kako rastu neizvjesnost i rizik, a očekivani prinosi na uloženi kapital opadaju i povjerioci i preduzeća postaju manje zainteresovani za zaključavanje dugoročnih kredita (Demirgüç-Kunt i drugi 2020). Iz perspektive zajmodavaca (povjerioca), s obzirom na porast vjerovatnoće nemogućnosti naplate potraživanja, rok za plaćanje kamate značajno se povećava tokom krize, što čini dugoročna zaduženja manje atraktivnim u odnosu na kratkoročna zaduženja (Gürkaynak i Wright 2012; Dick i drugi 2013). Kako se povećavaju nesigurnost ili rizik, a izgledi za poslovanje postaju sve neizvjesniji, preduzeća koja nisu u mogućnosti da se odluče za agregatnu strukturu dospeljeća, uprkos visokim troškovima mogu odabrati i smanjene roka dospeljeća i finansijske poluge. Odnosno, preduzeća u tim okolnostima za investicije ne koriste pozajmljene izvore finansiranja.

Istraživanja u Belgiji i SAD su pokazala da preduzeća koja su imala veće kratkoročne dugove prije globalne finansijske krize doživjela su veći pad investicija tokom krize (Duchin i drugi 2010; Vermoesen i drugi 2013). S druge strane „kraća dospeljeća mogu ublažiti problem nedovoljnog investiranja dužničkog finansiranja u vremenima rastuće neizvjesnosti i postati privlačnija zajmoprimcima, jer je vrijednost kratkoročnog duga manje osjetljiva na buduće mogućnosti ulaganja od vrijednosti dugoročnog duga” (Myers 1977). Prema ekonomskoj teoriji vjerovatnoća do koje mjere kriza utiče na strukturu kapitala preduzeća stvaranjem većih rizika, veće nesigurnosti ili manjih prinosa na uloženi kapital, zavisi od karakteristika finansijskog sistema i pravno-institucionalnog okruženja u kojem preduzeća posluju (Demirgüç-Kunt i drugi 2020; Duvnjak 2020, 42). U skladu sa tim, u akcionarskim društvima prema agencijskoj školi troškova u uslovima krize (Jensen i Meckling 1976) u zemljama u kojima su troškovi monitoringa i troškovi bankrota visoki, povećanje mogućnosti odstupanja od prinosa izazvalo bi veće preusmjeravanje rizika na akcionare. U uslovima krize, kada se ostvare loši rezultati (Duvnjak 2020, 54) i neizvjesnosti, veća je vjerovatnoća skraćivanja dospeljeća duga i smanjenja uticaja na dug u okruženjima u kojima je teško izvršiti ugovore, na primjer gdje su zakoni i postupci o stečaju takvi da mnogo košta likvidacija preduzeća (Diamond 2004). U kontekstu međunarodnog duga, u uslovima krize u zemljama sa slabim imovinskim pravima ili vladavinom zakona, nedostatak prava investitora može rezultirati neefikasno kratkim dospeljećem duga i prekomjernim rizicima (Jeanne 2009). U periodu neposredno nakon početka globalne finansijske krize: finansijska poluga, upotreba dugoročnog duga za finansiranje

imovine i dospijeće duga opali su među firmama koje su prije krize koristile dugoročne kredite za servisiranje duga. To je zabilježeno u nerazvijenim zemljama, zemljama u razvoju, zemljama koje nisu doživjele sistemsku bankarsku krizu i različitim vrstama firmi (Demirgüç-Kunt i drugi 2020). Pad finansijske poluge i dugoročnih kredita posebno je izražen u malim i srednjim preduzećima i velikim preduzećima koja ne kotiraju na berzi. Suprotno tome, nije zabilježen značajan pad omjera duga ili dospijeće duga među firmama koje kotiraju na berzi. Analizirajući preduzeća u kojima su uočene značajne promjene u strukturi kapitala, smatra se: da su pad finansijske poluge, dospijeće duga i upotreba dugoročnog duga znatno veća za mala i srednja preduzeća u zemljama sa strožijim ograničenjima za dizanje kredita (Demirgüç-Kunt i drugi 2020). U periodu prije krize i nakon krize preduzeća, s omjerom duga nižim od prosjeka, u industriji bilježe porast omjera duga, dok preduzeća s omjerom duga većim od prosjeka industrije bilježe pad omjera duga (Iqbal and Kume 2015; Leary and Roberts 2005). Tokom i neposredno nakon globalne finansijske krize postoje složeni međusobni odnosi između evolucije čvrstih struktura kapitala i karakteristika zemlje. Finansijski sektor i jako pravno institucionalno okruženje mogu ublažiti negativne efekte finansijske i ekonomske nestabilnosti, na mala, srednja i velika poduzeća.

Iznenadni događaj (COVID-19 pandemija) pokrenula je mnoga pitanja o tome kako hronična neizvjesnost uzrokovana kriznim događajima utiče na dostupnost preduzetničkih izvora finansiranja za novoosnovana, mala i srednja poduzeća (MSP) (Brown i Rocha 2020).

Istraživanje ulaganja u preduzetničke finansije u Kini tokom odvijanja krize Covid-19 pokazuje da su ove kapitalne investicije dramatično opale neposredno nakon virusa Covid-19, što je rezultiralo godišnjim smanjenjem od 60% ukupnog obima investicija prikupljenih između 1. kvartala 2019. i 1. kvartala 2020. (Brown i Rocha 2020). godine. Istraživanje je pokazalo da su novoosnovana preduzeća najteže pogođena krizom. Iako je globalna finansijska kriza snažno pogodila dužnička tržišta, poduzetničko finansiranje je još osjetljivije na velike preokrete izazvane krizom Covid-19. Iako je upravljanje krizama na mikro nivou u velikoj mjeri zadatak samih preduzeća, pravno-institucionalno okruženje treba da podrži preduzetnike u njihovim nastojanjima da se nose s krizama poput COVID-19, što znači da kreatori politika provode krizno upravljanje na makro nivou, s ciljem jačanja otpornosti preduzeća, uključujući startupe i za podršku njihovim pojedinačnim akcijama upravljanja krizama (Kuckertz i drugi 2020). Istraživanja su pokazala da su regije koje pokazuju visok nivo preduzetništva prije krize više otporne na egzogene šokove (Williams i Vorley 2015; Bishop 2019). Istraživanja u Grčkoj su pokazala da nedostatak institucionalne podrške ograničava preduzetničku aktivnost i da je taj efekat izraženiji u uslovima krize (Williams i Vorley 2015).

ZAKLJUČAK

S obzirom na raspoložive izvore finansiranja razvilo se više teorijskih pristupa za utvrđivanje kriterijuma optimalnog odnosa između pojedinih izvora, odnosno stepena optimalnosti strukture kapitala. U ovom radu detaljno su analizirane Tradicionalna teorija strukture kapitala, Modigliani-Miller (MM) teorije strukture kapitala, Teorija izbora (Agencijska teorija strukture kapitala i modernija shvatanja) i Struktura kapitala u uslovima krize u cilju približavanja odgovoru na „istorijsko“ pitanje: „Da li se još uvijek traži optimalna struktura kapitala?“

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OPTIMAL CAPITAL STRUCTURE

Summary: *The capital structure occupies a significant place in the process of financing business activities. There is an open question about what should be the ideal capital structure mix, i.e. in which circumstances borrowing is more justified and in which circumstances the use of own resources. When looking for an answer to this question, it is always necessary to start from the basic task of business, which is to increase the value of the company. For this purpose, the research of authors who have made a fundamental and theoretical contribution will be presented and efforts will be made to expand existing knowledge about the optimality of capital structure.*

Key words: *capital structure, indebtedness, own funds, enterprise, value*

JEL classification: G32

INTRODUCTION

The capital structure policy implies a decision on the most favorable capital structure. This should be the capital structure that will provide the greatest value of the company with the lowest cost of capital. Business processes are dynamic category, and the business environment of the company is subject to constant changes, so the criteria for the degree of optimality of the capital structure are relative. For these reasons, it is necessary to take into account other aspects of the company's business policy and a number of other business decisions when defining the capital structure policy.

1. TRADITIONAL THEORY OF CAPITAL STRUCTURE

The market value of shares and other cash flow rights of companies that are owned by investors determine the economic value of companies in the market. The company's funds are directed to the company's business and investment activities. The higher the risk, the higher the investor's return on invested capital. When we consider the traditional school of capital structure, we start from the question of whether there is a capital structure in which the company can achieve its highest market value, and the answer is that there is a combination of debt and equity that minimizes the average price of capital, and maximize its market value. When the share of borrowed capital increases, the value of the company will also increase because the equity (higher price) is replaced by borrowed capital (lower price), which reduces the average price of the company's capital and increases its market value. Furthermore, when indebtedness increases excessively, profit is called into question, and creditors and shareholders demand higher rates of

return, and market value declines. According to this theory of capital structure, the basic problem is the behavior of investors, shareholders and creditors who, when the share of borrowed capital in the capital structure increases to a certain level they, in line with the increase in risk, start looking for higher returns, so that there is a decline in the market value of the company.

2. MODIGLIANI- MILLER THEORIES OF CAPITAL STRUCTURE

Modigliani-Miller (MM) theories of capital structure has two starting points. One is about irrelevance and the other about the optimality of capital structure. According to Modigliani-Miller (MM) theories of capital structure, the relationship between borrowed and equity is irrelevant (Miller 1958). According to this theory, the value of a company is determined by the amount of cash and risk at cash flows that depend on the investment, and not the financial decisions of the company. In conditions of perfect capital markets, capital value is independent of the capital structure, or irrelevant. The addition of this theory introduces corporate income tax into the analysis. As interest is recognized as an expense for tax purposes, the company will increase the share of debt in the capital structure to increase the residual cash flows to investors in the amount of tax savings on interest payments. That is, since the tax is paid on gross profit, interest as an expense reduces the value of gross profit, and thus reduces the tax base. The existence of tax deductions on interest payments causes the company's value to increase with the increase in risk for the amount of the capitalized value of tax deductions for interest (Modigliani 1988; Miller 1988). Thus, the new position of the MM theories change the position, considering that the benefit of replacing dividend payments that are not recognized as expenses for tax purposes, with interest payments recognized as tax purposes, makes that the optimal capital structure that maximizes the value of the company is one in which the share of indebtedness is 100 the estimate. The conclusions of MM theories on the irrelevance of the capital structure and on the optimality of the capital structure are incorrect (Arnold and Hatzopoulos 2000). In the MM theories, it is neglected that tax savings based on interest are uncertain. As risk increases, calls into question the realization of a positive profit before tax. By using other tax exemptions, the company can reduce its tax base through: exemption based on additional investments in the company, termination of employment of redundant workers, digressive write-off of fixed assets, reduction of corporate income tax rate, finding more favorable suppliers, etc. The tax effects of interest disappear if the company goes bankrupt, and its probability of going bankrupt is higher if the indebtedness is higher. The risk of interest tax effects is growing, and their possible impact on the value of the company is weak.

After the introduction of the corporate income tax, as a supplement to the MM theories, the personal profit tax of shareholders and creditors was introduced. The introduction of personal taxes has not significantly changed the theory that by using corporate debts, the value can be increased by an amount that is directly proportional to the share of debts in the capital structure.

However, the amount of increase in the value of companies based on joint corporate-personal tax savings differs from the product of the marginal and average tax rates of the firm and the market value of the debts (Myers and Nicholas 1984).

As a supplemented MM theories of capital structure, the theory of static compromise and the theory of static optimum are developed. The theory of static and compromise theory of static optimum developed the introduction costs of financial difficulties and the reduction of tax effects on the real amount. According to this theory, companies strive to keep the level of indebtedness relatively unchanged relative to a predetermined point of static optimum that represents a compromise or balance between missed tax savings on the one hand, and the cost of financial difficulties on the other. With the growth of the degree of indebtedness, the value of the company grows by the amount of the present value of interest tax effects, but with the growth of the degree

of indebtedness, the discounted value of the expected costs of financial difficulties grows (Milton 1991). Yet this theory has no value for business decision making. Rarely useful practical message is that the company should be moderately indebted. The extent to which the company will borrow depends on the structure of funds. In accordance with the views of critics, MM theories and its attached theory of static compromise are inappropriate because in the absence of tax deductions, and due to the existence of financial difficulties, indebtedness will not be useful.

The existence of an optimal capital structure is also called into question, because the shift of the capital structure, regardless of the direction, by the market is interpreted by the fall in stock prices and the value of the company. This is contradictory with today's theory of capital structure, because the market reaction should depend on whether the capital structure is moving towards the point of optimum or moving away from it. Another contradiction of the theory is that interpreting the theory of static compromise leads to the conclusion that those companies that are more profitable in the branch should borrow more due to greater opportunities to service debts and higher taxable profits to be protected (Myers 1993). However, the most profitable companies in the industry are less indebted compared to those that are less profitable.

3. AGENCY THEORY OF CAPITAL STRUCTURE AND MODERN CONCEPTIONS

The traditional theory of capital structure and the MM theories are considered controversial today, but the amended MM theories gave a financial theory of capital structure, or the theory of static compromise. Along with the development of these theories, there have been developed and attitudes agency theory and other theories about the impact of capital structure on the value of the company, but have not yet been completes in the special theory of capital structure (Miglè 2021).

3.1. Agency costs and ownership structure

Today's financial theory of capital structure is incompetent because it does not consider the impact of ownership structure on the value of the company. The value of the company increases with increase in concentration of ownership in the extent of changes in property leads to a reduction in agency costs, and a better alignment of interests of managers and shareholders. In companies that are identical, but differ only in the degree of concentration of ownership, those that have a more concentrated ownership structure, have higher profitability and greater value because there is greater interest of owners to monitor and control and make the necessary changes in management. Because companies are the target of takeovers by market participants, it is also important to consider ownership in the capital structure. Higher indebtedness reduces the possibility of enemy takeover. The growth of the degree of indebtedness increases the degree of concentration of ownership and control, which leads to an increase in the value of the company (Dawar 2014).

3.2. Agency theory applied to investment funds

Managers destroy the value of the company by investing available surplus cash in investment projects that are not profitable. Free cash flows are what remains of the business net cash flow after issuing from it to all investment projects with a positive net present value. In mature companies is very significant problem of free cash flow because uncontrolled draw in business activities instead of being channeled into profitable investment activities. Control of agency costs related to free cash flows can be performed, in addition to the company's market control mechanism, with use of indebted capital, because debts discipline managers. Higher indebtedness

has disciplining effects on the management of companies with positive free cash flows due to the reduced risk of reinvesting funds in unfavorable projects and greater management engagement to secure debt repayment funds (Berger and Udell 1994; Berger and Udell 2006).

3.3. Agency cost of debt

Agency borrowing costs are linked to the conflict between the shareholder / manager-creditor and lead to a decline in the value of the company. The main sources of conflicts of interest between shareholders and creditors on bonds are: dividend policy (new borrowing reduces the value of bonds); dilution of rights (the value of creditors' rights will decrease by borrowing); the problem of asset substitution (when an enterprise substitutes less risky assets with assets that are more risky, the value of creditors' rights will decrease and the value of equity will increase); the problem of underinvestment. Creditors will, depending on the intensity of agency costs of debts, demand a premium on interest rates, thus shifting the bearing of these costs ex-ante to shareholders. Shareholders will prefer to bear the additional agency costs of new debts as long as new investments increase their well-being.

3.4. Asymmetric Information and Capital Structure

Borrowing capacity is the amount of indebtedness in the capital structure that is optimal from the point of view of maximizing the value of the company for shareholders. That is the amount of indebtedness that the company should have. In practice, the concept of borrowing is linked to creditors' assessments of investment security and the ability of debtors to pledge funds for assumed debts. Borrowing capacity is higher if there is an active market for the assets available to the company and if the assets are not subject to obsolescence. Borrowing capacity is lower if a company has high taxes compared to the cash flows it generates. If the value of a company comes largely from assets that are already in operation, it will have higher borrowing capacity than companies whose future depends on future investment opportunities. Borrowing capacity is higher if fixed assets participate more in the structure of assets. Is it better to borrow or issue shares? Since borrowing is in line with the optimistic forecasts of managers in relation to business, there will be an increase in stock prices. A manager who works for the interest of shareholders will issue shares only if their value is real or overvalued, while if he does not work for the interest of shareholders he will issue shares when their value is underestimated. Investors interpret each issue of shares as an indicator that the shares are overvalued, and reduce the amount of investment that they are willing to pay for the shares. The issue of shares for investors is bad news, which means that the issue of shares leads to a drop in the share price. According to Myers' theory (Myers 1984), assuming that the dividend policy is set in the long run and there are no changes in the short run, the company will prefer internal rather than external sources of funding, and will only, after exhaustion of internal resources, use external and those that are the least risky financing sources. If the company prefers to have more capital after conventional borrowing, it will switch to risky borrowing by issuing bonds, then by issuing convertible securities and warrants, then by issuing preferred shares and only after all exhaustion of borrowing will issue ordinary shares. In this theory, there is the apparent role of asymmetric information. The use of funds from the accumulation of profits does not require a new issue of shares, so it is not affected by the problem of asymmetric information and therefore these sources will always have an advantage over external sources of funding. The prices of preferred shares and bonds are less sensitive to changes in the company's perspective, so these sources are not strongly influenced by the problem of asymmetric information. Ordinary shares in each of their new issues are checked and examined by investors in relation to the business perspective and the

value of the company's assets, so that they represent a more risky source of financing with a pronounced problem of asymmetric information. As mentioned earlier, managers issue shares when they are overvalued, so investors will not want to pay the full price for the shares that managers would issue, but would only buy them at a discount. So if managers work in the interest of shareholders, they will not issue shares, but provide capital from the source of borrowing. Undervalued shares will not be issued by the manager, if he works in the interest of the shareholders, but he will regain the capital from borrowing. Therefore, management first draws capital by borrowing. Only in cases where the indebtedness of the company is so high that all borrowing capacities have been used, the company will issue shares.

According to Myers Theory (Myers 1993) financial reserves are unused borrowing capacity and cash surpluses, as well as securities and real assets that can be sold quickly. A company, waiting for favorable investment opportunities, often does not use the borrowing capacity to the end so if the company is highly indebted, it will be difficult to attract new sources of borrowing. The concern that management will miss the investment opportunity is also the situation where new shares can be issued only with significant discounts, cash reserves, securities and real assets that can be sold quickly. According to this theory there is a clear distinction between internal and external capital. The optimal capital structure, according to this theory, does not exist. According to the theory of static compromise, companies adhere to the point of static optimum, while according to Myers theory, the debt ratio of companies can shift relatively often and with high amplitudes, and in accordance with the dynamics of resource depletion to the determined hierarchical order. According to this theory the risk varies with disharmony of internal cash flows and investment decisions. Therefore, the company with high profitability and limited investment opportunities have a low level of indebtedness, while companies with low profitability and the average investment opportunities will be debited to finance investments. This theory, although quite close to business practice, still has deviations because there are many companies that issue shares even though they could issue bonds. This theory does not consider the impact arising from interest tax effects, the cost of financial difficulties, changes in the ownership structure, and changes in agency costs of free cash flows. Therefore, this theory more could be called bets on the financial policies of the company to meet a funding gap.

4. CAPITAL STRUCTURE IN CRISIS

The global financial crisis in 2008 raised many questions about how financial and macroeconomic instability may affect the capital structure of small, medium and large enterprises (Demirgüç-Kunt et al. 2020). The financial crisis can affect the capital structure of a company in different ways. In times of crisis, as uncertainty and risk grow and expected returns on invested capital decline, both creditors and companies become less interested in concluding long-term loans (Demirgüç-Kunt et al. 2020). From the perspective of lenders (creditors), due to the increase in probability of inability to collect receivables, the deadline for payment of interest increases significantly during the crisis, which makes long-term debt less attractive in relation to short-term debt (Gürkaynak and Wright 2012; Dick et al 2013). As uncertainty or risk increases and business prospects are becoming increasingly uncertain, companies that are unable to opt for an aggregate structure of maturity may choose to have reduced maturities and leverage despite high costs. That is, companies in these circumstances do not use borrowed sources of financing for investments.

Research in Belgium and the US has shown that companies that had higher short-term debts before the Global Financial Crisis experienced a larger decline in investment during the crisis (Duchin et al. 2010; Vermoesen et al. 2013). On the other hand, "shorter maturities can alleviate the problem of underinvestment of debt financing in times of growing uncertainty and become

more attractive to borrowers because the value of short-term debt is less sensitive to future investment opportunities than the value of long-term debt” (Myers 1977). According to economic theory, likely extent to which the crisis affects the capital structure of company by creating higher risks, greater uncertainty or lower returns on invested capital depends on the characteristics of the financial system and the legal and institutional environment in which companies operate (Demirgüç-Kunt et al. 2020; Duvnjak 2020, 42). Accordingly, in joint stock companies, according to the agency theory of costs, in crisis conditions (Jensen and Meckling 1976) in countries where monitoring costs and bankruptcy costs are high, increasing the possibility of deviations from the yield would cause a greater redirection of risk to shareholders. In times of crisis when poor results are achieved (Duvnjak 2020, 54) and uncertainty, it is more likely to shorten the maturity of debt and reduce the impact on debt in environments where it is difficult to execute contracts, for example where bankruptcy laws and procedures are such as cost a lot (Diamond 2004). In the context of international debt, in times of crisis in countries with weak property rights and the rule of law, a lack of investor rights may result in inefficiently short debt maturities and excessive risks (Jeanne 2009). In the immediate aftermath of the global financial crisis: leverage, the use of long-term debt to finance assets and the maturity of debt declined among firms that used long-term loans to service debt before the crisis. This has been observed in underdeveloped countries, developing countries, countries that have not experienced a systemic banking crisis and different types of firms (Demirgüç-Kunt et al. 2020). The decline in leverage and long-term loans is particularly pronounced in small and medium-sized enterprises and large companies that are not listed on the stock exchange. In contrast, there was no significant decline in the debt or maturity ratio among listed companies. Analyzing companies in which significant changes in capital structure have been observed, it is considered: that the decline in leverage, maturity of debt and use of long-term debt is significantly higher for SMEs in countries with stricter restrictions on raising loans (Demirgüç-Kunt et al. 2020). In the pre-crisis and post-crisis period, companies with a debt ratio lower than the industry average recorded an increase in the debt ratio, while companies with a debt ratio higher than the industry average recorded a decline in the debt ratio (Iqbal and Kume 2015; Leary and Roberts 2005). During and immediately after the global financial crisis, there are complex interrelationships between the evolution of solid capital structures and the characteristics of a country. The financial sector and a strong legal institutional environment can mitigate the negative effects of financial and economic instability on small, medium and large enterprises. The surprise event (COVID-19 pandemic) has raised many questions about how chronic uncertainty caused by crisis events affects the availability of entrepreneurial funding sources for start-ups, small and medium-sized enterprises (SMEs) (Brown and Rocha 2020). A study of investment in entrepreneurial finance in China during the unfolding crisis Covide-19 shows that these capital investments dropped dramatically immediately after the virus Covide-19, resulting in an annual reduction of 60% of the total volume of investment of collected between the first quarters of 2019 and first quarter of 2020 (Brown and Rocha 2020). Research has shown that start-ups are hardest hit by the crisis. Although the global financial crisis strongly affected the debt market, entrepreneurial finance is still vulnerable to major upheavals caused by the crisis Covide-19th. Although micro-level crisis management is largely the task of the companies themselves, the legal and institutional environment should support entrepreneurs in their efforts to deal with crises such as COVID-19, which means that policymakers implement crisis management at the macro level to strengthen corporate resilience, including startups, and to support their individual crisis management actions (Kuckertz et al. 2020). Studies have shown that regions that show a high level of entrepreneurship before the crisis are more resistant to exogenous shocks (Williams and Vorley 2015; Bishop 2019). Studies in Greece have shown that a lack of institutional support limits

entrepreneurial activity and that this effect is more pronounced in times of crisis (Williams and Vorley 2015).

CONCLUSION

Considering the available sources of financing, several theoretical approaches have been developed for determining the criteria of the optimal relationship between individual sources, i.e. the degree of optimality of the capital structure. In this paper, the Traditional Theory of Capital Structure, Modigliani-Miller (MM) Theories of Capital Structure, Agency Theory of Capital Structure and Modern Conceptions and Capital Structure in Crisis are analyzed in detail in order to approach the answer to the "historical" question: "Is the optimal capital structure still required?"

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KORPORATIVNO UPRAVLJANJE U CRNOJ GORI - EMPIRIJSKO ISTRAŽIVANJE

Rezime: *Istraživanje u ovom radu ima za cilj da istraži vezu između različitih parametara korporativnog upravljanja i performansi preduzeća u novom digitalnom dobu. Fokus rada je usmjeren na značaj prihvatanja efikasnog upravljanja promjenama u savremenoj organizaciji, kao i međuzavisnost korporativnog upravljanja i uloga primjene principa korporativnog upravljanja u procesu upravljanja promjenama. U organizacionom životu, jedina konstanta su promjene. Promjenom standardnog poslovnog okruženja u novo, čije su glavne karakteristike globalizacija, digitalna ekonomija, fleksibilnost i razvoj digitalnih kompanija i biznisa, utiče se na uslove poslovanja i ponašanje kompanija. Promjene traže prilagođavanje. Usled nedovoljnog fokusa na upravljanje, nadzor i procjenu poslovnih procesa korporativnih donosilaca odluka, dovodi se do defanzivne pozicije i reaktivnog pristupa rešavanju poslovnih problema. U radu se analiziraju prikupljeni podaci i prezentuju najvažniji rezultati empirijskog dijela istraživanja.*

Ključne riječi: *digitalna ekonomija, korporativno upravljanje, upravljanje promjenama*

JEL klasifikacija: *F6, G3, G34, L2, O16*

UVOD

Cilj istraživanja ovog rada je da na sažet i razumljiv način istraži istraživača vezu između korporativnog upravljanja i performansi preduzeća, kroz perspektivu primjene principa korporativnog upravljanja i njihovog uticaja na performanse preduzeća, kao i međuzavisnost korporativnog upravljanja i uloga primjene principa korporativnog upravljanja u kontekstu procesa upravljanja promjenama. Dakle, glavni cilj istraživanja je utvrditi postoji li veza između korporativnog upravljanja i performansi preduzeća.

Ključna ideja, odnosno hipoteza rada je u tome da se pokaže da ne postoji značajna povezanost između korporativnog upravljanja i performansi preduzeća.

U radu se analiziraju prikupljeni podaci i prezentuju najvažniji rezultati dijela empirijskog istraživanja čije nalaze prate analitički osvrti iz oblasti primjene principa korporativnog upravljanja u savremenoj organizaciji, a koji se tiču ovog rada.

1. PLATFORMA (OKVIR) RADA

Opšti pristup problem

Da bi se razumjela priroda kapitala, firme, korporacije, potrebno je razumjeti njenu ideju nastanka, jer je ona u osnovi svega! Problem neće biti moguće riješiti ukoliko ne znamo prirodu problema. Kako društvo reaguje na prirodu i svrhu kapitala, firme, korporativnog upravljanja, itd?

U kontekstu procesa upravljanja promjenama, istraživanje se fokusira na pitanja: zašto, šta i kako se mijenja? Koliko upravljanje promjenama utiče na performanse organizacije? Zašto i kako upravljati promjenama?

Prilikom analiziranja karakteristika primjene principa korporativnog upravljanja njenog uticaja na poslovanje preduzeća u savremenim društvima (u procesu globalizacije), kao i uticaj na proces implementacije i iniciranja organizacionih promjena, značajno je ispitivanje odnosa prema principima korporativnog upravljanja, što predstavlja predmet istraživanja i analize u ovom radu.

Prema OECD-ovim Principima korporativnog upravljanja iz 2004. godine, korporativno upravljanje predstavlja institucionalni okvir kojim se određuju ciljevi poslovanja, način njihovog ostvarivanja i metode kojima se prate performanse i mjeri uspješnost. To je sistem kojim su korporacije *usmjerene i kontrolisane*. Korporativno upravljanje bavi se odnosima između različitih nosilaca interesa u odnosu na kontrolu kompanija.

Za organizacije i firme nove prilike i izazovi pojaviće se zajedno sa mogućnošću globalnog povezivanja. Novi nivo odgovornosti, iza koje će stajati ljudi, natjeraće te učesnike da razmisle o svom postojećem djelovanju i prilagode planove za budućnost, mijenjajući i način rada i način predstavljanja svojih aktivnosti javnosti.

Po Barney-ovoj klasifikaciji resursa (Barney 1991, 99-120), organizacione resurse čine organizaciona struktura, korporativna kultura, pravila i procedure, upravljanje informacionim sistemima i odnos preduzeća prema zainteresovanim stranama. Za današnje firme organizacioni resursi i sposobnosti menadžmenta su osnova u postizanju konkurentске prednosti. Menadžment znanja uključuje *ljude* (ljudske resurse), *tehnologiju* (IT infrastrukturu) i *organizacione procese* kao međusobno povezane i preklapajuće djelove.

U poređenju sa Barney-em, Grant (Grant 1991) pravi mnogo jasniju razliku između resursa i sposobnosti. Grant klasifikuje resurse organizacije na: *opipljive* (finansijski, fizički i ugovori), *neopipljive* (tehnologija, odnosi sa snabdjevačima, odnosi sa kupcima, odnosi sa partnerima, reputacija i kultura) i *ljudske resurse* (specijalizovane vještine i znanje, komunikativne i interaktivne sposobnosti i motivacija), koji mogu biti kombinovani na različite načine. Dok opipljivi i neopipljivi resursi ulaze u proces proizvodnje, sposobnosti se tiču „kooperacije i koordinacije grupa resursa” (Grant 1991).

Po Grantu organizacione sposobnosti su složeni produktivni potencijali koji zavise od kapaciteta firme da integriše znanje. Organizacione sposobnosti mogu biti različite aktivnosti, procesi, funkcije ili usluge koje organizacija može efektivno i efikasno da realizuje. (Grant 1996).

Grant zaključuje da iako su resursi izvor sposobnosti organizacije, sposobnosti su glavni izvor njene konkurentске prednosti. Međutim, on takođe naglašava da resursi ponekad mogu direktno voditi konkurentskoj prednosti. (Grant 1991).

U novoj tehnološko-ekonomskoj paradigmi, *informacija* postaje ključni resurs savremenog društva. Posledica uticaja informaciono-komunikacionih tehnologija je *umreženo društvo*. Umrežena društvo (ekonomija) ima za posledicu i novu organizacionu logiku. Principi slobodno-tržišne konkurencije i preduzetništva sastavni su dio sfere kulture.

Stepen uspješnosti poslovne organizacije zavisice od informacija, procesa upravljanja i donošenja odluka, vizije, strategije i ljudskog potencijala kojim kompanija raspolaže.

Kako su promjene u svim oblastima života i rada dinamičnije, organizacija mora biti brza, fleksibilna i efikasna, sposobna za brže i nagle promjene kursa poslovanja. Uz stalno prisustvo procesa unapređenja, poslovne organizacije moraju se kontinuirano prilagođavati sve bržim promjenama koje im nameće okruženje u kojem su.

Spremnost na tehnološke i organizacione promjene današnju kompaniju čini fleksibilnom. Da bi se desila tehnološka promjena, ljudi moraju da prate šta se dešava. Pokušaj organizovanog pogleda na dešavanja, pa davanje odgovora.

Usled nedovoljnog fokusa na upravljanje, nadzor i procjenu poslovnih procesa korporativnih donosilaca odluka, dovodi se do defanzivne pozicije i reaktivnog pristupa rešavanju poslovnih

problema. U tom smislu doprinos rada je u dinamičkom odnosu za prilagođavanje novim okolnostima i dinamičnom traženju nove tržišne prilike. Da korporativno upravljanje, kako se istražuje u ovom radu, omogućava ljudima koji vode firmu da osmišljavaju nove tržišne niše, odnosno da koriste dolazeće trendove i na tržištu potvrde tu svoju viziju, misiju, profit i rast firme, fleksibilnost u promjenama, neupadanje u krizu, odnosno bolje upravljanje krizom. Što bi značilo da su proaktivno anticipirali promjene, imaju strateško razmišljanje i vode firmu na tom talasu.

U kom pravcu se mijenja svijet i tržište, koje se to šanse ukazuju i koje donosi „digitalizacija”, da bi se i time postavili pravci za traženje odgovora u kom smjeru će evoluirati korporativno upravljanje i njegov uticaj na performanse preduzeća?

Primjena i izučavanje korporativnog upravljanja u procesu upravljanja promjenama zahtijeva *interdisciplinarni pristup*. Dosadašnja istraživanja daju uglavnom deskriptivno opisnu analizu, bez „dubljih” empirijskih dokaza koji bi objasnili njegove uzroke, posljedice i specifičnosti.

Sve ove promjene i prilagođavanje promjenama imaju odraz i na korporativno upravljanje kompanijama.

2. KORPORATIVNO UPRAVLJANJE U DIGITALNOJ EKONOMIJI

Korporativno upravljanje zaokuplja pažnju istraživača koji se bave finansijskim, računovodstvenim, pravnim, sociološkim problemima i predstavlja jednu od tema o kojoj se dosta diskutuje u akademskim krugovima. Interesovanje za korporativno upravljanje je interdisciplinarno. Analiza poslovanja kompanija (Duvnjak 2020; Duvnjak 2018; Hough and Spillan 2005; Mankiw 2010; Sharma 2001; Godet 2000) koje su se suočile sa brojnim korporativnim prevarama i računovodstvenim skandalima, insajdersko trgovanje, previsoke kompenzacije i neadekvatan sistem nagrađivanja, a koji su veoma često doveli do bankrotstva ili likvidacije uspješnih kompanija predstavljaju aktuelnu i izazovnu istraživačku oblast. Analize su pokazale da je najčešći odgovor loše korporativno upravljanje. Zbog toga se postavlja pitanje: Koji je značaj, njegova svrha i šta čini dobro korporativno upravljanje?

Slabosti korporativnog upravljanja su bile u korijenu svih velikih finansijskih kriza. Do sada, najčešće se radilo o klasičnoj eksproprijaciji akcionara i slabom nadzoru uprave (nadležnost upravnog odbora) (Đulić 2009).

Oslanjajući se na metodologiju Međunarodne finansijske korporacije (IFC), rad „Korporativno upravljanje u krizi” (Đulić 2009), nudi referentni okvir za analizu pojedinih aspekata funkcionisanja Odbora direktora i daje osnovu za komparativnu analizu. Rad se fokusira na Odbore direktora (koji su loše upravljali rizicima i koji su pravili pogrešne strateške izbore) - mehanizam korporativnog upravljanja koji je na mikro nivou kompanija, po mišljenju autora, najviše doprinio izbijanju globalne finansijske krize.

U poslovnom životu, finansijska tržišta, kretanje kapitala i korporativno upravljanje se mijenja i prilagođava promjenama. Promjene su veoma brze, pa tako i neke prakse korporativnog upravljanja brzo postaju konzervativne.

Korporativno upravljanje je kolektivno donošenje odluka! Korporativno upravljanje je „zajedničko upravljanje” ili „upravljanje od strane više lica”.

U OECD-ovim Principima korporativnog upravljanja iz 2004. godine korporativno upravljanje uključuje skup odnosa između menadžmenta, uprave, nadzornog odbora, akcionara i ostalih zainteresovanih strana. Ono predstavlja strukturu unutar koje se predstavljaju ciljevi akcionarskog društva, kao i način postizanja tih ciljeva i praćenje rezultata. Postojanje efikasnog korporativnog upravljanja unutar pojedinih akcionarskih društava i cjelokupne ekonomije, pomaže da se osigura stepen povjerenja potreban za pravilno funkcionisanje tržišne ekonomije.

Vlasnici kapitala koriste efikasne sisteme korporativnog upravljanja kako bi uticali na menadžere da postupaju na način koji omogućava ostvarivanje ciljeva vlasnika. Ti sistemi se

zasnivaju na adekvatnom sistemu kontrole, kao i motivacije. U ovom smislu sistemi korporativnog upravljanja ostvaruju izvjesne društvene vrijednosti.

Prema Priručniku za korporativno upravljanje u Crnoj Gori iz 2009 godine, sistem korporativnog upravljanja treba da motivise akcionare, direktore i menadzere da sarađuju na implementaciji ovih planova kako bi ostvarili dugoročni poslovni uspjeh kompanije, odnosno razvoj kompanije i ostvarenje profita. Ali da li je svaki sistem korporativnog upravljanja dobar i da li je primjenljiv?

Povjerenje je osnovni koncept korporativnog upravljanja. Povjerenje predstavlja posebnu vrijednost u smislu da ga pojedinci visoko cijene u ekonomskom životu kao i drugdje. Odsutnost povjerenja, negativno utiče na ekonomski život.

Korporativno upravljanje uključuje mnoge različite faktore u procesudonošenja stratejskih odluka, adekvatno i transparentno izvještavanje vlasnikakoji su uložili svoj kapital, pouzdano finansijsko izvještavanje i postupanje u skladusa zakonima i propisima.

Razvoj korporativnog upravljanja u velikoj mjeri se odnosi na unapređenje prakse *korporativnog izvještavanja*. Korporativno izvještavanje podrazumijeva objavljivanje informacija i finansijsku transparentnost.

Finansijski izvještaji su jedan od glavnih izvora informacija o preduzeću, osnova su za donošenje brojnih odluka, ali su i osnova, tj. nezaobilazni izvor informacija neophodnih za procjenu vrijednosti kapitala preduzeća. Zbog svega toga, oni moraju jasno i nedvosmisleno iskazivati pojedine kategorije, moraju biti objektivni i pouzdani. (Babić i Čurić 2016, 13).

Odnosi između kompanije i njenih nosilaca interesa, prije svega je fokusiran na izvještavanje investitora i javnosti.

Istraživanja su pokazala da rukovodeći organi u većini naših preduzeća, bez obzira na vlasničku strukturu i organizacioni oblik, finansijsko izvještavanje vide kao teret, a izradu finansijskih izvještaja kao puko zadovoljavanje zakonskih zahtjeva. Zanimljivo je da se ili ne razumije, svrha finansijskog izvještavanja kao takvog. Veoma mali broj preduzeća se koristi informacijama iz finansijskih izvještaja za upravljanje i donošenje poslovnih odluka. Gotovo je nevjerovatno da mnogim menadžerima finansijske informacije o preduzeću uopšte nisu potrebne za upravljanje. Postavlja se pitanje kako onda uopšte donose poslovne odluke i dokle će ih moći tako donositi? (Babić 2010, 163).

Ukoliko kompanija ne priprema izvještaje u skladu sa Međunarodnim standardima finansijskog izvještavanja, postoji rizik od neadekvatne osnove koja se koristi za pripremu finansijskih izvještaja, a samim tim i neadekvatne osnove za ocjenu ključnih indikatora uspjehnosti koji dolaze iz analize finansijskih izvještaja.

Neki od problema koji su vezani za kvalitet finansijskog izvještavanja tiču se činjenice da je u zemljama regiona dugo bila zapostavljena prava svrha sastavljanja finansijskih izvještaja, da oni nisu bili sastavljeni u skladu sa Međunarodnim računovodstvenim standardima. (Babić i Čurić 2016, 27).

U digitalnoj ekonomiji, akcenat se sada stavlja na *upravljanje promjenama*. Organizaciona kultura utiče na gotovo sve relevantne segmente iniciranja i realizacije *organizacionih promjena* kroz: organizacionu viziju, koordinaciju, timski rad, proces identifikacije, potrebu za promjenama. Organizaciona kultura određuje način na koji preduzeće skenira svoje okruženje i kojim definiše svoju poziciju u njemu, kao i način na koji analizira i procjenjuje sopstvene resurse i sposobnosti. Ukoliko je preduzeće usvojilo vrijednosti koje naglašavaju otvorenost, fleksibilnost i sklonost promjenama, ono će brže identifikovati impulse iz okruženja koji ukazuju na potrebu za promjenom i lakše će donijeti odluku da se željena promjena inicira.

Permanentne promjene na tržištu donijele su pored jačanja konkurencije i transformacije iz industrijske ere u eru kompanija koje svoju produktivnost, efikasnost i efektivnost zasnivaju na znanju i inovacijama. U tom smislu i menadžment kao naučna disciplina i kao praktična vještina, doživio je velike promjene. (Marinković 2010, 199).

Upotreba *informacija i znanja*, kao novih resursa, utiče na promjene u sferi rada, vlasništva i upravljanja. Znanje u firmi se ogleda kroz razmjenu (protok) podataka, informacija i znanja zaposlenih i uprave. Upravljanje znanjem je sredstvo za postizanje cilja, a ne cilj djelovanja.

U kontekstu globalizacije, brzine i konkurencije, mnoga preduzeća su pod pritiskom i suočena sa sve bržom *reaktivnošću*. Sticanje konkurentске prednosti moguće je samo brzinom prenosa informacija i načinom komunikacije. Na ovaj način se privredne organizacije *projektuju u budućnost*. Promjena postojeće paradigme podrazumijeva da preduzeća planiraju svoju budućnost u saradnji s primarnim akcionarima i zainteresovanim stranama.

Digitalno društvo je društvo u kojem kreacija, distribucija i upravljanje informacijama postaje najvažnija ekonomska i kulturna aktivnost. Organizaciona struktura treba da se prilagodi promjenama, da bude fleksibilnija, kako bi brže i bolje reagovala na tržišne zahtjeve. Uspjeh preduzeća zavisiće od uspješnosti u prilagođavanju strategije tržišnog komuniciranja novim tehnologijama, kao i od sposobnosti distribucije informacija ka ciljnoj grupi potrošača i kupaca na najbrži, najefikasniji i najrazumljiviji način. Brzina postaje srž *donošnja ekonomskih odluka*! Preduzeća nove poslovne sisteme ne treba da posmatraju kao tehnološka, već kao organizacioni izazov promjene korporativne kulture firme, jer se na taj način efikasno pomjeraju ka razmišljanju o pojedincu.

Globalizacija je sposobnost nacije, kompanije i svakog pojedinca da uče kako da prihvate nove poglede i odnose sa ostatkom svijeta!...(Vukotić 2011). Tako će nacionalna kultura (sistem vrijednosti, odnos prema radu, karakterne osobine ljudi,...) prihvatati na specifičan način globalne informacije! Odnosno filter nacionalne kulture će određivati djelotvornost globalno dostupnih informacija! Kultura će uticati i na brzinu prihvatanja informacija! (Vukotić 2011). Danas organizacije imaju bolji protok informacija. Uticaj i brzina informacija nas prisiljava na promjenu paradigme.

Pitanje koje se postavlja je da li menadžment savremenih organizacija može da funkcioniše bez promjena? Odgovor je ne. Ne samo glavni menadžment, nego svi nivoi menadžmenta u digitalnom dobu su suočeni i sa kompleksnošću i sa promjenama. Jednom uspostavljena organizaciona struktura preduzeća ne može biti zadovoljavajuća na duže vrijeme, a posebno ne trajno. Promjene u tržišnom i ukupnom okruženju nameću obavezu menadžmentu da kontinuirano usavršava organizacionu strukturu preduzeća, sa ciljem očuvanja i unapređenja pozicije preduzeća na tržištu. Upravo ovdje se daje *značaj korporativnom upravljanju*.

Veliki dio ekonomskog života može se posmatrati u smislu ekonomske organizacije, odnosno sa stanovišta kako su ljudi, institucije i materijalni predmeti međusobno povezani i razdvojeni. Moderna kompanija mora da bude pripremljena da uspješno odgovori na promjene, nizom aktivnosti na polju vizije, misije, strateških ciljeva, reinženjeringa procesa i na toj osnovi promjenama u organizacionoj strukturi, broju i strukturi zaposlenih. Pored eksternih stejkholdera, na promjene u korporativnom upravljanju utiče i niz internih faktora. (Marinković 2010, 202).

Savremena organizacija u dinamičnom poslovnom okruženju mora da u organizacionu strukturu inkorporira *preduzetnički menadžment*, odnosno preduzetnički način rukovođenja, koji potencira strateški pristup baziran na prihvatanju rizika, kreativnosti, potencijalu i odgovornosti. Organizacije treba da imaju razvijenu *korporativnu kulturu*, da budu spremne za sprovođenje *organizacionih promjena*. Dakle, organizacija u *digitalnoj ekonomiji*, mora u svoju strukturu da ugradi: upravljanje promjenama, organizovano napuštanje svega što radi, ali i sposobnost da kreira novu vrijednost.

Za efikasnije upravljanje preduzećem, menadžeri kao reprezenti menadžmenta moraju biti dovoljno osposobljeni da bi nezavisno i autoritetom ličnosti upravljali promjenama i procesima. Stručnjaci za korporativno upravljanje treba da budu prioritetno arhitekte organizacije, koji su sposobni da ponude odgovarajuću formu organizacione strukture za sprovođenje odabrane strategije. Pored toga, oni treba da budu dovoljno osposobljeni da identifikuju slabosti i ponude odgovarajuća rešenja za promjenu metoda i procesa koji će olakšati primjenu strategije. (Marinković 2010, 203).

Korporativna strategija razvoja sem duboko ukorijenjenog preduzetničkog duha, prije svega mora da se zasniva na kvalitetnom korporativnom upravljanju.

Značaj korporativnog upravljanja za ekonomije u tranziciji se ogleda u uticaju na razvoj nacionalne ekonomije u cjelini što podrazumijeva: kreiranje ključnih institucija za razvoj privatnih kompanija putem kojih se potpomaže adaptacija na tržišno organizavanu ekonomiju; razvoj finansijskog tržišta (koji je usko povezan sa dinamikom razvoja korporativnog upravljanja) i povezivanje sa kompanijama u cilju efikasnog alociranja kapitala u djelove privrede gdje je to potrebno; privlačenju stranih investicija (koje u slučaju tranzicionih ekonomija imaju veći značaj od domaćih investicija).

Unaprijed naznačena analiza nas navodi na zaključak da najznačajniju ulogu u prepoznavanju prihvatanja i implementaciji procesa promjena, imaju vlasnici i rukovodstvo organizacije. Za njih je od suštinske važnosti da ovladaju sposobnostima upravljanja promjenama, koje sem znanja uključuje i vještinu vođenja organizacionih promjena. Promjene omogućavaju da se stvori nešto novo i nešto različito. Promjene, a ne stabilnost je prirodno stanje organizacije. U organizacionom životu, jedina konstanta su promjene. Promjene traže prilagođavanje. (Stojanović i Đokić i Đokić 2013, 69-82).

Korporativno upravljanje omogućava preduzećima da upravljaju promjenama i rizicima i ne dozvole da budu iznenađene. Dosadašnja praksa pokazuje da efikasno korporativno upravljanje značajno doprinosi boljim i efikasnijim poslovnim performansama. Principi korporacionog upravljanja daju mogućnost opstanka usled značajnih promjena u okruženju i svijetu.

Iako firma uspješno posluje i ima dobre rezultate u dužem vremenskom periodu, to ne znači da može da ignoriše pravila i dobru praksu korporativnog upravljanja. Principi korporativnog upravljanja su stvarani iz dugogodišnjeg iskustva i već su se bezbroj puta pokazali kao važni. Principi korporacionog upravljanja su *evolutivni* i treba ih posmatrati u svijetlu značajnih promjena u okruženju.

U zemljama razvijene tržišne ekonomije, menadžment ima vrlo značajnu ulogu u industrijskim odnosima na nivou preduzeća. (Marinković 2010, 212).

Razvoj i rast preduzeća umnogome će zavisiti od toga koliko je menadžment spreman da prihvati neke nove koncepte upravljanja.

Preduzeći moraju imati *proaktivan* pristup sa visokim strateškim značajem. Na taj način one su usmjerene na međusobnu saradnju.

Iz ovog nedvosmisleno zaključujemo da sve ove promjene i prilagođavanje i upravljanje promjenama imaju odraz i na kretanje kapitala, kao i na korporativno upravljanje, a spoljno poslovno okruženje dodatno otežava njegovo poslovanje.

3. EMPIRIJSKO ISTRAŽIVANJE

3.1. Metodologija istraživanja

Istraživanje primjene koncepta korporativnog upravljanja čiji je fokus da ispita stanje, a zatim ukaže na faktore koji utiču na bolje performanse kompanija kroz perspektivu ICT-ja i informacione otvorenosti, organizacione i nacionalne kulture u procesu upravljanja promjenama i principa korporativnog upravljanja u kompanijama izvršeno je metodom anketnog upitnika u periodu juna i jula 2014. godine u saradnji sa Komisijom za hartije Crne Gore i Unijom poslodavaca Crne Gore. Metodologija istraživanja je izabrana u skladu sa definisanim ciljem istraživanja i zasnovana je na kombinaciji kvalitativnog i kvantitativnog metoda, kao i komparaciji sa relevantnom literaturom i naučnim saznanjima.

Upitnik je kreiran tako da se dobiju informacije o ispitivanim varijablama: odnosu prema promjenama, faktorima koji utiču na sprovođenje organizacionih promjena, uzrocima otpora promjenama, karakteristikama organizacione kulture, osobinama rukovodioca, internim pravilima i procedurama, promjenama u sferi rada, vlasništva i upravljanja... Cilj je bio prije svega na ispitivanje percepcija i stavova vlasnika, rukovodioca i top menadžmenta preduzeća s

aspekta upravljanja, jer su oni glavni nosioci donošenja odluka i pozicioniranja organizacije. Uzorak istraživanja je projektovan na veličini od 102 akcionarska društva, društva sa ograničenom odgovornošću i ostalih. Prilikom određivanja uzorka koristio se slučajni uzorak. Prikupljeni podaci su obrađeni i analizirani primjenom statističkog softvera SPSS-a. Na osnovu odgovora rukovodilaca preduzeća (uglavnom mala i srednja preduzeća), na postavljena pitanja u anketi dolazi se do osnovnih pretpostavki koje kreativno utiču na proces korporativnog upravljanja.

Za potrebe ovog rada prezentovaće se dio rezultata istraživanja iz oblasti primjene principa korporativnog upravljanja u procesu upravljanju promjenama sa ciljem što boljeg uvida na pitanja za ocjenu percepcija i stavova u navedenim karakteristikama. Podaci će se prikazati brojčano i grafički radi boljeg prezentovanja.

3.2. Rezultati istraživanja

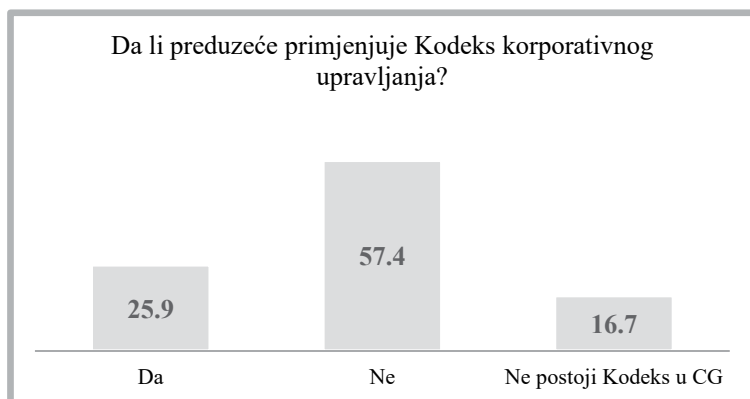
Prije analize prikupljenih podataka dijela empirijskog istraživanja, osnovni demografski podaci govore da po obliku organizovanja privredne djelatnosti 53,92% je akcionarskih društava, 44,12% društva sa ograničenom odgovornošću i 1,96% ostalih. U odnosu na dominantnu vlasničku strukturu preduzeća učestvovalo je 76,92% u privatnom vlasništvu, 21,15% u državnom vlasništvu i 1,92% javno-privatno partnerstvu. Prema veličini preduzeća u istraživanju je bilo 68,63% koja obuhvataju mala preduzeća (1-49 zaposlenih), 29,41% srednja preduzeća (50 - 249 zaposlenih) i 1,96% velikih preduzeća (više od 250 zaposlenih).

Na osnovu podataka dobijenih tokom istraživanja, mogu se izvesti sledeći zaključci:

Po stepenu vlasništva nad kompanijom podaci govore da je skoro dvije trećine ili 63,64% ima disperzovano vlasništvo, dok je 32,37% u koncentrisanom vlasništvu.

Kada je u pitanju *prisustvo većinskog vlasništva* (više od 50% akcija), podaci dobijeni upitnikom kažu da je u 69,64% kompanija prisutan većinski vlasnik, a u 28,57% kompanija nije prisutan.

Kodeks korporativnog upravljanja navelo je da koristi 25,9% kompanija, dok čak 57,4% anketiranih je reklo da ne primjenjuje Kodeks korporativnog upravljanja, a čak 16,7% je reklo da Kodeks čak i ne postoji (Grafikon 1).



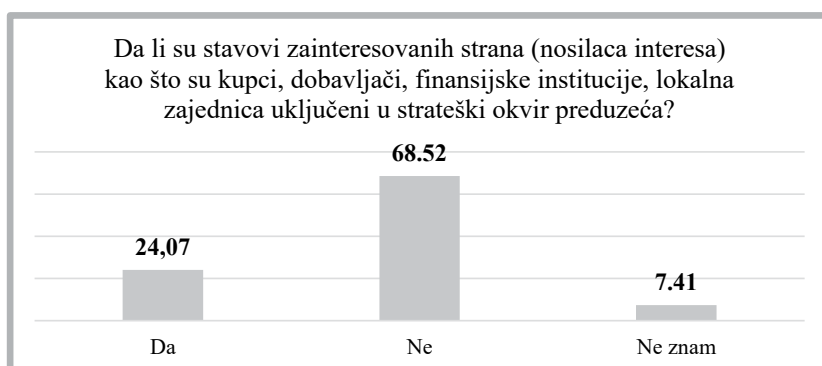
Grafikon 1. Primjena Kodeksa korporativnog upravljanja (Autor)

Ovakvi podaci nam govore o više stvari, između ostalog i o tome da je jedna od posledica nestabilnosti finansijskog tržišta i neusvajanje Kodeksa korporativnog upravljanja u brojnim zemljama svijeta i nakon izbijanje globalne finansijske krize 2008. godine, što je slučaj i sa nama.

U želji za poboljšanjem prakse upravljanja, preduzeća su dužna da usklade svoje prakse sa preporukama Kodeksa. Kao preduslov konvergencije modela korporativnog upravljanja je

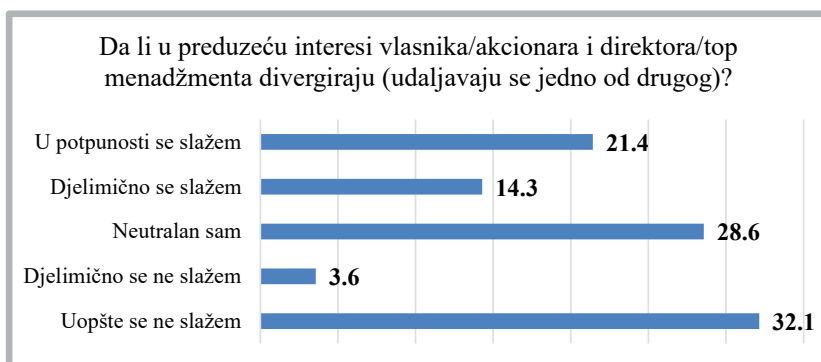
promjena zakonskog okvira pojedinih zemalja, a sve sa ciljem stvaranja univerzalnog pravnog konteksta preko afirmacije kodeksa korporativnog upravljanja i dobre prakse. OECD principi stvaraju okvir efikasnog korporativnog upravljanja koji će promovisati transparentno i efikasno tržište, koje će biti u skladu sa vladavinom prava i jasno podijeliti odgovornost između nadzornih i regulatornih organa. Dakle, jedan od dokumenata čija je svrha pospješivanje implementacije principa korporativnog upravljanja u kompanijama je Kodeks korporativnog upravljanja. Svaka kompanija može, ukoliko smatra potrebnim, usvojiti Kodeks na nivou kompanije. Kompanija bi trebalo da uvrsti poglavlje o korporativnom upravljanju u svoj godišnji izvještaj u kojem se opisuju relevantni događaji u vezi sa korporativnim upravljanjem što su se dogodili tokom prethodne godine.

Na pitanje „*Da li su stavovi zainteresovanih strana (nosilaca interesa) kao što su kupci, dobavljači, finansijske institucije, lokalna zajednica uključeni u strateški okvir preduzeća?*”, najveći broj ispitanih odgovorio je da nisu - 68,52%, dok je 24,07% dalo potvrđan odgovor (Grafikon 2).



Grafikon 2. Uključenost zainteresovanih strana u strateški okvir preduzeća (Autor)

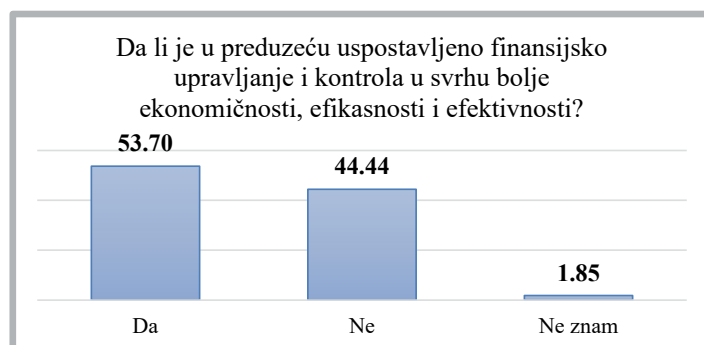
Ispitana preduzeća su na pitanje o tome *da li divergiraju* (udaljavaju jedno od drugog) *interesi vlasnika/akcionara i direktora/top menadžmenta* dali sledeće odgovore: uopšte se ne slažem – 32,1%, delimično se ne slažem – 3,6%, neutralan sam (prosječan uticaj) – 28,6%, delimično se slažem – 14,3%, u potpunosti se slažem – 21,4% (Grafikon 3). Činjenica ukazuje da ipak više od 60% anketiranih se suočava sa činjenicom da se interesi vlasnika-direktora udaljavaju, što nema pozitivan uticaj na performanse preduzeća. Dakle, ovo nam govori o izraženim agencijskim problemima i vjerovatno o nedovoljnoj obrazovanosti, upućenosti ili nespremonosti da vlasnik kompanije ima menadžera koji će raditi u interesu kompanije. Takođe, kao jedan od problema koji se potencijalno može okarakterisati je i taj da vlasnik/akcionar nema politiku nagrađivanja direktora/top menadžmenta, čime bi bar delimično bili sigurni u njihov rad u korist kompanije, što opet ima uticaj na performanse preduzeća.



Grafikon 3. Stepen divergiranja interesa vlasnika/akcionara i direktora/top menadžmenta (Autor)

Kako bi se povećala motivacija menadžera i efikasnije upravljanje preduzećem, menadžerima se daju kompenzacioni paketi s vlasničkim (manjinskim) učešćima, kao i finansijski bonusi za dugoročne performanse preduzeća. Navedeni argumenti imaju podršku empirijskih istraživanja koji pokazuju da postoji pozitivan odnos (povezanost) između poslovnih performansi i veličine vlasničkih udjela menadžera u preduzeću.

Najveći broj ispitanih preduzeća, njih 53,70%, navelo je činjenicu da njihova organizacija ima *uspostavljeno finansijsko upravljanje i kontrolu u svrhu bolje ekonomičnosti, efikasnosti i efektivnosti*, dok čak 44,44% nema uspostavljeno finansijsko upravljanje i kontrolu u svrhu bolje ekonomičnosti, efikasnosti i efektivnosti (Grafikon 4).

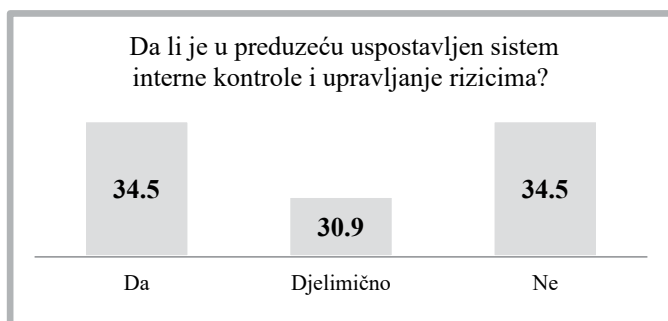


Grafikon 4. Stepen uspostavljenosti finansijskog upravljanja i kontrola u svrhu bolje ekonomičnosti, efikasnosti i efektivnosti (Autor)

Finansijsko upravljanje i kontrola (FMC) je najznačajnija oblast interne kontrole, jer ona utiče na sve aktivnosti subjekta. U upravljanju finansijama u javnom sektoru velika pažnja se poklanja konceptu finansijske kontrole. Svi rukovodioci imaju dužnost i obavezu finansijske kontrole u cilju obezbjeđenja iskorišćenosti resursa.

Efikasno upravljanje javnim finansijama je važno radi stvaranja povjerenja i transparentnosti, a sve u funkciji pružanja vrijednosti za novac (pravilo 3 E - ekonomičnost, efikasnost i efektivnost).

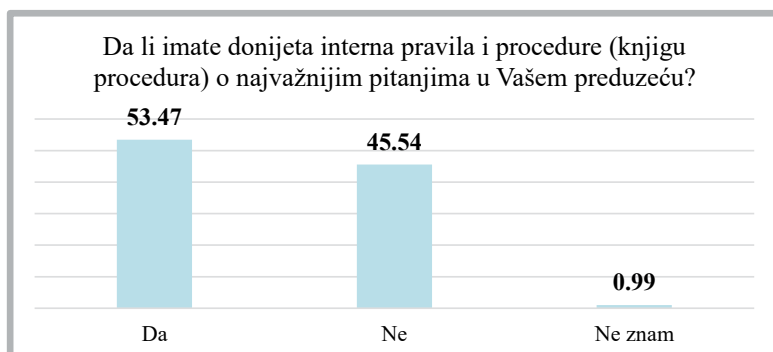
O *uspostavljenosti sistema interne kontrole i upravljanje rizicima*, isti broj preduzeća u procentu od 34,5% je reklo da ima i da nema sistem interne kontrole i upravljanja rizicima. Oko 1/3, odnosno 30,9% preduzeća je reklo da u nekom vidu djelimično posjeduje interne kontrole i upravljanje rizicima (Grafikon 5).



Grafikon 5. Stepen uspostavljenosti sistema interne kontrole i upravljanje rizicima (Autor)

U cilju poboljšanja internih kontrola, neophodno je usvojiti okvir sistema finansijskog upravljanja i kontrola koji objedinjuje sva finansijska pitanja koja utiču na ostvarenje ključnih ciljeva preduzeća. Savremene strukture korporativnog upravljanja stavljaju značajan akcenat na upravljanje rizicima. Ona obezbjeđuje veće povjerenje u korporativno upravljanje preduzeća. Svrha upravljanja rizicima je smanjenje rizika na prihvatljiv nivo.

Na pitanje „*Da li imate donijeta interna pravila i procedure (knjigu procedura) o najvažnijim pitanjima u Vašem preduzeću?*”, najveći broj anketiranih je odgovorilo da ima (53,47%), dok je 45,54% ispitanika odgovorilo da nema donijetu knjigu procedura (Grafikon 6).



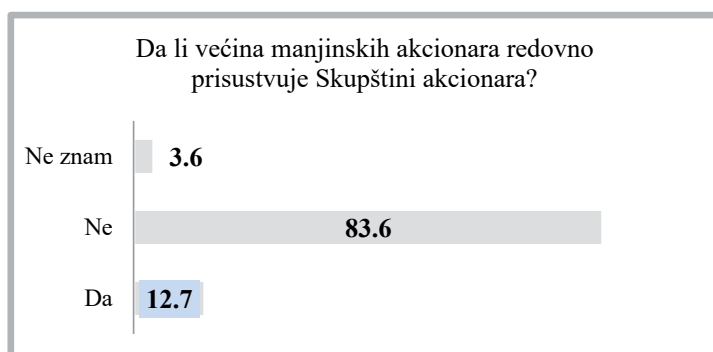
Grafikon 6. Stepen donijetih internih pravila i procedura (knjiga procedura) (Autor)

Radi sprovođenja sistema finansijskih kontrola i upravljanja (FMC) u preduzeću, neophodno je sačiniti set internih pravila i procedura u cilju pravilnog, ekonomičnog, efikasnog i efektivnog korišćenja sredstava. Interni pravilnik za finansijsko upravljanje predstavlja skup pravila i procedura, uključujući i opis radnih mjesta koji objašnjavaju rad finansijskog poslovanja u preduzeću.

Podatak da skoro polovina ispitanih nema donijeta interna pravila i procedure (knjigu procedura) o najvažnijim pitanjima u organizaciji je izuzetno zabrinjavajući i potvrđuje stav o inertnosti menadžmenta.

Da bi se poboljšao sistem unutrašnje kontrole potrebno je da svaka institucija usvoji FMC okvir koji objedinjuje sva finansijska pitanja koja utiču na efikasnost u postizanju ključnih ciljeva preduzeća. Cilj je zapravo da se formalizuje okvir za FMC koji će se objediniti u formi internih pravila i procedura koje daju smjernice svim zaposlenim po tim pitanjima.

O tome da li većina manjinskih akcionara redovno prisustvuje Skupštini akcionara, bilježimo poražavajući podatak da čak 83,6% manjinskih akcionara ne prisustvuje Skupštini akcionara (Grafikon 7).



Grafikon 7. Prisustvo manjinskih akcionara Skupštini akcionara (Autor)

Prosječan rezultat od čak 83,6% nije zadovoljavajući, već razočaravajući. Društva uglavnom nemaju interne akte koji dodatno štite prava manjinskih akcionara. Kao i u regionu, najveći broj društava nema usvojene akte niti procedure koje zabranjuju trgovanje na osnovu povlašćenih internih informacija. U velikoj mjeri ne postoje prakse niti mehanizmi objavljivanja informacija o transakcijama članova odbora sa društvom.

U Crnoj Gori je prihvaćen anglosaksonski model korporativnog upravljanja, koji se zasniva na efikasnoj zaštiti manjinskih akcionara, razvijenom tržištu kapitala i i kontinuiranom objavljivanju informacija o pravnom i finansijskom položaju preduzeća kako bi nosioci materijalnih interesa mogli da donose odgovarajuće odluke.

Okvir korporativnog upravljanja treba da obezbijedi *ravnopravan tretman svih akcionara*, uključujući i manjinske i strane akcionare. Svi akcionari treba da imaju mogućnost da obezbijede efikasnu pravnu zaštitu u slučaju povrede njihovih prava, što je jedan od šest OECD Principa.

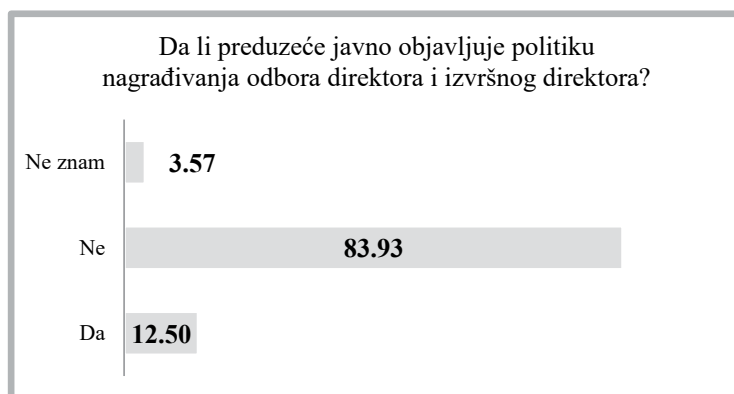
Prema Indeksu globalne konkurentnosti Svjetskog ekonomskog foruma za 2019-tu godinu, kojim su obuhvaćene 141 ekonomije, Crna Gora zauzima 73. mjesto, što je pad od 2 mjesta u odnosu na 2018. godinu, a čak 24 mjesta u odnosu na 2010. godinu.

Ovo nam govori da se moraju više uključiti eksterni mehanizmi korporativnog upravljanja, kao što su zaštita prava manjinskih akcionara (tržište menadžerskih usluga). Zaštita prava manjinskih akcionara, uglavnom imperativnim zakonskim normama, jedan je od osnovnih ciljeva kompanijske regulative.

Dosadašnja praksa dominantno je pokazala da stepen razvoja tržišta kapitala zavisi od kvalitetne kontrole i primjene odgovarajućih zakona koji izjednačavaju prava akcionara.

Ovaj konstantan problem rešava se putem unapređenja korporativnog upravljanja uopšte i putem unapređenja prava manjinskih akcionara.

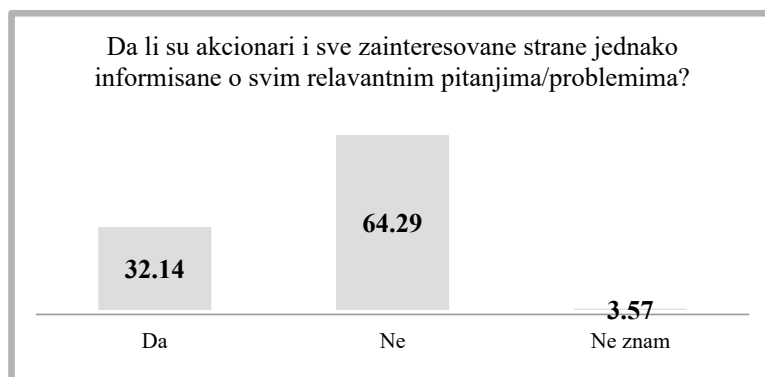
Pet šestina ili 83,93% preduzeća *ne objavljuje politiku nagrađivanja odbora direktora i izvršnog direktora*. Svega 12,50% preduzeća javno objavljuje politiku nagrađivanja odbora direktora i izvršnog direktora (Grafikon 8).



Grafikon 8. Javno objavljivanje politike nagrađivanja odbora direktora i izvršnog direktora (Autor)

Dakle, oko 5/6 anketiranih smatra da nije potrebno javno objavljivati politiku nagrađivanja odbora direktora i izvršnog direktora, što nam opet govori da naš balkanski mentalitet još uvijek ima lošu percepciju prema preduzetništvu i preduzetničkoj kulturi. Ovo nam govori da se, nažalost još uvijek u razmišljanjima nismo pomjerali sa početka tranzicionog perioda. Preduzetnička kultura društva je jedan od osnovnih preduslova za razvoj svake ekonomije i društva u cjelini.

Kada se radi o tome *da li su akcionari i sve zainteresovane strane jednako informisane o svim relevantnim pitanjima/problemima*, opet bilježimo zabrinjavajući podatak da čak 64,29% nisu informisane. Svega 1/3 je reklo da su akcionari i sve zainteresovane strane jednako informisane o svim relevantnim pitanjima/problemima (Grafikon 9).



Grafikon 9. Da li su akcionari i sve zainteresovane strane jednako informisane o svim relevantnim pitanjima/problemima (Autor)

Akcionarska društva treba da osiguraju pristup pouzdanim i aktuelnim informacijama na redovan i pravovremen način prema svim akcionarima i zainteresovanim stranama. Informisanost se može raditi putem web-a kao najjeftinijim i najjednostavnijim načinom ili putem elektronske pošte, što kao mali, ali jako bitan segment značajno doprinosi povećanju konkurentnosti i poslovnim performansama preduzeća.

Prema *Kodeksu korporativnog upravljanja u Crnoj Gori* iz 2009 godine, društvo treba da ima uspostavljene efikasne operative mehanizme za obezbjeđenje istinitog, blagovremenog, sveobuhvatnog i ravnopravnog informisanja svih članova odbora direktora o pitanjima relevantnim za obavljanjenjihove funkcije (član 16).

Nažalost, veliki procenat nalaza empirijskog istraživanja, kao i empirijsko istraživanje sprovedeno za potrebe ovog rada nam govori da ne postoji opšta informisanost, znanje i odlučnost za ulogu koju ima korporativno upravljanje. Takođe, može se zaključiti da kod nas dominira slaba sklonost promjenama.

ZAKLJUČAK

Opšta slika korporativnog upravljanja u kompanijama je loša. Nizak nivo korporativne kulture i loša praksa poštovanja zakona i propisa glavni su razlozi lošeg stanja. U istraživanju je dokazana činjenica da među kompanijama postoje svijetli primjeri. U tim kompanijama se poprilično odmaklo s primjenom dobre prakse korporativnog upravljanja.

Nažalost, veliki procenat nalaza empirijskog istraživanja nam govori da ne postoji opšta informisanost, znanje i odlučnost za ulogu koju ima korporativno upravljanje i njegovog uticaja na performanse preduzeća, kako kod nas tako i u okruženju.

U procesu ekonomske tranzicije i globalizacije, mala i srednja preduzeća su jedan od glavnih oslonaca ekonomije. Za njih se kaže i da su kičma ekonomije, a može se reći da ta kičma boluje ili se neki pršljen uklještio. Istovremeno to je i sektor koji zapošljava i najveći broj ljudi.

U dostizanju visokih performansi organizacije i u skladu sa ciljevima, adekvatno mjesto se ogleda u kvalitetu menadžmenta i efikasnom korporativnom upravljanju, posebno u uslovima promjena, odnosno u novom digitalnom dobu. Principi funkcionisanja menadžmenta i procesa korporativnog upravljanja bi morali biti potpuno drugačiji od trenutno korišćenih.

Uporedna praksa je pokazala da se izrazito povoljni efekti mogu ostvariti usvajanjem i efikasnom primjenom nacionalnog kodeksa korporativnog upravljanja, koji bi predstavljao vrstu spona između zakonskih rešenja i prakse društava. Svakom akcionarskom društvu treba dati mogućnost da apstraktna zakonska rešenja prilagodi svojim konkretnim potrebama.

Rezultati istraživanja nam potvrđuju da je jedan od najznačajnijih problema neadekvatna upotreba znanja i nedovoljna aktivnost stručnih ustanova, koja su potrebna za efikasno upravljanje promjenama.

Za kontinuirano unapređenje poslovanja bitan je proces implementacije unapređivanja znanja u funkciji unapređivanja kvaliteta poslovnih performansi preduzeća i postizanja konkurentske sposobnosti.

Nova ekonomija, novo preduzeće i nova tehnologija neraskidivo su povezani i čine sinergetsku cjelinu.

Organizacije treba da imaju razvijenu korporativnu kulturu koja je orjentisana ka budućnosti, da budu spremne za sprovođenje organizacionih promjena. Dakle, organizacije moraju težiti *proaktivnom* pristupu sa visokim strateškim značajem.

Institucionalni okvir, faktori razvoja tržišta kapitala (promjene u dosadašnjem sistemu, posebno upravljanja, rukovođenja i ocjene poslovanja preduzeća) odnosno, izgradnja tržišta kapitala se dovodi u vezu sa korporativnim upravljanjem.

Može se zaključiti da je digitalna era, era u kojem kreacija, distribucija i upravljanje informacijama i promjenama postaje najvažnija ekonomska i kulturna aktivnost.

Kako se u radu pošlo od pretpostavke da što je bolje korporativno upravljanje bolje su performanse preduzeća, a uzimajući u obzir nalaze empirijskog istraživanja, dolazimo do zaključka da *ne postoji značajna veza (povezanost) između različitih parametara korporativnog upravljanja i performansi preduzeća*, posebno u svijetlu globalizacije i promjena, odnosno da korporativno upravljanje zavisi od interesa vlasnika i menadžera.

Ovim se proširuje koncept i otvara istraživanje cijelog rada u smislu da korporativno upravljanje može biti važan instrument da firma u promjenljivim okolnostima opstaje i da korporativno upravljanje evoluira.

Na tržištu će opstati ne onaj koji je najjači, već onaj koji se najbolje prilagodi promjenama i prati trendove u digitalnoj ekonomiji. Potrebno je više ideja, znanja i vještina koje su u funkciji korporativnog upravljanja. Ideje su budućnost!

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CORPORATE GOVERNANCE IN MONTENEGRO - AN EMPIRICAL STUDY

Summary: *This research examines the relationship between the different parameters of corporate governance and company performance in the new digital age. The paper focuses on the importance of accepting the effective management of change in modern organizations, as well as the interdependence of corporate governance and the role of applying the principles of corporate governance in the process of management changes. In the life of an organization, the only constant is change. This paper presents how the changing of the standard business environment into the new one, whose main features are globalization, the digital economy, flexibility and the development of the digital companies and businesses, affect the business conditions and behaviour of companies. Change requires adjustment. An insufficient focus on the management, monitoring and evaluation of corporate decision-making business processes leads to a defensive position and reactive approach to solving business problems. This paper analyzes the collected data and presents the main results of the empirical part of the study.*

Key words: *digital economy, corporate governance, change management*

JEL classification: *F6, G3, G34, L2, O16*

INTRODUCTION

The aim of this study is to examine, in a concise and understandable manner, the relationship between corporate governance and company performance, through the perspective of the application of the principles of corporate governance and its impact on company performance, as well as the interdependence of corporate governance and the role of principles of corporate governance in the context of changing management processes. Thus, the main aim of the research is to determine whether there is a link between corporate governance and company performance.

The main idea, the hypothesis of the paper, is to prove that there is no significant connection between corporate governance and company performance.

This paper analyses the collected data and presents the main results of the empirical part of the study, following by analytical reviews in the field of the principles of corporate governance in modern organizations concerning this work.

1. THE PLATFORM (FRAMEWORK) OF THE PAPER

The general approach to the problem

To understand the nature of a firm, a corporation, it is necessary to understand the idea of its foundation, because it is the basis of everything. The problem cannot be solved unless we know the nature of the problem. How does society react to the nature and purpose of the company, its corporate governance and so on?

In the context of changes to the management process, this research focuses on the questions: why, what and how does it change? What is the measure of how the management change affect the performance of the organization? Why and how can we best manage these changes?

In analysing the characteristics of applying the principles of corporate governance and its impact on businesses in modern societies (in the process of globalization), as well as the impact on the process of initiating and implementation of organizational changes, examining its relationship to the principles of corporate governance is very important. This is the main subject of research and analysis in this paper.

According to the 2004 OECD „Principles of corporate governance”, corporate governance is an institutional framework which defines the objectives of the business, the way of exercising its activities and the methods which are used to monitor performances and measure success. It is a system by which corporations are *directed* and *controlled*. The main point is in the establishment of a clear structure of responsibilities, duties and transparency across the whole company. Corporate governance deals with the relationships between the various stakeholders in relation to the control of the company.

For all organizations and companies, new opportunities and challenges will appear along with the possibility of global connectivity. The new level of responsibility, which people will stand behind, forces participants to think about their own actions and adapt their existing plans for the future, changing the mode and manner of presenting their activities to the public.

By Barney's classification of resources (Barney 1991, 99-120), an organizational resource is composed of the corporate culture, organizational structure, policies and procedures, the management of information systems and the enterprise relationship to stakeholders. For today's companies, organizational resources and management capability are essential in achieving a competitive advantage. Knowledge management involves *people* (human resources), *technology* (IT infrastructure) and *organizational processes* as interrelated and overlapping elements.

By contrast to Barney, Grant (Grant 1991) makes a much clearer distinction between resources and capabilities. Grant classifies an organization's resources into: *tangible* (financial, physical and contractual), *intangible* (technology, supplier relations, customer relations, partner relations, reputation and culture), and *human resources* (specialized skills and knowledge, communication and interactive skills and motivation), which can be combined in different ways. While tangible and intangible resources are both included in the production process, capabilities are concerned with the „cooperation and coordination of resource groups” (Grant 1991).

According to Grant, organizational capabilities are complex productive potentials that depend on the firm's capacity to integrate knowledge. Organizational capabilities can be the various activities, processes, functions or services that an organization can effectively and efficiently implement. (Grant 1996).

Grant concludes that although resources are the source of an organization's capabilities, capabilities are in turn a major source of its competitive advantage. However, he also emphasizes that resources can sometimes directly lead to competitive advantage. (Grant 1991). In the new techno-economic paradigm, *information* is becoming a key resource in contemporary society. The result of the impact of information and communication technology is the *network society*. The digital networked economy has resulted in a new organizational logic. The principles of free-market competition and entrepreneurship are an integral part of the cultural sphere.

The degree of success of business organization will depend on the information, management and decision-making processes, as well as the vision, strategy and human resources that the company has.

As changes in all areas of the life and work are becoming more dynamic, organizations must be fast, flexible and efficient, capable of rapid and sudden changes in the course of business. With the constant presence of process improvement, business organizations need to be

continually adapted to the ever-faster changes imposed by the environment they find themselves in.

The willingness to engage with technological and organizational changes makes the company flexible. For technological change to happen, people have to follow what is happening. There is a need to try to have an organized view of the events, and respond accordingly.

An insufficient focus on the management, monitoring and evaluation of business processes of corporate decision-making, leads to a defensive position and a reactive approach to solving business problems. In this sense, the contribution of this paper is in considering the dynamic relationships needed in adapting to new circumstances and the dynamic search for new market opportunities. Corporate governance, as it is explored in this paper, allows people who lead companies to design new market niches or to use upcoming trends and confirm their vision, mission, profit and growth of the company within the market through flexibility to change which has the added benefit of ensuring no decline in a crisis, and more generally better crisis management. What would it mean to pro-actively anticipate changes through strategic thinking and lead the company in this wave?

Another set of questions also arises: How is the world and the market going to change, and what opportunities are being brought forward thanks to „digitization“? In answering those questions, we gain directions in the search for answers, and can consider in what direction corporate governance and its impact on company performance will evolve.

The implementation and study of corporate governance in the process of change management requires an *interdisciplinary approach*. Previous studies have mostly provided descriptive analysis, rather than „deeper“ empirical evidence to explain its causes, consequences and specificity.

All of these changes and adaptations to changes are reflected in the corporate management of companies.

2. CORPORATE GOVERNANCE IN THE DIGITAL ECONOMY

Corporate governance attracts the attention of researchers who deal with financial, accounting, legal and social issues and it is one of the topics that is widely discussed in academic circles. Interest in corporate governance is interdisciplinary. The analysis of the operations of companies (Duvnjak 2020; Duvnjak 2018; Hough and Spillan 2005; Mankiw 2010; Sharma 2001; Godet 2000) that are faced with a number of corporate fraud and accounting scandals, insider trading, excessive compensation and an inadequate system of remuneration, shows that this often leads to the bankruptcy or liquidation of successful companies, and represent an important and challenging research issues in the modern day. Analysis has shown that the most common issue is poor corporate governance. Therefore, the question arises: What is its significance and purpose and what actually constitutes good corporate governance?

Weaknesses in corporate governance have been at the root of all major financial crises. Up until now, it has mostly been a matter of the classic expropriation of shareholders and weak management supervision (related to the competence of the Board of Directors) (Đulić 2009).

Relying on the methodology of the International Finance Corporation (IFC), the article „Corporate governance in crisis“ (Đulić 2009), offers a reference framework for the analysis of certain aspects of the functioning of the Board of Directors and provides a basis for comparative analysis. This article is focused on the Board of Directors (who mismanaged risks and made wrong strategic choices) as a corporate governance mechanism, which at the company level, has most often contributed to the emergence of global financial crises.

In business life, corporate governance is changing and adapting to the changes. These changes are happening very fast and so some corporate governance practices are becoming conservative equally quickly.

Corporate governance is collective decision-making. Corporate governance is thus „joint management“ or „management by more than one person“.

In the 2004 OECD „Principles of corporate governance”, corporate governance is seen as involving a set of relationships between management, the Board of Directors, the Supervisory Board, the shareholders and other relevant stakeholders. It represents a structure for the objectives of the joint stock company, as well as the means of achieving these objectives and monitoring results. The existence of effective corporate governance within individual joint stock companies and the overall economy help to ensure the level of trust required for the proper functioning of the market economy.

The owner's capital uses effective corporate governance systems in order to influence the managers to act in a way that allows the achievement of the owner's objectives. These systems are based on an adequate system of control and motivation. In this sense, corporate governance systems achieve certain social values.

According to the „Manual for Corporate Governance in Montenegro” from 2009, the system of corporate governance should motivate shareholders, directors and managers to collaborate on the implementation of these plans in order to achieve the long-term business success of the company, the company's development and the realization of profits. However, is any system of corporate governance good and at the same time usable?

Trust is the basic concept of corporate governance. Trust represents a special value in the sense that it is highly valued by individuals in economic life, as it is elsewhere. A lack of trust negatively affects economic life.

Corporate governance involves many different factors in the strategic decision-making process, adequate and transparent reporting to the owners who have invested their capital, reliable financial reporting and compliance with laws and regulations.

The development of corporate governance is largely related to the improvement of *corporate reporting* practices. Corporate reporting involves publishing information and financial transparency.

Financial statements as a major source of information about the company, are the basis for many decisions, but also an indispensable source of the information which is necessary to assess the value of capital. Because of this, reports must clearly and unambiguously express certain categories, while at the same time they must be objective and reliable (Babić and Ćurić 2016, 13).

The relationship between the company and its stakeholders is primarily focused on reporting to investors and to the public.

Research has shown that the governing bodies of most companies in the region, regardless of ownership structure and organizational form, consider financial reporting as a burden, and the preparation of financial statements as a mere satisfaction of legal requirements. The purpose of financial reporting as such, has thus been neglected or misunderstood. Very few companies use the information from financial statements to manage and make business decisions. It seems almost incredible that many managers do not need financial information about the company at all for management. The question is, how do they make business decisions in general, and how long will they be able to make them in that way? (Babić 2010, 163).

If a company does not prepare reports in accordance with International Financial Reporting Standards, there is a risk of an inadequate basis which should be used for the preparation of financial statements, and thus an inadequate basis for assessing key performance indicators coming from the analysis of financial statements.

Some of the problems, concerning the quality of financial reporting, are related to the fact that for a long time in the countries of the region the real purpose of the financial statements was neglected and to the fact that they were not reported in accordance with international accounting standards. (Babić and Ćurić 2016, 12).

In the digital economy, the emphasis is now placed on the *management of change*. The organizational culture affects almost all the relevant segments for initiating and implementing *organizational change*. For example, the organizational culture affects the determination of the needs for change through: the organizational vision, coordination, teamwork, the identification

process, and the perception of the need for change. The organizational culture determines the way in which the company scans its environment and by that defines its own position in it, and the ways that it analyses and assess its own resources and abilities. If the company has adopted values that emphasize openness, flexibility, and a propensity for change, it will quickly identify the impulses from the environment that indicate the need for change and it will more easily make the decision to initiate the desired change.

Permanent changes in the market have brought, beside the strengthening of competition, the transformation from the industrial era to the era of companies that base their productivity, efficiency and effectiveness on knowledge and innovation. In that sense, both management as a scientific discipline and as a practical skill, has altered significantly. (Marinković 2010, 199). The use of *information* and *knowledge*, as well as new resources, influences change in the labour sphere, as well as in ownership and management. The knowledge of the company is reflected through the data share (data flow) of information and knowledge between employees and management. Knowledge management is a means to an end, not the sole aim of the action. In the context of globalization, speed and competition, many companies are under pressure and faced with increasingly faster *reactivity*. A proactive approach with high strategic importance is only possible thanks to the transmission speed of information and the means of communication. In this way, business organizations are *projected into the future*. Changing an existing paradigm and participation in the process of organizational changes means that companies need to plan their future in cooperation with the primary shareholders and stakeholders.

The digital society is a society in which the creation, distribution and management of information has become the most important economic and cultural activity. The organizational structure should adapt to change, to be more flexible in order to respond faster and better to market demands. The success of a company thus depends on the success of the strategies used for the adaptation of marketing communication to new technologies, as well as the ability to distribute information to the target group of consumers and customers in the quickest, most efficient and most comprehensive way. Speed is becoming the core of economic decision-making. Any company's new business systems should not be viewed as simply a technological, but also as an organizational challenge of changing the corporate culture of the company, because in this way companies effectively move toward thinking about the individual.

Globalization is the ability of the nation, the company and every individual to learn how to accept new perspectives and relationships with the rest of the world. (Vukotić 2011). Thus the national culture (the system of values, attitudes toward work, character traits of people and so on) accept a specific form of global information. The filter or national culture will determine the effectiveness of the global information available. Culture will also affect the rate of acceptance of information (Vukotić 2011). Today, organizations have a better flow of information. The impact and the speed of information forces us to change the paradigm.

The question is whether the management of modern organizations could function without change. The answer is no, not just for top management, but to all levels of management which are today faced with complexity and change. Once established, the organizational structure of the enterprise may not be sufficient to the needs of the company for a long time, and certainly not permanently. The constant change in the market environment and overall management are the imperative to continuously improve the organizational structure of the enterprise with the aim of acquiring, preserving and improving its market position. This is the fact that points out the *importance to corporate governance*.

A large part of modern economic life can be seen in terms of economy organizations or from the standpoint of how people, institutions and material objects are connected to each other or kept separate.

A modern company must be prepared to successfully respond to change, through a series of activities in the field of vision, mission, strategic goals, process reengineering and, on that basis, make changes to its organizational structure, and the number and structure of its

employees. In addition to external stakeholders, changes in corporate governance are also influenced by internal factors (Marinković 2010, 202).

Modern organizations in a complex business environment must incorporate entrepreneurial management into the organizational structure, *leadership in an entrepreneurial manner*, which emphasizes a strategic approach based on the acceptance of risk, creativity and innovation and individual responsibility for the operations of the organization. Organizations should have developed a *corporate culture*, to be ready for the implementation of these *organizational changes*. Therefore, organizations in the *digital economy*, have to embed into their structure: the management of change, the organized abandonment of everything that has been functioning up to now, but also the ability to create new value.

For the more efficient management of the company, managers as representatives of management need to be sufficiently well trained that they can manage change and processes independently and with the authority of their personality.

Moreover, corporate governance professionals should be the organization's architects, who are able to offer the appropriate form of organizational structure to implement the chosen strategy. In addition, they need to be sufficiently well trained to be able to identify weaknesses and offer appropriate solutions to change methods and processes that will facilitate the implementation of the strategy (Marinković 2010, 203).

In this corporate strategy of development, alongside a deeply ingrained entrepreneurial spirit, must be based above all on high-quality corporate governance.

The importance of corporate governance in transition economies is reflected in the impact on the development of the national economy as a whole, which includes: creating a key institution for the development of private companies which facilitates the adaptation to a market organized economy; financial market development (which is closely linked to the dynamics of the corporate governance development) and connecting with companies in order to achieve efficient allocation of capital into the parts of the economy where it is needed; and attracting foreign investment (which in the case of transition economies have increasing importance as opposed to domestic investment).

Previous analysis leads us to conclude that the most important role in the recognition of the acceptance and implementation of the change process is played by the owners and management of the organization. For them it is essential to master the skills of change management, which beside knowledge includes the skill of conducting organizational changes. Only change make it possible to create something new and different. Thus change, rather than stability, is the natural state of the organization. In organizational life, the only constant is change. Change requires adjustment (Stojanović and Đokić and Đokić 2013, 69-82).

Corporate governance allows companies to manage change and risks and to ensure that they are not surprised. The practice shows that effective corporate governance contributes to significantly better and more efficient business performances. These principles of Corporate Governance offer the possibility of continued survival in business, even given the significant changes in the region and the world.

Although a company may have been operating successfully and had good results over a longer period of time, it does not mean that it can ignore the rules and practices of good corporate governance. The principles of Corporate Governance were created from years of experience and have already many times proved to be important.

The principles of corporate governance are evolving and should be considered in the light of significant changes in the environment.

In countries with developed market economies, management plays a very important role in industrial relations at the enterprise level (Marinković 2010, 212).

The development and growth of enterprises will largely depend on how far management is prepared to accept certain new management concepts.

Companies must have a *proactive* approach involving high strategic importance. Thus, they are directed to mutual cooperation.

All of these changes and adaption to change influence capital movements as well as corporate governance, in which any foreign business environment further complicates its business.

3. AN EMPIRICAL STUDY

3.1. Research methodology

Our case study of the applied concept of corporate governance, whose focus is to examine the situation, and then to point out the factors that influence the performance of companies through the perspective of ICT and information transparency, organizational and national culture in the process of change management and the principles of corporate governance in companies, was carried out by poll questionnaire during the period from June to July 2014, in cooperation with the Securities Commission of Montenegro. The research methodology was chosen in accordance with the defined purpose of the research and is based on a combination of qualitative and quantitative methods, as well as on comparison with the relevant literature and scientific knowledge.

The questionnaire was designed to obtain information about the following studied variables: the attitude towards change, the factors that affect the implementation of organizational change, the causes of resistance to change, the characteristics of the organizational culture, the character of the managers, the internal rules and procedures, any changes in the sphere of labour, ownership and management, and other relevant parameters. The objective was primarily focused on examining the perceptions and attitudes of the owner, manager and top management of companies from a management point of view, because they are the main actors in terms of the decision-making process and the positioning of the organization. A sample survey was designed to the size of 102 joint-stock companies, limited liability companies, and others. In determining the sample, a random sampling approach was used. The collected data were processed and analysed using the statistical software SPSS. Based on the responses of the managers of the enterprises (mainly SMEs), the questions asked in the survey provide us with the basic assumptions that creatively affect the process of corporate governance.

For the purpose of this paper, a part of the research results will be presented in the field of principles of corporate governance in the change management process, with the aim of providing a better insight into questions related to the assessment of perceptions and attitudes towards the characteristics. The data will be displayed numerically and graphically so as to ensure its clarity.

3.2. Research results

Before analysing the collected data from the empirical part of the research, the basic demographic data show that the shape of organizing economic activity is 53.92% shareholding companies, 44.12% of the limited liability companies and 1.96% of others. In relation to the dominant ownership structure of the company, 76.92% were privately owned, 21.15% were owned by the state and 1.92% were public-private partnerships. According to the size of the companies, the study involved 68.63% small businesses companies (those with 1-49 employees), 29.41% medium-sized enterprises (with 50 – 249 employees) and 1.96% large companies (with more than 250 employees).

Based on the data obtained during the researching, the following can be concluded:

Data about the degree of ownership of the company show that nearly two-thirds, or 63.64% have dispersed ownership, while 32.37% have concentrated ownership.

When it comes to the *presence of majority ownership* (more than 50% of shares), the data obtained from the questionnaires indicates that in 69.64% of the companies presented had majority owner, and in 28.57% of the companies that was not the case.

The Corporate Governance Code is used by 25.9% of the companies, while 57.4% of respondents said they did not apply the Corporate Governance Code, with as many as 16.7% saying that such a Code does not even exist (Figure 1).

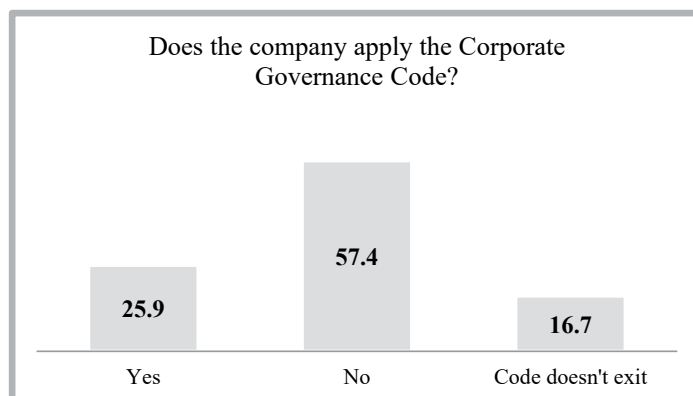


Figure 1. Implementation of the Corporate Governance Code (Author)

These data tell us about many different things, including the fact that one of the consequences of the instability of the financial markets and highlights the failure to adopt a widely-accepted Corporate Governance Code in many countries, after the outbreak of the global financial crisis in 2008, which is also the case with our country.

In order to improve management practices, companies are obliged to align their practices with the Code recommendations. As a prerequisite of model convergence of the corporate governance, we need a change in the legal framework of certain countries, with the aim of creating a universal legal context through the affirmation of the principles and good practice of the Corporate Governance Code. The OECD has created a framework of effective corporate governance to promote transparent and efficient markets, which will be in accordance with the rule of law and clearly divide responsibility between the supervisory and regulatory authorities. One of the documents aimed at promoting the implementation of corporate governance principles in companies is the Corporate Governance Code. Each company may, if it considers it necessary, adopt the Code. The company should thereafter incorporate a chapter about corporate governance in its annual report describing the relevant events related to corporate governance which occurred during the previous year.

To the question „*Are the views of interested parties (stakeholders) such as customers, suppliers, financial institutions, or the local community involved in the strategic framework of the enterprises?*”, the majority of the respondents replied that they are not - 68.52%, while 24, 07% gave a positive answer (Figure 2).

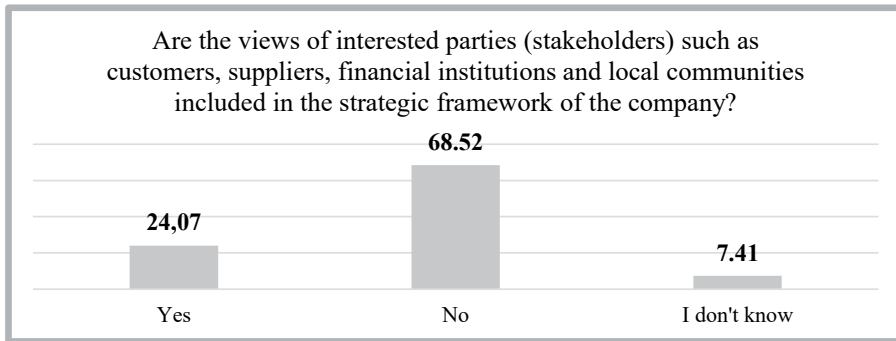


Figure 2. The involvement of stakeholders in the strategic framework of enterprises (Author)

On the question about *whether the interests of the owners / shareholders and directors / top management diverge* (depart from each other), the surveyed companies offered the following responses on a five point scale: strongly disagree - 32.1%, partially disagree - 3.6%, neutral (average effect) - 28.6%, partially agree - 14.3% strongly agree - 21.4% (Figure 3). The fact indicates that more than 60% of respondents were still confronted with the fact that the interests of the owner-director are not sufficiently aligned, which does not have a positive impact on company performance. As such, this tells us about strongly expressed agency concerns and probably about the insufficient of education or familiarity or perhaps the unreadiness on the part of the owner of the company to have a manager who will work in the interest of the company. Moreover, one of the problems that can potentially be characterized is that the owner / shareholder does not have the right remuneration policy for the directors / top management, which would at least partly assure owners that the managers were working for the benefit of the company, which in turn has an impact on the company performance.

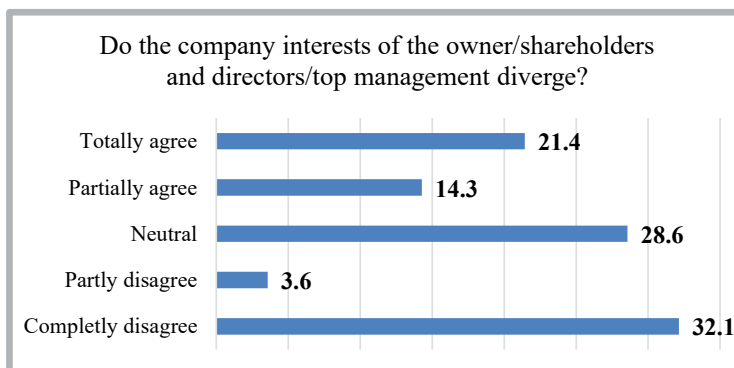


Figure 3. The degree of divergence of interests between owners/shareholders and directors/top management (Author)

To increase the motivation of managers and ensure the effective management of the company, managers are given compensation packages with minority ownership shared participation, as well as financial bonuses related to the long-term performance of the company. These arguments are supported by empirical research and they show that there is a positive correlation between business performance and the size of the equity stake held by the managers in the company.

A majority of the surveyed companies, 53.70% of them, stated the fact that their organization *has established financial management and control in order to enact the necessary improvements*

in the economy, efficiency and effectiveness of their work, while even 44,44% has established financial management and control for better economy, efficiency and effectiveness (Figure 4).

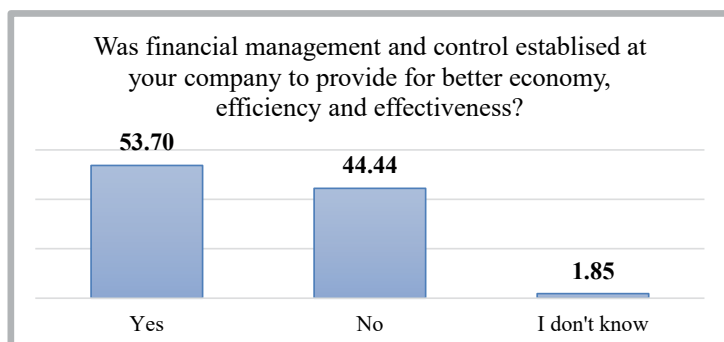


Figure 4. The level of restitution of financial management and control for better economy, efficiency and effectiveness (Author)

Financial management and control (FMC) is the most important area of internal control, as it affects all the activities of the organization. In financial management in the public sector, great attention is paid to the concept of financial control. All managers have a duty and obligation to engage in financial control in order to ensure the correct utilization of the resources.

The efficient management of public finances is important so as to create confidence and transparency, and, above all, for the purpose of providing value for money (Rule 3 E - economy, efficiency and effectiveness).

In relation to the *establishment of internal control and risk management*, the split was fairly even, with about 1/3 of companies (an exactly equal 34.5%) both saying that this existed and, by contrast, that there was no system of internal control and risk management. The remaining 1/3, or 30.9% of the firms said that in some partially form they did have a system of internal control and risk management (Figure 5).

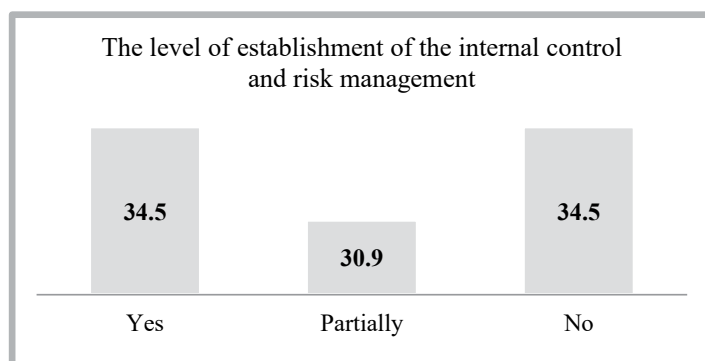


Figure 5. The level of the establishment of internal control and risk management (Author)

In order to improve internal controls, it is necessary to adopt a framework of financial management and control which incorporates all the financial issues affecting the realization of key company objectives. Contemporary corporate governance structures place significant emphasis on risk management. It provides greater confidence in corporate governance. The purpose of risk management is to reduce risk to an acceptable level.

In answer to the question „Have you adopted internal rules and procedures (a procedure book) on the most important issues in your company?” most respondents answered that they had (53.47%), while 45.54% of respondents answered that they did not have a book of procedures (Figure 6).

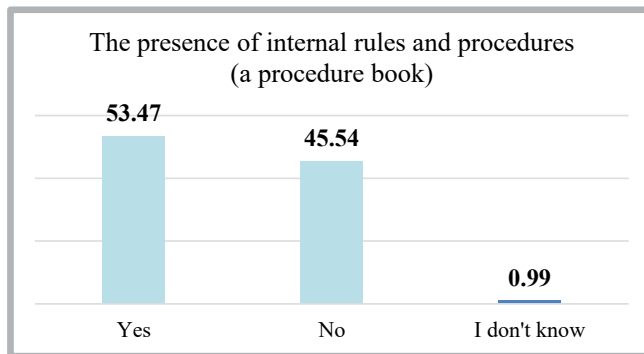


Figure 6. The level of internal rules and procedures (procedure book) (Author)

For the implementation of the system of financial management and control (FMC) in an enterprise, it is necessary to draw up a set of internal rules and procedures for the proper, economical, efficient and effective use of goods. Internal rules for financial management offer a set of rules and procedures, including a description of the working place-jobs that explain the operation of the financial management of the company.

The fact that only about half of the respondents had adopted internal rules and procedures (in the form of a procedure book) on the most important issues in the organization is extremely worrying and confirms the view of the inertia of management.

In order to improve the internal control system it is required that each institution adopt an FMC framework that integrates all financial matters affecting the efficiency in achieving the key objectives of the company. The goal is actually to formalize a framework for FMC which will be collected in the form of internal policies and procedures, that provide guidance on these issues to all the staff of the company.

In relation to questions about whether the majority of the minority shareholders regularly attends meetings of shareholders, the disconcerting fact was noted that a vast majority (83.6%) of the minority shareholders do not even attend the General Assembly of Shareholders (Figure 7).

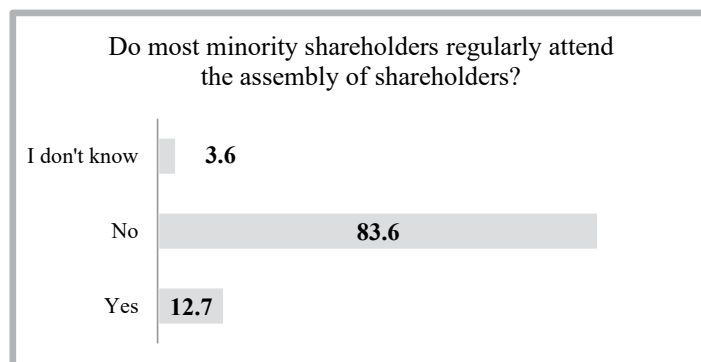


Figure 7. The presence of minority shareholders at Shareholders' Meeting (Author)

A value of up to 83.6% is not merely unsatisfactory, but disappointing. Companies generally do not have internal documents that further protect the rights of minority shareholders. As is the case in the region, the largest number of companies has no adopted acts or procedures that prohibit trading on the basis of privileged internal information. To a large extent, there is no law or mechanisms for disclosing information on transactions to company board members.

Montenegro has adopted the Anglo-Saxon model of corporate governance, which is based on the effective protection of minority shareholders, a developed capital market and the continued publication of information on the legal and financial position of the company, so that the holders of material interests can make appropriate decisions.

The corporate governance framework should ensure the equitable treatment of all shareholders, including minority and foreign shareholders. All shareholders should have the option of recourse to effective legal protection in cases of the violation of their rights, which is one of the six OECD Principles.

According to the Global Competitiveness Index of the World Economic Forum from 2019, which covers 141 economies, Montenegro ranks 73rd, which is a decrease of 2 places compared to 2018, and is as many as 24 places lower when compared to 2010.

This tells us that the external mechanisms of corporate governance must be more involved, such as the protection of minority shareholders (by the market management services). The protection of minority shareholders rights, generally defined by imperative legal norms, is one of the main goals of the company's regulations.

Practice so far has predominantly shown that the degree of development of the capital market depends on quality control and the application of appropriate laws that equalize the rights of shareholders.

This constant problem is solved by improving corporate governance in general, and by improving the rights of minority shareholders in particular.

Five-sixths or 83.93% of the companies from the survey *do not publish the remuneration policy for the Board of Directors and the CEO*. Only 12.50% of companies publicly announce the remuneration policy for the Board of Directors and the CEO (Figure 8).

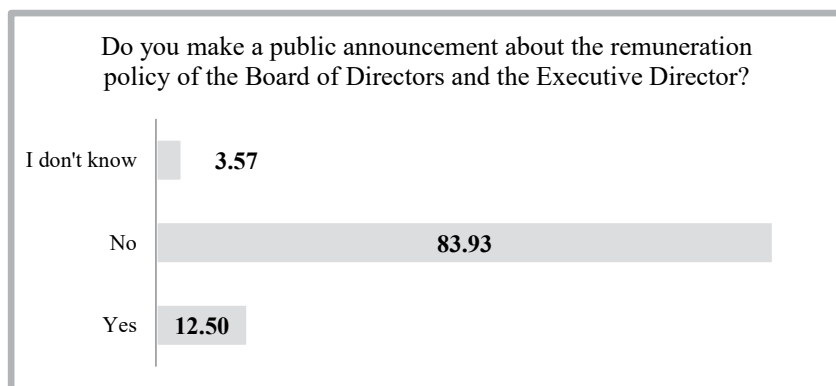


Figure 8. Public announcement on the remuneration policy of the Board of Directors and the Executive Director (Author)

So, about five-sixths of respondents believe that it is not necessary to publicly disclose the remuneration policy as related to the Board of Directors and the Executive Director, which again tells us that our Balkan mentality still has a poor perception towards entrepreneurship and entrepreneurial culture. This tells us that, unfortunately, in this particular area we have not

moved forward from the beginning of the transition period. Creating an entrepreneurial culture in society is one of the basic prerequisites for the development of any economy and society as a whole.

When it comes to *whether the shareholders and all stakeholders are equally informed about all relevant issues / problems*, again we note the disturbing fact that a vast majority (64.29%) are not informed. Only a third said that the shareholders and all stakeholders are equally informed about all relevant issues / problems (Figure 9).

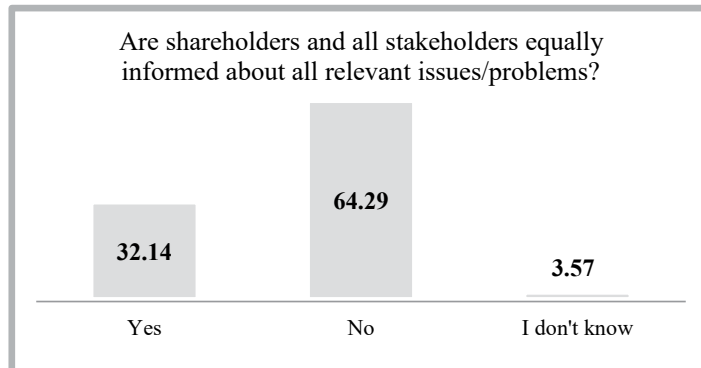


Figure 9. Are shareholders and all stakeholders equally informed about all relevant issues/problems?
(Author)

Joint stock companies should ensure access to reliable and current information to all shareholders and stakeholders in a regular and timely manner. Awareness can be raised through the web as the cheapest and easiest way, or by e-mail, which as a small but very important segment contributes significantly to increasing the competitiveness and business performance of the company.

According to the *Corporate Governance Code in Montenegro* from 2009, each company should have established efficient operational mechanisms for providing truthful, timely, comprehensive and equal information of all members of the Board of Directors on matters relevant to carrying out their functions (Article 16).

Unfortunately, a large number of the findings of empirical research on the issue, as well as the empirical research conducted for the purpose of this study, tell us that there is no general awareness, knowledge or determination of the role that corporate governance needs to have. Furthermore, it can be concluded that weak tendencies and approaches to change dominate.

CONCLUSION

The general picture of corporate governance in the examined companies is poor. The low level of corporate culture and poor practice of respect for laws and regulations are the main reasons for this poor state. The study has also demonstrated that among the companies there are shining positive examples. These companies are quite well advanced with the application of the good corporate governance practices.

Unfortunately, a large percentage of the findings of empirical research tells us that there is no general awareness, knowledge or determination of the role that corporate governance needs to have and its impact on company performance, both here and in the neighboring countries.

In the process of economic transition and globalization, small and medium-sized enterprises (SMEs) are one of the mainstays of the economy. For them, it is said that they are the backbone of the economy, but it might also be said that this spine suffers or that a vertebra is pinching. At the same time, it is also the sector that employs the largest number of people.

In achieving the high performance of the organization in accordance with the objectives, an adequate position is reflected in the quality management and effective corporate governance, especially in terms of managing change, in light of the new digital era. The principles of management and corporate governance processes should be completely different from those that are currently used.

Comparative practice has proved that extremely beneficial effects can be achieved by adopting the effective application of national corporate governance codes, which would be a kind of link between the legislation and the practices of companies. Each joint stock company should be able to tailor abstract legal solutions that are adapted to its specific needs.

The results of studies confirm that one of the most important problems is the inadequate use of knowledge and the insufficient activity of professional institutions, which are necessary for the effective management of change.

For the continuous improvement of operations, it is important to engage in an implementation process of improving knowledge in the function of improving the quality of business performance and achieving competitive ability.

The new economy, a new company and new technology are inextricably linked and all together form a synergistic whole.

Future organizations should have an established corporate culture, which has to be ready for the implementation of organizational change. Therefore, organizations must strive for a *proactive* approach which takes on high strategic importance.

The institutional framework, and the factors of capital market development (changes in the current system, especially the management, governance and evaluation of business operations), which is essentially capital market construction, is also associated with corporate governance.

It can be concluded that the digital era is the era in which the creation, distribution and management of information has become the most important economic and cultural activity.

As this work proceeded from the assumption that better corporate governance causes the better performances of the company, taking into account the findings of the empirical research, we conclude that there is *no significant relationship (correlation) between the different parameters of corporate governance and company performance*, especially in the light of globalization and change, and that corporate governance depends on the interests of owners and managers.

This expands the concept and opens up the entire research area in terms of understanding that corporate governance can be an important instrument for company survival even in changing conditions, and that the corporate governance is evolving.

Survival in modern business is not guaranteed for the most powerful company, but rather the one who can best adapt to change and monitor the trends in the digital economy. What is needed are the ideas, knowledge and skills that contribute to good corporate management. In that sense, ideas are the future.

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UTICAJ COVID-19 NA FINANSIJSKI POLOŽAJ MALIH I SREDNJIH PREDUZEĆA U REPUBLICI SRPSKOJ

Rezime: Cilj rada je analizirati efekte krize uzrokovane pojavom Covid-19 na finansijske pokazatelje malih i srednjih preduzeća (MSP) koja posluju u Republici Srpskoj. Hipoteza testirana u istraživanju je da je Covid-19 imao jače izražen negativan uticaj na ukupan prihod, dobit i zaposlenost malih i srednjih preduzeća u Republici Srpskoj u poređenju sa pokazateljima velikih preduzeća. Kako bismo testirali hipotezu, prikupili smo i analizirali empirijske podatke o tri odabrana finansijska pokazatelja (ukupan prihod, dobitak i broj zaposlenih) za više od 10.000 MSP u Republici Srpskoj u trogodišnjem periodu 2017-2019. godine i poredili podatke sa pokazateljima u 2020. godini, godini u kojoj su preduzeća pogođena krizom Covid-19. Takođe, poredili smo finansijske pokazatelje malih i srednjih preduzeća sa pokazateljima velikih preduzeća u istom periodu (2017-2020. godine).

Rezultati empirijskog istraživanja potvrdili su postavljene hipoteze da je kriza uzrokovana pojavom Covid-19 imala jače izražen negativan uticaj na finansijske pokazatelje MSP u odnosu na velika preduzeća. U 2020. godini, godini u kojoj su se preduzeća suočila sa krizom, došlo je do procentualno većeg pada ukupnog prihoda MSP u odnosu na pad ukupnog prihoda velikih preduzeća. Takođe, rezultati istraživanja pokazuju da su dobit i broj zaposlenih kod MSP zabilježili pad u 2020. u odnosu na 2019. godinu, dok su u istom periodu velika preduzeća zabilježila rast i dobiti i broja zaposlenih.

Ovo istraživanje je potvrdilo ranjivost malih i srednjih preduzeća u kriznim vremenima u odnosu na velika preduzeća, te ukazalo na potrebu države da obrati posebnu pažnju na preduzeća ove veličine.

Ključne riječi: mala i srednja preduzeća, finansijski pokazatelji, Republika Srpska, Covid-19

JEL klasifikacija: E24, O1, L25

UVOD

Kriza uzrokovana Covid-19, koja se pojavila početkom 2020. godine, ozbiljno je uticala ne samo na zdravlje ljudi, već i na društva i privrede širom svijeta. Preduzeća su se suočila sa različitim problemima poput smanjenja tražnje, otkazivanja narudžbi za izvoz, poremećaja u lancu snabdijevanja, nestašice sirovina, problema sa transportom i sl. Vlade zemalja širom svijeta sprovodile su razne mjere za sprečavanje širenja bolesti, kao što su zabrane ili ograničenja obavljanja određenih poslova, zabrane ili ograničavanja kretanja stanovništva i putovanja, karantin i tzv. „zaključavanja”. Sve ovo je dovelo do smanjenja privredne aktivnosti u toku 2020. godine. Kroz rad će se analizirati efekti krize uzrokovane pojavom Covid-19 na finansijske pokazatelje malih i srednjih preduzeća (MSP) u Republici Srpskoj. MSP predstavljaju važan dio mnogih

privreda. Prema Godišnjem izvještaju o evropskim MSP 2018/2019, u Evropskoj uniji MSP učestvuju sa 56.4% u dodatoj vrijednosti i sa 66.7% u ukupnoj zaposlenosti.

Prema godišnjem izvještaju za oblast MSP u Republici Srpskoj za 2018. godinu, MSP i preduzetnici činili su 99,8% svih poslovnih subjekata u Republici Srpskoj, učestvovali su sa 73% u ukupnom prihodu, 75% u neto dobiti, 71% u izvozu i 71% u zaposlenosti Republike Srpske.

Pretpostavka od koje se pošlo u istraživanju je da je kriza izazvana pojavom virusa Covid-19 imala jače izražen negativan uticaj na finansijske pokazatelje MSP u Republici Srpskoj u odnosu na velika preduzeća.

Različite studije pokazuju da MSP najčešće imaju ograničen pristup finansijskim izvorima i zavise od kreditiranja banaka, plaćajući više kamate u odnosu na velika preduzeća (Beck i drugi 2008; Bourletidis i Triantafyllopoulos 2014). Nedavno istraživanje koje je provela Harvard Business School, takođe, pokazuje da su zbog izbijanja korona virusa mnoga mala preduzeća postala finansijski krhka (Bartik i drugi 2020). Takođe, ograničene tehnološke i upravljačke sposobnosti MSP mogu ograničiti njihovu spremnost za duge krize (Caballero-Morales 2021).

Cilj rada je istražiti uticaj krize uzrokovane pojavom Covid-19 na odabrane pokazatelje uspjehnosti poslovanja: ukupan prihod, dobit i zaposlenost u MSP u Republici Srpskoj.

Rad je strukturisan na sljedeći način. Nakon uvoda, u prvom dijelu istražujemo uticaj Covid-19 na globalnu ekonomiju, a u drugom dijelu efekte Covid-19 na makroekonomske pokazatelje privrede Republike Srpske. U trećem dijelu su predstavljeni uzorak i metodologija istraživanja, kao i uticaj Covid-19 na finansijske pokazatelje (ukupan prihod, dobit i zaposlenost) malih i srednjih preduzeća koja posluju u Republici Srpskoj. Na kraju rada predstavljeni su glavni zaključci istraživanja.

1. UTICAJ COVID-19 NA PRIVREDU U SVIJETU

Kriza izazvana pojavom Covid-19 ostavila je ozbiljne posljedice na globalnu privredu. Tako je npr. do 23. aprila 2020. godine samo u Sjedinjenim Američkim Državama izgubljeno 26,5 miliona radnih mjesta, smanjena je proizvodnja, smanjena domaća potražnja za neprehrambenom robom, smanjena inostrana potražnja za američkom robom i poremećeni lanci snabdijevanja (Eggers 2020). U Kini, kao „fabriki svijeta”, je takođe došlo do poremećaja u lancima snabdijevanja (Tang i drugi 2021).

Najranjivije zemlje su zemlje sa slabom zdravstvenom infrastrukturom, one koje su u velikoj mjeri zavisne o trgovini i turizmu, jako zadužene i koje zavise od nestabilnih tokova kapitala.

Prema nedavnom izvještaju Međunarodnog monetarnog fonda (MMF 2021), pojava Covid-19 ostavila je ozbiljne posljedice na globalni rast BDP-a, koji je procijenjen na -3,3% u 2020. godini. Američki BDP je procijenjen na -3,5% u 2020. godini, BDP Eurozone na -6,6%, Velike Britanije na -9,9%, a BDP zemalja u razvoju na -2,2%. Među najviše pogođenim zemljama su: Španija, sa realnim rastom BDP-a od -11% u 2020. godini, Velika Britanija sa -9,9%, Italija sa -8,9%, Francuska i Meksiko sa -8,2% i Indija sa realnim rastom BDP-a od -8%. U Njemačkoj je pad BDP-a (4,9%) bio manji od prosjeka euro-zone od -6,6%, dok su nordijske privrede (Danska, Island, Norveška i Švedska) imale najbolje performanse od razvijenih evropskih ekonomija, sa padom BDP-a od 2,4%. Prosječni BDP Rusije u 2020. godini procijenjen je na -3,1%, zemalja jugoistočne Evrope koje su članice EU (Bugarska, Hrvatska, Rumunija) na -4,5%, zemalja jugoistočne Evrope koje nisu članice EU (Albanija, BiH, Srbija, Crna Gora, Sjeverna Makedonija) na -3,5%. Kina je postigla najbolji rezultat u 2020. godini sa realnom stopom rasta BDP-a od +2,3%, kao i Turska sa +1,8% (Ibid).

Tabela 1. Projekcije kretanja BDP-a (u %) (International Monetary Fund 2021)

	2020.	Godina	
		Predviđanja	
		2021.	2022.
Svijet	-3,3	6,0	4,4
Razvijene privrede	-4,7	5,1	3,6
SAD	-3,5	6,4	3,5
Euro zona	-6,6	4,4	3,8
Njemačka	-4,9	3,6	3,4
Francuska	-8,2	5,8	4,2
Italija	-8,9	4,2	3,6
Španija	-11,0	6,4	4,7
Japan	-4,8	3,3	2,5
Velika Britanija	-9,9	5,3	5,1
Kanada	-5,4	5,0	4,7
Ostale razvijene privrede	-2,1	4,4	3,4
Tržište u nastajanju i privrede u razvoju	-2,2	6,7	5,0
Azija	-1,0	8,6	6,0
Kina	2,3	8,4	5,6
Indija	-8,0	12,5	6,9
ASEAN-5	-3,4	4,9	6,1
Evropa	-2,0	4,4	3,9
Rusija	-3,1	3,8	3,8
Latinska Amerika i Karibi	-7,0	4,6	3,1
Brazil	-4,1	3,7	2,6
Meksiko	-8,2	5,0	3,0
Bliski istok i Centralna Azija	-2,9	3,7	3,8
Saudijska Arabija	-4,1	2,9	4,0
Sub-saharska Afrika	-1,9	3,4	4,0
Nigerija	-1,8	2,5	2,3
Južna Afrika	-7,0	3,1	2,0
Tržišta u nastajanju i ekonomije sa srednjim dohotkom	-2,4	6,9	5,0
Zemlje u razvoju sa niskim primanjima	0,0	4,3	5,2

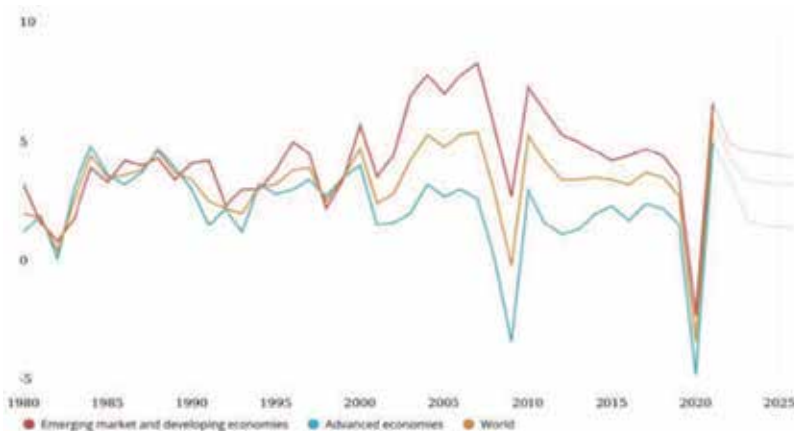
Vlade većine zemalja uočile su da će doći do poteškoća u poslovnom sektoru usljed krize izazvane pojavom Covid-19 te su preduzele različite mjere. Odlaganje plaćanja ili reprogram duga je mjera finansijskog restrukturisanja koja je u slučaju Covid-19 najadekvatnija u cilju prevazilaženja problema i sprečavanja produbljivanja krize (Duvnjak 2020). Takođe, Centralne banke pružile su značajnu podršku u segmentu likvidnosti.

Prema prognozama MMF-a, u 2021. godini se očekuje oporavak i rast globalne privrede po stopi od +6%, a u 2022. godini po stopi od +4,4%. To je značajno poboljšanje u odnosu na procijenjeni BDP na svjetskom nivou u 2020. godini od -3,3%.

Prognoze su da će BDP u razvijenim zemljama u 2021. godini rasti po prosječnoj stopi od +5,1%, u 2022. godini po stopi od +3,6%, u 2023. godini po stopi od +1,8%, u 2024. godini po stopi od

+1,6% te u 2025. i 2026. godini po stopi od +1,5%. Sa druge strane, prognoze su optimističnije za zemlje u razvoju, za koje je prognozirano da će rast prosječnog BDP-a u 2021. godini iznositi +6,7%, +5% u 2022. godini, +4,7% u 2023. godini, +4,6% u 2024, +4,5% u 2025. godini i +4,4% u 2026. godini.

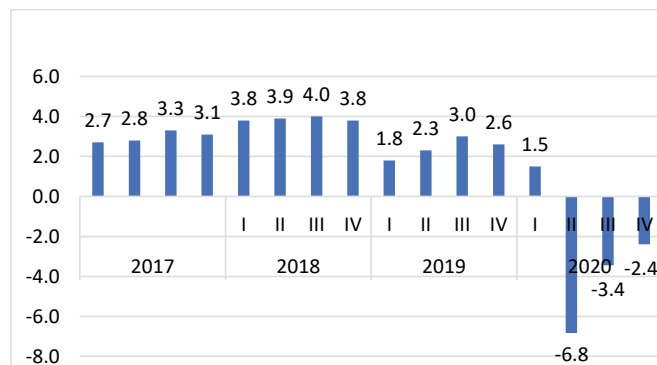
Prognoze BDP-a za svijet, razvijene privrede i privrede u razvoju su prikazane su na grafikonu 1.



Grafikon 1. Realni rast BDP-a (International Monetary Fund 2021)

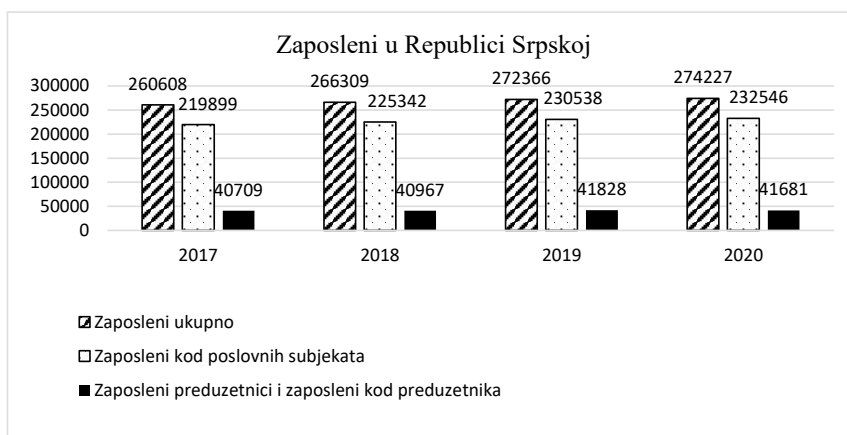
2. UTICAJ COVID-19 NA PRIVREDU REPUBLIKE SRPSKE

Pojava virusa Covid-19 imala je značajan uticaj i na privredu Republike Srpske u 2020. godini. Prema Republičkom zavodu za statistiku Republike Srpske, realne stope rasta BDP-a Republike Srpske bile su: +1,5% u prvom tromjesečju, -6,8% u drugom tromjesečju, -3,4% u trećem i -2,4% u četvrtom tromjesečju 2020. godine (Republički zavod za statistiku, 2021). Iako zvanični podaci još nisu objavljeni, realna stopa rasta BDP-a u Republici Srpskoj za 2020. godinu će biti oko -2,8, na osnovu tromjesečnih stopa realnog rasta BDP-a u 2020. godini.



Grafikon 2: Tromjesečni BDP u Republici Srpskoj, realna stopa rasta (Autori, na osnovu podataka Republičkog zavoda za statistiku Saopštenje br. 96/21 i 85/18)

Ono što je važno je da uporedo sa padom BDP-a u toku 2020. godine nije došlo i do pada u broju zaposlenih. Na kraju 2020. godine u Republici Srpskoj bilo je 274.227 zaposlenih, što je povećanje od 0,68% u odnosu na prethodnu godinu. Broj zaposlenih kod poslovnih subjekata je na kraju 2020. godine iznosio 232.546, što je povećanje od 0,87%, dok je broj zaposlenih kod preduzetnika iznosio 41.681, što je neznatno smanjenje od 0,35% (Republički zavod za statistiku Republike Srpske, 2021).



Grafikon 3. Zaposlenost u Republici Srpskoj (Autori, na osnovu podataka Republičkog zavoda za statistiku)

Do pada u broju zaposlenih nije došlo usljed aktivnih mjera Vlade Republike Srpske usmjerenih na podršku privrednim subjektima kojima je bio zabranjen rad, koji su imali potpuni ili djelimični prestanak rada ili su radili sa smanjenim obimom poslovanja. Tako je za mjesec mart 2020. godine Vlada Republike Srpske uplatila doprinose i poreze za plate radnika za 11.898 privrednih subjekata kojima je bio zabranjen rad, za mjesec april 2020. godine najnižu platu sa doprinosima za 41.377 radnika, dok su za mjesec maj 2020. godine bile uplaćene plate, porezi i doprinosi za radnike privrednih subjekata kojima je u maju bio zabranjen rad. Takođe, donesena je odluka o odgodi plaćanja poreskih obaveza, odluka o tromjesečnom moratorijumu na otplatu glavnice i kamate za kredite Investiciono-razvojne banke Republike Srpske (IRBRS), zaključak o neobračunavanju zateznih kamata „Elektroprivrede Republike Srpske“. Smanjena je kamatna stopa IRBRS za kredite privredi te su smanjena neporeska davanja privrednih subjekata. Putem Garantnog programa podrške privredi za ublažavanje posljedica pandemije olakšan je pristup finansijskim sredstvima za privredne subjekte – mikro, mala i srednja preduzeća, izdavanjem garancija za obezbjeđenje kreditnih zaduženja.

Sve ove mjere uticale su na zadržavanje broja zaposlenih u privredi u Republici Srpskoj na nivou koji je bio prije pojave Covid-19.

3. UTICAJ COVID-19 NA FINANSIJSKE POKAZATELJE MALIH I SREDNJIH PRDUZEĆA U REPUBLICI SRPSKOJ

3.1. Uzorak i metodologija

Cilj ove studije je ispitati uticaj Covid-19 na odabrane pokazatelje uspješnosti MSP koja posluju u Republici Srpskoj: ukupni prihod, dobit prije oporezivanja i broj zaposlenih.

Postavili smo sljedeće hipoteze koje ćemo testirati u istraživanju:

H1. Covid-19 je imao snažnije izražen negativan uticaj na *ukupan prihod* MSP-a u Republici Srpskoj u poređenju sa pokazateljima velikih preduzeća.

H2. Covid-19 je imao snažnije izražen negativni uticaj na *dobitak prije oporezivanja* MSP-a u Republici Srpskoj u poređenju sa pokazateljima velikih preduzeća.

H3. Covid-19 je imao snažnije izražen negativni uticaj na *broj zaposlenih* u MSP-a u Republici Srpskoj u poređenju sa pokazateljima velikih preduzeća.

Kako bismo testirali hipoteze prikupićeemo i analizirati empirijske podatke o tri odabrana pokazatelja uspješnosti MSP u trogodišnjem razdoblju 2017-2019. godine i uporediti podatke s 2020. godinom, u kojoj su preduzeća bila pogođena krizom i mjerama Covid-19. Takođe ćemo uporediti pokazatelje malih i srednjih preduzeća sa pokazateljima velikih preduzeća u istom periodu (2017-2020. godine).

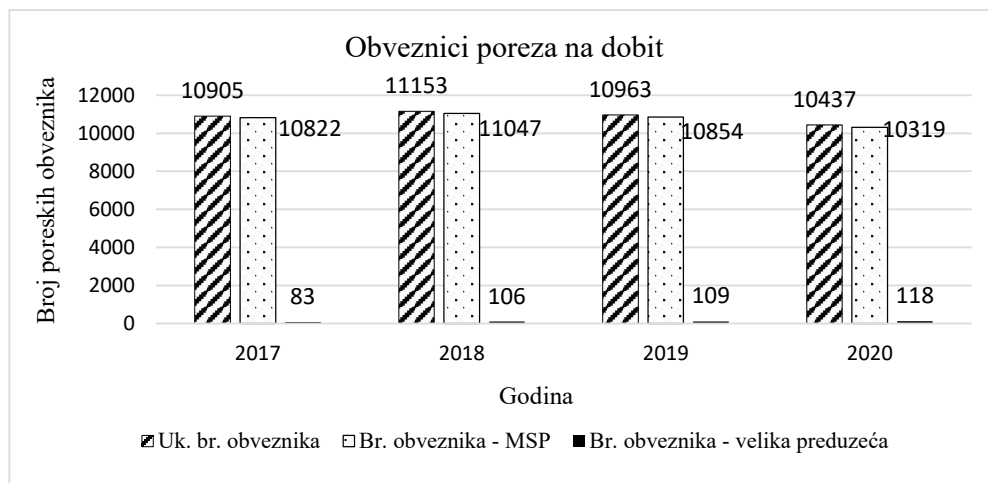
Prema Zakonu o izmjeni zakona o razvoju malih i srednjih preduzeća (Sl. gl. Republike Srpske broj 84/19), mala i srednja preduzeća u Republici Srpskoj su ona preduzeća koja zapošljavaju manje od 250 radnika i čiji je ukupan godišnji prihod manji od 97,79 miliona KM ili čija je ukupna vrijednost poslovne imovine na kraju poslovne godine manja od 84,099 miliona KM.

Uzorak predstavljaju sva mala i srednja preduzeća, pravna lica, koja zapošljavaju manje od 250 zaposlenih, čiji je ukupni godišnji prihod manji od 97.790.000 KM i koja su podnijela prijavu poreza na dobit u Republici Srpskoj (preduzetnici-fizička lica nisu uključena u uzorak).

Uzorak MSP-a ćemo porediti sa velikim preduzećima, pravnim licima, koja zapošljavaju više od 250 radnika, čiji je ukupan godišnji prihod veći od 97.790.000 KM i koja su podnijela prijavu poreza na dobit. Izvor podataka je Poreska uprava Republike Srpske.

U Republici Srpskoj u 2020. godini od ukupno 10.437 obveznika (pravnih lica) koji su podnijeli prijavu za porez na dobit, 10.319 ili 98,9% su mala i srednja preduzeća, a 118 ili 1,1% su velika preduzeća.

Na grafikonu broj 4 prikazan je uzorak tj. obveznici poreza na dobit u periodu 2017-2020. godine.



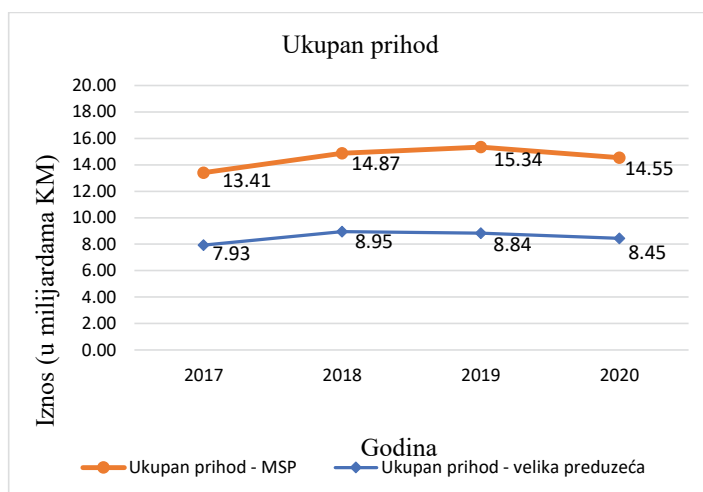
Grafikon 4. Uzorak - obveznici poreza na dobit u periodu 2017-2020. godine (Autori, na osnovu podataka Poreske uprave Republike Srpske)

Grafikon 4 pokazuje da je ukupan broj obveznika poreza na dobit u 2020. godini najmanji u odnosu na prethodni trogodišnji period 2017-2019. godine. Tako je npr. ukupan broj poreskih obveznika u 2020. godini manji za 526 obveznika ili za 4,8% u odnosu na 2019. godinu, s tim da je broj obveznika - malih i srednjih preduzeća manji za 535 obveznika ili za 4,9%, a broj obveznika – velikih preduzeća veći za 9 obveznika ili za 8,3% u odnosu na 2019. godinu.

U sljedećim odjeljcima predstavljeni su rezultati istraživanja - uticaj Covid-19 na ukupan prihod, profitabilnost i zaposlenost MSP iz Republike Srpske u poređenju sa učinkom velikih preduzeća.

3.2. Uticaj COVID-19 na ukupan prihod

Grafikon 5 prikazuje kretanja ukupnog prihoda malih i srednjih preduzeća u odnosu na velika preduzeća u Republici Srpskoj, u periodu 2017-2020. godine.

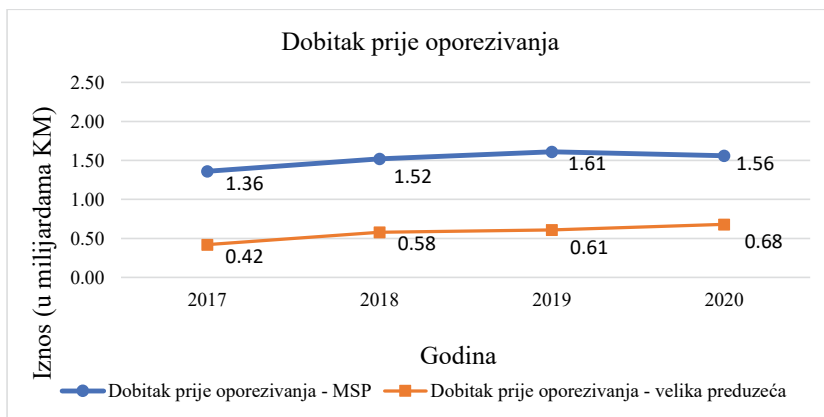


Grafikon 5. Kretanje ukupnog prihoda u periodu 2017-2020. godine (Autori, na osnovu podataka Poreske uprave Republike Srpske)

Grafikon 5 pokazuje da je ukupan prihod kod malih i srednjih preduzeća rastao u periodu 2017-2019. godine po prosječnoj stopi od 7% godišnje. Takođe, u istom periodu, ukupan prihod je rastao i kod velikih preduzeća u Republici Srpskoj, po prosječnoj stopi od 5,8% godišnje. U 2020. godini, godini u kojoj su se preduzeća suočila sa Covid-19 krizom, uočavamo pad ukupnog prihoda u odnosu na 2019. godinu i kod MSP i kod velikih preduzeća, s tim da je *pad* kod MSP bio izraženiji (-5,2%) u odnosu na *pad* ukupnog prihoda kod velikih preduzeća (-4,4%).

3.3. Uticaj COVID-19 na profitabilnost

Grafikon 6 prikazuje kretanje dobiti prije oporezivanja malih i srednjih preduzeća u odnosu na velika preduzeća u Republici Srpskoj, u periodu 2017-2020. godine.

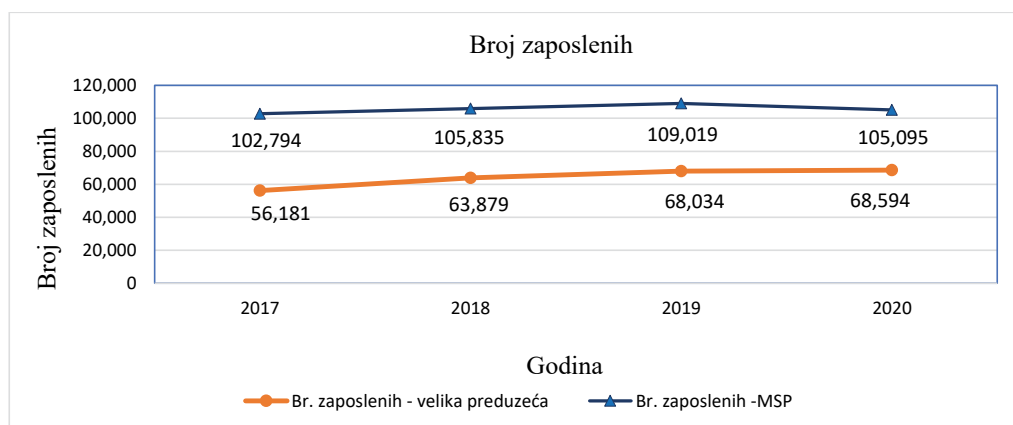


Grafikon 6. Kretanje dobitka prije oporezivanja u periodu 2017-2020. godine (Autori, na osnovu podataka Poreske uprave Republike Srpske)

Grafikon 6 pokazuje da je dobitak prije oporezivanja kod malih i srednjih preduzeća rastao u periodu 2017-2019. godine, po prosječnoj stopi od 8,7% godišnje. Takođe, u istom periodu, dobitak prije oporezivanja je rastao i kod velikih preduzeća u Republici Srpskoj, po prosječnoj stopi od 21,2% godišnje. U 2020. godini, godini u kojoj su se preduzeća suočila sa Covid-19 krizom, kod MSP uočavamo *pad* dobitka prije oporezivanja u odnosu na 2019. godinu za 3,1%, dok je kod velikih preduzeća zabilježen *rast* od 12,5%.

3.4. Uticaj COVID-19 na zaposlenost

Grafikon 7 prikazuje kretanja u broju zaposlenih u malim i srednjim preduzećima u odnosu na velika preduzeća u Republici Srpskoj, u periodu 2017-2020. godine.



Grafikon 7. Kretanje u broju zaposlenih u periodu 2017-2020. godine (Autori, na osnovu podataka Poreske uprave Republike Srpske)

Grafikon 7 pokazuje da broj zaposlenih kod malih i srednjih preduzeća bilježi rast u periodu 2017-2019. godine po prosječnoj stopi od 3% godišnje, a kod velikih preduzeća po prosječnoj stopi od 10% godišnje. U 2020. godini, godini u kojoj su se preduzeća suočila sa Covid-19 krizom, kod MSP je došlo do *pada* broja zaposlenih u odnosu na 2019. godinu za 3,6%, dok je kod velikih preduzeća zabilježen *rast* broja zaposlenih od 0,82%.

ZAKLJUČAK

Istraživanje je potvrdilo postavljenu hipotezu da je kriza izazvana Covid-19 imala snažnije izražen negativan uticaj na finansijske pokazatelje (ukupan prihod, profitabilnost i zaposlenost) malih i srednjih preduzeća koja posluju u Republici Srpskoj, u odnosu na velika preduzeća. U 2020. godini, godini u kojoj su se preduzeća suočila s krizom Covid-19, došlo je do većeg smanjenja ukupnog prihoda malih i srednjih preduzeća (-5,2%) u odnosu na pad ukupnog prihoda velikih preduzeća (-4,4%). Dok su dobit i zaposlenost malih i srednjih preduzeća smanjeni u 2020. godini (za 3,1% i 3,6% respektivno) u odnosu na 2019. godinu, velika preduzeća u Republici Srpskoj zabilježila su rast i dobiti (za 12,5%) i zaposlenosti (za 0,82%).

Ovo istraživanje je potvrdilo ranjivost malih i srednjih preduzeća u kriznim vremenima te ukazalo na potrebu države da obrati posebnu pažnju na preduzeća ove veličine.

DODATAK

- Republički zavoda za statistiku za period 2017-2020. godina (evidencija o zaposlenosti).
- Poreske uprave Republike Srpske (evidencija o zaposlenosti).

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IMPACT OF COVID-19 ON THE FINANCIAL PERFORMANCE OF SMALL AND MEDIUM-SIZED ENTERPRISES OPERATING IN REPUBLIC OF SRPSKA

Summary: *The aim of this study is to analyze the effects of coronavirus disease (COVID-19) on the financial performance of small and medium-sized enterprises (SMEs) operating in Republika Srpska. The hypothesis tested in the research is that COVID-19 had a stronger negative impact on the sales, profit and employment of the SMEs in Republika Srpska compared to performance of large enterprises. In order to test the hypothesis we will gather and analyze empirical data on three selected performance indicators (sales, profit and employment) of more than 10,000 SMEs in Republika Srpska in the three year period 2017-2019 and compare the data with performance in year 2020, in which the enterprises were affected by COVID-19 crises. Also the SMEs data will be compared with performance indicators of large enterprises in the same period 2017-2020. Our empirical results confirmed set hypotheses that COVID-19 crises had a stronger negative impact on the financial performance of SMEs compared to large enterprises. In year 2020, in which companies faced the COVID-19 crisis, there was stronger decrease of SMEs' sales compared to total sales decrease of large companies. Also, while SMEs' profit and employment decreased in 2020 compared to 2019, large companies recorded an increase of profit and employment. This research confirmed the vulnerability of small and medium sized companies in times of crises compared to large one, and the need for governments to pay special attention to these enterprises.*

Key words: *small and medium sized enterprises, financial performance indicators, Republika Srpska, COVID-19*

JEL classification: *E24, O1, L25*

INTRODUCTION

The COVID-19 crisis, which started at the beginning of 2020, severely affected not only the health of the people but also affected societies and economies throughout the world. The enterprises faced a variety of problems such as a decrease in demand, cancelation of export orders, supply chain disruptions, raw material shortage and transportation problems. Government authorities of countries throughout the world announced measures to prevent the spread of disease in the form of lockdowns, quarantine, travel restriction and the ban on certain businesses. This all has led to a reduction in economic activity. This study is aimed at analyzing the effects of COVID-19 crisis on the financial performance of small and medium-sized enterprises operating in Republika Srpska.

SME's represent an important part of many economies. According to the Annual report on European SMEs 2018/2019, SMEs participate with 56.4% in value added and with 66.7% in total employment in the European Union.

According to the Annual report on SMEs in Republika Srpska for 2018, SMEs and entrepreneurs accounted for 99,8% of all business entities in the Republic of Srpska, participated with 73% in total sales, 75% in net profit, 71% in export, and with 71% in employment.

The hypothesis set in this research is that the crisis caused by the outbreak of COVID-19 virus had a more negative impact on the financial indicators of SMEs in Republika Srpska than on large companies.

Different studies show that SMEs, in comparison to large enterprises, usually have limited access to financial resources and they are dependent on banks' lending, paying higher interest rates (Beck et al. 2008; Bourletidis and Triantafyllopoulos 2014). A recent study conducted by Harvard Business School also reported that due to the current outbreak of corona virus, many small businesses are financially fragile (Bartik et al. 2020). Also, SME's limited technological and managerial capabilities may reduce their preparedness for long crises (Caballero-Morales 2021).

The objective of the paper is to explore the impact of COVID-19 on selected business performance indicators: sales, profit and employment of SMEs in Republika Srpska.

The paper is structured as follows. After the introductory section, Section 1 explores the influence of COVID-19 on the global economy while Section 2 explores the effects of COVID-19 on the macroeconomic indicators of Republika Srpska economy. The sample and the methodology of the research are presented in Section 3. This section also explores the impact of COVID-19 on the financial performance (total sales, profitability and employment) of small and medium-sized enterprises operating in Republika Srpska. At the end the main conclusions of the research are presented.

1. IMPACT OF COVID-19 ON THE GLOBAL ECONOMY

The COVID-19 crisis has had a severe effects on the global economy. As of 23 April 2020, 26.5 million jobs were lost in the US alone along with contraction in manufacturing, reduction of domestic demand for non-food goods, reduction of foreign demand for US goods exports, supply-chain disruptions and plant closures (Eggers 2020). Also, in China, considered as a "factory of the world", there have also been disruptions in supply chains (Tang et al. 2021).

The most vulnerable countries are those with weak health infrastructure, heavily dependent on trade and tourism, heavily indebted, and dependent on unstable capital flows. According to a recent report of the International Monetary Fund (IMF 2021) the COVID-19 outbreak had important consequences for global GDP growth that was estimated to -3,3 percent in 2020. US GDP was estimated to -3,5 percent in 2020, Euro Area GDP to -6,6 percent, United Kingdom GDP -9,9 percent and the emerging markets and developing economies GDP to -2,2 percent. Among the most hit countries are: Spain, with real GDP growth of -11 percent in 2020, United Kingdom with -9,9 percent, Italy with -8,9 percent, France and Mexico with -8,2 percent and India with real GDP growth of -8 percent. In Germany real GDP decline (4,9 percent) was lesser than the Euro Area average of -6,6 percent, while Nordic economies (Denmark, Island, Norway and Sweden) had the best performance of advanced European economies with GDP decline of 2,4 percent. Russian average GDP in 2020 was estimated to -3,1 percent, Southeastern European EU member states (Bulgaria, Croatia, Romania) to - 4,5 percent, Southeastern European Non-EU member states (Albania, BiH, Serbia, Montenegro, North Macedonia) to -3,5 percent. China achieved the best result in 2020, with real GDP growth rate of +2,3 percent as well as Turkey with +1,8 percent (Ibid).

Table 1. Overview of the IMF World Economic Outlook Projections
(Percent change) (International Monetary Fund 2021)

	Year over Year		
	2020	Projections	
		2021	2022
World Output	-3,3	6,0	4,4
Advanced Economies	-4,7	5,1	3,6
United States	-3,5	6,4	3,5
Euro Area	-6,6	4,4	3,8
Germany	-4,9	3,6	3,4
France	-8,2	5,8	4,2
Italy	-8,9	4,2	3,6
	—		
Spain	11,0	6,4	4,7
Japan	-4,8	3,3	2,5
United Kingdom	-9,9	5,3	5,1
Canada	-5,4	5,0	4,7
Other Advanced Economies	-2,1	4,4	3,4
Emerging Market and Developing Economies	-2,2	6,7	5,0
Emerging and Developing Asia	-1,0	8,6	6,0
China	2,3	8,4	5,6
India	-8,0	12,5	6,9
ASEAN-5	-3,4	4,9	6,1
Emerging and Developing Europe	-2,0	4,4	3,9
Russia	-3,1	3,8	3,8
Latin America and the Caribbean	-7,0	4,6	3,1
Brazil	-4,1	3,7	2,6
Mexico	-8,2	5,0	3,0
Middle East and Central Asia	-2,9	3,7	3,8
Saudi Arabia	-4,1	2,9	4,0
Sub-Saharan Africa	-1,9	3,4	4,0
Nigeria	-1,8	2,5	2,3
South Africa	-7,0	3,1	2,0
<i>Memorandum</i>			
Emerging Market and Middle-Income Economies	-2,4	6,9	5,0
Low-Income Developing Countries	0,0	4,3	5,2

Governments of most countries recognized that there would be strains in the business sector caused by COVID-19 crises and they undertook various measures.

One of the financial restructuring measures that are most adequate in the case of COVID-19 crises in order to overcome the problems and prevent the deepening of crisis is deferred payments or debt rescheduling (Duvnjak 2020). Central banks have provided unprecedented liquidity support.

According to IMF (2021) the global economy is projected to grow at 6 percent in 2021, moderating to 4.4 percent in 2022. That is an important improvement from an estimated contraction of -3.3 percent in 2020. Projection for the global economy in 2023 is +3,5 percent, in year 2024 +3,4 percent and in year 2025 and 2026 + 3,3 percent.

Projection for developed countries in 2021 is GDP growth at + 5.1 percent, moderating to +3.6 percent in 2022, +1.8 percent in 2023, +1.6 percent in 2024 and +1.5 percent in 2025 and 2026. On the other hand, projection for emerging markets and developing economies are more optimistic forecasting GDP growth in 2021 to + 6.7%, moderating to + 5% in 2022, + 4.7% in 2023, + 4.6% in 2024, + 4.5% in 2025 and + 4.4% in 2026.

These GDP projections (annual percent change) for the world, advanced economies and emerging markets and developing economies are shown in the Figure 1.

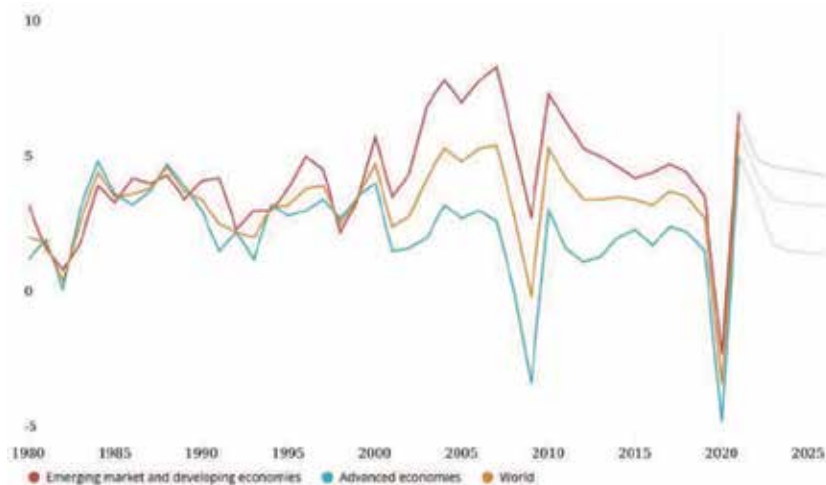


Figure 1. Real GDP growth (International Monetary Fund 2021)

2. IMPACT OF COVID-19 ON THE ECONOMY OF REPUBLIKA SRPSKA

The outbreak of Corona-19 virus has had a severe impact on the economy of Republika Srpska in 2020. According to the Republika Srpska Institute of Statistics, real GDP growth rates of Republika Srpska were -6,8% in the second quarter of 2020, -3,4% in the third quarter and -2,4% in the fourth quarter of year 2020 (Republika Srpska Institute of Statistics 2021). Although the official data has not yet been published, the real GDP growth rate in Republika Srpska for 2020 will be around -2,8 percent based on quarterly real GDP growth rates in 2020.

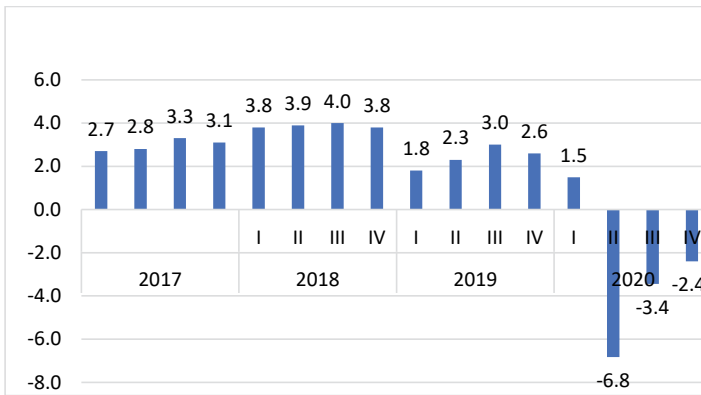


Figure 2: Quarterly GDP in Republika Srpska, Real Growth Rates (Authors, based on the Republika Srpska Institute of Statistics data Quarterly release number 96/21 and 85/18)

What is important is that compared to GDP decline in 2020, there was no decline in the employment. At the end of 2020, there were 274,227 employees in Republika Srpska, which is an increase of 0.68% compared to 2019. The number of employees in business legal entities at the end of 2020 amounted to 232,546, which is an increase of 0.87%, while the number of employees in entrepreneurs amounted to 41,681, which is a slight decrease of 0.35% (Republika Srpska Institute of Statistics, 2021).

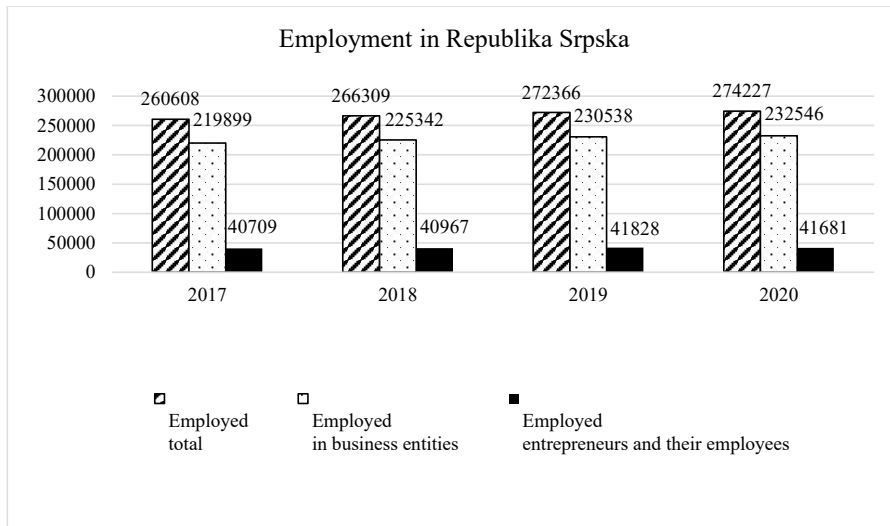


Figure 3. Employment in Republika Srpska (Authors, based on Republika Srpska Institute of Statistics data)

There was no decline in the employment in Republika Srpska due to active measures of Republika Srpska Government aimed at supporting entrepreneurs and enterprises that were banned from

working, which had a complete or partial cessation of work, or worked with a reduced volume of business due to crises and measures related to COVID-19. Thus, for March 2020, the Government of Republika Srpska paid contributions and taxes for salaries for 11,898 business entities that were banned from work, for April 2020 paid the lowest salary with contributions for 41,377 workers, while for May 2020 it paid salaries, taxes and contributions for workers of economic entities who were banned from working during May. Other measures of Republika Srpska Government include: moratorium on payment of tax obligations, reduction of non-tax payments of business entities, a three-month moratorium on the principal and interest repayment of the Investment and Development Bank of Republika Srpska loans, non-billing of default interest of the state electricity supply company "Elektroprivreda Republike Srpske" etc. Also, the Investment and Development Bank of Republika Srpska reduced the interest rates for corporate loans.

Through the special Government Guarantee Program designed for mitigation of the consequences of the COVID-19, easier access to financial resources for small and medium enterprises has been provided. The effects of these measures were remaining the number of employees in economic entities at the level that was before the outbreak of COVID-19 crisis.

3. IMPACT OF COVID-19 ON THE FINANCIAL PERFORMANCE OF SMALL AND MEDIUM-SIZED ENTERPRISES OPERATING IN REPUBLIKA SRPSKA

3.1. The Sample and the Methodology

The aim of this study is to examine the impact of COVID-19 on selected performance indicators of SMEs operating in Republika Srpska: total sales, net profit and employment.

We set the following hypothesis which will be tested in the research:

H1. COVID-19 had a stronger negative impact on the total sales of SMEs in Republika Srpska compared to performance of large enterprises.

H2. COVID-19 had a stronger negative impact on the net profit of SMEs in Republika Srpska compared to performance of large enterprises.

H3. COVID-19 had a stronger negative impact on the employment of SMEs in Republika Srpska compared to performance of large enterprises.

In order to test the hypothesis we will gather and analyze empirical data on three selected performance indicators of SMEs in the three year period 2017-2019 and compare the data with year 2020, in which the enterprises were affected by COVID-19 crises and measures. Also the SMEs data will be compared with performance indicators of large enterprises in the same period 2017-2020.

According to the Law on changing the law on development of SME's (Official Gazette of Republika Srpska number 84/19) the small and medium enterprises in Republika Srpska are those enterprises that employ less than 250 employees along with annual sales turnover up to 97,89 million KM (50 million EUR).

The sample is represented by all small and medium sized enterprises, legal entities, from Republika Srpska that employ less than 250 employees, whose total annual sales is less than 97.790.000 KM (equal to 50 million EUR) and that have reported a corporate income tax. The sample is compared with large enterprises, legal entities, that employ more than 250 employees, whose total annual sales is more than 97.790.000 KM (50 million EUR), and that have reported a corporate income tax. The source of information is the Republika Srpska Tax Administration.

In Republika Srpska in 2020, out of a total of 10,437 taxpayers (legal entities) that have reported a corporate income tax, 10,319 or 98.9% are small and medium enterprises, while 118 or 1.1% are large enterprises.

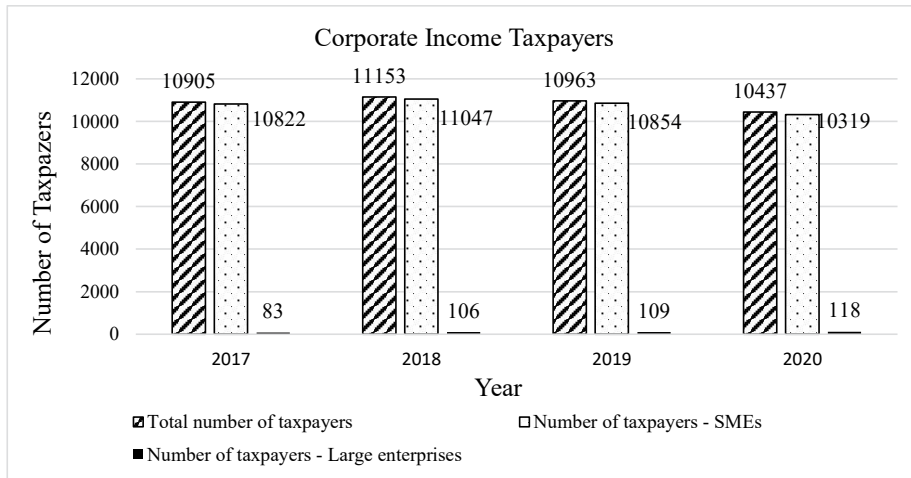


Figure 4. The Sample - corporate income taxpayers in the period 2017-2020 (Authors' processing of Republika Srpska Tax Administration data)

However, the Figure 4 shows that the total number of corporate income taxpayers in 2020 is the lowest compared to the previous three-year period 2017-2019. Thus, e.g. the total number of corporate taxpayers in 2020 is lower by 526 taxpayers or by 4.8 percent compared to 2019, out of which the number of taxpayers – SMEs is lower by 535 taxpayers or 4.9 percent, while the number of taxpayers - large companies is higher by 9 taxpayers, or 8.3 percent compared to 2019.

In the next sections the research results are presented - the impact of COVID-19 on total sales, profitability and employment of the SMEs from Republika Srpska compared with the performance of large enterprises.

3.2. Impact of COVID-19 on total sales

Figure 5 shows a comparison of the total sales trend of the SMEs and large enterprises in Republika Srpska in the period 2017-2020.

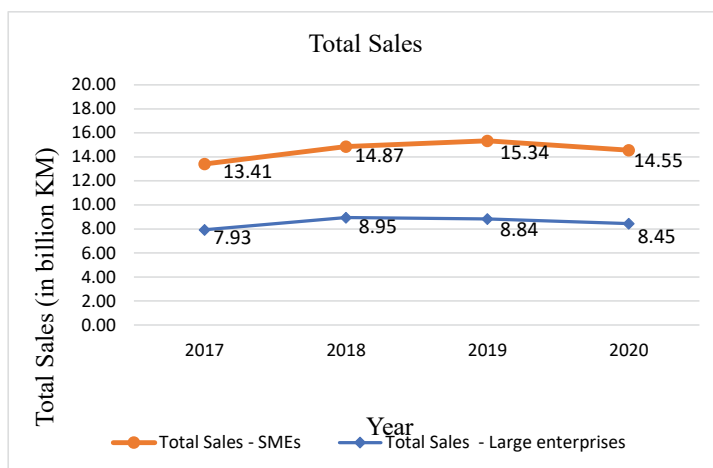


Figure 5 Total sales trend in the period 2017-2020 (Authors' processing of Republika Srpska Tax Administration data)

Figure 5 shows that the total sales of small and medium sized enterprises increased in the period 2017-2019 at an average annual rate of 7%. Also, in the same period, total sales of large enterprises in Republika Srpska increased at an average rate of 5.8% per year. In year 2020, in which companies faced the COVID-19 crisis, we see a decrease of total sales compared to 2019 for both, SMEs and large companies, but the decrease in SMEs' total sales was stronger (-5.2%) in relation to total sales decrease of large companies (-4.4%).

3.3. Impact of COVID-19 on profitability

Figure 6 shows a comparison of the pre-tax profit trend of the SMEs and large enterprises in Republika Srpska in the period 2017-2020.

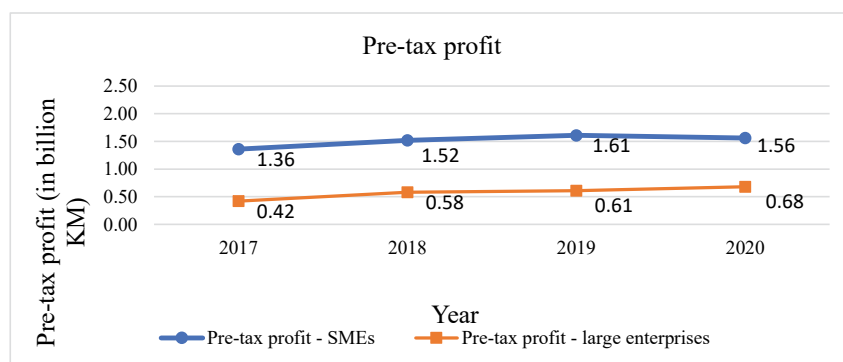
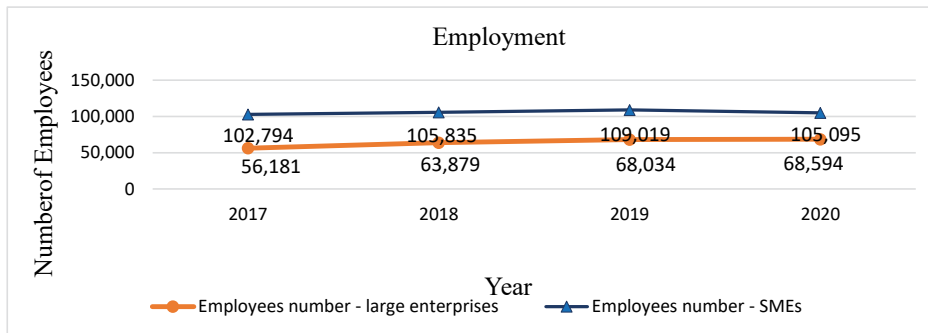


Figure 6. Pre-tax profit trend in the period 2017-2020 (Authors' processing of Republika Srpska Tax Administration data)

Figure 6 shows that the pre-tax profit of small and medium sized enterprises increased in the period 2017-2019 at an average annual rate of 8.7%. Also, in the same period, the pre-tax profit of large companies in Republika Srpska increased at an average rate of 21.2% per year. In year 2020, in which companies faced the COVID-19 crisis, SMEs' profit before tax decreased by 3.1% compared to 2019, while large companies recorded a profit before tax growth of 12.5%.

3.4. Impact of COVID-19 on employment

Figure 7 shows a comparison of the employment trend of the SMEs and large enterprises in Republika Srpska in the period 2017-2020.



Figure

7. Employment Trend in the Period 2017-2020 (Authors' processing of Republika Srpska Tax Administration data)

Figure 7 shows that the number of employees of SMEs increased in the period 2017-2019, at an average rate of 3% per year, while the number of employees of large companies increased at an average rate of 10% per year. In year 2020, in which companies faced the COVID-19 crisis, the number of employees in SMEs decreased by 3.6% compared to 2019, while the number of employees in large companies increased by 0.82%.

CONCLUSION

The research confirmed set hypotheses that COVID-19 crisis had a stronger negative impact on the financial performance (total sales, profitability and employment) of small and medium enterprises operating in Republika Srpska compared to large enterprises. In year 2020, in which companies faced the COVID-19 crisis, there was stronger decrease of SMEs' total sales (-5.2%) as compared to total sales decrease of large companies (-4.4%). While SMEs' profit and employment decreased in 2020 (by 3.1% and 3.6% respectively) compared to 2019, at the same time large companies recorded an increase of profit (by 12.5%) and employment (by 0.82%). This research confirmed the vulnerability of small and medium sized companies in times of crises compared to large one, and the need for governments to pay special attention to these enterprises.

APPENDIX

- Republic Statistical Office for the period 2017 - 2020 (employment records).

- The Tax Administration of the Republic of Srpska (employment records).

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INTEGRISANE MARKETING KOMUNIKACIJE KAO IZAZOV SAVREMENOG KOMUNIKACIJSKOG SISTEMA

Rezime: Cilj rada je da se pokažu prednosti novih integrisanih marketing komunikacija, koje postaju sve zastupljenije u komunikacijskom sistemu globalnog sveta. Rad pokušava dokazati povezanost načina komuniciranja i uspešnosti poslovanja savremenih preduzeća, posebno onih koji posluju na globalnom tržištu i koriste ostale prednosti globalizacija, a to su pre svega, korporativno poslovanje i integrisane marketing komunikacije. Da bi se uspešno koristile u poslovanju, posebno u sektoru marketinga i menadžmenta, potrebno je shvatiti njihovu suštinu, a onda i prednosti, što je cilj ovog rada, jer jedino tako postaje moguće njihovo korišćenje u poslovanju, a posebno u sektoru potrošača proizvoda i usluga.

Ključne riječi: marketing, komunikacije, koncept IMC, potrošač

JEL klasifikacija: E60, F 16, J 11

UVOD

Osnovna odlika sadašnjice je vreme brzih i stalnih tehnoloških inovacija, informacionih dostignuća i bespoštedne konkurencije, što uzrokuje i permanentne socijalne promene u svim slojevima društva i oblastima društvenog razvoja. Komunikacije su oblast na koju se sve promene odražavaju, u smislu potrebe da se celi komunikacioni sistem čini „živim“ i spremnim da se menja i stalno prilagođava, kako bi bio u stanju da poveže sve te promene, procese i izazove. Zbog toga integrisane marketing komunikacije (IMC) ostaju značajan faktor pokretanja ekonomskih i društvenih razvojnih potencijala. Socijalne oscilacije, kao i tehnološka dostignuća uzrokovale su bitne promene u ponašanju potrošača, što rađa sve veće potrebe za integracijom svih komunikacijskih aktivnosti, grane, sektora, marketinga ili npr. destinacije, ako je u pitanju turistički marketing. Osnovni principi integracije komunikacija i njenih osnovnih efekata vrede, bez obzira o kojoj delatnosti je reč i u kojem vremenu se posluje i komunicira. Razlike u primeni se javljaju samo u kontekstu pronalaženja najadekvatnijih instrumenata u zavisnosti od specifičnosti privredne oblasti, turizma kao sistema ili destinacije kao proizvoda i organizacije ove aktivnosti. Pored toga, naravno da treba uzeti u obzir i različitosti svake grane privrede koja može da crpi iskustva razvijenih zemalja, ali mora da uzme u obzir sva svoja obeležja i posebnosti, kao i činjenicu da se njen imidž po nečemu razlikuje od imidža nekih drugih poželjnih proizvoda, grana, destinacija, ali i društvenih sistema, grupa i kultura.

1. KAKO TREBA SHVATITI (I PRIHVATITI) INTEGRISANE MARKETING KOMUNIKACIJE DANAS

Savremeni uslovi poslovanja i napredak informacionih tehnologija zahtevaju da privredni subjekti, putem tržišne utakmice primenjuju sve svoje veštine i znanja. U toj utakmici ne mogu preživeti kompanije koje ne poznaju okvire savremenog poslovanja i koje ne poštuju zakone i zakonske regulative, ne sagledavaju rizik i ne podržavaju IMC. Komunikacije predstavljaju „glas” proizvoda ili usluge, odnosno brenda koji kompanija želi da promoviše (Lugonja i Knežević i Grumo 2017). Međutim, pod uticajem sve veće fragmentisanosti svetskog tržišta i medija, pojačavanja globalne konkurentске borbe, tehnološkog napretka u sferi telekomunikacija, došlo se do značajnog zaokreta u profilisanju komunikacionog miksa, u smislu usvajanja koncepta integrisanih marketing komunikacija, koji je osnova nove komunikacijske strategije koja značajno unapređuje efikasnost ostalih marketing strategija (Domazet 2013).

Osnovna karakteristika integrisanih marketing komunikacija je njihova multidisciplinarnost, iz koje proizilazi složenost izvora, procesa, načina komuniciranja i krajnjih rezultata koji se postižu u organizacijama. Verovanje u ishod i evaluacija ishoda utiču na stav. Normativna uverenja i motivacija za pridržavanje utiču na subjektivne norme. Stav i subjektivne norme utiču na nameru ponašanja. Namera ponašanja utiče na ponašanje. Ovo je primenjeno u sektoru prehrambene industrije, ali je slična složenost i uslovljenost i u drugim sektorima privređivanja i u tom smislu se ništa nije značajno menjalo u percepciji potrošača, iako se u ovom veku mnogo šta promenilo u odnosu kupac – potrošač i percepciji kupaca, a posebno je napravljen značajan pomak u integraciji marketing komunikacija (Dokić 2017).

Dakle, integralno marketing komuniciranje danas predstavlja novu komunikacionu paradigmu, koja je usledila nakon sve češćeg napuštanja linearnog modela komuniciranja u praksi međunarodnih marketing aktivnosti vodećih svetskih kompanija. Ovakvim pristupom komunikacionom aspektu međunarodnog marketinga nastoje se prevazići nazadovoljavajući efekti tradicionalne medijske propagande, putem korišćenja brojnih modaliteta međunarodnog komuniciranja (Duralina 2018). I dalje se koriste tradicionalni izvori informisanja iz kojih će potencijalni kupci biti obavešteni o kompaniji, ali i mnogi novi koji će potencijalne korisnike obavestiti o sadržaju i ponudi. Ali ovo nije dovoljno. U savremenom komunikacijskom sistemu se ukazala potreba komuniciranja sa ciljnim grupama i s javnošću u isto vreme, kao i potreba uspostavljanje bliskog kontakta sa kupcima, zaposlenima i članovima njihovih porodica, akcionarima, vlasnicima, medijima, kao i brojnim organizacijama i institucijama koje može zanimati sudbina proizvoda ili usluge koja se promoviše. Ovaj odnos je prevazišao klasične oblike marketinga i otvorio nove totalne, globalne komunikacije, usmerene na celo okruženje i društvo u celini, kako bi se postigla pozitivna slika u javnosti, a što treba da rezultira prihvatanjem ponuđenog proizvoda ili usluge na tržištu. Tako su savremene marketing komunikacije sinergija kreativnosti, inovacije, integracije i komunikacijskih modela, gde je „integracija i sinergija zajednički posao (Domazet i Stošić i Lazić 2017).

Koncept IMC se razvija u dva pravca: teorijsko definisanje koncepta i njegova praktična primena putem agencija za marketing njihovih korisnika. Kako je na teorijskom nivou ostalo još mnogo toga što treba da bude razjašnjeno, smatra se da su IMC još uvek na nivou predparadigme. Imajući ovo u vidu, Šulc i Kičen, koristeći analogiju sa životnim ciklusom proizvoda, zaključuju da se koncept IMC nalazi u fazi uvođenja ili eventualno, ranoj fazi rasta (Vuković i drugi 2015).

2.KAKO JE NASTAO KONCEPT IMC

Do pojave IMC (Flunn 2004; Underwood 2004) egzistirao je funkcionalni pristup formulisanja strategije komuniciranja s potrošačima koji je podrazumevao posebno posmatranje pojedinih

oblika promocije i nezavisno postavljanje strategije svakoga od njih. To znači, da su unutar kompanije postojale posebne strategije oglašavanja, lične prodaje, unapređenja prodaje i publiciteta. Tokom dvadesetog veka, delovanjem marketinških agencija, specijalizovanih za pružanje usluga u pojedinim oblicima promocije, data je podrška usvajanju funkcionalnog principa i novog koordiniranog pristupa promociji. Krajem osamdesetih godina prošlog veka, međusobno su se povezale u velike grupacije agencije, pružajući širok spektar usluga. Pretpostavlja se da je ovo ukрупnjavanje podstaklo autore da uvedu koncept IMC. Analizirajući stavove različitih autora koji su se bavili konceptom IMC, dve su osnovne skupine faktora posebno doprineli pojavi i razvoju ovog novog koncepta u marketinškom komuniciranju. To su tržišni faktori i tehnološki faktori (Madhavaram i Badrinarayanan i McDonald 2013).

Tržišni faktori su uslovljeni povećanom konkurencijom na tržištu (O'Mahony 2010). Usled povećane konkurencije povećava se i medijski pritisak na potrošača. Ako kompanija ne može da izdvoji svoju poruku od drugih i da privuče pažnju budućeg potrošača, tada ne može ni uspostaviti komunikaciju sa ciljnom grupom potrošača. Zbog toga raste potreba da kompanija pristupi promociji. Veća konkurencija više ukazuje na značaj integrisanja marketinških komunikacija. Bitno je naglasiti da dolazi i do redistribucije promotivnog budžeta u korist drugih oblika promocije. Sve manji procenat sredstava izdvaja se za oglašavanje, a sve veći procenat sredstava usmerava se na aktivnosti unapređenje prodaje. Preduzeća vremenom imaju problem sa promenama na strani konkurencije i promenama u ponašanju potrošača, a to se sve odražava na promenu potreba, želja, ukusa i tražnje kupaca. Njihovi ukusi, stilovi, načini korišćenja proizvoda i usluga odražavaju njihov socijalni status i imidž pa tako tržište postaje socijalna scena različitosti društvenih slojeva, klasa, grupa, a posebno elitnih, koje su i najveći potrošači i kupci. Zato je proizvođačima roba i usluga bio nužan prelaz sa marketinga masovne proizvodnje na segmentirani marketing (Baidya and Maity 2010). Sve ovo ima veliki uticaj na marketinške komunikacije. Na lokalnom tržištu, u trenutku kada se poruka emituje, mogu se nalaziti pripadnici različitih ciljnih grupa, a takođe se oni mogu nalaziti i na drugom mestu od onoga koje je pretpostavljeno kada se izrađivao plan medija. Ove promene su proizvele potrebu integrisanja komunikacija, jer samo na taj način poruka može biti jedinstvena i doći do potrošača, nebitno gde se on u tom trenutku nalazio. Početkom ovog veka nekadašnjim globalnim mrežama sve više konkurišu novi mediji: kablovska televizija, nove TV i radio stanice, časopisi, dnevni listovi, društvene mreže, platforme i profili, a ti kanali dovode do fragmentacije medija, gde novi primalac – potrošač sve manje pravi razliku između izvora iz kojih mu je poruka upućena. Zato se pojavljuje potreba za interaktivnim medijima, koji će moći čuvati veliki broj informacija u bazama podataka, a to dalje omogućuje da obe strane istovremeno primaju i šalju informacije i na taj način unaprede dalji tok komunikacije, gde se sa masovnog obraćanja kupcima prelazi na obraćanje odabranim kupcima. Tu smo danas, na početku treće decenije 21. veka.

3. UTICAJ IMC NA POTROŠAČE PROIZVODA I USLUGA

Javnost je svakodnevno obasuta velikom količinom informacija što dovodi do zasićenja primaoca poruke informacijama, konfuzije i kontradiktornosti stavova, uslovljavajući krizu identiteta preduzeća i probleme u komuniciranju sa javnošću. Od savremenog marketinga očekuje se da u procesu kontinuirane komunikacije sa stvarnim i potencijalnim potrošačima pruži neophodne informacije, utiče na kreiranje imidža i reputacije proizvoda i preduzeća i podstiče na akciju (kupovinu). Pored potrošača, preduzeća su sve više zainteresovana da, pored ostalog i odgovarajućim komuniciranjem uspostave korektne i fer odnose sa ostalim interesnim grupama javnosti: dobavljačima, posrednicima, konkurencijom, vladom, finansijskim institucijama, zaposlenima, civilnim sektorom i ostalim segmentima javnosti. Međusobnom razmenom

informacija svi segmenti javnosti formiraju sliku o preduzeću. Fer i poštteni odnosi su vrlo važni u građenju korporativnog imidža i reputacije preduzeća (Gutić i Rudelj 2009).

Efikasnim upravljanjem, marketing komuniciranjem preduzeće profiliše željeni imidž i stvara odgovarajuću poziciju u svesti potrošača i ukupne javnosti. Ciljevi takvog komuniciranja proizilaze iz marketing ciljeva preduzeća. Pored informisanja i ubeđivanja, marketing komuniciranje treba da doprinese osvajanju novih potrošača kreiranjem i unapređenjem imidža preduzeća. Izmenjeno okruženje je nova realnost koja zahteva promene u marketing komuniciranju koje postaje složenije, zahteva veća ulaganja u novu tehnologiju i nova znanja i veštine zaposlenih u tom sektoru. Ovi zahtevi nameću potrebu za planskim pristupom u definisanju mesta i uloge komuniciranja za preduzeće kao celinu, za pojedine njegove delove, proizvode i marke i za pojedina tržišta. Uspostavljanje kontakata sa potencijalnim i postojećim kupcima i ostalim poslovnim partnerima se smatra ključnim za generisanje prodaje i kreiranje imidža na poslovnom tržištu putem komunikacijskog sistema.

Naime, komunikacija će biti efektivnija i u znatnoj meri olakšana ukoliko su prodavac i kupac sličniji: po fizičkim karakteristikama, godinama, obrazovanju, načinu života, političkim uverenjima, i sl. Empatija može predstavljati važnu karakteristiku prodavca u povećanju verovatnoće uspešne prodaje i povećanju obaveštenosti potrošača o konkretnom proizvodu, usluzi ili turističkoj destinaciji. Ovakva procedura podrazumeva da se pristupa strategijski marketing komunikacijama i da se dobro poznaju tržišni segmenti. Kvaliteti koji se zahtevaju od uspešnog izvršioca prodaje variraju u zavisnosti od konkretne situacije, ali ono što je od uslovnog značaja je da pravilno komunicira, neguje profesionalni imidž, poznaje i koristi određene tehnike prodaje, da koristi pomoćna sredstva i pribor prilikom sprovođenja aktivnosti prodaje. Najnovije tehnike su direktnog marketinga, gdje se preko indirektnih medija komunicira sa pojedinačnim kupcima ili kompanijama i nude se proizvodi i usluge, sa ciljem dobijanja merljivog odgovora ili transakcije. Korišćenjem televizije, štampanih, elektronskih medija i društvenih mreža poruke se dostavljaju identifikovanom kupcu, a ne ciljnoj grupi. Time se približava direktnoj prodaji i neposrednoj komunikaciji s kupcem, gde se kvalitetno procenjuje i vrši selekcija ciljnog tržišta, rano testiranje i merenje odziva na ponudu. Jedan od dobro prihvaćenih novih oblika privlačenja potrošača je telemarketing, čime se pojačano deluje da klijent kupi i troši i ono što mu nije potrebno, čime se ostvaruju cilj marketinga: „prodaja radi prodaje“.

Globalno gledano, jačanje IMC, dovodi do povećanje potrošnje, što je interes svih ekonomija, država i kompanija (Dodig i Rađenović 2017). Ali, gledano sa stanovišta kupca, čoveka, potrošača i člana društva, rezultat nije socijalno pozitivan, jer se raspon bogatih i siromašnih permanentno povećava, a sve više ljudi pada u totalno siromaštvo i bedu. Drugim rečima, IMC imaju i drugu stranu svoje medalje, o kojoj se malo govori: odgovornost za siromašenje, za nekontrolisanu potrošnju i potrošača kojem šoping čini najbolji lek za sve bolesti, a posebno kao antistres terapiju. Krajnji proizvod ovakve ekonomije je gomilanje smeća, otpada svih vrsta, proizvodnja viška, pohlepa i pohlepno ponašanje prema prirodi i njenim resursima. Opomena ovakvog ponašanja savremene ekonomije i njenog konzumenta – čoveka je i pandemija COVID 19, koja je samo prvo upozorenje da se čovek mora resetovati u svom moralnom stavu i odnosu, kako prema prirodi, tako i prema resursima, prirodnim i ljudskim.

Kuda vodi vodi društvo, pitaju se sociolozi, psiholozi, psihijatri i slični analitičari-kritičari potrošačkog društva i potrošačkog mentaliteta? Treba li u sistem direktne komunikacije proizvođača, prodavaca i potrošača uneti dozu socijalne i ekološke etike, socijalnog humanizma i humanizma prema prirodi, koja treba da „proguta“ savremenu potrošnju, koja, opet u interesu svakog kupca, obiluje sve više proizvodima kratkog vremena korišćenja i dugog vremena razgradnje (Gans 2020). Dakle, nužno je redizajniranje strategije relacionog marketinga (Jegdić 2019), kako bi on mogao odgovoriti i drugim standardima savremenog društvenog života, koji obezbeđuju održiv i human razvoj, ne samo današnjeg čoveka – potrošača, nego i njegovih

naslednika. Posebno se ovo odnosi na direktni marketing, koji personalizuje i prilagođava poruke svakom pojedinačnom čoveku – „klijentu“ pa tako elektronskim i internet kanalima možemo ljudima poslati i druge poruke, koje imaju humanističku, ekološku, održivu i slične poruke, a koje mogu globalno poboljšati i poslovni i ljudski ambijent.

ZAKLJUČAK

Od savremenog marketinga očekuje se da u procesu kontinuirane komunikacije sa stvarnim i potencijalnim potrošačima pruži neophodne informacije, utiče na kreiranje povoljnog imidža i reputacije proizvoda i preduzeća i podstiče potrošače na akciju (kupovinu). Pored potrošača, marketing komuniciranje ima zadatak da uspostavi korektne i fer odnose sa ostalim interesnim grupama javnosti: dobavljačima, posrednicima, konkurencijom, vladom, finansijskim institucijama, zaposlenima i opštom javnosti. Međusobnom razmenom informacija svi segmenti javnosti formiraju sliku o preduzeću i utiču na stvaranje njegove reputacije. Efektivnost i efikasnost marketing komunikacija je u veoma tesnoj korelaciji sa razumevanjem i zadovoljenjem potreba potrošača, a temelj uspešne marketing strategije je baza relevantnih podataka sintetizovana na osnovu informacija iz tržišnog okruženja.

Suštinska karakteristika strategije integrisane marketing komunikacije je upravljanje komunikacijama u cilju uspostavljanja dugoročnih odnosa sa potrošačima i maksimiziranje tržišnih i širih društvenih rezultata. Formulisanje strategije integrisane marketing komunikacije za konkretan proizvod, predstavlja kompleksnu aktivnost za čije je sprovođenje neophodno uključivanje mnogih relevantnih aktera, pa i sociologa, psihologa, pedagoga, andragoga. Ovakav višedimenzionalan pristup ovoj aktivnosti ograničava mogućnost neprofesionalnog pristupa problematici, ali i otvara prostore za delovanje u smislu odgovornog poslovanja, etičnog odnosa prema čoveku – potrošaču i kupcu i taj direktan odnos treba iskoristiti za edukaciju, vaspitanje i odrastanje novih generacija, u smislu odgovornog trošenja, humanog odnosa prema robi i uslugama, ali i prema svakom čoveku, društvu, lokalnoj zajednici i posebno prema prirodi. Zelene tehnologije, suverenitet hrane i proizvodnje, zaštita prirode i biodiverziteta nas opominju na odgovorno ponašanje. Covid 19 je jedna ili prva opomena da je priroda, stvarno ugrožena i da u našoj potrošačkoj groznici moramo napraviti neke ustupke, ne toliko zbog nas samih, jer smo zakasnili, ali za nove generacije, našu djecu i unuke, koji imaju jednako pravo da na ovoj Zemlji, jednoj i jedinoj, prožive svoj život. Strategijom integrisane marketing komunikacije treba obuhvatiti sve relevantne činjenice vezane za proizvod koji se želi promovisati, a u cilju ostvarivanja dugoročnih rezultata i dugoročnog kvalitetnog odnosa prema čoveku i prirodi, jer jedino takva sinergija obezbeđuje trajanje, a trajanje je opšti cilj svake strategije.

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INTEGRATED MARKETING COMMUNICATIONS AS A CHALLENGE OF MODERN COMMUNICATION SYSTEM

Summary: *The aim of this paper is to show the advantages of new integrated marketing communications, which are becoming more and more present in the communication system of the global world. The paper tries to prove the link between the way of communication and business success of modern companies, especially those that operate in the global market and use other advantages of globalization, and these are, first of all, corporate business and integrated marketing communications. In order to be successfully implemented in business, especially in the marketing and management sector, it is necessary to understand their essence, and then the advantages, which is the aim of this paper. Only in this way does it become possible to use them in business, especially in the consumer sector.*

Key words: *marketing, communications, IMC concept, consumers*

JEL classification: *E60, F 16, J 11*

INTRODUCTION

Nowadays we live in the times of fast and constant technological innovations, information technology's achievements, relentless competition, which causes permanent social changes in all layers of society and fields of social development. Communications is a field where all changes are reflected in terms of the need to make the whole communication system "alive" and ready to change and constantly adapt, in order to be able to connect all these changes, processes and challenges. Therefore, integrated marketing communications (IMC) remain significant factors in triggering economic and social development potentials. Social oscillations, as well as technological advances have caused significant changes in consumer behavior, which results with an increasing need to integrate all communication activities, industry, sector, marketing or destination, for example, in the case of tourism marketing. The principles of communication integration and its effects are valid regardless of the activity in question. Differences in application occur only in the context of finding the most appropriate instruments depending on the specifics of the economic area, tourism as a system or destination as a product and organization of this activity. In addition, of course, one should take into account the differences of each branch of the economy that can draw on the experience of developed countries, but it must take into account all its features and peculiarities, as well as the fact that its image differs from the image of some other desirable products, branch, destination.

1. HOW INTEGRATED MARKETING COMMUNICATIONS SHOULD BE UNDERSTOOD (AND ACCEPTED) NOWADAYS

Contemporary conditions of the business operations and the advance of the information technologies demand that business subjects, by the means of market competition apply their skills and knowledge. In that competition, companies that are not familiar with the frames of the modern business actions, and do not obey law and law regulations, do not understand the risk and do not support IMC cannot survive. Communications are the "voice" of a product or service, or a brand that a company wants to promote (Lugonja and Knežević and Grumo 2017). However, under the influence of increasing fragmentation of the world market and media, intensification of global competition, technological progress in the field of telecommunications, there has been a significant shift in profiling the communication mix, in terms of adopting the concept of integrated marketing communications, which should be the basis of communication strategy with target audiences, which would significantly improve the effectiveness of marketing strategies (Domazet 2013).

The main characteristic of integrated marketing communications is their multidisciplinary, which results in the complexity of sources, processes, ways of communication and end results that are achieved in organizations, as shown in the following table. Belief in the outcome and evaluation of the outcome influence the attitude. Normative beliefs and motivation to adhere affect subjective norms. Attitude and subjective norms influence the intention of behavior. Behavioral intent influences behavior. This has been applied in the food industry sector, but the complexity and conditionality is similar in other sectors of the economy and in that sense nothing has changed significantly in consumer perception, although in this century much has changed in customer-consumer relationship and customer perception. Significant progress has been made in the integration of marketing communications (Đokić 2017).

So, integrated marketing communication today presents a new communication paradigm, which followed after the increasingly frequent abandonment of the linear model of communication in the practice of international marketing activities of the world's leading companies.

By this approach to the communication aspect of international marketing it is strived to overcome the satisfactory effects of traditional media propaganda, through the use of numerous modalities of international communication (Duralina 2018). Traditional sources of information are still used, from which potential buyers will be informed about the company, but also many new ones that will inform potential users about the content and offer. But this is not enough. Because of the need to communicate with the target groups and publicity, it is necessary to provide close contact with the buyers, employees and members of their families, shareholders, owners, media, as well as numerous organizations and institutions that can take interest in the destiny of the product or the promoted service. This relation overcomes classical forms of marketing. Those are now total, global communications directed to the whole environment and the society as a whole, in order to achieve positive image in the public, which should result in accepting the offered product or the service on the market. Therefore modern marketing communications present synergy of creativity, innovation, integration and communication models where 'integration and synergy are neutral work' (Domazet and Stošić and Lazić 2017).

The IMC concept is developing in two directions: the theoretical definition of the concept and its practical application through the marketing agencies of their users. As much remains to be clarified on a theoretical level, it is believed that IMCs are still at the pre-paradigm level. Taking this into account, Shultz and Kitchen, using the analogy with life cycle of the product, conclude that IMC concept is in the phase of introduction or eventually early phase (Vuković i drugi 2015).

2. HOW DID THE CONCEPT IMC CAME ABOUT

Until the emergence of the IMC (Flunn 2004; Underwood 2004), there was a functional approach of formulating a strategy for communicating with consumers, which involved special observation of individual forms of promotion and independent setting of the strategy of each of them. This means that within the company there were special strategies for advertising, personal sales, sales promotion and publicity. During the twentieth century, the activities of marketing agencies, specialized in providing services in certain forms of promotion, supported the adoption of a functional principle and a new coordinated approach to promotion. In the late 1980s, they interconnected into large groups of agencies providing a wide range of services. It is assumed that this enlargement prompted the authors to introduce the IMC concept. Analyzing the views of various authors who have dealt with the concept of IMC, it can be said that there are two basic groups of factors that have particularly contributed to the emergence and development of this new concept in marketing communication. These are market factors and technological factors (Madhavaram and Badrinarayanan and McDonald 2013).

Market factors are conditioned by increased competition in the market (O'Mahony 2010). Due to the increased competition, the media pressure on the consumer is also increasing. If a company cannot separate its message from others and attract attention then it cannot even establish communication with the target group of consumers. Therefore, there is a growing need for the company to access promotion. Greater competition is more indicative of the importance of integrating marketing communications.

It is important to emphasize that there is a redistribution of the promotional budget in favor of other forms of promotion. A decreasing percentage of funds is allocated for advertising, and an increasing percentage of funds is directed to sales promotion activities. Businesses have a problem with changes on the competitive side and changes in consumer behavior over time, and all this is reflected in the changing needs, desires, tastes and demands of customers. Their tastes, styles, ways of using products and services reflect their social status and image, so the market becomes a social scene of diversity of social layers, classes, groups, and especially the elite, who are also the biggest consumers and customers. That is why producers of goods and services needed a transition from mass production marketing to segmented marketing (Baidya and Maity 2010). All this has a great impact on marketing communications. In the local market, at the time when the message is broadcasted, there may be members of different target groups, and they may also be in a different place from what was assumed when the media plan was made. These changes have produced the need to integrate communications, because only in that way can the message be unique and reach the consumer, no matter where it was at the time.

At the beginning of this century, new media are increasingly competing with the former global networks: Cable television, new TV and radio stations, magazines, daily magazines, and these channels lead to media fragmentation, where the new recipient-consumer makes smaller distinction between the sources from which his message was instructed.

Therefore, there is a need for interactive media, which will be able to store a large amount of information in databases, and this further allows both parties to receive and send information simultaneously and thus improve the further flow of communication, from mass communication with customers to selected addressed customers. We are here today, at the beginning of the third decade of the 21st century.

3. IMPACT OF IMC ON THE CONSUMER OF THE PRODUCT OR SERVICE

The public is flooded with a large amount of information on a daily basis, which leads to saturation of the recipient of the message with information, confusion and contradictory attitudes, causing a crisis of corporate identity and problems in communicating with the public. Modern marketing is expected to provide the necessary information in the process of continuous communication with

actual and potential consumers, influence the creation of the image and reputation of products and companies and encourage action (purchase). In addition to consumers, companies are increasingly interested in, among other things, establishing appropriate and fair relations with other stakeholders: appropriate suppliers, intermediaries, competition, government, financial institutions, employees, civil society and other segments of the public. By exchanging information with each other, all segments of the public form an image of the company. Fair and honest relationships are important in building the corporate image and reputation of a company.

By effectively managing marketing communication, the company profiles the desired image and creates an appropriate position in the minds of consumers and the general public. The goals of such communication derive from the marketing goals of the company (Gutić and Rudelj 2009).

In addition to informing and persuading, marketing communication should contribute to winning new customers, repurchasing existing ones and creating and improving the company's image. The changed environment is a new reality and requires changes in marketing communication. Communication is becoming more complex, requiring greater investment in new technology and new knowledge and skills of employees. These requirements impose the need for a planned approach in defining the place and role of communication for the company as a whole, for its individual parts, products and brands, and for individual markets. Establishing contacts with potential and actual customers and other business partners is considered key to generating sales and creating an image in the business market.

Namely, communication will be more effective and significantly facilitated if the seller and the buyer are more similar (in terms of physical characteristics, age, education, lifestyle, political beliefs, etc.). Empathy (the ability of the seller to feel the same as the buyer feels) can be an important characteristic of the seller in increasing the probability of a successful sale and increasing the tourist's awareness of a particular product or destination. This procedure implies that strategic marketing communications are approached in the destination and that market segments are well known. The qualities required of a successful personal salesperson will vary depending on the specific situation, but what is conditional is that: communicates properly; nurtures a professional image; knows and uses certain sales techniques; uses aids and accessories when conducting sales activities. The latest direct marketing techniques, where through indirect media it communicates with individual customers or companies offering their products and services, with the aim of obtaining a measurable response or transaction. Using television, print or electronic media, messages are delivered to the identified customer, not the target group.

Forms of direct marketing are: direct sales, direct mail, catalog marketing, telemarketing, television, online marketing and other direct response marketing media. Direct selling is the original and the oldest form of direct marketing, while direct mail is the most popular. It allows the selectivity of the target market, early testing and response measurement. It involves sending an offer or notifying a certain person to their address and every year direct sellers send millions of such shipments. "Telemarketing" is the latest form of attracting consumers to buy and spend even what they do not need, to achieve its goal of "selling for sale", which causes long-term negative consequences for customers, buyers and members of society.

Globally, the strengthening of the IMC, leads, on the one hand, to an increase in consumption, which is in the interest of all economies, states and companies (Dodig and Rađenović 2017). But seen from the point of view of the buyer, man, consumer and member of society, the result is not socially positive, because the range of rich and poor is constantly increasing, and more and more people are falling into total poverty and misery. In other words, IMCs have the other side of their coin, which is little talked about: responsibility for poverty, for uncontrolled consumption and a consumer product for which shopping is the best cure for all diseases, especially as an anti-stress therapy.

Where does such a society lead, sociologists, psychologists, psychiatrists and similar analysts-critics of consumer society and consumer mentality ask? Should a dose of social and even environmental ethics, social humanism and humanism towards nature be introduced into the system of direct communication between producers, sellers and consumers, which should "swallow" modern consumption, which, again in the interest of every customer, abounds in use of short-lived products with long decomposition time (Gans 2020). Therefore, it is necessary to redesign the strategy of relational marketing (Jegdić 2019), so that it can meet other standards of modern social life, which provide sustainable and humane development, not only of today's man - the consumer, but also his successors.

This especially refers to direct marketing, which personalizes and adapts messages to each individual person - "client", so we can send other messages via electronic and internet channels, which have humanistic, environmental, sustainable and similar messages, and which can improve globally both business and human environment.

CONCLUSION

Marketing communication is the intentional exchange of ideas, opinions, information and instructions with the target groups of the public through certain symbols, in order to achieve the goals of the organization. The role of marketing communication in the marketing mix comes from the need to communicate the value created for the consumer. Modern marketing is expected to provide the necessary information in the process of continuous communication with actual and potential consumers, influence the creation of a favorable image and reputation of products and companies and encourage consumers to take action (purchase). In addition to consumers, marketing communication has the task of establishing fair and equitable relationships with other public interest groups: suppliers, intermediaries, competition, government, financial institutions, employees and the general public. By exchanging information with each other, all segments of the public form an image of the company and influence the creation of its reputation. The effectiveness and efficiency of marketing communications is very closely correlated with understanding and meeting the needs of consumers, and the foundation of a successful marketing strategy is a database of relevant data synthesized based on information from the market environment.

An essential feature of an integrated marketing communication strategy is communication management in order to establish long-term relationships with consumers and maximize market and wider social outcomes. Formulating a strategy of integrated marketing communication for a specific product is a complex activity for the implementation of which it is necessary to involve many relevant actors, including sociologists, psychologists, pedagogues and andragogues. This multidimensional approach for this activity limits the possibility of unprofessional approach to the issue, but also opens spaces for action in terms of responsible business, ethical attitude towards man - consumer and customer and this direct relationship should be used for education, upbringing and growing new generations in terms of responsible spending, humane attitude towards goods and services, but also towards every human being, society, local community and especially towards nature.

Green technologies, food and production sovereignty, nature protection and biodiversity warn us to behave responsibly. Covid 19 is one or the first warning that nature is really endangered and that in our consumer fever we have to make some concessions, not so much for ourselves because we are late, but for new generations, our children and grandchildren, who have equal rights to live their lives on this Earth, the one and only. The strategy of integrated marketing communication should include all relevant facts related to the product to be promoted, in order to achieve long-term results and long-term quality relationship with man and nature, because only such synergy ensures duration, which is the general goal of any strategy.

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OKVIR KORISNE UPOTREBE OSTATAKA PROIZVODNJE U FABRICI GLINICE ARR – OBRADA CRVENOG MULJA

Rezime: *Kada se boksit prerađuje za proizvodnju glinice, stvara se nusproizvod čvrstog otpada. Za svaku tonu boksita obrađivanog postupkom rafiniranja proizvede se oko 400 kg glinice i 600 kg ostataka. Kao posljedica toga, oko 100 fabrika glinice u Australiji, Kini, Brazilu, Indiji, Evropi i drugdje stvori do 120 miliona tona čvrstog otpada svake godine, a prema podacima o proizvodnji (u zadnjih trideset godina) preko tri milijarde tona otpada se skladišti u otpadnim deponijama u svijetu, čineći fabrike glinice najvećim deponijama industrijskog otpada. Fizikalne i hemijske karakteristike ostataka fabrike glinice već su dugo predmet naučnih istraživanja, jer ostatak sadrži željezo, aluminijum, silicijev dioksid, titan, natrijum i ostale elemente i spojeve potencijalne vrijednosti. U posljednjih deset godina ova su istraživanja bila usmjerena ne samo na reciklažu vrijednih sastojaka otpada, već i na različite mogućnosti korisne ponovne upotrebe povezane s ovom vrstom otpada. Jedan od načina je smanjenje količine skladištenog otpada, iskorišćavajući specifične vrijedne komponente u njemu. Industrija glinice je zbog toga razvila niz „novih tehnologija“ za rješavanje rastućih zaliha otpada, uključujući i kako ih bolje dehidrirati i sigurno skladištiti. Međutim, iako su hvale vrijedni, ovi pravci su se uglavnom usmjeriti na poboljšanje procesa i povećanje produktivnosti i nisu uspjeli riješiti određene osnovne istine povezane s održivom i korisnom, ponovnom upotrebom. U radu se tvrdi da se samo sveobuhvatnim razumijevanjem i razmatranjem svih aspekata ostataka proizvodnje u fabrici glinice, koja su korisna za ponovno korišćenje, kao i angažovanjem najšireg kruga učesnika, društva i industrije, zaista može ostvariti održiva budućnost za ovu vrstu otpada.*

Ključne riječi: *održiv okvir, boksit, fabrika glinice, obrada „crvenog mulja“*

JEL klasifikacija: *Q5, Q56, Q57*

UVOD

Glinica (Al_2O_3) proizvodi se rafiniranjem boksitne rude koja je eksploatisana iz velikih otvorenih rudnika. Aluminijum je jedan od najvažnijih lakih metala na svijetu za pakovanje, transport i izgradnju, a proizvodi se elektrolizom glinice. Oko 260 miliona tona (mt) boksita godišnje se iskopa u svijetu iz globalne rezerve koja je procijenjena između 55 i 75 milijardi tona, a 30% boksita iskopano je u Australiji (77 mt), 18% u Kini (47 mt), 13 % u Brazilu (34 mt), 12% u Indoneziji (30 mt), 7% u Indiji (19 mt), 6% u Gvineji (17 mt) i 3% na Jamajci (9 mt), a ostatak je iskopan u zemljama kao što su Rusija, Gvajana, Bosna i Hercegovina i Surinam (Bray 2014, 12).

Boksit prerađuju lokalne fabrike ili se izvozi u više od 100 rafinerija širom svijeta, pri čemu se, na primjer, broj fabrika glinica u Kini povećao sa sedam u 2001. na 49 u 2011. Ovaj će se broj još više povećati, s obzirom na to da se očekuje da će zahtjevi za boksitom iz Kine do 2030.

godine dostići 240 mt, a ukupna svjetska potražnja boksita za glinicu, odnosno aluminij trebala bi doseći 350 mt do 2018. godine (International Aluminium Institute 2010). Najčešća metoda izlužavanja glinice iz boksita je Bayer-ov postupak, koji je austrijski hemičar i industrijalac Karl Bayer razvio krajem devetnaestog vijeka. Pri tom procesu nastaje nerastvorna glinica kada se boksit tretira natrijevim hidroksidom (tj. kaustična soda, NaOH) pri temperaturi između 100 - 240°C i pritisku između 1-6 atm. Nusproizvod - otpad koji nastaje Bayerovim procesom kolokvijalno je poznat kao „crveni mulj“, ali se u industriji naziva „ostatak boksita“ ili „ostatak fabrike glinice“ (Habashi 1995, 17).

Za svaku tonu boksita obrađenog Bayerovim postupkom nastaje između 300 i 500 kg glinice i 500 do 700 kg ostataka rafinerije glinice (ARR), tako da glinica ide u elektrolizu za proizvodnju aluminija i ARR (alumina refinery residue) koji se ispušta dugotrajno u deponije kao mulj (ili se ponekad odlažu u more ili okean) (International Aluminium Institute 2010). Uticaj ovih zagađenja može biti značajan, na površini od 200 ha i do 40 m dubine pa zbog toga može zabrinuti dijelove lokalne zajednice. Nakon ispuštanja iz rafinerije, ARR je visoko alkalni (obično oko 5 000 mg/kg ukupne alkalnosti, ali ponekad čak i 30. 000 mg/kg ili 3%, što je uporedivo s nivoom slanosti u morskoj vodi), sa pH većim od 12.

Uključujući analizu životnog ciklusa, kako bi se ostaci mogli ugraditi u šire regionalne planove za održivi razvoj, neizbježna je činjenica da je ostatak rafinerije glinice klasifikovan kao opasan otpad u većini država s potencijalno štetnim uticajem na zdravlje ljudi i okolinu, ako se primijeni na pogrešan ili neprimjeren način. Uzimajući u obzir ne samo očigledne industrijske, trgovačke i hemijske imperativne koji pokreću ponovnu upotrebu ostataka i informišu o trenutnim planovima tehnologije, nego i uključivanjem regulatornih, okolinskih, investicijskih, istraživačkih i društvenih dimenzija licenciranja (između ostalih učesnika), cjelokupne budućnosti, ovaj rad predstavlja novi okvir za korisnu ponovnu upotrebu ostataka proizvodnje glinice u fabrici.

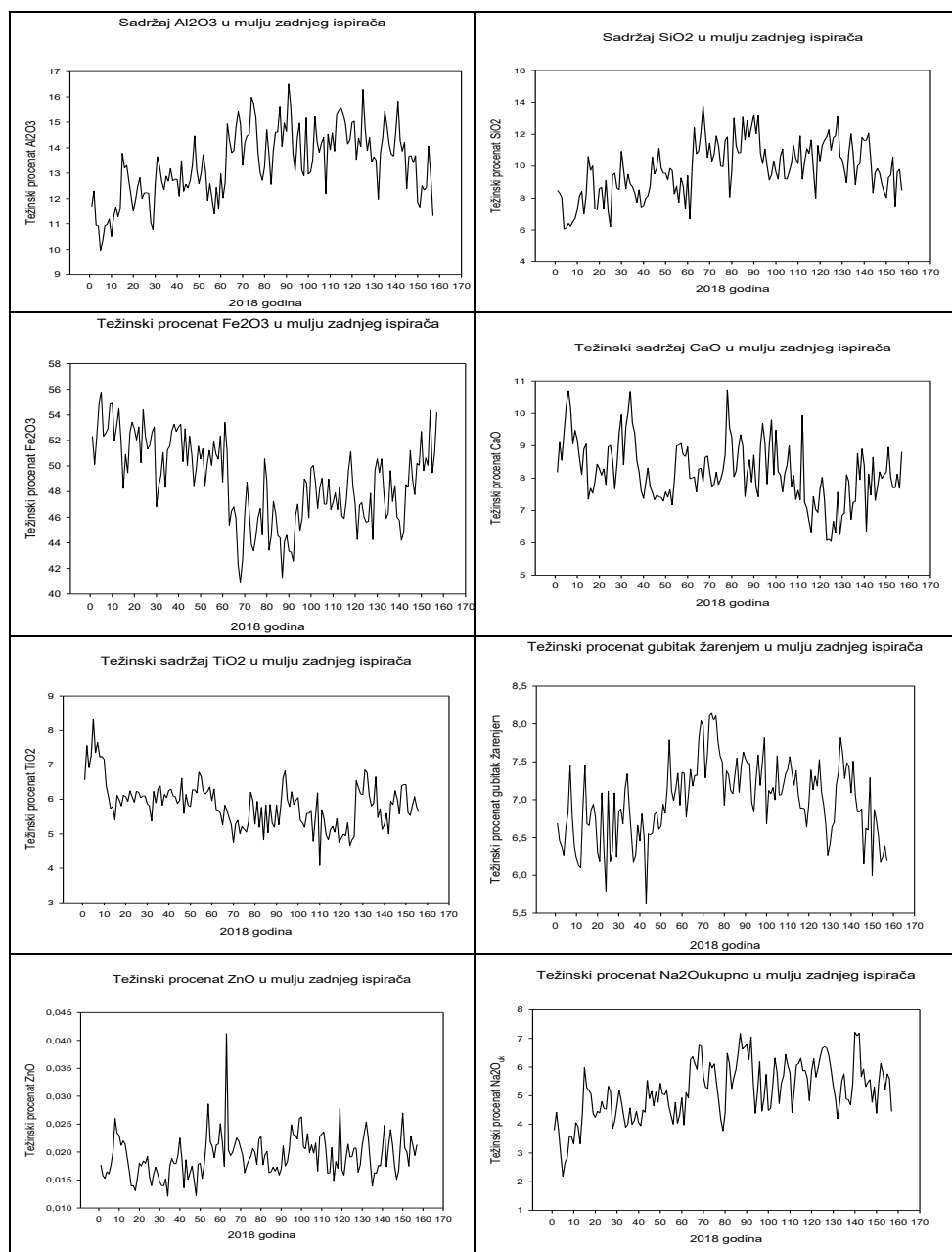
1. ARR - OBRADA CRVENOG MULJA

ARR se često kvalifikuje kao „opasan“ (ali nije „toksičan“) industrijski otpad po mnogim nacionalnim i međunarodnim jurisdikcijama i konvencijama, kao što je Bazelska konvencija (tj. Klasifikacija # B2110), zbog izrazito kaustične prirode (Brunori i drugi 2005, 58). ARR može pri kontaktu spaliti kožu, a među ostalim štetnim osobinama nadražuje oči, nos i grlo.

Stvaranje velikih količina ARR-a predstavlja značajan problem zbrinjavanja i rada operativnoj industriji glinice. Da bi se ova tvrdnja stavila u kontekst, uzima se u obzir da najmanje 120 mt ARR godišnje proizvedu rafinerije u Australiji, Brazilu, Kini, Francuskoj, Indiji, Rumuniji, Rusiji i drugdje, s projekcijama od 140 mt do 2018. godine (Liu i Wu 2012, 3). Pitanje sigurnog skladištenja, praćenje i upravljanje opasnim ARR-om i njegovim potencijalnim problemima u zaštiti životne sredine i društvenim uticajima veliki su svjetski industrijski i društveni izazov.

Kada se uzme u obzir i zatvaranje još 30 rafinerija širom svijeta, ostavljajući naslijeđene zalihe od više stotina miliona tona opasnog otpada, često u zapuštenom stanju, potreba za održivom budućnošću ARR-a nedvosmisleno je važna. Iz tog razloga, Alcoa, koja je istorijski jedan od najvećih svjetskih proizvođača ARR-a, do 2005. godine naglasila je da „pronalaženje praktične upotrebe i novih načina skladištenja ostataka rafinerije - koji imaju stalni uticaj na okolinu i zemljište i iziskuju značajne troškove skladištenja“, vjerovatno najveći izazov s kojim se suočava globalna industrija glinice (Fergusson 2016, 967). Sedam regionalnih vlada, uključujući Australiju, Indiju i Kinu, koje zajedno čine 53% svjetske proizvodnje aluminija osnovali su Azijsko-pacifičko partnerstvo za čisti razvoj i klimu, učinili su ARR ključnim u području politike za koje je neophodno obezbijediti značajna daljna istraživanja i ulaganja (Gräfe i Power i Klauber 2011, 35). Među glavnim izazovima povezanim s upravljanjem ARR-om su njegove fizičke i hemijske osobine. Neobrađen ARR obično se sastoji od željeza (25-35%), aluminija (10-20%), natrija (3-10%), titana (5-10%), silicija (5-20%) i kalcija (5-10%) u oksidnim, hidroksidnim i/ili oksi-hidroksidnim stanjima. Nijedan od ovih elemenata ne

predstavlja poseban problem sam po sebi, ali zbog svoje kombinovane, izrazito kaustične prirode oni predstavljaju znatne dugoročne rizike upravljanja okolinom i zdravljem ljudi. Konkretno, u nastavku je prikazano na grafikonima 1. i 2. kretanje težinskog sastava pojedinih komponenti ARR u 2018. godini (funkcija kvaliteta boksita), kao i prosječan težinski udio pojedinih komponenti u 2018. godini u fabrici glinice u Zvorniku.

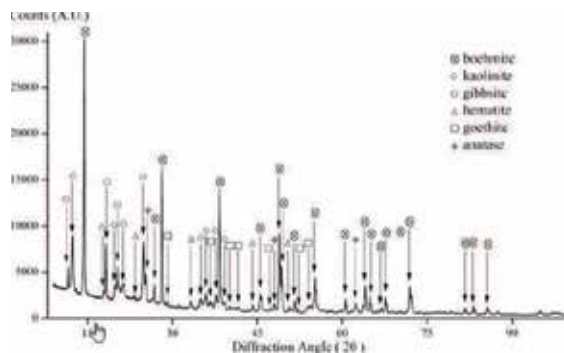


Grafikon 1. Težinski sastav pojedinih komponenti u „crvenom mulju“ u toku 2018. godine (Autori)



Grafikon 2. Prosječan težinski sastav ARR fabrike glinice Zvornik u 2018. godini (Autori)

Na primjer, ARR je sastavljen od složenog koktela metala i minerala, uključujući hematit (Fe_2O_3), beohmite (AlOOH), gipsit ($\text{Al}(\text{OH})_3$), sodalit ($\text{Na}_4\text{Al}_3\text{Si}_3\text{O}_{12}\text{Cl}$), anatas (TiO_2), aragonit (CaCO_3), brucit ($\text{Mg}(\text{OH})_2$), diaspor ($\beta\text{-Al}_2\text{O}_3 \cdot \text{H}_2\text{O}$), ferrihidrit ($\text{Fe}_5\text{O}_7(\text{OH}) \cdot 4\text{H}_2\text{O}$), gips ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$), hidrokalumit ($\text{Ca}_2\text{Al}(\text{OH})_7 \cdot 3\text{H}_2\text{O}$), hidrotalcit ($\text{Mg}_6\text{Al}_2\text{CO}_3(\text{OH})_{16} \cdot 4\text{H}_2\text{O}$) i paluminohidrokalцит ($\text{CaAl}_2(\text{CO}_3)_2(\text{OH})_4 \cdot 3\text{H}_2\text{O}$), koji doprinose njenoj povišenoj kaustičnosti. U slučaju fabrike glinice u Zvorniku mineraloški sastav dat je na grafikonu 3.



Grafikon 3. Mineraloški sastav ARR fabrike glinice Zvornik (Autori)

ARR takođe, može sadržavati teške metale i metaloide, uključujući arsen (As), hrom (Cr), galij (Ga), torijum (Th), uran (U) i vanadij (V), mada obično samo u koncentraciji i tragovima između nekoliko dijelova na milijun do 200 mg/kg. Iako su prisutnost radionuklida, poput olova (Pb), torijuma (Th) i uranijuma (U), izazvali zabrinutost, ti se elementi gotovo uvijek nalaze u neradioaktivnim stanjima (Gräfe i Power i Klauber 2011, 22-28).



Slika 1. Fotografski snimci deponija ARR: 1. Australija, 2. Zvornik, 3. Rumunija (Autori)

Oko 50% ARR je amorfno, sa svojim kristalnim sastojcima sastavljenim uglavnom od gethita i hematita, kvarca i titana, poput rutila, anatasa i/ili ilmenita. Mogu biti prisutne i mnoge manje faze ostatka izvorne boksitne rude (glina) i novostvorene vrste nastale kao rezultat specifičnih uslova u Bayerovom procesu (npr. natroalunit i noselit). Nakon dodira s vodom, čvrste komponente u ARR-u (koje su obično oko 30-40% otpadnog mulja) daju $\text{pH} \pm 12,5$, s povišenim nivoom električne vodljivosti (EC) između 1 i 16 mS/cm i visokom gustoćom, s više od 80% čestica ARR-a na <10 mikrona (Fergusson 2014, 107). Međutim, fizičke i hemijske karakteristike bilo kojeg određenog ARR-a mogu se uveliko razlikovati, a određene su geološkim osobinama boksitne rude i industrijskim procesnim uslovima obrade boksita u fabrici.

Evidentna je zabrinutost za zdravlje ljudi, uključujući pojavu raka, u ili oko rafinerije glinice. Vršeci istraživanja u Alcoa-i, Donoghue, ljekar, zaključio je da su štetni rizici kao što su akutni i hronični zdravstveni problemi i inkrementalni kancerogeni faktori rizika povezani s izlaganjem ARR-u u rafinerijama Alcoa Wagerup i Pinjarra u zapadnoj Australiji bili zanemarljivi (Donoghue 2014, 20). Njegova studija je bila naručena zbog toga što su se u blizini rafinerije Wagerup održavali protesti stanovnika obližnjeg grada Yarloopa koji kažu da ih emisije čine bolesnima, što izaziva simptome poput krvarenja iz nosa, upaljenih očiju i čireva na koži. Postoji vrlo dugačak popis poznatih otrovnih ili kancerogenih materijala koje se redovno emituju (iz rafinerije), ali tačna kombinacija koja ljude čini bolesnima nije jasno određena. Mnoga onečišćenja povezana s rafiniranjem glinice pojavljuju se u Australijskom nacionalnom popisu zagađivača (NPI). Na primjer, rafinerije glinice su utvrdile da su kontaminanti iz emisija, uključujući arsen (As), hrom (Cr), olovo (Pb), živa (Hg), acetaldehid, benzen, formaldehid, polihlorirani bifenil (PCB), dioksin i dioksinu slični spojevi, policiklički aromatski ugljikovodici (PAH-ovi), toluen, ksileni, cijanidni i fluoridni spojevi, sumpor-dioksid i torij (Th) i uran (U) mogu se izmjeriti i treba ih objaviti. Međutim, nisu se ostvarili nikakvi empirijski medicinski dokazi koji bi povezivali rafineriju glinice, uključujući proizvodnju i skladištenje ARR-a, s nepovoljnim rezultatima za zdravlje ljudi.

Kao posljedica ovih nalaza i ostalih poboljšanja u radu industrije boksita, glinice i aluminija na takozvanoj „ljestvici održivosti“ ekvivalentno su poboljšani uslovi u posljednjih deset godina, za oko 30 kvadratnih kilometara rafinerijskog zemljišta godišnje (ekvivalentno vrijednosti godišnja površina novog iskopavanja boksita) se svake godine obnavlja. Potrošnja električne energije smanjuje se 6% od 1990. za elektrolize i 8% za rafinerije, a emisija perfluorouglijika (PFC) i fluora iz elektroliza smanjuje se za 75% odnosno 44% od 1990, iako pouzdano podaci o potrošnji vode, koji predstavljaju glavni doprinos rafiniranju glinice, nisu sigurni (International Aluminium Institute 2010).

Postoji, međutim, još jedna strana ovih pozitivnih izvještaja. Možda najbolji podsjetnik na opasne osobine ARR-a i zasigurno jedan od najtužnijih događaja u 120-godišnjoj istoriji ove industrije bio je izliv ARR-a s ostatkom brane u Kolantáru, Mađarska, u septembru 2010. godine, što je rezultiralo smrću deset ljudi i ozlijedilo ih je još 60, kada je oko milion tona kaustičnog ARR-a poplavilo sedam gradova i prijetilo da će kontaminirati nekoliko rijeka, uključujući Dunav. Kao posljedica izlivanja, sav biološki život u rijeci Marcal je „ugašen“, a događaj je mađarski premijer Viktor Orban opisao kao „ekološku tragediju“ (Renforth i drugi 2012, 255). Međutim, dosad nisu primijećeni nepovoljni zdravstveni nalazi povezani s prahom ARR koja je nastala ovom industrijskom nesrećom.

Ovaj i drugi slučajevi važni su kad se razmatra mogućnost ponovne upotrebe ARR u drugim industrijskim okvirima „otpad-kao-resurs“ ili premiještanja istih iz zagađenja u velike poljoprivredne aplikacije, kao što je predloženo (Gräfe i Power i Klauber 2011, 65). Na primjer, ako se ARR ponovno upotrebljava, njegove opasne osobine trebaju biti poboljšane kako bi se moglo sigurno rukovati, prevoziti i ponovo koristiti u industrijskim ili komunalnim uslovima ili koristiti u poljoprivredi i širem društvu. Iz tog razloga, mnoge rafinerije glinice tragale su za načinima da izmjene ARR tako što će „neutralizovati“ njegovu ukupnu alkalnost (posebno visoke koncentracije Na i tako smanjiti pH, a time i njegovu kaustičnost).

U posljednjih 20 godina identifikovana je i testirana široka raznolikost različitih metoda modifikacije ARR-a, uključujući karbonizaciju, neutralizaciju sa morskom vodom, koncentrisano dodavanje soli i nanofiltraciju, dodavanje sumpora i neutralizaciju kiseline (Carter i drugi 2008, 479). Svaka metoda, u različitoj mjeri, smanjuje alkalnost, snižava pH i električnu vodljivost, a ARR čini „sigurnim“ (tj. neopasnim), a svaka metoda ima prednosti i nedostatke, iako su ovdje predstavljeni za katalogizaciju.

Kritično pitanje u razmatranju održivosti metode glasi: hoće li ARR nakon izmjene biti čuvan u deponiji ili će se ponovno koristiti? Odgovor na prvo znači da, iako izmijenjeni ARR može biti čuvan na siguran način bez karakterističnih opasnih osobina, nema se namjeru ponovo koristiti u drugim aplikacijama i zbog toga metoda modifikacije ne mora niti jednom uzeti u obzir bilo kakve hemijske ili fizičke osobine ARR-a koje se mijenjaju. Odgovor na drugo pitanje dovodi do konkretnih odluka o primijenjenoj metodi modifikacije, posebno ako zahtjev za ponovnu upotrebu zahtijeva ARR koji će da neutrališe kiselinu ili kiselinu pufera, izdvoji teške metale, veže fosfat, doda makro i mikroelemente u zemljište, sinergistički komunicira s hemijskim i/ili biološkim agensima ili na drugi način obavljaju specifične okolinske, tehnološke ili industrijske funkcije (ove metode modifikacije mogu se slobodno nazvati ARR „korisnošću“). Na primjer, kad se uzmu u obzir osobine ARR-a sa deponije, jedna metoda modifikacije može sniziti njegov pH i učiniti ga hemijski inertnim, smanjujući na taj način dugoročne probleme ispiranja, ali modifikovani ARR možda neće zadržati svoje „korisne“ osobine kada se ima na umu njegova ponovna upotreba u proizvodnji cementnih proizvoda ili poljoprivredi. Suprotno tome, druga metoda modifikacije može povećati kapacitet neutralizacije kiseline (ANC) ARR, ali ta osobina možda neće biti opravdana ako će ARR biti pasivno čuvan na deponiji.

Na primjer, dok je istraživanje ARR-a i njegovo potencijalno ponovno korišćenje sveobuhvatno urađeno, ali se osnovna pogreška čini ne razlikujući A), B) i C), što se može primijetiti u radovima Liu i Wu u Kini (Liu i Wu 2012, 1234) i Traoré, et al, u Gvineji (Traoré i Traoré i Diakité 2014, 18). U svrhu razvoja ovog okvira održivosti, ovaj se rad odnosi samo na C), tj. modifikovani ARR koji je pogodan za korisnu ponovnu upotrebu, ali radi sažetka, rad ne razlikuje različite vrste modifikovanih ARR-ova. Jednom promijenjen, ovaj tip C) ARR ima niz važnih karakteristika i funkcija, a one se mogu dodatno poboljšati miješanjem s drugim hemijskim i biološkim aditivima ili daljnjim izmjenama za druge primjene kroz specijalizirane industrijske procese, kao što je peletizacija, dokumentovano je u više od 700 patenata podnesenih u periodu od 1964-2008. godine (Klauber i Gräfe i Power 2011, 15). Sažetak korisnih zahtjeva za ponovnu upotrebu modifikovanog ARR-a prikazan je u tabeli 1.

Tabela 1. Dokumentovani zahtjevi za upotrebu modifikovanog ARR, uključujući i predviđenu količinu ARR koje su u navedenim referencama (Autori)

Sažetak prijava za ponovnu upotrebu modifikovanog ostatka rafinerije glinice		
Primjena	Scale	Reference
Izgradnja i ugradnja, uključujući beton, maltere, maltere i agregate; izgradnju cesta i brana	veliki	37, 38, 39
Cementni proizvodi, uključujući opeku, blok, pločice, izolaciju peći i proizvodnju klinkera	veliki	40, 41, 42
Poljoprivreda i vrtlarstvo, uključujući kompostiranje	veliki	43, 44, 45
Ekstrakcija minerala, metala i rijetkih zemlja, poput željeza (Fe), titana (Ti), galija (Ga) i skandija (Sc)	veliki	7, 46, 47, 48
Keramika, plastika, katalizatori, prevlake, pigmenti i geopolimeri	veliki	49, 50, 51
Taljenje i lijevanog željeza i proizvodnja čelika, uključujući valjanje	veliki	52, 53
Obrada industrijskog otpada, uključujući obradu gasovitog, tečnog i čvrstog otpada	srednji	13, 54
Tretman rudarskog otpada i sanacija rudnika i obnova	srednji	55, 56, 37
Obrada onečišćenog zemljišta, uključujući kisela sulfatna zemljišta (ASS) i sanacija industrijskih lokacija	srednji	57, 5
Obrada otpada gasa - ugljenog gasa	srednji	58

Desulfurizacija dimnih gasova i ostalih otpadnih gasova	mali	59
Tretman pitke vode	mali	60
Obrada komunalnog otpada, uključujući obradu gasovitog, tečnog i čvrstog otpada	mali	61, 62, 63

Iz ovog pregleda očito je da modifikovani ARR ima značajanu industrijsku, privrednu namjenu kao i ostvarivanje efekata u zaštiti životne sredine te je neophodno i dalje istraživati njegovu održivu upotrebu.

2. POSTOJEĆI PRAVCI U INDUSTRIJI

Evidentni su pokušaji stvaranja okvira za održivu, ponovnu upotrebu ostataka rafinerije glinice ARR u industrijskom kompleksu na Bliskom Istoku. Slično, niz tehnoloških planova razvijeni su u industriji boksita, glinice i aluminijske u posljednjih 20 godina. Mape puta predstavljaju način na koji industrija glinice sebe vidi sada i kako se želi vidjeti u kratkoročnoj i dugoročnoj budućnosti (Wehrli i Campbell i Fergusson 2011, 179).

Ciljevi razvoja tehnologije za industriju glinice uglavnom su visok kvalitet i identifikuju ključna područja, s posebnim naglaskom na industrijske ciljeve, mjerila i izazove ili područja istraživanja i razvoja. Ključni industrijski ciljevi, mjerila i izazovi, koji su utvrđeni ovim mapama, uključuju: 1) rafinerije bi trebale raditi sa zatvorenim ciklusom vode; 2) rafinerije bi trebale minimizirati prašinu, emisije gasova, isparljive organske spojeve, alkalne rastvore i druge izvore stvarnih ili uočenih rizika za okolinu i zdravlje ljudi; 3) rafinerije bi trebale smanjiti svoju potrošnju energije i tražiti alternativne izvore energije; 4) rafinerije bi trebale smanjiti uticaj dužine cijevovoda na poslovanje, smanjujući na taj način troškove i poboljšati efikasnost opreme; 5) rafinerije bi trebale poboljšati efikasnost rastvora; 6) rafinerije bi trebale postići veću fleksibilnost u rasčinjavanju različitih ruda boksita, poboljšavajući na taj način kvalitet glinice.

Ključna područja daljnjeg istraživanja i razvoja, koja su identifikovana u putokazima, uključuju: 1) ubrzanje precipitacije glinice; 2) poboljšane strategije kontrole; 3) poboljšane metode korišćenja boksita; 4) poboljšano uklanjanje nečistoća Bayer-ovih rastvora; 5) smanjenje potrošnje lužine; 6) efikasniju upotrebu toplote.

Iako su takozvane metode „isplativo pretvaranje u inertni materijal i alternativna upotreba“ ARR-a razmatrane u nekim radovima (International Aluminium Institute 2010), one se uglavnom svode na pretvaranje ostataka u sigurniji materijal koji treba obraditi prilikom skladištenja (tj. tip ARR B), a ne istraživanje i provođenje održivih i korisnih opcija ponovne upotrebe. To postaje posebno očito kada industrija unaprijedi koncept „inertiranog“ ARR-a (tj. čini ga hemijski inertnim ili „neutralnim“) kao fokus mape puta. U takvim je slučajevima pronalazak alternativne upotrebe za ARR sekundarni, jer „inertni“ ostatak ima malu ili nikakvu upotrebu u životnoj sredini. Zapravo, upravo zahvaljujući jedinstvenim svojstvima ARR-a, uključujući njegove ANC i fosfatno vezujuće kapacitete i kapacitete za odvajanje teških metala, među ostalim prednostima, čine korisnu ponovnu upotrebu ARR-a tako privlačnom.

Ipak, putokazi govore o opštem cilju upravljanja „ostacima boksita na takav način da promoviraju/podstaknu upotrebu kao proizvoda i resursa za druge industrije, a za sve preostale ostatke da se skladište u ekološki prihvatljivom obliku“ (International Aluminium Institute 2010). Tamo gdje je identifikovan specifičan cilj usmjeren prema industriji, on je uglavnom postavljen u kontekstu cjelokupnog održivog razvoja, što je osnova dobrog planiranja i izvještavanja.

Međutim, razumno je naglasiti da putokazi nisu modeli održivog razvoja za korisnu ponovnu upotrebu, jer nedostaje razmatranje razmjene lidera-člana-lidera (Leader-Member-Exchange) (LMX), procjene životnog ciklusa (Life Cycle-Assesments) (LCA) i dizajna rizika za upravljanje životnom sredinom (Design for Environment) (DfE), koji su bitni elementi svakog sveobuhvatnog okvira održivosti. Ograničenje u trenutnim planovima tehnološke povezanosti dijelom je posljedica činjenice da su razvojne ideje nastale u ranom dijelu prošlog vijeka, a

stvarni pristupi dizajniranju i provođenju i programa održivosti, poput onoga koji je razmatran u ovom radu, tek su se pojavili, ali takođe nastaje zbog „industrijski usmjerenog“ gledišta ARR-a, u kojem interesi rafinerije nadmašuju interese svih i svega ostalog. Mape puta uključuju inkluzivnost jer se odnose na uključivanje industrije, akademskih radnika i udruženja industrije u upravljanje ARR-om, a rafinerije glinice priznaju rastući uticaj ekoloških i socijalnih pitanja na njihovu industriju. Međutim, njihov je glavni fokus na glinici, kao na robu, a ne na ARR-u kao potencijalno korisnoj sirovini za ponovnu upotrebu pa kao posljedica toga propuštaju bogatstvo cjelovitog i sveobuhvatnog okvira za razvoj održive budućnosti industrije. Taj nedostatak postaje očigledan kad su paralelno s napredovanjem inicijativa za ponovnu upotrebu ARR-a neke velike aplikacije ARR-a postale spektakularno pogrešne, posebno kada velike aplikacije koriste nepromijenjeni ARR i kada lokalna zajednica, mediji i drugi učesnici nisu u potpunosti upoznati sa planiranjem, implementacijom i nadzorom takvih aplikacija.

3. NOVI OKVIR ODRŽIVOG RAZVOJA

Okvir održivosti predložen u ovom radu zamišljen je kao sveobuhvatan i inkluzivan pristup konceptualiziranju budućnosti za ARR. Pretpostavlja se da svi učesnici mogu i trebaju igrati ulogu u transparentnom i otvorenom razgovoru, uz široko razumijevanje i sporazumijevanje u pitanjima koja se odnose na korisnu ponovnu upotrebu ARR-a.

Okvir, takođe, smatra osnovnim načelom da svaki učesnik treba doprinijeti i dobiti koristi od ponovne upotrebe ARR-a. Iz tih razloga se komunikacija, obrazovanje i inkluzija vide kao kritični elementi ako se radi o efikasnom djelovanju i na taj način vodi do dugoročnih rezultata održivosti i nedostatak komunikacije o njima kad se primijene. Na primjer, kada su Alcoa i Ministarstvo poljoprivrede vlade zapadne Australije krajem 1990-ih odlučili primijeniti nepromijenjeni ARR na poljoprivrednim površinama, očito nisu savjetovani svi učesnici, a obrazovanje i komunikacija u zajednici možda nedostaju.

Kad su novinari postali svjesni opsežnog programa ponovne upotrebe i primijetili prisutnost urana u ARR-u, pretpostavili su i objavili široj australijskoj javnosti da je poljoprivredno zemljište na kojem je primijenjen ARR postalo radioaktivno (ova aplikacija postala je poznata kao „veliki eksperiment crvenog mulja koji je prošao radioaktivno“ (Fergusson 2016, 969). Njihov zaključak bio je pogrešan, ali šteta je učinjena, a Alcoa i vlada Zapadne Australije nikada se nisu u potpunosti oporavili od ovog iskustva, a sve ostale aplikacije ARR-a u toj državi od tada su obustavljene.

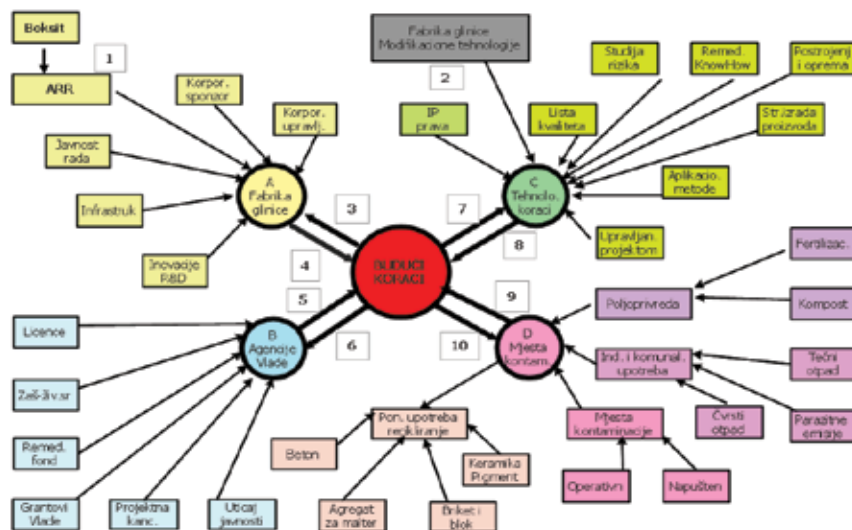
Uprkos njihovim naporima da istraže ponovnu upotrebu ARR-a u stvarnom svijetu, reakcija zajednice i loša reklama na najbolji način su uništili sve daljnje pokušaje ponovne upotrebe ARR-a u Zapadnoj Australiji. Izuzetno loš međunarodni publicitet oko spomenutog izlivanja ARR-a u Mađarskoj slično je učinio na unapređivanju napora za održivost ovog programa.

Svaki efikasan okvir održivosti ARR-a mora zbog toga postići tri osnovna cilja: 1) primijeniti samo modifikovani, neopasni ARR u projektima ponovne upotrebe; 2) biti predstavljen kao „cijeli sistem“, a ne kao industrijska inicijativa „otpad-do-resursa“ (tj. uraditi tako da to ne bude način da se industrija riješi otpada koji se želi upakovati u inicijativu kao „održiv razvoj“, zajednica će to pogrešno shvatiti kao pokušaj „odlaganja“ industrijskog otpada na sumnjiv način; 3) provesti transparentan, otvoren i uključiv način, uključivši sve učesnike u proces.

Iz ovog razloga, pristup održivosti predložen u ovom radu je proaktivan, a ne reaktivan. Osmišljen je za informisanje i edukaciju učesnika - postupak koji se smatra ključnim za bilo koju održivu budućnost ARR-a. Ako postoji zabrinutost, potrebno je riješiti „unaprijed“, ne nakon niza pritužbi ili zahtjeva, obično regulatoru ili medijima, a često su zasnovane na pristrasnim ili iskivljenim informacijama.

Takva sudbina zadesila je proizvodnju gasa iz uglja (CSG) u Australiji, u kojoj je percepcija zajednice o opasnosti koju predstavljaju hemikalije za hidraulično lom i postupci bušenja barem djelomično prouzrokovana vlastitom tajnovitosti industrije; Činjenica da CSG industrija nerado ili odbija otkrivanje hemijskih svojstava svoje „fracking“ tekućine (od kojih mnoge sadrže

poznate mutagene i kancerogene, ali se mnogi nikada ne koriste) samo još više povećava uznemirenost društva i protivljenje takvim industrijama. Velika tajnovitost i nedostatak znanja, strah i otpor promjenama su neizbježni, ali često idu na štetu potencijalnog društvenog napretka.



Slika 2. Okvir održivosti (dio A), identifikovanje ključnih stručnjaka (sa fokusom na A-D) i njihov doprinos (Autori)

Slike 2. i 3. prikazuju pregled novog okvira s devet ključnih učesnika koji doprinose održivoj budućnosti ARR-a i imaju koristi od njega. Ti su učesnici označeni kao A-L (s naglaskom na učesnike A-D na slici 2. i E-L na slici 3). Zainteresovane strane u ovom su kontekstu definisane kao pojedinci (ili skupine pojedinaca) i subjekti od kojih se opravdano može očekivati da će doprinijeti i na koje bi to moglo uticati primjenom ARR-ove korisne upotrebe.

Devet ključnih učesnika su: na slici 2. učesnik A, rafinerija glinice, koja ima centralnu ulogu kao snabdijatelj ARR-a; učesnik B, vladine agencije, učesnik C, interesno rješenje tehnološkog rješenja i pružalac usluga, učesnik D, vlasnici kontaminiranih mjesta, proizvođači otpada i operateri firmi koji mogu imati koristi od ponovne upotrebe ARR-a i na slici 3. učesnik E, društveno odgovorni investitori, učesnik F, mediji, uključujući pisane, digitalne i emitovane medije te kompanije za marketing i odnose s javnošću, učesnik G, naučno-istraživačka zajednica, uključujući kooperativne istraživačke centre (CRC) i nezavisne istraživače, učesnici H, savjetnici, izvođači i industrijska udruženja, uključujući građevinske inženjere, ekološke savjetnike i revizore, prevoznicike firme i analitičke laboratorije i učesnika L, šira javnosti.

Treba napomenuti da, budući da predstavljeni putokazi stavljaju naglasak na pitanja kao što su upravljanje ljudskim resursima (HRM), zdravlje i sigurnost na radnom mjestu poput gubitka štete u vremenu (LTIR) i ukupna stopa povrede koja se može zabilježiti (TRIR) te industrijski odnosi, predstavljeni okvir postavljen je na osnovu savremenih standarda zaštite na radu i zbog toga se ta pitanja ne rješavaju direktno.

Model, takođe, pretpostavlja da su učesnici koje doprinose održivoj budućnosti za ARR sigurni na radnom mjestu i da su sve stranke korporativni građani. Slično tome, okvir nije istaknuo značaj i potrebu procjena rizika od strane relevantnih učesnika.

Zbog toga sadašnji okvir pretpostavlja da će procjene rizika, zajedno s drugim aspektima izgradnje održive budućnosti, kao što su upravljanje krizama, izvještavanje o životnoj sredini, održive prakse nabavke, etičko ponašanje, obrazovanje i osposobljavanje te ljudska prava i ravnopravnost polova, biti sastavni dio u planiranju i prevođenju ARR u oblik koristan za

ponovnu upotrebu. Nadalje, okvir nije istaknuo potrebu za dokumentacijom i izvještavanjem učesnika, ali pretpostavlja da bi takve osnovne prakse održivosti primjenjivale i provodile relevantne strane.

U tom okviru, niti jedan učesnik nema koristi od postupka na štetu bilo kojeg drugog učesnika, a okvir je modelovan na principu „sve i svi pobjeđuju“ (Elkington 1994, 95). Iako rezultat konceptualno može predstavljati igru s nultom sumom (tj. koristi se nadoknađuju jednakim doprinosima), okvir je suma koji nije nula, jer rezultat primjene modela nije ekonomski ili ekološki nula. Ako ništa drugo, rezultat primjene takvog modela trebao bi biti suma koja nije nula, a u korist je svima.

Na primjer, neke rafinerije glinice vjeruju da je njihov „dobitak“ samo smanjenje ARR-a (tj. prenošenjem odgovornosti davanjem ili prodajom opasnog ARR-a) veći od njihovog „doprinosa“ (tj. daljnjem korišćenju korisnih aplikacija za ponovnu upotrebu). Oni, takođe, pogrešno vjeruju da ukidanjem svoje odgovornosti i smanjenjem svoje dugoročne odgovornosti (tj. promjenom jednačine opasnosti u njihovu korist kao rezultat ARR-a koji napušta svoje mjesto) oni bi trebali imati malu ili nikakvu brigu za ono što se događa s ARR-om izvan njihovih vrata. Međutim, taj jednostrani industrijsko-centrični pristup je neodrživ. On pretpostavlja: „mi pobjeđujemo, a nije nas briga za ostalo“.

Šta više, neke su rafinerije prihvatile stav „ne želimo sudjelovati ili biti uključeni u niže aplikacije jer nismo u poslu ponovne upotrebe“, iako se takav stav mijenja. Poznati primjeri uključuje RUSAL, jednog od najvećih svjetskih proizvođača glinice uz pomoć ruskog Ministarstva nauke, koji trenutno testira velike količine ARR metala i programe za reciklažu rijetkih zemalja, te proizvodnju čelika i betona, te cijelu indijsku industriju glinice koja istražuje načine proizvodnje sivog i livenog željeza i šljake bogate glinicom plazmenim topljenjem ARR (Indian Bureau of Mines 2014, 8).

Drugim riječima, nije dovoljno reći „radićemo na stvaranju održive budućnosti za ARR“ (kada se zapravo samo želimo riješiti industrijskog otpada“. Istinska održivost i korporativna odgovornost zahtijevaju daleko aktivniji angažman u širem okruženju održivosti, a odgovornost i povjerenje su okosnica svakog takvog angažmana.

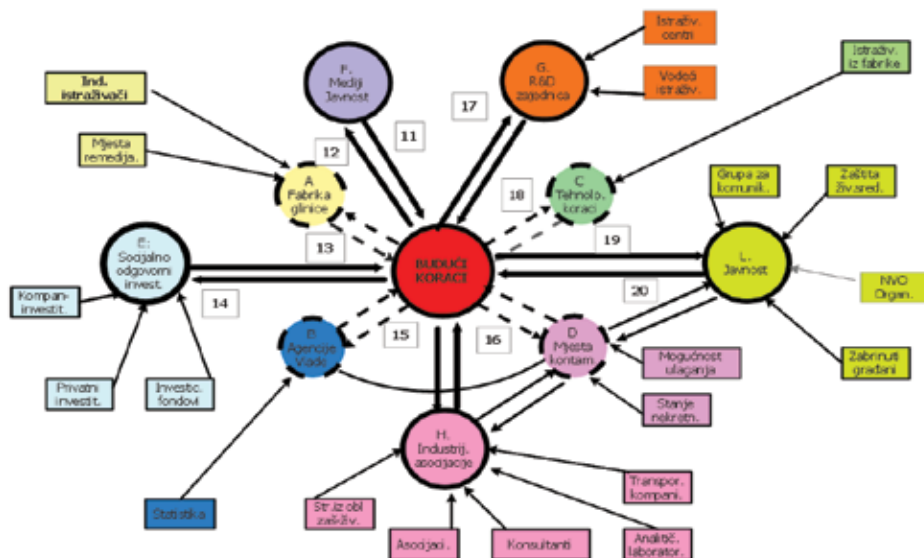
Ostatak rafinerije glinice ARR (1), dobijen iz boksita, prvi je glavni doprinos ovom okviru održivosti; sve što je u modelu predviđeno je ARR kojeg proizvodi rafinerija glinice (A). Model, takođe, pretpostavlja da su glavni učesnici procesa nebrojene tehnologije modifikacija (2), koje ARR pretvaraju u benigne, sigurne, upotrebljive, ali ne inertne sirovine (model pretpostavlja da su takve metode i rezultirajući ARR odobreni od strane nadležnih tijela za ponovno korišćenje u komunalnim i industrijskim primjenama).

Doprinosi održivoj budućnosti rafinerije glinice (3) uključuju: ARR sirovine, stručnost u rukovanju i prevozu ARR-a, industrijsko znanje i vjerodostojnost, sposobnosti odnosa s javnošću, sponzorstvo i korporativna filantropija, korporativno upravljanje (kao generator i vlasnik ARR-a), infrastruktura i istraživačke i razvojne sposobnosti. Takvi se doprinosi potpuno uklapaju u kategorije korporativne etike, javne odgovornosti i korporativne društvene odgovornosti (CRS) i reagovanja, a svi su temelj savremene prakse održivosti poslovanja i izvještavanja. Prednosti rafinerije glinice od ovih doprinosa (4) uključuju: smanjenu dugoročnu odgovornost za upravljanje ARR-om i nadzor, smanjeni troškovi povezani s održavanjem i upravljanjem ovom obavezom, a samim tim i poboljšani bilans, sanaciju vlastitih kontaminiranih lokacija, uključujući obnavljanje zagađenja ARR-om, povećani značaj unutar industrije, vlade i društva i dobre volje.

Doprinosi vladinih agencija za održivu budućnost (5) uključuju: licenciranje i odobravanje projekata zaštite životne sredine, finansiranje projekata putem državnih subvencija i sredstava za sanaciju, mogućnosti bolje povezanosti sa agencijama za odnose s javnošću, podaci i statistika i nadzor usklađenosti.

Vlade, takođe, imaju cijelovit popis napuštenih i zapuštenih objekata ARR-a, kao i napuštenih i zapuštenih rudnika u vezi zaštite životne sredine (posebno rudnika zbog koncesionih prava) koja su prebačena u vladinu kontrolu i nadzor i za koja su vlade odgovorne.

Mnoga od tih napuštenih nalazišta nalazi se (na primjer, 1322 mjesta u okolini Superfund-a) u SAD-u i više od 50 000 jalovišta, napuštenih rudarskih nalazišta u cijeloj Australiji koja su trenutno pod državnom kontrolom (Liu i Wu 2012, 1241) su kontaminirana i potrebno ih je ponovo ukloniti. U mnogim je slučajevima modificirani ARR dobro prilagođen ovom zadatku. Koristi vladinih agencija (6) od doprinosa održivoj budućnosti uključuju: smanjenu dugoročnu odgovornost, smanjeni troškovi povezani s dugoročnim upravljanjem i nadgledanjem napuštenih ARR-ova i drugih onečišćenih mjesta, potencijalno prevođenje u poljoprivredno zemljište koje se može ponovo upotrebljavati, bolji odnosi s javnošću i bolja percepcija vlasti od strane društva.



Slika 3. Okvir održivosti (dio B), identifikovanje vodećih zainteresovanih strana u obradu ARR (Autori)

Doprinosi održivoj budućnosti tehnoloških rješenja i pružatelja usluga (7) uključuju: tehnološko znanje, posebno u vezi s ekonomičnim i efikasnim metodama za izmjenu ARR-a u pripremi za ponovnu upotrebu, proizvodna stručnost u vezi s razvojem proizvoda od ARR, kontrolom kvaliteta i osiguravanjem kvaliteta, kao i znanje o hemijskom miješanju i pakovanju i isporuci proizvoda, evidencija uspjeha u marketingu i primjeni modificiranog ARR-a i korisničke baze putem koje se ARR može primijeniti, istraživačke mogućnosti i pristup tržišnim podacima, studije slučaja i ostala tehnička dokumentacija, uključujući sigurnosne listove o sigurnosti materijala (MSDS), postrojenja i oprema prikladna za isporuku ARR-a u različitim oblicima, uključujući kao đubtrivo, prah ili pelet, stručnost u primjeni, kao što su sistemi i procesi kontrole za direktno dodavanje i filtriranje, ekspertizu o upravljanju i provođenju projekata.

Primjeri tehnoloških rješenja od strane davaoca usluga koji se bavi obnavljanjem metala od ARR-a, sanacijom životne sredine i tretmanom otpada koji koriste ARR uključuju Orbite Aluminae u Kanadi i Virotec u Australiji (Fergusson 2014, 115-118). Prednosti tehnoloških rješenja od davaoca usluga i doprinosa održivoj ARR budućnosti (8) uključuju: povećane komercijalne mogućnosti i rast poslovanja, pristup bespovratnim sredstvima i konkursima, pristup širokom spektru projekata zaštite životne sredine, projektna dokumentacija i proširene tehničke mogućnosti, proširena baza klijenata i komercijalne povratne informacije i povećana tržišna kapitalizacija.

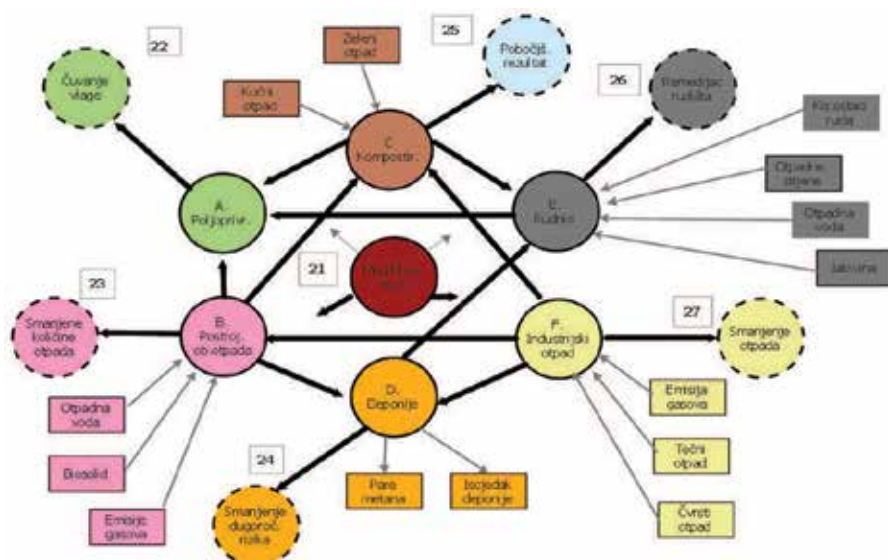
Doprinosi održivoj budućnosti vlasnika i/ili menadžera zagađenih mjesta i proizvođača otpada, osim firmi koje mogu imati koristi od ponovne upotrebe ARR-a u proizvodnji cementnih proizvoda ili u drugim aplikacijama s dodanom vrijednošću (9), uključuju: efikasan tretman niz tokova gasnih, tekućih i čvrstih otpada koji su pogodni za ARR recikliranje i/ili ponovnu upotrebu, smanjena kratkoročna i dugoročna obaveza, smanjeni rizik nepridržavanja i novčane kazne od agencija za zaštitu sredine i potencijal da otpadna mjesta - „mjesta troška“ postanu „profitni centri“.

Prednosti ovih vrsta poduzeća (10) uključuju: smanjeni (opasni) otpad, najbolje industrijske prakse za upravljanje i obradu otpada i saniranje kontaminiranih mjesta, izvor sirovina kao sirovina drugim industrijskim proizvodima, poput proizvodnje betona, opeke i blokova, keramike, geopolimera, maltera i agregata, smanjene novčane kazne i druga kršenja i dogovor sa vladom o trajnom zatvaranju mjesta.

Na slici 3. mediji (11), uključujući internetske, štampane i emitovane medije, kako u opštem komunikacijskom prostoru, tako i preko posebnih industrijskih medijskih kanala, imaju važnu ulogu u doprinosu i stvaranju održive budućnosti za ponovno korišćenje ARR. Ta se uloga sve više prepoznaje kao ključni element u procjeni održivosti korporativne odgovornosti. Doprinosi medija uključuju: činjeničnu i informativnu komunikaciju s širom javnošću, vladom i industrijom o projektima ponovne upotrebe ARR-a i drugim inicijativama za ponovnu upotrebu industrijskog otpada, činjenična i informativna komunikacija o održivom razvoju, kao i razmjenom informacija i mišljenja putem internetskih foruma i blogova. Mediji mogu imati koristi od održive budućnosti (12) dobivanjem informacija o inicijativama za održivi razvoj i ekološkim projektima od industrije, vlade i šire javnosti, povećavajući na taj način njihov intelektualni kapital i vjerodostojnost u društvu, što vodi do veće dobre volje prema medijima. Doprinosi društveno odgovornih ulagača održivoj budućnosti (13) uključuju mogućnost ulaganja i učestvovanja u investicijama koje mogu biti prihvatljive za životnu sredinu, koje se mogu dobiti, s visokim povratom i u firme koje doprinose dobrobiti društva. Ulaganja mogu vršiti socijalno odgovorni investicioni fondovi, korporativni i privatni investitori ili privatni dobrotvori. Društveno odgovorni investitori imaju koristi od održive budućnosti (14) osiguravajući povrat ulaganja i učestvujući u društveno i ekološki odgovornijim ulaganjima.

Doprinosi održivoj budućnosti savjetnika za zaštitu životne sredine i inženjera, industrijskih udruženja i nezavisnih trećih strana, poput civilnih ugovora (15) uključuju: učestvovanje u projektima inženjera i stručnjaka za životnu sredinu, značajno proširena mreža klijenata i kolega, analitičke sposobnosti certifikovanih laboratorija i prevoz proizvoda od strane prevozničkih firmi. Prednosti konsultanata za zaštitu životne sredine i inženjera, izvođača radova, industrijskih udruženja i nezavisnih trećih strana (16) uključuju: veću stručnost u industriji, povećana zaposlenost i poslovne mogućnosti, povećana stručnost i izloženost većem broju projekata, povećani pristup mrežama klijenata i kolega kroz poslovne sinergije, povećane poslovne mogućnosti i proširena baza klijenata, povećana baza članova za industrijske organizacije, mogućnosti istraživanja i savjetovanja, prilika za interakciju i rad s drugim stručnjacima iz industrije i čast.

Doprinosi naučno istraživačke zajednice održivoj budućnosti (17) uključuju: učestvovanje nezavisnih istraživača koji mogu ispitati prednosti i rezultate održivog razvoja u ARR-u, učestvovanje kooperativnih istraživačkih centara (CRC), koji imaju i značajne istraživačke vještine i resurse, kao i značajne veze s industrijom i vladom, pristup međunarodnim, recenziranim časopisima i izloženost naučnim i zajedničkim projektima i inicijativama. Prednosti naučno-istraživačkoj zajednici (18) uključuju: pristup širokom rasponu projekata zaštite životne sredine na vodećim skupovima nauke i tehnologije, podaci o životnoj sredini i održivom razvoju, stručnost i mogućnosti istraživanja i povećani kapital znanja.



Slika 4. Okvir održivosti (dio C), benefiti korišćenja modifikovanog ARR u različitim granama industrije (Autori)

Doprinosi šire javnosti za održivu budućnost (19) uključuju: učestvovanje nevladinih organizacija (NVO), ekologa, zainteresovanih građana i akcijskih grupa u zajednici i pojašnjenje „javne volje“ kroz forume zajednice, radionice i sastanke gradske zajednice. Koristi za širu javnost (20) uključuju: povećani pristup korisnim javnim mjestima koja prije nisu bila vrijedna, smanjena dugoročna odgovornost za životnu sredinu, smanjena odgovornost države, veće mogućnosti zapošljavanja, poboljšane obrazovne mogućnosti i bolje znanje o životnoj sredini.

Kao što je gore spomenuto, postoji širok raspon industrija i primjena koje mogu imati koristi od ponovne upotrebe modifikovanog ARR-a za obradu otpada i odlagališta otpada, a u nekim slučajevima mogu proizvesti proizvod koji se može ponovno koristiti iz obrađenog otpada. Oni uključuju: poljoprivredu i vrtlarstvo, proizvodnja betona i specijalnih proizvoda od cementnih proizvoda, postrojenja za pročišćavanje kanalizacije, postrojenja za kompostiranje, odlagališta, rudna nalazišta i industrije, poput topionica olova i cinka, gasovoda, firmi za očuvanje drveta, kamenoloma, proizvodnih firmi i firmi za galvansko nanošenje prevlaka, postupci neutralizacije i sanacije zemljišta, operacije dobijanja gasa iz uglja i druge naftne i gasne kompanije, bio-rafinerije, elektrane na ugalj, čeličane i dr. (Fergusson 2014, 12).

Slika 4. prikazuje primjer modela šest industrija (A-F) koji mogu imati koristi od primjene modifikovanog ARR-a i/ili proizvoda izvedenih iz njega te prikazuje potencijalne interakcije među njima. Konkretno, slika 4. sugerise kako tok otpada, koji ARR tretira u jednoj industriji, može se ponovo upotrebiti kao ulaz za korisnu ponovnu upotrebu u drugoj industriji. Takođe, sažima održivi rezultat svake industrije, budući da se odnosi na otpad koji je tretiran ARR-om. Slikom 4. predviđa da se na ulazu modifikovanog i/ili neutralizovanog ARR-a (21) u svih šest područja primjene, a to su: Primjena A poljoprivreda, Primjena B postrojenja za prečišćavanje kanalizacije, Primjena C kompostiranje, Primjena D odlagališta otpada, Primjena E nalazišta ruda i primjena F industrijski otpad.

Na primjer, kada se primjenjuje na poljoprivredu (A), pokazalo se da ARR pomaže u zadržavanju vlage, pomaže u zadržavanju fosfata u bioraspoloživom obliku, podstiče rast biljaka dodavanjem makro i mikrohranjivih sastojaka, pomaže u odvajanju iz zemljišta teških metala koji mogu biti štetni za biljke i drveće, što dovodi do poboljšanih prinosa usljed većeg zadržavanja vlage i zdravijih uslova (22). Slično tome, kada se primjenjuje na prečišćavanje

kanalizacije u STP (B), pokazalo se da proizvodi dobiveni ARR smanjuju fosfat, azot, biološku potrebu za kiseonikom (BPK), hemijsku potrebu za kiseonikom (COD), teške metale i E. Coli u komunalnim otpadnim vodama, kao i smanjuju zapreminu biosolida i smanjuju potrebu za drugim hemikalijama, kao što su flokulanti i polimeri, prilikom obrade biosolida, što dovodi do boljih rezultata obrade i smanjenja količine otpada (23).

Kada se ARR primjenjuje na STP, obrađeni biosolidi imaju ponovnu vrijednost kao đubrivo u poljoprivredi i vrtlarstvu te na rudarskim nalazištima. Obrađeni biosolidi mogu se koristiti i u postrojenjima za kompostiranje, a tretirani biosolidici mogu se ispuštati na odlagalište bez dugoročnih negativnih uticaja na odlagalištima povezanim s neobrađenim biootrovima. Štaviše, pročišćena komunalna, otpadna voda ima potencijalnu vrijednost kao reciklirana voda za upotrebu u poljoprivredi i postrojenjima za kompostiranje i na rudarskim nalazištima, mada zabrinjavajuća istraživanja pokazuju da pročišćeni otpadni otpad i biosolidi možda nisu tako benigni kao što se prije mislilo (Hendricks i Pool 2012, 290).

Kada se ARR doda u zeleni i kućni otpad, koji se koristi u kompostiranju (C), ova primjena rezultira višim temperaturama kompostiranja, bržom razgradnjom komposta i kvalitetnijim kompostom (25). Tretirani kompost može se koristiti kao đubrivo i u poljoprivredi i u obnovi rudnika. Kad se deponije čvrstog otpada (D), poput građevinskog otpada i otpada od rušenja, kiselih sulfatnih zemljišta, onečišćenog zemljišta i drugih tokova čvrstog otpada poput biosolida poslije obrade na deponiji, ti čvrsti materijali mogu se preklasificirati (tj. Iz „opasnih“ ili „opasni niskog nivoa“ na „čisti materijal“, čime se smanjuju troškovi odlaganja) ili se može umanjiti vjerovatnost dugoročne kontaminacije, uključujući stvaranje onečišćenog iscjetka. Pod bilo kojim uslovima odlagališta otpada mogu stvarati metan za ponovnu upotrebu ili preprodaju (24) (Rubinos i Spagnoli i Barral 2013, 440).

Postoji veliki broj tokova gasnog, tekućeg i čvrstog otpada koji se generišu na rudarskim nalazištima (E), uključujući otpadne stijene, jalovinu, otpadne vode i fugitivne emisije. Na primjer, kada se gasne emisije tretiraju s modifikovanim ARR-om, one ne rezultiraju stvaranjem gasova staklene bašte ili zagađenjem atmosfere. Zavisno o vrsti otpada, obrađene otpadne vode rudnika mogu se slično ispuštati u lokalno prihvatno okruženje. Takvi programi obnove, takođe, podstiču rast trave i drveća, uključujući obnavljanje napuštenih nalazišta rude, što rezultira u obnovljenim nalazištima ruda i čistom, održivom životnom sredinom (26) (Fergusson 2014, 12-17).

Postoji i velik broj tokova gasovitih, tekućih i čvrstih otpada koji se generišu iz većine industrija (F), od kojih se mnoge mogu prilagoditi obradi modifikovanim ARR. Na primjer, obrađene emisije gasa ne rezultiraju stvaranjem gasova staklene bašte ili zagađenjem atmosfere (Hutson and Attwood 2008, 285). Zavisno o vrste otpada, obrađene industrijske otpadne vode, takođe, se mogu odbaciti u kanalizaciju kao „trgovački otpad“, a neke obrađene čvrste stvari mogu se koristiti u kompostiranju ili ići na odlagalište u reklasificiranom obliku, čime se smanjuju troškovi odvoza čvrstog otpada. Rezultat ove inicijative za industrijski otpad je opšte smanjenje otpada i čišće, održivije društvo i životna sredina (27) (Kalamanda 2016, 165-177).

ZAKLJUČAK

Ostaci rafinerije glinice su opasni otpad u velikim količinama, koji nakon modifikacije može imati korisna fizička i hemijska svojstva. Brojne važne istraživačke studije pokazale su da ARR ima značajnu vrijednost ponovne upotrebe (Liu i Wu 2012, 4; Traoré i Traoré i Diakité, 20), uključujući primjenu u obradi otpadnih voda i čvrstih stvari, proizvodnji cementnih proizvoda, obnavljanju metala, keramike i sanaciji onečišćenog mjesta. Industrija glinice prešla je neke načine u ostvarivanju ove budućnosti razvijanjem tehnoloških karata koji su počeli rješavati pitanje ARR-a, ali je potreban daljnji rad. Ovaj zaključak postaje posebno istinit ako uzmemo u obzir da većina mapa puta ne razmatra pretvaranje hemijskih svojstava ARR-a, preklasificirajući ga iz „opasnog“ otpada u dobroćudnu sirovinu, a tek potom ga ponovo upotrebljava u drugim industrijskim ili okolišnim primjenama. Zabrinuto društvo ne bi trebalo

da dovodi u pitanje mudrost i da se ne zalaže za izmjenu ARR-a, istovremeno nudeći njegovu ponovnu primjenu.

Nadalje, trenutni industrijski planovi usmjereni na industriju nisu uspjeli uključiti sve relevantne učesnike ili u potpunosti uzeti u obzir šire posljedice razvoja održive budućnosti za ARR. Ovakva pozicija rezultira sa manje, nego vjerodostojnim zaključcima i rezultatima, a kao posljedica toga odgovornost i povjerenje industrije su dovedeni u pitanje. Iako su ovi zaključci i rezultati u većini slučajeva neopravdani zbog napora industrije glinice, još se može učiniti za postizanje konsenzusa oko pitanja koji se odnose na održivu budućnost ostataka rafinerije glinice.

Iz tih razloga, ovaj rad razvija okvir koji ima za cilj obuhvatiti sofisticiraniji pristup izgradnji održive budućnosti za korisnu ponovnu upotrebu ARR, uključujući u osnove transparentnosti, komunikaciju, obrazovanje i izgradnju povjerenja učesnika. Iako nije posebno naglašen, model pretpostavlja međunarodne standarde, empirijska istraživanja i izvještavanja o održivosti.

Model prepoznaje da će se očekivanja i motivacije učesnika razlikovati, ali takođe, priznaje da se te razlike trebaju priznati i razjasniti, a ne zanemariti ih. Pokušaje uključivanja i razumijevanja razlika treba podsticati, a pokušaji razumijevanja šireg društvenog i industrijskog krajolika, u kojem je program osmišljen, smatraju se kritičnim za uspjeh ponovne upotrebe ARR-a u komercijalnim i okolinskim aplikacijama. U stvari, okvir se temelji na izgradnji mreže zabrinutih, obrazovanih i predanih vlasnika procesa i temelji se na tvrdnji da se komercijalni, regulatorni i socijalni savezi i sinergije najbolje ispituju i iskorišćavaju, a ne da ih jednostavno vodi putokaz iz gledišta industrije glinice.

U tom smislu, trenutni je okvir je zamišljen tako da rezultira stalnim učenjem i obrazovanjem svih učesnika, s temeljnim pristalicama, pokretačima i vlasnicima procesa koji preuzimaju vlastitu odgovornost za vodstvo i ključne odluke i provedbu projekta. Vidjeli smo taj ideal usvojen u vodstvu koje je Alcoa pokazala u Australiji i drugim rafinerijama širom svijeta, uključujući RUSAL u Rusiji i Chinalco u Kini, gdje učesnici aktivno nastoje naći širu upotrebu ostataka rafinerije glinice u široj industriji i društvu. U interesu je cijele međunarodne zajednice i dugoročne održivosti planeta. Napori poput Azijsko-pacifičkog partnerstva za čisti razvoj i klimu i druge inicijative istomišljenika, koje istražuju i iskorišćavaju korisne mogućnosti ponovne upotrebe ostataka rafinerija glinice, su za pozdraviti.

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Preliminary communication

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UTILISATION FRAMEWORK OF ALUMINA REFINERY RESIDUES (ARR) – RED MUD TREATMENT

Summary: *When the bauxite is processed in alumina production, a solid waste by-product is created. Each tonne of bauxite processed in the refining process produces around 400 kg of alumina and 600 kg of residues. As the result of this, around 100 alumina factories in Australia, Brazil, India, Europe and elsewhere create up to 120 million tonnes of solid waste each year. According to production data (in the last thirty years) over three billion tonnes of waste is stored in waste dumps in the world, making alumina factories the largest waste dumps of industrial waste. Physical and chemical characteristics of residues from alumina factories have been a subject of scientific research for quite some time, as they contain iron, aluminium, silica, titanium, sodium and other elements and compounds of potential value. In the last ten years, these researches were focused not only on recycling of valuable contents of waste, but also on various possibilities of worthwhile re-use of this type of waste. One of the ways is to decrease the amount of storage waste by using its specific valuable components. Therefore, the alumina industry has developed a series of "new technologies" to deal with increasing waste, including the ways how to better dehydrate and store it safely. However, although commendable, these directions mostly focus on improving the process and increasing productivity and did not manage to solve some basic truths connected with sustainable and worthwhile re-use. The paper claims that only a comprehensive understanding and analysis of all aspects of production by-products in an alumina factory, who are worth re-using and through involvement of a wide circle of participants, society and industry, can really achieve sustainable future for this type of waste.*

Key words: sustainable framework, bauxite, alumina factory, "red mud" treatment

JEL classification: Q5, Q56, Q57

INTRODUCTION

Alumina (Al_2O_3) is produced by refining bauxite ore mined from large open-cast mines. Aluminium is one of the most important light metals in the world, used for packaging, transport and construction, and it is produced by electrolysis of alumina. Around 260 million tonnes (mt) of bauxite is mined each year in the world from the global reserve estimated to between 55 and 75 billion tonnes – 30 % in Australia (77 mt), 18 % in China (47 mt), 13 % in Brazil (34 mt), 12 % in Indonesia (30 mt), 7 % in India (19 mt), 6 % in Guinea (17 mt) and 3 % in Jamaica (9 mt), while the rest is mined in countries such as Russia, Guyana, Bosnia and Herzegovina and Surinam (Bray 2014, 12).

Bauxite is processed in local factories or imported to over 100 refineries all over the world, and we can see, for example, that the number of alumina factories in China increased from seven in 2001 to 49 in 2011. This number is going to increase even more, considering the fact that

demands for bauxite from China will reach 240 mt by 2030, while the total demand for bauxite for alumina, i.e. for aluminium should reach 350 mt by 2018 (European Aluminium Association 2013, 14). The most frequently used method for refining alumina from bauxite is the Bayer process, developed by Austrian chemist and industrialist Karl Bayer in late nineteenth century. This process gives out undiluted alumina when the bauxite is treated with sodium hydroxide (i.e. caustic soda, NaOH) at temperatures between 100 and 240°C and pressure between 1 and 6 atmospheres. The by-product – waste that is the result of the Bayer process is colloquially known as “red mud”, but the industry calls it “bauxite residues” or “alumina refinery residue” (Habashi 1995, 17).

Influence of these pollutants can be significant over the surface from 200 ha and down to 40 m of depth, and therefore can cause concern to parts of local community.

Each tonne of bauxite refined through the Bayer procedure gives between 300 and 500 kg of alumina and 500 to 700 tonnes of alumina refinery residues (ARR), so that the alumina goes to electrolysis for aluminium productions and the alumina refinery residue (ARR) is released into long-term depots as mud (or sometimes released into a sea or ocean) (International Aluminium Institute 2010). After being released from the refinery, the ARR is highly alkaline (usually around 5,000 mg/kg of total alkalinity, but sometimes even 30,000 mg/kg or 3 %, which can be compared to the level of salt in seawater), with pH above 12.

Including the life-cycle analysis, in order to fit the residues into wider regional plans for sustainable development, the fact remains that the alumina refinery residues is classified and dangerous waste in most countries, with potential hazardous influence on health of people and the environment if used in wrong or inadequate manner. Bearing in mind not only obvious industrial, trading and chemical imperatives that drive the re-use of residues and inform on current technology plans, but also by involving regulatory, environmental, investment, research and social dimensions of licensing (among other participants), the whole of future, this paper represents a new framework for utilisation of alumina refinery residue.

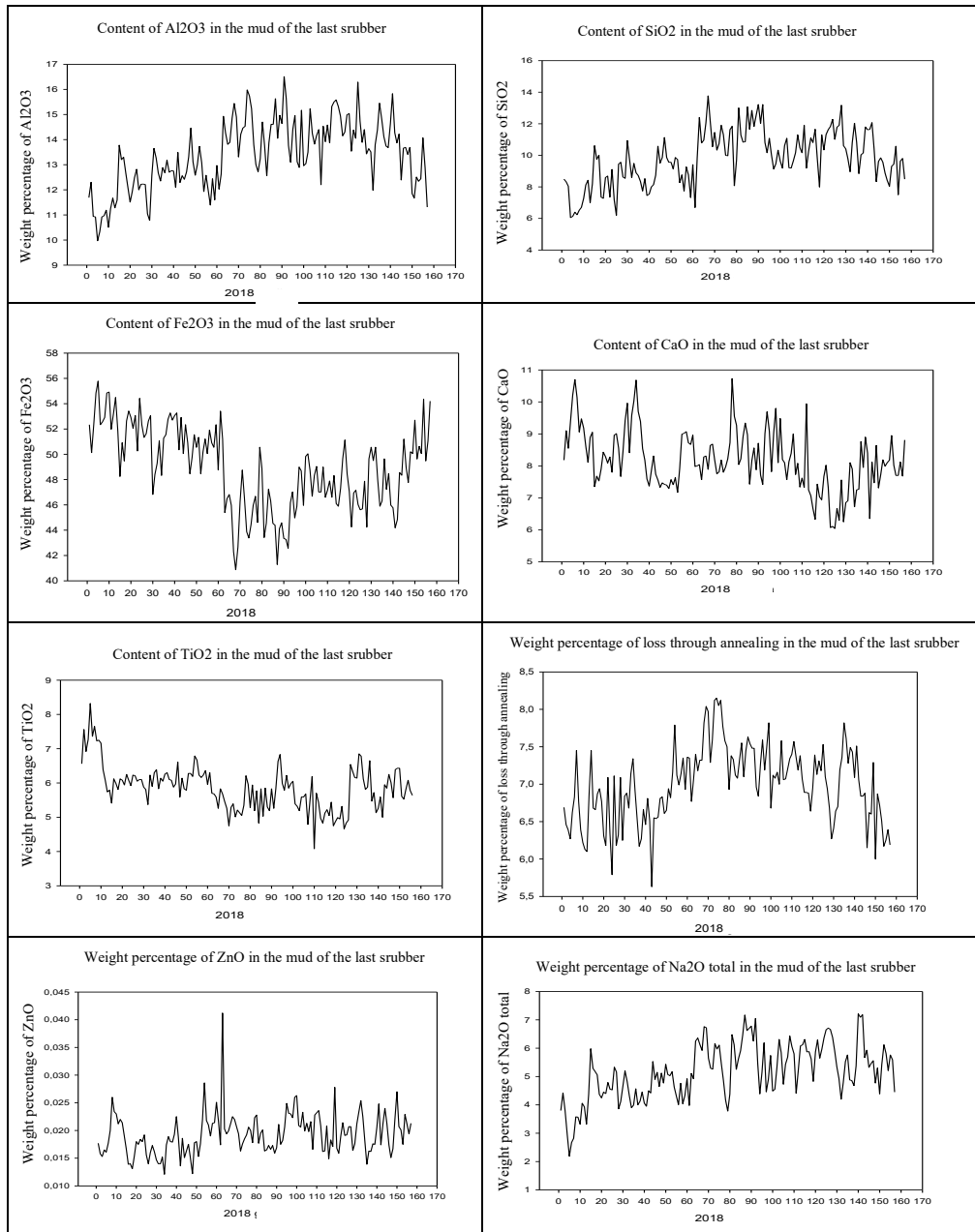
1. ARR - RED MUD TREATMENT

ARR is often qualified as “hazardous” (but not “toxic”) industrial waste according to many national and international jurisdictions and conventions, such as the Basel Convention (i.e. Classification # B2110), due to extremely caustic nature (Brunori et. al. 2005, 58). ARR can burn skin upon contact, and other harmful properties can be irritation to eyes, nose and throat. Creating large quantities of ARR presents a significant problem to management and work of operational alumina industry. In order to put this claim into context, we bear in mind that at least 120 mt of ARR is produced annually in refineries in Australia, Brazil, China, France, India, Romania, Russia and elsewhere, with projections of 140 mt until 2018 (Liu and Wu 2012, 3). The issue of safe storage, monitoring and management of hazardous ARR and its potential problems in environmental protection and social impact are a large global industrial and social challenge.

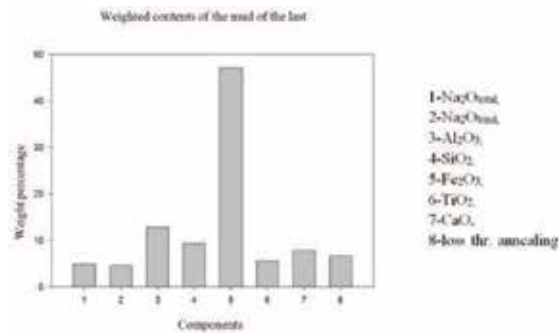
Bearing in mind that all over the world another 30 refineries are to close, leaving inherited stockpile of several million tonnes of hazardous waste, often neglected, the need for sustainable future of ARR is undoubtedly important. For that reason, Alcoa, historically one of the largest producers of ARR in the world up to 2005 stressed that “finding a practical use and new manners of storing refinery residues – which have permanent influence on the environment and the soil and require significant storage expenses”, probably the biggest challenge facing the global alumina industry” (Fergusson 2016, 967). Seven regional governments, including Australia, India and China, together making 53 % of global aluminium production, have founded an Asian-Pacific partnership for clean development and climate, and made ARR the key issue in their policies that needs to be provided with significant further research and investment (Gräfe and Power and Klauber 2011, 35). One of the key challenges of ARR management are its physical and chemical properties. Unprocessed ARR usually contains iron

(25-35 %), aluminium (10-20 %), sodium (3-10 %), titanium (5-10 %), silicon (5-20 %) and calcium (5-10 %), in oxide, hydroxide and/or oxy-hydroxide states. None of these elements is a significant problem by itself, but due to its combined extremely caustic nature they present significant long-term risks to management of the environment and human health.

To give concrete examples, the graphs 1 and 2 below show movement of weighted contents of individual components of ARR in 2018 (bauxite quality function) as well as average weighted share of individual components in 2018 in the alumina refinery in Zvornik.

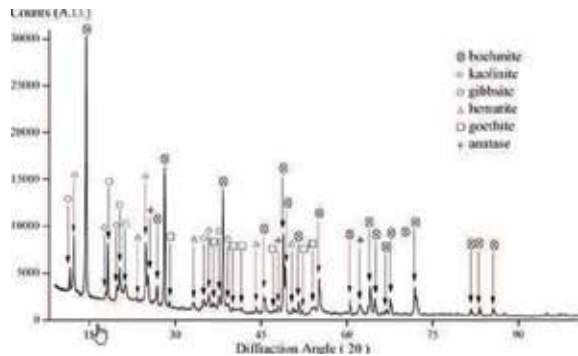


Graph 1. Weighted contents of individual components of "red mud" during 2018 (Authors)



Graph 2. Average weighted contents of ARR in the Zvornik alumina refinery in 2018 (Authors)

For example, ARR contains a complex cocktail of metals and minerals, including hematite (Fe₂O₃), boehmite (AlOOH), gibbsite (Al (OH)₃), sodalite (Na₄Al₃Si₃O₁₂Cl), anatase (TiO₂), aragonite (CaCO₃), brucite ((OH)₂), diaspore (β-Al₂O₃.H₂O), ferrihydrite (Fe₅O₇ (OH).4H₂O), gypsum (CaSO₄.2H₂O), hydrocalumite (Ca₂Al(OH)₇.3H₂O), hydrotalcite (Mg₆Al₂CO₃(OH)₁₆.4H₂O) and paluminohydrocalcite (CaAl₂(CO₃)₂(OH)₄.3H₂O), which contribute to its increased causticity. In the case of Zvornik alumina refinery, the mineral composition is shown on Graph 3.



Graph 3. Mineral composition of Zvornik alumina refinery ARR (Authors)

ARR can also contain heavy metals and metalloids, including arsenic (As), chrome (Cr), gallium (Ga), thorium (Th) and vanadium (V), although usually just in concentrations and traces between several parts per million up to 200 mg/kg. Although presence of radionuclides, such as plumb (Pb), thorium (Th) and unarnium (U), were a cause for concern, such elements are always found in non-radioactive states (Gräfe and Power and Klauber 2011, 22-28).



Picture 1. Photographs of ARR dumps. 1. Australia, 2. Zvornik, 3. Romania (Authors)

Around 50 % of ARR is amorphous, with its crystal content made up mostly from goethite and hematite, quartz and titan, such as rutile, anatase and/or ilmenite. Smaller remain stages of the source original ore (clay) can also be present, as well as newly formed types created as a result of specific conditions in the Bayer process (e.g. natroalunite and noselite). After coming in contact with water, solid components of ARR (which are usually around 30-40 % of waste mud) give $\text{pH} \pm 12.5$ with increased level of electric conductivity (EC) between 1 and 16 mS/cm and high density, with over 80 % particles of ARR over <10 microns (Fergusson 2014, 107). However, physical and chemical characteristics between any two ARR can be largely different, and are determined by geological properties of the bauxite ore and industrial conditions of bauxite processing in the refinery.

There is a clear concern for health of people, including occurrences of cancer in or around alumina refinery. During his research in Alcoa, Dr Donaghue, a physician, concluded that harmful risks such acute and chronic health issues and incremental cancerous risk factors connected to exposure to ARR in the refineries Alcoa Wagerup and Pinjarra in Western Australia were negligible (Donoghue 2014, 20). His study was requested because near the Wagerup refinery there were protests of residents of nearby town of Yarloop who claimed that the emission were making them ill, with symptoms such as nosebleeds, inflammation of the eyes and boils on skin. There is quite a long list of known or cancerous substances that are regularly emitted (from the refinery), but the exact combination that makes people ill had not been clearly determined. Many alumina related contamination appear in the Australian National Pollutants Inventory (NPI). For example, alumina refineries found that contaminants from emissions, including arsenic (As), chrome (Cr), plumb (Pb), quicksilver (Hg), acetaldehyde, benzene, formaldehyde, polychlorinated biphenyl (PCB), dioxin and dioxin-like compounds, polycyclic aromatic carbohydrates (PAHs), toluene, xylenes, cyanide and fluoride compounds, sulphur-dioxide and thorium (Th) and uranium (U) can be measured and need to be. However, there are no empirical, medical evidence connecting the alumina refinery, including the production and storing of ARR with harmful effects on people's health.

As a consequence of these findings and other improvement in work, industries of bauxite, alumina and aluminium on so-called "ladder of sustainability" improved the conditions in the last ten years – around 30 square kilometres of refinery grounds (equivalent to the surface of newly mined bauxite annually) is remediated each year. Use of electrical power has been decreasing by 6 % since 1990 for electrolysis and 8 % for refineries, while the emission of perfluorocarbons and fluorine from electrolysis has been decreasing by 75 % and 44 % respectively since 1990, although reliable data on use of water, which is a major contributor to alumina refining, are not reliable (International Aluminium Institute 2010).

However, there is another side of these positive reports. Perhaps the best reminder to dangerous properties of ARR is one of the saddest events in 120-year-long history of this industry was the spillage of ARR with the rest of the dam in Kolantár, Hungary, in September 2010, which resulted in the death of ten people and injured another 60, when a million tonnes of caustic ARR flooded seven towns and threatened to contaminate several rivers, including the Danube. As a consequence of the spillage, all biological life in the Marcal river was "terminated", a this event was described by Hungarian Prime Minister Viktor Orban as a "environmental tragedy" (Renforth et. al. 2012, 255). However, so far not unfavourable health finding have been noticed connected with ARR dust that was the result of this industrial accident.

This and other cases are important when considering the possibility of reusing ARR in other industrial "waste-as-resource" framework or moving them from the polluted area into large agricultural applications, as it was suggested (Gräfe i Power i Klauber 2011, 65). For example, if the ARR is reused, its hazardous properties need to be improved in order to safely handle, transport and reuse it in industrial or communal conditions or used in agriculture and a wider society. For that reason, many alumina refineries sought for ways to change ARR by "neutralising" its total alkalinity (especially high concentration of Na and with that decrease pH, and by that lower its causticity).

In the last 20 years a wide spectrum of ARR modification has been identified and tested, including carbonisation, neutralisation with sea water, concentrated adding of salt and nano-filtration, adding sulphur and neutralisation of acidity (Carter et. al. 2008, 479). Each method, to different extent, decreases the alkalinity, lowers pH and electrical conductivity, and makes ARR “safe” (e.g. non-hazardous), and each method has advantages and flaws, although we present them here for cataloguing.

The key question in considering the sustainability of this method is: Will the ARR, after the modification, be stored in a dump or will it be reused? If the answer is the first one this means that, although modified ARR can be stored in a safe manner without characteristic hazardous traits, there is no intention of using it in other application, so therefore the modification method does not, not once, need to take into consideration any chemical or physical traits of ARR that are changed. If the answer is the second one, this leads to more concrete decisions on the applied modification method, especially if the request of reusing it requires ARR that would neutralise the acidity or buffer acid, separate heavy metals, bind phosphate, adds macro and micro elements into soil, communicate with synergy with chemical and/or biological agents, or in some other way perform specific environmental, technological or industrial functions (these modification methods can be freely called ARR “utilization”. For example, when we take into consideration properties of ARR from a dump, one modification method can lower its pH and make it chemically inert, in that way decreasing long-term ablation issues, but modified ARR may not keep its “useful” properties when we think about its reuse in production of cement products or in agriculture. As opposed to that, another modification method can increase acid neutralization capacity (ANC) of ARR, but that trait may not be justified is the ARR is to be passively stored at a dump.

For example, while research into ARR and its potential reuse has been comprehensive, a basic mistake is made by not differentiating A), B) and C), which can be seen in papers by Liu and Wu in China (Liu and Wu 2012, 1234) and Traoré, et al, in Guinea (Traoré and Traoré and Diakité 2014, 18). For the purpose of developing this sustainability framework, this paper refers only to C), i.e. the modified ARR suitable for utilization, but for the sake of brevity, the paper does not differentiate different types of modified ARR. Once changed, this type C) of ARR has a number of important properties and functions, and those can be additionally improved by mixing it with other chemical and biological additives (Fergusson and Blair 2010, 405), or further changes for other applications through specialised industrial processes, such as pelletisation, which has been documented in more than 700 patents submitted from 1964 to 2008 (Klauber and Gräfe and Power 2011, 15). Summary of useful requests for reuse of modified ARR is shown in Table 1.

Table 1. Documented requests for use of modified ARR, including the planned amount of ARR in the references (Authors)

Summary of reports for reuse of modified alumina refinery residue		
Application	Scale	Reference
Construction and installation, including concrete, plasters, plasters and aggregates; construction of roads and dams	large	37, 38, 39
Cement products, including bricks, blocks, tiles, furnace insulation and production of clinker	large	40, 41, 42
Agriculture and gardening, including composting	large	43, 44, 45
Extraction of minerals, metals and rare soils, such as iron (Fe), titanium (Ti), gallium (Ga) and scandium (Sc)	large	7, 46, 47, 48
Ceramics, plastics, catalysts, coatings, pigments and geo polymers	large	49, 50, 51
Smelting and casting of iron and production of steel, including rolling	large	52, 53
Processing of industrial waste, including processing of gaseous, liquid and solid waste	medium	13, 54
Treatment of mining waste and rehabilitation and renewal of mines	medium	55, 56, 37

Processing of contaminated soil, including acidic sulphate soils (ASS) and rehabilitation of industrial sites	medium	57, 5
Processing of gas waste - carbon gas	medium	58
Desulphurisation of smoke gases and other waste gases	small	59
Treatment of drinking water	small	60
Processing of communal waste, including processing of gaseous, liquid and solid waste	small	61, 62, 63

It is obvious from the summary that modified ARR has significant industrial and economic use, as well as achieving effects in environmental protection and it is necessary to further research its sustainable use.

2. EXISTING COURSES IN INDUSTRY

There are clear attempts to create a sustainable reuse framework for alumina refinery residue in an industrial site in the Middle East. Similarly a series of technological plans have been developed in the bauxite, alumina and aluminium industry in the last 20 years. Road maps are a way in which the alumina industry sees itself now and how it wants to see itself in short-term and long-term future (Wehrli and Campbell and Fergusson 2011, 179).

Goals of alumina industry technology development are mostly high quality and identify key areas, with special emphasis on industrial goals, standards and challenges, or research and development area. Key industrial goals, standards and challenges established in these roadmaps include: 1) refineries should work with a closed water cycle; 2) refineries should minimize dust, emission of gasses, vaporising organic compounds, alkaline solutions and other sources of real or noticed risks for the environment and health of people; 3) refineries should decrease their energy consumption and seek alternative energy sources; 4) refineries should decrease the impact of the length of pipelines on their operation, by that decreasing their expenses and improve efficiency of equipment; 5) refineries should improve efficiency of solutions; and 6) refineries should achieve more flexibility in dissolving various bauxite ores, by that improving the quality of alumina.

Key areas of further research and development identified in roadmaps include: 1) increasing the speed of alumina precipitation; 2) improving control strategy; 3) improved methods of bauxite use; 4) improved removal of impurities of Bayer's solutions; 5) decreased spending of lye; and 6) efficient use of health.

Although so-called methods of "cost-effective transformation into inert material and alternative use" of ARR discussed in some papers (International Aluminium Institute 2010), they mostly come down to transforming the residues into safer material that needs to be processed during storing (i.e. ARR B type), and not research and implementation of sustainable and useful options for reuse. That becomes quite obvious when the industry improves the concept of making ARR "inert" (i.e. making it chemically inert or "neutral") as the focus of the roadmap. In such cases finding an alternative use for ARR is secondary, because the "inert" residue has small or none use in the environment. In fact, thanks to the very unique properties of ARR, including its ANC and capacities to bond phosphates and separate heavy metals among other, the utilisation of ARR is so attractive.

However, roadmap signposts speak on the general goal of managing "bauxite residues in such matter to promote / incentivise its use as a product and resource for other industries, and for all other residues to be stored in an environmentally acceptable form" (International Aluminium Institute 2010). Where the identified specific goal is aimed towards the industry, its mainly set in the context of whole sustainable development, which is a basis for good planning and reporting.

However, it is reasonable to stress that the signpost are not a model of sustainable development for the utilization, because there is no discussion on the Leader-Member-Exchange (LMX),

Life Cycle-Assessments (LCA) and Design for Environment (DfE) risk, who are important elements of each comprehensive sustainability framework.

Limitation in current plans for technological connection is in part a consequence of the fact that development ideas originate in early last century, while the real approaches to designing and implementation and sustainability programmes, such as the one discussed in this paper, have just only appeared, but also comes due to the „industrially focused“ view on ARR in which interests of the refinery supersede interest of everyone and everything else. The roadmaps include inclusivity, because they relate to including the industry, academia and industrial associations in the management of ARR, while alumina refineries recognize the growing influence of environmental and social issues on their industry. However, their main focus is on alumina, as goods, and not on ARR as potentially useful raw material for reuse, and as the consequence they miss the wealth of the complete and comprehensive development framework of the sustainable future of the industry.

This flaw becomes obvious when parallel with progress of ARR reuse initiatives, some large applications of ARR became spectacularly wrong, especially when the large applications use unmodified ARR and when the local community, media and other stakeholders are not fully informed from planning, implementation and monitoring of such applications.

3. NEW SUSTAINABLE DEVELOPMENT FRAMEWORK

The sustainability framework proposed in this paper is envisioned as a comprehensive and inclusive approach to conceptualising the future of ARR. It assumes that all stakeholders can and should play a role in a transparent and open conversation, with wide understanding and comprehension of issues relating to utilisation of ARR.

The framework also considers that one of the basic principle is that each stakeholder needs to contribute and gain from reuse of ARR. For that reason communication, education and inclusion are seen as critical elements of efficient action, and in that way lead to long-term sustainability results, while the lack of communication one they are applied. For example, when Alco and the Ministry of Agriculture of West Australia in late 1990ties decided to apply unmodified ARR on agricultural land, obviously not all stakeholders were advised, while education and communication in community were lacking. When journalists became aware of an extensive reuse programme and notices the presence of uranium in ARR, they assumed and informed the wider Australian public that the application turned this agricultural land radioactive (this application became known as the “great red mud experiment that went radioactive” (Fergusson 2016, 969). Their conclusion was wrong, but the damage was done, and Alcoa and the Government of West Australia never fully recovered from this experience, while all other applications of ARR in this state since then have been aborted.

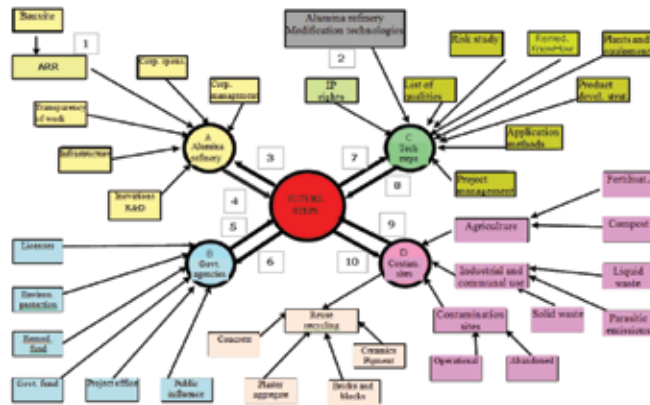
Despite their efforts to research reuse of ARR in real world, the reaction from the community and bad advertising destroyed in the best possible way all further attempts to reuse ARR in Western Australia. Extremely bad international publicity around the spillage of ARR in Hungary did similar for the improving efforts in sustainability of this programme.

Because of that, each efficient ARR sustainability framework must achieve three basic goals: 1) apply only modified, non-hazardous ARR in reuse projects; 2) present it as a “whole system”, and not as an industrial initiative “waste-to-resource” (i.e. do it in such manner that it is not a way for the industry to get rid of waste that they want portray as a „sustainable development“ initiative, because the community will misunderstand it as the attempt to “dispose” of industrial waste in a suspicious way; and 3) conduct it in a transparent, open and inclusive way, including all stakeholders in the process.

For that reason, approach to sustainability proposed in this paper is proactive, and not reactive. It is developed for informing and educating stakeholders - a procedure that is considered key for any sustainable future of ARR. If there are concerns, they need to be resolved “beforehand”,

and not after a series of complaints or requests, usually to the regulator or the media, and which are often based on biased or distorted information.

The production of coals seam gas (CSG) in Australia had such fate, where perception of the community on the danger of chemicals for hydraulic fracturing and drilling procedures was at least in part caused by the industry's own secrecy. The fact that the CSG industry hesitates or rejects to reveal chemical properties of its "fracking" liquid (many of which contain known mutagens and cancerous materials, but many of them are never used) only increases concerns of the society and opposition to such industries. Great secrecy and lack of knowledge, fear and resistance to change are inevitable, but often harm potential social progress.



Picture 2. Sustainability framework (part A), identifying key experts (with focus on A-D) and their contribution (Authors)

Pictures 2 and 3 show overview of the new framework with nine key stakeholders who give contribution to sustainable future of ARR and have use of it; these stakeholders marked as A-L (with emphasis on participants A-D in picture 2 and E-L in picture 3). Stakeholders in this context have been defined as individuals (or groups of individuals) and subjects that can be justifiably expected to give contribution and be affected by the application of ARR's utilisation. Nine key participants are: in picture 2, participant A alumina refinery, that has central role as supplier of ARR; participant B. government agencies; participant C. Interesting technical solution and service provider; participant D. owners of contaminated sites, producers of waste and business operators who could benefit from reuse of ARR; and in picture 3, participant E. socially responsible investors; participant F. the media, including printed, digital and broadcasting media, and marketing and public relations companies; participant G. scientific and research community, including corporative research centres (CRC) and independent researchers; participants H. advisors, contractors and industrial associations, including construction engineers, environmental advisors and auditors, transport companies and analytical laboratories; and participant L. wider public.

We need to mention that, since the presented signposts focus on issues such as human resource management (HRM), health and safety at work (such as lost time incident rate – LTIR) and total recordable incident rate (TRIR), and industrial relations, present a framework based on contemporary occupational health and safety standards and therefore this issue is not approached directly.

The model also assumes that the participants contributing the sustainable future of ARR are safe at their workplaces and that the all parties are corporative citizens. Similar, the framework did not emphasize the importance and need for risk assessment by relevant participants.

Due to that the current framework assumes that the risk assessment, together with other aspects of building a sustainable future, such as crisis management, environmental reporting, sustainable procurement practices, ethical behaviour, education and training, and human rights and gender equality, will be a integral part of planning and transforming ARR into a shape useful for reuse. Furthermore, the framework did not emphasise the need for documentation and participant reporting, but assumes that such basic sustainability practices would be applied and implemented by the stakeholders.

In that framework, not a single participant does not have benefits from actions damaging any other participant, and the framework has been modelled on the principle "everything and everybody wins" (Elkington 1994, 95). Although the result in conceptual manner can present a zero sum game (i.e. the benefits are compensated with equal contributions), the framework is not a zero sum, because the results of applying the model is not economic or environmental zero. If nothing else, the results of applying such model should be a sum that is not zero, and benefits all.

For example, some alumina refineries believe that their "gain" is just decreased ARR (i.e. transferring responsibility by giving of selling dangerous ARR) larger than their "contribution" (i.e. further use of useful applications of reuse). They also wrongly believe that by abolishing their responsibility and decreasing their long-term responsibility (i.e. change of hazard equation for their gain as the result of ARR leaving its place) they should have small or no care for what is going on with ARR beyond their door. However, that simple industry-centric approach is unsustainable; it presumes: "we win, and we don't care for anything else".

Moreover, some refineries adopted the attitude "we do not want to participate or be involved in lower application, because we are not in the reuse business", although such attitude is changing. Famous examples include RUSAL, one of world's largest producers of alumina with the help of Russian Ministry of Science, who are at the moment testing large quantities of ARR metals and rare soil recycling programmes, and production of steel and concrete, and the whole of Indian alumina industry who are researching ways to produce grey and cast iron and alumina rich slag by using plasma melting of ARR (Indian Bureau of Mines 2014, 8).

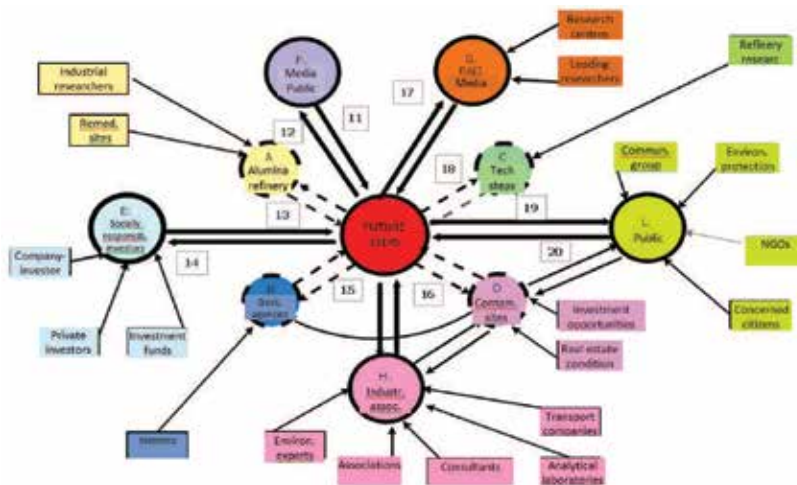
In other words, it is not enough to say "we will work on achieving sustainable future for ARR" (when in fact we really just want to get rid of industrial waste); true sustainability and corporative responsibility demand far more active involvement in wider sustainability environment, while responsibility and trust are the backbone of such involvement.

Alumina refinery residue – ARR (1), obtained from bauxite, is the first main contribution to this sustainability framework; everything foreseen in the model is ARR produced by a alumina refinery (A). The model also assumes that the main participants of the process are countless modification technologies (2), who turn ARR into benign, safe, useable, but not inert raw material (the model assumes that such methods and resulting ARR were approved by authorities for use in communal and industrial applications).

Contributions to the sustainable future of an alumina refinery (3) include: ARR raw materials; expert knowledge in handling and transport of ARR; industrial know-how and credibility; public relations capabilities; sponsorship and corporative philanthropy; corporative management (as generator and owner of ARR); infrastructure; and research and development capabilities. Such contributions fully fit into categories of corporative ethics, public responsibility and corporative social responsibility (CRS) and reactions, and all of them are foundations of contemporary practices of business sustainability and reporting. Advantages of an alumina refinery from these contributions (4) include: decreased long-term responsibility for management of ARR and monitoring; decreased expenses relating with maintenance and management of this obligation, and in turn improved balance as well; remediation of own contaminated locations, including renewal of ARR pollution; increased importance within industry, government and society; and good will. Contribution of government agencies for sustainable future (5) including: licensing and approval of environmental protection programmes; financing of projects through state subventions and remediation funds;

possibilities for better connection with public relation agencies; data and statistics; compliance surveillance. Governments also have a comprehensive list of abandoned and neglected ARR facilities, as well as of abandoned and neglected mines in relation to protection of the environment (especially mines due concession rights) that were transferred to government's control and surveillance and for which the governments are responsible.

Many of those abandoned sites are located in the USA (e.g. 1322 sites in the area of Superfund) and more than 50,000 waste heaps, abandoned mining sites in the whole of Australia that are under state control (Liu and Wu 2012, 1241) have been contaminated and need to be removed again. In many cases modified ARR is well adapted for this task. Use of government agencies (6) from the contributions to sustainable future include: decreased long-term responsibility; decreased expenses relating to long-term management and monitoring of abandoned ARR and other polluted sites; potential transformation into agricultural land that can be reused; better public relations and better perception of authorities by the society.



Picture 3. Sustainability framework (part B), identifying leading stakeholders for processing of ARR (Authors)

Contributions to sustainable future of technological solutions and service providers (7) include: technological knowledge, especially in relation to economic and efficient methods for modification of ARR in preparation for reuse; production expertise in relation with ARR product development, quality control and assurance, as well as the knowledge on chemical mixing and packing, and delivery of products; evidence of success in marketing and application of modified ARR and a user database through which ARR can be applied; research capabilities and access to market data; study case and other technical documentation, including material safety datasheets (MSDS); plants and equipment adequate for delivery of ARR in different forms, including as fertilizer, powder or pellet; expertise in application, such as control system processes for direct adding and filtering; expertise on project management and implementation. Examples of technological solutions by a service provider who works on metal renewal from ARR, remediation of the environment and waste treatment who use ARR include Orbite Aluminae in Canada and Virotec in Australia (Fergusson 2014, 115-118). Advantages of technological solutions from service providers and contributions to sustainable ARR future (8) include: increased commercial possibilities and growth of business: access to grants and competitions; access to wide spectrum of environmental projects; project documents and extended technical capabilities; extended client base and commercial feedback; increased market capitalisation.

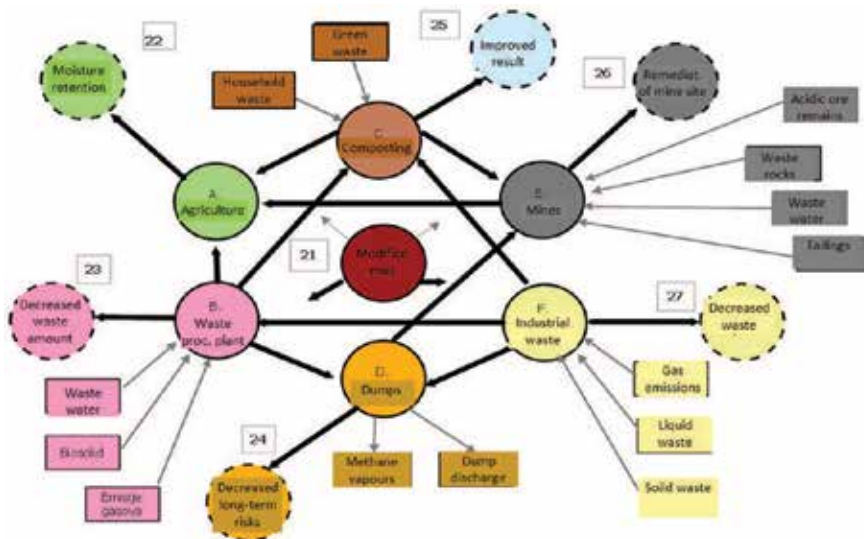
Contribution to sustainable future of the owner and/or manager of contaminated sites and waste producers, except from companies that can have use of reuse of ARR in the production of cement products, or in other added value applications (9), include: efficient treatment of a series of gas, liquid and solid waste suitable for ARR recycling and/or reuse; decreased short and long-term obligation; decreased risk of non-compliance and fines by environmental agencies; and a potential for waste sites – turn from “sites of expense” into a “profit centres”. Advantages of such types of companies (10) include: decreased (hazardous) waste; best industrial practices for management and processing of waste and remediation of contaminated sites; source of raw materials as a raw material for other industrial products, such as production of concrete, bricks and blocks, ceramics, geopolymers, plaster, plaster and aggregates; decreased fines and other violations; and agreement with the government on permanent site closure.

In Picture 3, the media (11), including web, printed and broadcast media, as in general communication area, so through special industrial media channels, have an important role in contributing to and creating sustainable future for ARR reuse. That role is increasingly recognized as a key element in assessing the sustainability of corporate responsibility. Contribution of the media include: factual and informational communication with the public, government and industry on ARR reuse projects and other initiatives for reuse of industrial waste; factual and informative communication on sustainable development; as well as exchange of information and opinions through internet forums and blogs. The media can have benefits from sustainable future (12) by receiving information on sustainable development initiatives and environmental projects from the industry, government and the public, by that increasing their intellectual capital and credibility in the society, which leads to better good will towards the media.

Contributions by socially responsible investors to the sustainable future (13) include the possibility to invest and participate in investments that can be environmentally acceptable, that can also be gained, with high return by companies that contribute to the well-being of the society; investment can be made by socially responsible investment funds, corporate and private investors, or private benefactors. Socially responsible investors have use of the sustainable future (14) by ensuring return on investment and participating in socially and environmentally responsible investments.

Contribution to the sustainable future by the environmental protection advisers and engineers, industrial associations and independent third parties, such as civilian contracts (15) include: participation in projects of engineers and environmental protection experts; significant extension of the clients and peer network; analytical capabilities of certified laboratories; and transport of products by transport companies. Advantages of environmental protection consultants and engineers, contractors, industrial associations and independent third parties (16) include: higher expertise in the industry; increased employment and business opportunities; increased expertise and exposure to a large number of projects; increased access to client and peer networks through business synergies; increased business opportunities and extended client base; increased member base for industrial organisations; possibilities for research and advisory; opportunity for interaction and work with other experts from the industry; honour.

Contributions of the scientific and research community to the sustainable future (17) include: participation of independent researchers who can test advantages and results of sustainable growth in ARR; participation of cooperative research centres (CRC), that have both significant research skills and resources, as well as significant connections with the industry and the government; access to international, reviewed magazines; and exposure to scientific and joint project and initiatives. Advantages for the scientific and research community (18) include: access to wide spectrum of environmental protection projects at leading scientific and technology events; data on the environment and sustainable growth; expertise and research possibilities; and increased knowledge capital.



Picture 4. Sustainability framework (Part C), benefits of using modified ARR in different industries (Authors)

Contributions of the public to sustainable future (19) include: participation of non-governmental organisations (NGOs), environmentalist, interested citizens and action groups in the community; and clarification of the “public will” through community forums, workshops and meetings of local communities. Benefits for the public (20) include: increased access to useful public sites that had no value before; decreased long-term responsibility for the environment; decreased responsibility of the state; better employment opportunities; improved education opportunities and better knowledge on the environment.

As state above, there is a wide spectrum of industries and applications that could have benefit from reusing modified ARR for waste processing and dumps, and in some cases they can produce a product that can be reused from processed waste. They include: agriculture and gardening; production of concrete and special cement products; sewage treatment plants; composting plants; dumps; mining sites and industries, such as lead and zinc smelting plants, gas lines, companies working on preservation of wood, quarries, production companies and companies for galvanic coating; procedures for neutralization and remediation of soil; operations for producing gas from goals and other oil and gas companies, bio-refineries, coal power plants, steel mills (Fergusson 2014, 12).

Picture 4 shows an example of a six industry model (A-F) that can benefit from the application of modified ARR and/or products made from it, and shows potential interactions between them. Concretely, Picture 4 suggest how the flow of waste that treated by ARR in one industry can be reused as an input for utilisation in another industry. Also, it summarises the sustainable results of each industry since it relates to the waste treated by ARR. Picture 4 predicts that the input of modified and/or neutralised ARR (21) is in all six application areas, and they are: Application A. agriculture; Application B. sewage treatment plants; Application C. composting; Application D. waste dumps; Application E. mining sites; and Application F. industrial waste. For example, when applied in agriculture (A), it shows that ARR helps in retention of moisture, retention of phosphates in biologically available form, incites growth of plants by adding macro and micro nutrients, helps in separating from the soil heavy metals that could be harmful for plants and trees, which leads to better yields due to better retention of moisture and healthier conditions (22). Similarly, when they are applied in sewage treatment plants (STP) (B), it shows that products from ARR decrease phosphate, nitrogen, biological oxygen demand (BOD), chemical oxygen demand (COD), heavy metals and E. Coli in communal wastewaters, as well

as decreasing the volume of biosolids and decrease need for other chemicals, such as flocculants and polymers, during processing of biosolids, while leads to better processing results and decreased amount of waste (23).

When ARR is applied to STP, processed biosolids have returned value as a fertilisers in agriculture and gardening, and on mining sites; processed biosolids can also be used in composting plants, and treated biosolids can be placed on dumps without long-term negative effects on dumps in relation to non-processed biotoxins. Moreover, treated communal wastewater has a potential value as recycled water for use in agriculture and composting plants, and on mining sites, although some worrying research shows that treated waste and biosolids may not be so benign as though before (Hendricks and Pool 2012, 290).

When ARR is added into green and household waste used in composting (C), this application results in higher composting temperatures, faster decomposition of compost and it higher quality (25). Treated compost can be used as a fertilised both in agriculture and in restoration of mines. When solid waste depots (D), such as construction waste and debris, acidic sulphate soils, contaminated soil and other flows of solid waste, such as biosolids after being treated at the dump, those solid materials can be re-classified (i.e. from “hazardous” or “low level hazardous” to “clean material”, which decreases dumping costs), or the probability of long-term contamination can be decreases, including creating a contaminated discharge; under any conditions, dumps can create methane for reuse or resale (24) (Rubinos and Spagnoli and Barral 2013, 440). There is a large number of flows of gas, liquid and solid waste being generated at mining sites (E), including waste rocks, tailings, wastewaters and fugitive emissions. For example, when gas emissions are treated with modified ARR, they do not result in greenhouse gases or contamination of the atmosphere. Depending on the type of waste, processed mining wastewaters can be similarly released into the local receiving environment. Such restoration programmes also incite growth of grass and trees, including restoration of abandoned mining sites, which results in restored ore deposits and clean, sustainable environment (26) (Fergusson 2014, 12-17).

There is also a large number of flows of gas, liquid and solid wastes being generated in most of industries (F), many of which can be adjusted for processing by modified ARR. For example, processed gas emissions do not result in creating greenhouse gases or contamination of the atmosphere (Hutson and Attwood 2008, 285). Depending on the type of waste, processed industrial wastewaters can also be released into the sewers as “trade waste”, and some processed solids can be used in composting, or be moved to a dump in a re-classified form, which decreases expenses of solid waste transport. The result of this industrial waste initiative is general decrease in waste and cleaner, more sustainable society and environment (27) (Kalamanda 2016, 165-177).

CONCLUSION

Alumina refinery residue is a dangerous waste in large quantities, which after a modification can have useful physical and chemical properties. Numerous important research studies have shown that ARR has a significant reuse value (Liu and Wu 2012, 4) (Traoré and Traoré and Diakité, 20), including its application in processing of waste waters and solids, production of cement products, restoration of metals, ceramics and remediation of contaminated sites. The alumina industry covered some of the ways to achieve this future by developing technological chard that started resolving the ARR issue, but further work is needed. This conclusion becomes very true if we take into consideration that most of roadmaps does not consider modification of ARR’s chemical properties, re-classifying it from “hazardous” waste to benign raw material, and only then reuse it in other industrial and environmental applications. A concerned society should not question the wisdom and fail to support modification of ARR, offering its reuse at the same time.

Furthermore, current industrial plans aimed at the industry did not succeed in involving all relevant participants, or fully bear in mind wider consequences of developing the sustainable future of ARR. Such position results with less than reliable conclusions and results, and as a consequence the responsibility and trust of the industry are in question. Although all these conclusions are results are in most cases unjustified due to alumina industry's efforts, we still can do something to achieve consensus on issued relating to sustainable future of alumina refinery residues.

For those reasons, this paper develops a framework with the aim to encompass a more sophisticated approach to building sustainable future for the utilisation of ARR including in its basis the transparency, communication, education and building trust between participants. Although there is no special emphasis, the model presumes international standards, empirical research and reporting on sustainability.

The model recognises that the expectations and motivation of participants will differ, but also recognises that those differences need to be recognised and clarified, and not neglected; attempts to include and understand differences needs to be supported, and attempts to understand a wider social and industrial landscape in which the programme is developed are considered to be critical for success of reuse of ARR in commercial and environmental applications. In fact, the framework is based on developing a network of concerned, educated and dedicated owners of the process and is based on the claim that commercial, regulatory and social alliances and synergies question and use in the best way, and not simply being led by a road sign from the alumina industry perspective.

In that sense, the current framework is envisioned in such way that it results in constant learning and education of all participants, with basic supporters, drivers and owners of the process who take their own responsibility for leadership and key decisions in the project implementation. We have seen that ideal adopted in the leadership that Alcoa showed in Australia and other refineries all over the world, including RUSAL in Russia and Chinalco in China, where participants are actively trying to find wider used of alumina refinery residues in the wider industry and society. This is in the interest of the whole international community and long-term sustainability of the planet. The efforts such as Asia-Pacific Partnership on Clean Development and Climate and other initiatives of like-mined people that research and exploit useful possibilities to reuse alumina refinery residues need to be hailed.

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JURISPRUDENCIJA SUDA PRAVDE EVROPSKE UNIJE U SLUŽBI ZAŠTITE PRAVA NA SLOBODNO PRUŽANJE USLUGA

Rezime: *Sud pravde Evropske unije svojom praksom znatno doprinosi razvoju prava evropske organizacije. Pretežni dio jurisprudencije Suda pravde predstavljaju presude na osnovu prethodnih pitanja, koja mu u vezi sa interpretacijom odredbi osnivačkih ugovora ili interpretacijom i utvrđivanjem valjanosti pravnih akata koje donose institucije Evropske unije, na osnovu člana 267. Ugovora o funkcionisanju Evropske unije, upućuju sudovi država članica. Manji dio jurisprudencije veže se za postupke po direktnim tužbama koje Sudu podnose Evropska komisija, odnosno države članice. Budući da je ekonomski kontekst pozadina integracionog procesa i da se ona može identifikovati gotovo u svakoj odluci Suda pravde, to okvire njegovog djelovanja predstavlja kao ostvarivanje ekonomske integracije, najprije kroz zonu slobodne trgovine, a kasnije kroz carinsku uniju i unutrašnje tržište. Svjesni da je analiza prakse Suda pravde Evropske unije sastavni dio različitih profila obrazovanja u Evropi te da je, samim tim, korisna stručnoj i naučnoj javnosti, u ovom radu analiziramo dvije odabrane presude Suda pravde iz 2020. godine koje se odnose na interpretaciju pojedinih odredbi Direktive o uslugama na unutrašnjem tržištu. Navedena direktiva predstavlja pravni instrument legalizacije i komplementarnosti, te doprinosi ostvarivanju ekonomske integracije budući da njenu sadržinu čine odredbe o izjednačavanju uslova za pristup i obavljanje uslužnih djelatnosti koje su u njenom dosegu, te odredbe koje nadograđuju ostale propise Unije afirmišući pravo na slobodu poslovnog nastanjivanja i pravo na slobodno pružanje usluga.*

Ključne riječi: *jurisprudencija, prethodno pitanje, direktna tužba, usluge, unutrašnje tržište*

JEL klasifikacija: *K33, K41*

UVOD

Pravni sistem Evropske unije formalno se ne zasniva na pravnom načelu anglosaksonskog prava prema kojem se kao obavezujući izvor prava favorizuje precedent (stare decisis). Naime, anglosaksonsko pravo je sačinjeno iz običajnog prava, razrađenog kroz sudske presude, a samo malim dijelom iz pisanih izvora. S tim u vezi, iako je Sud pravde osigurao pravni osnov mnogim svojim tumačenjima te je kroz svoju praksu razvio načela i pravila o tumačenju odredaba pravnih akata Unije koje su nacionalni sudovi i druga tijela u državama članicama dužna da poštuju i primjenju, pravo evropske organizacije je dio kontinentalnog evropskog pravnog sistema. Presude Suda su takve pravne prirode da u nacionalnim pravnim porecima država članica u velikoj mjeri determinišu način primjene materijalnog i procesnog prava (Taborowski 2012, 1881).

Pravo i dužnost odlučivanja po zahtjevima za rješavanje prethodnog pitanja Sud pravde crpi iz člana 19. stav 3. tačka b) Ugovora o Evropskoj uniji, kao i iz člana 267. Ugovora o

funkcionisanju Evropske unije u kojima je, između ostalog, propisano da je Sud pravde nadležan da odlučuje o prethodnim pitanjima koja se tiču interpretacije ugovora i valjanosti i tumačenja akata institucija, tijela, kancelarija ili agencija Unije. Postupanje u prethodnom postupku regulisano je i Statutom Suda pravde Evropske unije, Poslovnikom Suda i preporukama Suda za nacionalne sudove, koje se odnose na pokretanje prethodnog postupka. Predmetni postupak se pokreće pred nacionalnim sudom, a odvija se pred Sudom pravde Evropske unije (Weiler 1985). Na generalnoj ravni, „dijalog između Suda pravde i nacionalnih sudova u postupku po prethodnom pitanju uključuje mnogo različitih aspekata“ (Leijon 2020, 874), s tim da je osnovna zadaća Suda da ultimativno osigura jedinstveno tumačenje i primjenu pravne tekovine evropske organizacije. Uostalom, šta je pravni sistem bilo koje države ili međunarodne organizacije ako nije omogućena njegova dosljedna i jedinstvena primjena?

Subjekti ovlašćeni za podnošenje zahtjeva za rješavanje prethodnog pitanja su sudovi država članica (Krommendijk 2017, 1362). Međutim, situacija u vezi sa ovlašćenim subjektima nije jednostavna. Stoga se čini da je odredba člana 267. stav 3. Ugovora o funkcionisanju Evropske unije (ex član 234. Ugovora o Evropskoj zajednici) razrađena kroz sudsku praksu Suda pravde, jer su upravo kroz nju uspostavljeni kriterijumi u skladu sa kojima se određuje šta se ima smatrati pod izrazom „sud“. I u tom smislu se izraz „sud“ tumači vrlo ekstenzivno. U prilog navedenom govori presuda Suda pravde u predmetu C – 53/03 Synetairismos Farmakopoion Aitolias & Akarnanias (Syfait) and Others v GlaxoSmithKline plc and GlaxoSmithKline AEVE [2000] ECR 2005 I-04609, gdje se u paragrafu 29, između ostalog, navodi da prema ustaljenoj sudskoj praksi, u nastojanju da se odredi da li se tijelo na koje se upućuje smatra sudom ili tribunalom u smislu Ugovora o Evropskoj zajednici, Sud uzima u obzir brojne faktore, poput onog da li je tijelo uspostavljeno zakonom, da li je stalno, da li je njegova nadležnost obavezujuća, da li provodi postupke *inter partes*, da li primjenjuje propise i da li je nezavisno. Sud je navedene stavove zauzimao i u presudama C-54/96 Dorsch Consult [1997] ECR I-4961, paragraf 23, C-110/98 & C-147/98 Gabalfria and Others [2000] ECR I-1577, paragraf 33, C-195/98 Österreichischer Gewerkschaftsbund [2000] ECR I-10497, paragraf 24. i C-516/99 Schmid [2002] ECR I-4573, paragraf 34. Suštinski, nacionalni sud može uputiti pitanje Sudu pravde samo ako se pred njim vodi postupak i ako se od njega traži da donese odluku u postupku. Djelovanje nacionalnih sudija, u pogledu favorizovanja obraćanja Sudu pravde, je „uslovljeno mjerom u kojoj se one identifikuju sa ulogom sudije Suda pravde, kao i nivoom povjerenja u institucije evropske organizacije.“ (Glavina 2020, 52).

Što se tiče postupaka po direktnim tužbama koje Sudu podnosi Evropska komisija, odnosno države članice, treba da se podsjetimo da problematika neusklađenosti nacionalnih propisa sa pravom evropske organizacije dobija na značaju od 1984. godine kada je Evropska komisija, u skladu sa članom 226. Ugovora o Evropskoj zajednici, počela Evropskom parlamentu da dostavlja redovne godišnje izvještaje o broju i vrsti kršenja prava Unije od strane država članica. Upravo su ti rani izvještaji upozoravali na sistemsku neusklađenost među državama članicama (König & Luetgert 2008, 163-194). Naime, Evropska komisija je ključna institucija u čijem je djelokrugu staranje o primjeni prava Unije i to je vidljivo iz člana 17. Ugovora o Evropskoj uniji. Dakle, Komisija ima pravo i obavezu da osigura efektivnu primjenu prava Unije te se u tom kontekstu smatra da su glavne ugovorne odredbe koje se vežu za ovo pitanje, odredbe iz člana 258. Ugovora o funkcionisanju Evropske unije (ex član 226. Ugovora o Evropskoj zajednici – procedura kršenja prava) i odredbe iz člana 260. istog ugovora koje se odnose na finansijske sankcije. „Suštinski, bazične odredbe na osnovu kojih Komisija ili države članice pokreću proceduru zbog kršenja prava ostale su nepromijenjene u odnosu na one iz Rimskog ugovora.“ (Peers 2012, 33-34). Sa druge strane, Sud pravde je zauzeo stav da su nacionalni sudovi dužni da interpretiraju nacionalno pravo u skladu sa pravom Unije koliko god je to moguće (Rodin 2011, 2-13). „Dok u postupcima po prethodnim pitanjima Sud pravde ima mogućnost da balansira između nacionalnog identiteta i osnovnih sloboda ili da se prikloni nacionalnom sudu, u postupcima zbog kršenja prava Unije takva mogućnost ne postoji.

Priklanjaje u postupcima zbog kršenja prava bi vodilo ka tome da se konačna odluka prepusti nacionalnim tijelima koja bi, naravno, odlučila u korist države članice.“ (Rodin 2012, 32).

“Od trenutka osnivanja, Evropska unija je bila primjer duboke integracije i pokretača promjena te je sposobnošću stvaranja inovativnih rješenja za postizanje društvene jednakosti i pružanja kvalitetnih usluga stvorila jedinstven identitet.” (Franc 2020, 314). Kada je riječ o Direktivi o uslugama na unutrašnjem tržištu, koja je stupila na snagu 28. decembra 2006. godine, države članice su se obavezale da će do 28. decembra 2009. godine donijeti zakone i druge propise potrebne za usklađivanje sa ovim sekundarnim izvorom prava (Timmerman 2009, 3-51). U ovom dijelu je veoma važno da se razumije da je „promovisanje slobode pružanja usluga od slučaja do slučaja (case-by-case) predstavljalo zadatak koji je Sud pravde ispunio mnogo prije nego što je bila prepoznata potreba za donošenjem sekundarne legislative u ovoj oblasti.” (Veith 2008, 168). Cilj Direktive je da se napravi razlika između opšteg područja uređenja slobode pružanja usluga na unutrašnjem tržištu od posebnih sektorskih područja, kodifikuje dotadašnja praksa Suda pravde Evropske unije kojom se interpretiraju relevantne odredbe Ugovora, utvrdi obaveza pojednostavljenja administrativnih postupaka u oblasti pružanja usluga i naloži veća transparentnost, propišu uslovi za uvođenje odobravanja za pružanje usluga (authorization schemes), uvede crna lista zabranjenih zahtjeva koji ograničavaju slobodu pružanja usluga, propišu uslovi pod kojima države članice mogu ograničiti slobodu pružanja usluga i urede uslovi administrativne saradnje između Unije i država članica u oblasti usluga (Snell 2020, 335-347). Suštinski, Direktivom se uvode pravila koja pretenduju da zaštite potrošače tako što će, u oblasti prekogranične razmjene usluga, ukloniti prepreke koje uzrokuju propisi država članica (Minico i Viggiano 2017, 128-146).

Nakon što se krajem 2019. godine navršilo deset godina od isteka roka za transpoziciju Direktive o uslugama u državama članicama evropske organizacije, pokazuje se prikladnim da se upoznamo sa dvije izabrane presude Suda pravde iz 2020. godine, koje se odnose na interpretaciju pojedinih odredbi Direktive. Stoga, u nastavku u okviru zasebna dva naslova elaboriramo o izabranim slučajevima, nakon čega iznosimo ključna zapažanja.

1. DISKRIMINACIJA KOD STICANJA POLJOPRIVREDNOG ZEMLJIŠTA

Sud pravde Evropske unije je 11. juna 2020. godine donio veoma interesantnu presudu u predmetu C-206/19, „KOB“ SIA v Madonas novada pašvaldības Administratīvo aktu strīdu komisija. Glavni postupak je vođen pred latvijskim Opštinskim upravnim sudom u Rigi po tužbi koju je podnijelo privredno društvo „KOB“ SIA. Riječ je o privrednom društvu sa sjedištem u Latviji koje obavlja poljoprivrednu djelatnost, a čiji upravni odbor čini jedno lice, državljani Njemačke, koji ima pravo samostalnog zastupanja. Vlasničke udjele u ovom privrednom društvu imaju još tri društva registrovana u Latviji, čiji su vlasnici takođe njemački državljani. Podnošenju tužbe prethodilo je zaključenje kupoprodajnog ugovora, posredstvom kojeg je privredno društvo „KOB“ SIA kupilo zemljište površine 8.10 ha te je zatražilo odobrenje za upis u registar nepokretnosti. Međutim, nadležna tijela latvijske opštine Madona su odbila zahtjev za upis te je privredno društvo podnijelo tužbu smatrajući da latvijski nacionalni propisi o uslovima sticanja poljoprivrednih zemljišta dovode do diskriminacije na osnovu državljanstva i da su u suprotnosti sa garancijama o osnovnim slobodama iz čl. 18, 49. i 63. Ugovora o funkcionisanju Evropske unije i člana 45. Povelje Evropske unije o osnovnim pravima. U skladu sa latvijskim propisima, pravno lice može sticati vlasništvo nad poljoprivrednim zemljištem u Latviji, međutim ako to lice zastupa ili je ono pod kontrolom državljanina druge države članice, za sticanje moraju biti ispunjene dvije pretpostavke. Prvo, strani državljani, kao građanin Unije, mora izvršiti prijavu boravka u Latviji, a to podrazumijeva da tamo želi boraviti duže od tri mjeseca. Drugo, strani državljani je dužan da dokaže da poznaje latvijski jezik na nivou „B2“, što odgovara vladanju jezikom dovoljnom za vođenje razgovora o temama iz svakodnevnog i poslovnog života.

Latvijski sud je uputio Sudu pravde Evropske unije zahtjev za donošenje odluke o prethodnom pitanju u vezi sa usklađenošću nacionalnih propisa sa propisima Evropske unije. Naime, kao što smo naveli, prema latvijskim propisima stranim državljanima nije zabranjeno sticanje vlasništva nad poljoprivrednim zemljištem, s tim da je potrebno ispuniti naprijed navedene pretpostavke u situaciji kada pravno lice zastupa ili je ono pod kontrolom državljanina druge države članice. Nacionalni sud je istakao da se isti uslovi, pod istim okolnostima, primjenjuju za sticanje vlasništva nad poljoprivrednim zemljištem u Latviji na državljane država Evropskog ekonomskog prostora i Švajcarske konfederacije. U zahtjevu upućenom Sudu pravde iznio je svoje shvatanje o usklađenosti nacionalnih i propisa evropske organizacije, pri čemu je podsjetio na paragraf 80. presude u slučaju C-47/08, *Commission v Belgium*, EU:C:2011:334, prema kojoj je svrha člana 43. Ugovora o Evropskoj zajednici da osigura svakom državljaninu države članice sa poslovnim nastanom u drugoj državi članici, u svrhu obavljanja samostalne djelatnosti, isti tretman kakav imaju državljani te države i zabrani svaku diskriminaciju na osnovu državljanstva ustanovljenu nacionalnim zakonodavstvom. Takođe, taj sud je ukazao da je članom 49. Ugovora o funkcionisanju Evropske unije ustanovljena obaveza da se prema svakom državljaninu države članice koji se nastani u drugoj državi članici, kako bi tamo obavljao samostalnu djelatnost, postupa kao prema državljanima te države. Čini se da je Sud bio svjestan da u ovom predmetu „državljanstvo Unije treba razmatrati kao pravnu intervenciju u prava, status i vezu stanovnika Unije.“ (Davies 2019, 676). Ukazao je i na presudu Suda pravde u slučaju C-452/01, *Ospelt i Schlössle Weissenberg*, EU:C:2003:493, u kojoj je Sud zauzeo stav da iako se članom 345. Ugovora o funkcionisanju Evropske unije ne dovodi u pitanje mogućnost država članica da predvide posebne mjere kojima se uređuje sticanje vlasništva nad zemljištem, takve mjere moraju biti u skladu sa propisima Unije, uključujući propise o nediskriminaciji, slobodi poslovnog nastanjivanja i slobodnom kretanju kapitala. Nacionalni sud je ukazao i na Interpretativnu komunikaciju Komisije o sticanju poljoprivrednog zemljišta i pravu Evropske unije (2017/C 350/05) prema kojoj proizlazi da pravo na sticanje ili korišćenje poljoprivrednog zemljišta, ili raspolaganje njime mora biti u skladu sa načelima slobodnog kretanja kapitala koja su utvrđena članom 63. Ugovora o funkcionisanju Evropske unije te je istakao da je Evropska komisija, ipak, s obzirom na posebnu prirodu poljoprivrednog zemljišta, nacionalnim tijelima priznala mogućnost uvođenja određenih ograničenja radi postizanja ciljeva poput očuvanja tradicionalnog oblika gospodarenja poljoprivrednim zemljištem, zadržavanja stanovništva u ruralnim područjima, borbe protiv pritiska na zemljište ili pak upravljanja zelenim površinama i krajolicima. Nacionalni sud je tražio od Suda pravde odgovor na pitanje da li je u skladu sa propisima Evropske unije, posebno sa čl. 18, 49. i 63. Ugovora o funkcionisanju Evropske unije, propis države članice kojim se pravnim licima, kada su jedan ili više članova privrednog društva koji zajedno imaju više od polovine glasačkih prava u društvu i sva lica koja imaju pravo zastupanja tog društva državljani drugih država članica, nalaže obaveza da, radi sticanja vlasništva na poljoprivrednom zemljištu, dostave potvrde o prijavi boravišta u Latviji za svoje članove i zastupnike (koji su građani Unije) i dokument kojim se potvrđuje da oni poznaju službeni jezik dotične države članice barem na nivou „B2“. Suštinski, treba da se odgovori na četiri pitanja – da li su restrikcije koje su uvedene zbog zaštite legitimnog javnog interesa kompatibilne sa ciljevima Evropske unije; da li se restrikcije odnose i na državljane Latvije; da li su restrikcije koje se odnose na strane državljane proporcionalne, odnosno da li su adekvatne za postizanje cilja koji se želi postići nacionalnim propisima; da li je restriktivna mjera u skladu sa osnovnim pravima iz Ugovora (test opravdanosti) (Wallerman Ghavanini 2020, 897).

Sud pravde je, u okviru određenja „da li slučaj ulazi u doseg prava Evropske unije, što je uobičajeni i prvi korak kada je riječ o primjeni prava Evropske unije“ (Havelka 2014, 132), primarno istakao da član 345. Ugovora o funkcionisanju Evropske unije na koji referiše nacionalni sud, uspostavlja načelo neutralnosti Ugovorâ u pogledu uređenja vlasništva u državama članicama. Naime, prema odredbi ovog člana, Ugovori ni na koji način ne dovode u pitanje pravila kojima se u državama članicama uređuje sistem vlasništva. Međutim, prema

ocjeni Suda, odredba ovog člana nema za rezultat izuzimanje postojećih uređenja vlasništva u državama članicama od osnovnih pravila Ugovora o funkcionisanju Evropske unije. Dakle, iako ta odredba ne dovodi u pitanje mogućnost država članica da pravno urede način prometovanja i sticanja vlasništva nad poljoprivrednim i šumskim zemljištem, takvo uređenje mora biti u skladu sa pravilima o nediskriminaciji i pravilima o slobodi poslovnog nastanjivanja (Barnard i Snell 2020, 461-467) i slobodnog kretanja kapitala. U vezi sa navedenim, Sud pravde je uputio nacionalni sud na presudu u slučaju C-52/16 i C-113/16, SEGRO i Horváth, paragraf 51, EU:C:2018:157. Dakle, nacionalni propisi moraju biti u skladu sa propisima Unije o nediskriminaciji, slobodi poslovnog nastanjivanja i slobodnom kretanju kapitala koji su upravo ključni i za rješenje po zahtjevu nadležnog latvijskog suda. Sud evropske organizacije je podsjetio i na svoju raniju praksu kada je riječ o pitanju slobode kretanja, prema kojoj kada se određena nacionalna mjera istovremeno odnosi na više osnovnih sloboda, ona se načelno razmatra samo s obzirom na jednu od njih ako se pokaže da su u okolnostima predmetnog slučaja ostale slobode sporedne i u tom smislu je referisao na presudu u slučaju C-580/15, Van der Weegen and others, paragraf 25, EU:C:2017:492. Cijeneci cilj predmetnih nacionalnih propisa, Sud pravde je ukazao da u konkretnom slučaju iz zahtjeva kojim se upućuje prethodno pitanje proizlazi da društvo „KOB“ SIA nastoji steći poljoprivredna zemljišta u Latviji da bi ih koristilo, odnosno iskorištavalo u privredne svrhe, pa se pojavljuje nedoumica da li nacionalne propise treba cijeliti kroz prizmu člana 49. ili člana 63. Ugovora o funkcionisanju Evropske unije. U tim prilikama, kako bi se utvrdilo ulazi li predmet glavnog postupka u oblast jedne ili druge odredbe, Sud je uzeo u obzir činjenične elemente konkretnog predmeta, baš kao što je to uradio i u slučaju C-375/12, Bouanich, paragraf 30, EU:C:2014:138.

Prema ocjeni Suda pravde, predmetni slučaj treba da se riješi primarno na osnovu odredbi o pravu na slobodno poslovno nastanjivanje, a ne na osnovu odredbi o slobodnom kretanju kapitala kako je to u svom zahtjevu identifikovao nacionalni sud. Uz navedeno, treba da se razumije da, budući da član 49. Ugovora o funkcionisanju Evropske unije predviđa posebno pravilo o nediskriminaciji, u predmetnom slučaju ne može da se primijeni član 18. tog ugovora na koji se pozvao nacionalni sud. Dodatno, Sud je podsjetio da svaku nacionalnu mjeru u oblasti koja je u potpunosti usklađena na nivou Unije treba cijeliti u odnosu na odredbe sekundarnog izvora prava, a ne u odnosu na odredbe primarnog prava i u tom smislu je uputio na slučaj C-205/07, Sysbrechts i Santurel Inter, EU:D:2008:730, paragraf 33. Konkretno, Sud je ukazao da je ovdje potrebno prvenstveno napraviti poveznicu sa Direktivom u uslugama jer se u skladu sa članom 1. stav 1. tog sekundarnog izvora prava uspostavljaju opšta pravila kojima se pružiocima usluga olakšava ostvarivanje slobode poslovnog nastanjivanja, dok se poglavljem III (čl. 2. do 15) uređuje sloboda poslovnog nastanjivanja pružalaca usluga. Članovima 9. do 13. Direktive o uslugama određuju se uslovi pod kojima nacionalnim propisima države članice mogu utvrditi obavezu pribavljanja odobrenja za obavljanje uslužne djelatnosti. Kao što je već utvrđeno u vezi sa članom 14. te direktive, u kojem je sadržana lista „zabranjenih“ zahtjeva u okviru ostvarivanja slobode poslovnog nastana, treba smatrati da je članovima 9. do 13. iste direktive provedena iscrpna harmonizacija u odnosu na usluge obuhvaćene njenim područjem primjene te je u tom smislu potrebno ukazati na presudu u spojenim predmetima C-458/14 i C-67/15, Promimpresa and others, EU:C:2016:558, t. 60. i 61. u kojoj je Sud već zauzeo takav stav. Dakle, Sud je odlučio da nacionalni propis ispita kroz prizmu odredbi Poglavlja III Direktive o uslugama te je zaključio da iz zahtjeva nacionalnog suda proizlazi da se propisom Latvije provodi postupak u kojem se utvrđuju uslovi za sticanje vlasništva pravnog lica na poljoprivrednom zemljištu u Latviji. U tom kontekstu zahtijeva se i pribavljanje pisane potvrde da će se zemljišta o kojima je riječ trajno koristiti u poljoprivredne svrhe. Nema sumnje da takvo propisivanje može da se dovede u vezu sa „sistemom ovlašćivanja“ iz člana 4. tačka 6. Direktive o uslugama, tj. u vezu sa uvođenjem postupka koji pružalac ili primalac usluga mora slijediti da bi od nadležnog organa dobio odobrenje za obavljanje uslužne djelatnosti. Prema članu 9. stav 1. Direktive, države članice su ipak ograničene u pogledu propisivanja uslova u naprijed pomenutom smislu – primarno takav sistem ne smije biti diskriminirajući u odnosu na

pružaoca usluga, a što znači da mora biti u skladu sa članom 10. stav 2. tačka (a) Direktive. Osim toga članom 14. te iste direktive predviđeno je da države članice ne smiju uslovljavati pristup ili izvođenje uslužne djelatnosti na svom državnom području. Posebno su, u skladu sa tačkom 1. tog člana, zabranjeni diskriminirajući zahtjevi koji se neposredno ili posredno osnivaju na državljanstvu, kao i zahtjev da vlasnik poslovnog udjela ili članovi uprave ili nadzornih tijela pružalaca usluge moraju imati boravište na njihovom državnom području. U tom je pogledu Sud presudio da iz teksta člana 14. Direktive o uslugama i opšte strukture te direktive proizlazi da se zahtjevi navedeni u nacionalnom propisu ne mogu opravdati. Što se tiče predmeta u glavnom postupku, posebni uslovi koji su predviđeni za državljane drugih država članica nisu predviđeni za latvijske državljane te nacionalni propis dovodi do neposredne diskriminacije na osnovu državljanstva i taj je propis u suprotnosti s članovima 9, 10. i 14. Direktive o uslugama te nije potrebno ispitivati da li se protivi članu 63. Ugovora o funkcionisanju Evropske unije. Dakle, čl. 9, 10. i 14. Direktive o uslugama na unutrašnjem tržištu treba tumačiti na način da je u suprotnosti sa njima nacionalni propis kojim se pravo pravnog lica, čiji su jedan ili više članova koji zajedno imaju više od polovine glasačkih prava u njoj i lica koja imaju pravo na zastupanje tog lica državljani drugih država članica, da stekne vlasništvo na poljoprivrednom zemljištu koje se nalazi na području te države članice uslovljava time da ti članovi i zastupnici podnesu, s jedne strane, potvrdu o prijavi boravišta u navedenoj državi članici i, s druge strane, dokument kojim se potvrđuje da im njihov nivo vladanja službenim jezikom te države članice omogućuje da barem mogu razgovarati o temama iz svakodnevnog i poslovnog života.

2. MULTIDISCIPLINARNO OBAVLJANJE DJELATNOSTI

Za pravno lice od neprocjenjivog su značaja računovodstvene informacije (Vanstraelen and Schelleman 2017, 565-584). „Cilj svakog preduzeća, odnosno svakog pravnog lica, jeste da uspješno posluje. Uspješnost poslovanja se najbolje može sagledati iz prezentiranih finansijskih izvještaja, pod uslovom da finansijski izvještaji predstavljaju vjerodostojnu sliku prinostnog položaja i imovinske situacije preduzeća. Podaci o poslovanju će, kako internim, tako i eksternim korisnicima informacija, poslužiti kao dobra osnova za donošenje ekonomskih odluka, odnosno preduzimanje odgovarajućih akcija”. (Vuković Perduv i Čeklić i Čeklić 2018, 110-111). Navedeno je karakteristično za sve države članice (Ćwiałka- Małys 2020, 545-555) te je upravo zbog značaja računovodstvene profesije važno da se upoznamo sa pozicijom koju je zauzeo Sud pravde Evropske unije u pogledu spojivosti zajedničkog obavljanja računovodstvene i drugih djelatnosti.

Evropska komisija je u martu 2015. godine zatražila od Kraljevine Belgije informacije o nacionalnom propisu iz oblasti računovodstva na osnovu kojeg se ovlašćenim računovođama zabranjuje da računovodstvenu djelatnost obavljaju zajedno sa određenim drugim djelatnostima. Konkretno, u fokusu su bile odredbe Etičkog kodeksa Belgijskog instituta za ovlašćene računovođe i poreske savjetnike (IPCF) prema kojima je obavljanje djelatnosti iz preduzetničkog, poljoprivrednog ili trgovačkog sektora nespojivo sa obavljanjem računovodstvene djelatnosti. Komisija je smatrala da te odredbe nisu u skladu sa pravom Evropske unije, konkretno sa članom 25. Direktive o uslugama na unutrašnjem tržištu i članom 49. Ugovora o funkcionisanju Evropske unije. Kraljevina Belgija je smatrala da njen propis nije u suprotnosti sa pravom evropske organizacije te je u tom smislu odgovorila na pismo opomene i na obrazloženo mišljenje koje joj je uputila Komisija. Nakon izjašnjenja države članice na obrazloženo mišljenje, Komisija je u julu 2017. godine odlučila da Sudu pravde podnese tužbu protiv Kraljevine Belgije zbog kršenja prava Unije te svoju odluku nije promijenila ni nakon što joj je ta država, u avgustu 2017. godine, dostavila novi Etički kodeks IPCF-a. Tužba je podnesena u junu 2018. godine, a usmena izjašnjenja Komisije i Kraljevine Belgije iznesena su na raspravi održanoj 23. maja 2019. godine.

U svojoj argumentaciji Komisija je istakla da je cilj člana 25. Direktive o uslugama da se u državama članicama omogući pružanje multidisciplinarnih usluga, a da je u Kraljevini Belgiji bio na snazi propis koji je u suprotnosti sa tim opredjeljenjem, kao i da je do izvršenih izmjena Etičkog kodeksa IPCF-a u toj državi članici bilo zabranjeno da računovođe obavljaju svoju djelatnost zajedno sa bilo kojom preduzetničkom, poljoprivrednom ili trgovačkom djelatnošću, s jedne strane, i djelatnošću posrednika ili zastupnika u osiguranju, agenta za nekretnine ili bilo koje bankarske djelatnosti ili djelatnosti finansijskih usluga, s druge. U pogledu novog Etičkog kodeksa, Komisija je podsjetila da je taj propis dostavljen nakon roka određenog za odgovor na obrazloženo mišljenje, ali i da se njegovim donošenjem nije prestalo kršiti pravo Unije budući da član 21. stav 2. novog kodeksa ne odstupa od člana 21. stav 3. prethodnog. Komisija je navela da se zahtjevi koji ograničavaju obavljanje regulisanih profesija ispituju i ocjenjuju u skladu sa članom 25. stav 2. tačka (a) Direktive o uslugama i bilo kakav vid ograničenja može da se prihvatiti samo ako je to opravdano s obzirom na specifičnu prirodu svake profesije. Potpuna zabrana zajedničkog obavljanja računovodstvene djelatnosti, s jedne, i djelatnosti posrednika u osiguranju, zastupnika u osiguranju, agenta za nekretnine ili bilo koje bankarske djelatnosti ili djelatnosti finansijskih usluga, s druge strane, prevazilazi ono što je nužno da se osigura poštovanje pravila etičnosti računovodstvene struke i to nije, prema mišljenju Komisije, nužna mjera, budući da postoje i fleksibilnije mjere (poput internih postupaka) čijim se uvođenjem može spriječiti sukob interesa u domenu prenosa informacija i garantovati ispravna primjena pravila o čuvanju profesionalne tajne. Dakle, prema mišljenju Komisije, apsolutna zabrana nije proporcionalna zadanom cilju i ne mogu se prihvatiti razlozi Kraljevine Belgije, prema kojima ona kao opravdanje za neuvođenje internih postupaka u naprijed pomenutom smislu navodi da bi to značilo uvođenje novih administrativnih opterećenja, kao i uvođenje nadzora *ex post*. Uz navedeno, ocjena je Komisije da se Kraljevina Belgija pogrešno poziva na presudu u slučaju C-309/99 J. C. J. Wouters, J. W. Savelbergh and Price Waterhouse Belastingadviseurs BV v Algemene Raad van de Nederlandse Orde van Advocaten, intervenser: Raad van de Balies van de Europese Gemeenschap ECLI:EU:C:2002:98, jer rješenje koje je Sud prihvatio u toj presudi nije primjenjivo na predmetni slučaj. U pogledu člana 21. st. 1. i 2. Etičkog kodeksa IPCF-a, u kojem je utvrđena nespojivost računovodstvene sa bilo kojom preduzetničkom, poljoprivrednom ili trgovačkom djelatnošću, osim u slučaju kada strukovne komore odluče drugačije, Komisija je istakla da ta odredba treba da se ispita u kontekstu usklađenosti sa članom 25. Direktive o uslugama. Naime, za ovu instituciju evropske organizacije je upravo bilo sporno to što je država članica uvođenje zabrane iz člana 21. stav 1. Kodeksa pokušala da amnestira tvrdnjama da u skladu sa članom 21. stav 2. istog kodeksa strukovne komore imaju diskreciono pravo da odluče drugačije, tj. da donesu odluku da se zabrana u određenim situacijama neće uvesti. Naime, kako je navela Komisija, odredba o navedenom diskrecionom pravu je zadržana i u novom Etičkom kodeksu (član 21), dok u pogledu nužnosti i proporcionalnosti uvedenih ograničenja ni odredbama novog kodeksa nije jasno determinisano u kojim situacijama zajedničko obavljanje bilo koje preduzetničke, poljoprivredne i trgovačke djelatnosti, ili prema novoj formulaciji "bilo koje druge djelatnosti", može dovesti do sukoba interesa. Dakle, novim se propisivanjem i dalje u nepovoljan položaj stavljaju klijenti, drugi pružaoci usluga i društvo u cjelini. Iako Komisija priznaje da računovođe u Kraljevini Belgiji u sve većoj mjeri posluju s određenom kategorijom preduzetnika, ona tvrdi, međutim, da se njihov položaj nije izmijenio u značajnoj mjeri.

U svojoj argumentaciji Kraljevina Belgija je istakla da član 25. Direktive o uslugama ne sprečava države članice da pod određenim uslovima zabrane kombinovano obavljanje određenih regulisanih profesija, pri čemu je podsjetila da navedeni član pripada poglavlju V Direktive koji se odnosi na „Kvalitet usluga“ što znači da je primarno posvećen zaštiti potrošača. Ograničenja, prema mišljenju ove države članice, treba da su uvedena kada je neophodno da se osigura nepristrasnost, nezavisnost i integritet regulisanih profesija. U pokušaju da dodatno osnaži svoje argumente, Belgija je istakla da je posebno važno da se ima u vidu činjenica da su agenti za nekretnine, posrednici u osiguranju i agenti na berzi plaćeni na

osnovu provizije, a da taj iznos može da bude viši od naknada dobijenih za vršenje računovodstvene djelatnosti te bi tako moglo da dođe do sukoba interesa. Istakla je i da računovođe moraju da ulože veći trud kako bi osigurale poštovanje obaveze čuvanja poslovne tajne, jer povreda ove obaveze dovodi do kaznene odgovornosti, dok kod drugih struka to nije slučaj. Belgija se suprotstavila mišljenju Komisije i u pogledu proporcionalnosti predmetnog ograničenja, navodeći, između ostalog, da je ograničenje predviđeno u članu 21. Etičkog kodeksa proporcionalno, jer se njime ne uvodi opšta i apsolutna zabrana za zajedničko obavljanje svih multidisciplinarnih djelatnosti, nego samo za striktno određene djelatnosti. U pogledu nespojivosti obavljanja računovodstvene sa bilo kojom preduzetničkom, poljoprivrednom i trgovačkom djelatnošću, Kraljevina Belgija je istakla da je član 21. Etičkog kodeksa IPCF-a predviđao mogućnost odstupanja od te zabrane putem odobrenja strukovnih komora koje se u praksi uvijek izdavalo, pod uslovom da su ispunjene dvije hipoteze - s jedne strane da se računovodstvena djelatnost obavlja kao sporedna i, s druge, da nezavisnost i nepristrasnost računovođe ne budu ugrožene. Ta država članica smatra da je članom 21. novog Etičkog kodeksa IPCF-a predviđeno da je za odobrenje za zajedničko obavljanje računovodstvene struke s drugim, široko definisanim djelatnostima, uvijek dovoljan samo pisani zahtjev upućen strukovnim komorama, pod uslovom da se ne ugrožava nezavisnost i nepristrasnost računovođe. Kriterijumi za izdavanje odobrenja nisu diskriminatorni, unaprijed su poznati i ograničeni na one predviđene u članu 25. Direktive o uslugama. Prema tome, navedenom se odredbom uspostavlja sistem u kojem se odobrenje uvijek daje, a može se izuzetno uskratiti ako se ne poštuje uslov nezavisnosti koji je do sada jedini uslov koji treba ispuniti. Država članica se suprotstavila i mišljenju koje je Komisija iznijela po pitanju presude u predmetu C-309/99 J. C. J. Wouters.

U svom određenju Sud pravde Evropske unije, a kada je riječ o doseg u tužbe, navodi se da je za određivanje u pogledu kršenja prava Evropske unije u konkretnom slučaju relevantan period prije isteka roka određenog u obrazloženom mišljenju i da Sud ne može uzeti u obzir promjene koje su eventualno nastale nakon toga. U tom smislu je podsjetio na presudu u slučaju C-729/17 *Commissio n v Hellenic Republic*, p. 36, ECLI:EU:C:2019:534 u kojoj je već zauzeo takav stav, tj. odredio da postojanje povrede obaveze treba cijeniti s obzirom na situaciju u državi članici po isteku roka određenog u obrazloženom mišljenju i da Sud ne može uzeti u obzir promjene koje su nastale nakon toga. Suštinski, predmet spora nije moguće naknadno proširiti jer bi to dovelo do bitne povrede postupka. Budući da je Komisija u svojoj tužbi i replici istakla prigovore koje je upotrijebila u svom obrazloženom mišljenju, te se osvrnula i na novi Etički kodeks IPCF-a, Sud se odredio o tome da li takva upotreba podrazumijeva izmjenu predmeta tužbenog zahtjeva. Kao prvo, utvrdio je, a stranke to nisu osporile, da je doseg člana 21. stav 2. novog kodeksa istovjetan onom iz člana 21. stav 3. ranijeg Etičkog kodeksa. Te dvije odredbe u meritumu predviđaju da se za djelatnosti posrednika ili zastupnika u osiguranju, agenta za nekretnine, osim djelatnosti upravnika, kao i za sve bankarske djelatnosti i djelatnosti finansijskih usluga za koje je potreban upis kod Agencije za finansijske usluge i tržište kapitala uvijek smatra da ugrožavaju nezavisnost i nepristrasnost računovođe IPCF-a. Drugo, dok je član 21. stav 2. ranijeg Etičkog kodeksa IPCF-a određivao da izvršne komore IPCF-a (strukovne komore) imaju diskreciono pravo da pod određenim uslovima odobre obavljanje računovodstvene djelatnosti zajedno sa bilo kojom preduzetničkom, poljoprivrednom ili trgovačkom djelatnosti, pod uslovom da takvo odstupanje ne ugrozi nezavisnost i nepristrasnost računovođe IPCF-a i da je ta djelatnost sporedna, član 21. stav 1. novog Etičkog kodeksa IPCF-a na generalnoj ravni predviđa da računovođa IPCF-a multidisciplinarnu djelatnost obavlja uz odobrenje strukovnih komora pod uslovom da se ne ugroze njegova nezavisnost i nepristrasnost. Iz ovoga se vidi da se u odnosu na član 21. stav 2. ranijeg Etičkog kodeksa IPCF-a više ne nabrajaju strukovne djelatnosti za koje računovođa IPCF-a mora zatražiti odobrenje da bi ih mogao obavljati zajedno sa računovodstvenom strukom IPCF-a i tako se širi područje predviđenih djelatnosti te da se više ne propisuje uslov u vezi sa sporednom prirodom obavljanja takve djelatnosti. Sud je stoga istakao da se sadržaj ove odredbe ne može smatrati

istovjetnim onom iz člana 21. st. 1. i 2. ranijeg Etičkog kodeksa, s obzirom na to da je članom 21. stav 1. novog Etičkog kodeksa IPCF-a znatno izmijenjen sistem izdavanja odobrenja za zajedničko obavljanje struke računovođe s drugim strukovnim djelatnostima. Stoga, budući da se prigovori Komisije odnose i na član 21. stav 1. novog Etičkog kodeksa IPCF-a, njime se mijenja tužbeni zahtjev. Odlučujući o navedenom, Sud je odbacio prigovore u vezi sa povredom odredaba člana 49. Ugovora o funkcionisanju Evropske unije i člana 25. Direktive o uslugama, u dijelu u kojem se ti prigovori odnose na član 21. stav 1. novog Etičkog kodeksa IPCF-a, kao nedozvoljene te se upustio samo u ocjenu usklađenosti člana 21. st. 1. do 3. ranijeg Etičkog kodeksa IPCF-a i člana 21. stav 2. Novog Etičkog kodeksa IPCF-a s članom 25. Direktive o uslugama i članom 49. Ugovora o funkcionisanju Evropske unije. S tim u vezi, Sud je odlučivao o dva prigovora Komisije – prvi se odnosio na povredu člana 25. Direktive o uslugama, a drugi na povredu člana 49. Ugovora o funkcionisanju Evropske unije. Prvi prigovor se sastojao iz dva dijela (prvi dio se odnosio na povredu do koje je došlo propisivanjem iz člana 21. stav 1. ranijeg Etičkog kodeksa IPCF-a i članom 21. stav 2. novog Etičkog kodeksa IPCF-a, a drugi dio na povredu do koje je došlo propisivanjem iz člana 21. st. 1. i 2. ranijeg Etičkog kodeksa IPCF-a). Kada je riječ o prvom dijelu prvog prigovora Sud je podsjetio da su, u skladu sa članom 25. stav. 1. podstav 1. Direktive o uslugama, države članice dužne da osiguraju da se od pružaoca usluga ne zahtijeva da obavljaju isključivo određenu, specifičnu djelatnost, kao i da im se ne zabranjuje da zajednički ili u partnerstvu izvode različite djelatnosti. Međutim, član 25. stav 2. podstav 2. Direktive određuje da pružaocima usluga mogu izuzetno, pod određenim uslovima, biti postavljeni takvi zahtjevi. Država članica koja se poziva na važan razlog u opštem interesu ili na ograničenje predviđeno u članu 25. stav 1. podstav 2. tačka (a) Direktive, kako bi dokazala da je zabrana obavljanja multidisciplinarnih djelatnosti koju je uvela nužna da se osigura nezavisnost i nepristrasnost računovođa IPCF-a, mora podnijeti precizne dokaze kojima potkrepljuje svoju argumentaciju. Navedeno Sud argumentuje pozivom na presudu u slučaju C-377/17, *Commission v Germany*, EU:C:2019:562., p. 74.

Kada je riječ o relevantnosti presude u slučaju *Wouters*, Sud smatra da se obrazloženje te presude ne može primijeniti na predmetni slučaj. Sud je u slučaju *Wouters*, između ostalog, utvrdio da se profesija računovođe ne može izjednačiti sa profesijom advokata, jer ova prva ne podrazumijeva zastupanje na sudovima, već računovođe mogu samo intervenisati u svojstvu stručnjaka iz svoje oblasti, ali nemaju zakonsko ovlaštenje da zastupaju svoje klijente pred sudovima.

Sud nije podržao argumentaciju da je utvrđena zabrana proporcionalna, jer se tiče isključivo strogo određenih djelatnosti za koje se pretpostavlja da bi u slučaju njihovog zajedničkog obavljanja moglo doći do sukoba interesa zbog toga što je provizija koja se dobija za obavljanje tih tačno određenih djelatnosti veća od naknade koju ostvaruju računovođe. Razlog za izostanak podrške tiče se osnovane hipoteze da takva mogućnost (sukoba interesa) postoji i u slučaju drugih djelatnosti koje nisu predmet zabrane, a koje se mogu obavljati zajedno sa računovodstvenom djelatnošću pod uslovom pribavljanja odobrenja. U ovom dijelu je potrebno ukazati da prema ustaljenoj sudskoj praksi, kako navodi Sud pravde, teret dokaza koji je na državi članici ne može ići tako daleko da se od nje zahtijeva da pozitivno dokaže da navedeni cilj u istim uslovima ne bi bilo moguće ostvariti nijednom drugom mjerom. Međutim, Sud je istakao da je Belgija ipak imala obavezu da u osnovi i detaljno ospori elemente koje je iznijela Komisija, kao i zaključke koji iz njih proizlaze. U dijelu jurisprudencije Suda pravde se podsjeća na presudu u slučaju C-398/14, *Commission v Portugal*, EU:C:2016:61, p. 48 i presudu u slučaju C-433/15, *Commission v Italy*, EU:CC2018:31, p. 44. Dalje, Sud ističe da Kraljevina Belgija nije uvjerljivo osporila stavove Komisije prema kojima bi *ex post* nadzor strukovnih komora predstavljao manje ograničavajuću mjeru za postizanje cilja osiguranja nezavisnosti i nepristrasnosti računovođa IPCF-a, a argumenti koje je u pogledu manje efikasnosti takve mjere istakla ta država članica sami po sebi nisu mogli dokazati da takav nadzor ne bi bio primjeren za postizanje tog cilja. Konačno, u dijelu u kojem Belgija navodi praktične poteškoće provođenja alternativnih mjera koje je predložila Komisija, nesporno je da

se država članica ne može pozivati na praktične, administrativne ili finansijske poteškoće kako bi opravdala nepoštovanje obaveza koje proizlaze iz prava Unije. Stoga je Sud utvrdio da je prvi dio prvog prigovora Komisije osnovan, tj. da su član 21. stav 3. ranijeg Etičkog kodeksa IPCF-a i član 21. stav 2. novog Etičkog kodeksa IPCF-a u suprotnosti sa članom 25. Direktive o uslugama na unutrašnjem tržištu.

Kada je riječ o drugom dijelu prvog prigovora, Sud je smatrao da je u suprotnosti sa članom 25. stav 1. podstav 2. tačke (a) Direktive propisivanje da je nespojivo zajedničko obavljanje profesije računovođe IPCF-a sa bilo kojom preduzetničkom, poljoprivrednom i trgovačkom djelatnošću te da su izuzetno strukovne komore mogle da odluče drugačije. Treba da se razumije da predmetna odredba Direktive ne predviđa mogućnost uslovljavanja obavljanja regulisane profesije zajedno sa drugom djelatnošću pod uslovom da ta druga djelatnost bude karakterisana kao sporedna. Takođe, iako Kraljevina Belgija tvrdi da stručne komore, na traženje, gotovo uvijek u praksi dodjeljuju odobrenje za obavljanje multidisciplinarnih djelatnosti, iz samog teksta člana 21. stav 2. ranijeg Etičkog kodeksa proizlazi da strukovne komore u tom pogledu raspolazu diskrecionim ovlašćenjem koje nije ograničeno nijednim kriterijumom, što im daje jako veliku slobodu da odbiju zahtjev za izdavanje odobrenja ili da opozovu ranije dodijeljeno odobrenje. Stoga je Sud utvrdio da član 21. stav 2. ranijeg Etičkog kodeksa nije u skladu sa članom 25. stav 1. podstav 2. tačka (a) Direktive o uslugama.

Kada govorimo o drugom prigovoru Komisije koji se osniva na povredi člana 49. Ugovora o funkcionisanju Evropske unije, Sud je odbio argument Belgije u kojem se navodi da se član 49. Ugovora ne primjenjuje u ovom slučaju, jer Komisija nije dokazala postojanje prekograničnog elementa. Cijeneći osnovanost ovog prigovora Komisije, Sud je podsjetio da je u suprotnosti sa članom 49. svaka nacionalna mjera koja može, čak i kada se primjenjuje bez diskriminacije na osnovu državljanstva, otežati ili učiniti manje privlačnim izvršavanje slobode poslovnog nastana građana Unije koju garantuje Ugovor. U tom smislu je Sud podsjetio na presudu u slučaju C-268/15, Ullens de Schooten, EU:C:2016:874, p. 49 (Krommendijk 2019). Naime, čak i ako se uslovi propisani belgijskim propisom na isti način primjenjuju na računovođe s poslovnim nastanom u Belgiji kao i na one iz drugih država članica, oni bi mogli spriječiti potonju kategoriju da se poslovno nastani u Belgiji. Stoga je Sud ocijenio da zahtjevi iz belgijskih propisa predstavljaju ograničenje slobode poslovnog nastana u smislu člana 49. Ugovora.

Time što je posredstvom nacionalnih propisa zabranila da računovođe mogu računovodstvenu djelatnost obavljati zajedno sa djelatnostima posrednika ili zastupnika u osiguranju, agenta za nekretnine ili bilo koje bankarske djelatnosti ili djelatnosti finansijskih usluga i time što je tim propisima dala ovlašćenje komorama Instituta za ovlaštene računovođe i poreske savjetnike da zabrane zajedničko obavljanje računovodstvenih djelatnosti s bilo kojom preduzetničkom, poljoprivrednom i trgovačkom djelatnosti, Kraljevina Belgija je prekršila obaveze koje ima na osnovu člana 25. Direktive o uslugama kao i člana 49. Ugovora o funkcionisanju Evropske unije.

ZAKLJUČAK

Iz navedena dva slučaja jasno se može razumjeti značaj presuda Suda pravde Evropske unije po ključna životna pitanja pravnih subjekata koji djeluju na teritoriji evropske organizacije. Instrument harmonizacije sa nacionalnim propisima u oba slučaja predstavlja Direktiva o uslugama na unutrašnjem tržištu kao akt kodifikacije sudske prakse Suda pravde u oblasti slobodnog pružanja usluga i prava poslovnog nastanjivanja koja je prethodila njenom donošenju.

U slučaju sticanja zemljišta u Latviji, nacionalni sud se prilično nemušto poziva na propise Evropske unije i praksu Suda pravde, pri čemu je interesantno da uopšte ne pominje sekundarni izvor prava koji je ključan za rješavanje u predmetnom slučaju, tj. uopšte ne pominje Direktivu o uslugama. Uostalom, prilično su različiti i izbor ugovornih odredbi i interpretativni uglovi

gledanja nacionalnog i Suda pravde, pri čemu je ugao potonjeg odlučujući i konačan. Upućivanje na navedeni sekundarni izvor prava evropske organizacije vrši Sud pravde, dajući mu, u skladu sa svojom ustaljenom sudskom praksom, kao mjeri usklađivanja, prednost u odnosu na primarno pravo. Naime, iako sekundarno evropsko zakonodavstvo, koje se odnosi na sticanje poljoprivrednog zemljišta ne postoji, tj. države članice imaju nadležnost i diskreciju u regulisanju predmetne oblasti, moraju se poštovati osnovna načela Ugovora, prije svega osnovne slobode i nediskriminacija na osnovu državljanstva.

Kod multidisciplinarnih djelatnosti Sud je podsjetio na značaj člana 49. Ugovora o funkcionisanju Evropske unije, jer on garantuje i doprinosi da se otklone nacionalne mjere koje mogu, čak i kada se primjenjuju bez diskriminacije na osnovu državljanstva, otežati ili učiniti manje privlačnim ostvarenje prava na poslovno nastanjanje. Dodatno, Sud pravde osnažuje stara pravila da se država članica ne može pozivati na praktične, administrativne ili finansijske poteškoće kako bi opravdala nepoštovanje obaveza koje proizlaze iz prava Unije te afirmiše odredbe Direktive o uslugama koje mogućnost uslovljavanja obavljanja regulisane profesije zajedno sa drugom djelatnošću svode na najmanju moguću mjeru i insistira na podnošenju preciznih dokaza za potkrepljenje argumentacije u slučajevima da se uslovljavanje vrši. Dakle, svaki nacionalni propis koji zabranjuje da računovođe mogu računovodstvenu djelatnost obavljati zajedno sa djelatnostima posrednika ili zastupnika u osiguranju, agenta za nekretnine ili bilo koje bankarske djelatnosti ili djelatnosti finansijskih usluga, kao i propis kojim se ovlašćuju stručne komore Instituta za ovlaštene računovođe i poreske savjetnike da zabrane zajedničko obavljanje računovodstvenih djelatnosti s bilo kojom preduzetničkom, poljoprivrednom i trgovačkom djelatnosti, u suprotnosti je sa odredbama 25. Direktive o uslugama kao i člana 49. Ugovora o funkcionisanju Evropske unije.

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JURISPRUDENCE OF THE COURT OF JUSTICE OF THE EUROPEAN UNION IN THE SERVICE OF PROTECTING THE RIGHT TO FREE PROVISION OF SERVICES

Summary: *With its case-law, the Court of Justice of the European Union significantly contributes to the development of the law of the European organisation. A major part of the jurisprudence of the Court of Justice consists of preliminary rulings, requested by courts of Member States, in relation to interpreting provisions of the founding Treaties or interpreting and determining the validity of legal acts passed by the European Union institutions, under Article 267 of the Treaty on the Functioning of the European Union. A smaller part of the jurisprudence is related to direct complaints submitted by the European Commission, i.e. Member States. Since the economic context is the background of the integration process and it can be identified in almost every decision of the Court of Justice, the framework for its actions is to achieve economic integration, primarily through the free trade zone, and then through the customs union and internal market. Aware that analysing the case-law of the Court of Justice of the European Union is a component of different education profiles in Europe, and that it is therefore useful for the expert and scientific public, this paper analyses two chosen judgements of the Court of Justice from 2020 regarding the interpretation of specific provisions of the Directive on services in the internal market. This Directive represents a legal instrument of equalisation and complementarity and contributes to realising the economic integration, since it includes provisions on equalising conditions for accessing and performing service activities within its reach, as well as provisions complementing other Union acts by affirming the right to the freedom of establishment and freedom to provide services.*

Key words: *jurisprudence, preliminary ruling, direct complaint, services, internal market*

JEL classification: *K33, K41*

INTRODUCTION

The legal system of the European Union is not formally based on the legal principle of the Anglo-Saxon law, which favours precedent (*stare decisis*) as a binding source of law. Namely, Anglo-Saxon law consists mostly of customary law elaborated by court judgements, and only a smaller part of written sources. In that regard, even though the Court of Justice has ensured the legal basis for many of its interpretations, and with its case-law has developed principles and rules about interpreting provisions of EU legal acts that national courts and other bodies in Member States ought to respect and apply, European organisation law is a part of the Continental European legal system. Judgements of the Court are of such legal nature that they largely determine the way of applying substantive and procedural law in national legal orders of Member States (Taborowski 2012, 1881).

The Court of Justice derives the right and duty of giving preliminary rulings from point b) of Article 19(3) of the Treaty on the European Union, as well as from Article 267 of the Treaty on the Functioning of the European Union, which stipulate, *inter alia*, that the Court of Justice is competent to give preliminary rulings regarding the interpretation of the Treaties and validity and interpretation of acts of institutions, bodies, offices or agencies of the Union. Actions in preliminary ruling proceedings are also regulated by the Statute of the Court of Justice of the European Union, its rules of procedure and recommendations of the Court to national courts in relation to initiating preliminary ruling proceedings. The proceedings are brought before national courts, but take place before the Court of Justice of the European Union (Weiler 1985). Generally, “the dialogue between the Court of Justice and the national courts in the preliminary ruling proceedings involves many different aspects” (Leijon 2020, 874), but the basic task of the Court is to ultimately ensure a unified interpretation and application of the *acquis* of the European organisation. After all, what is a legal system of any country or international organisation if its consistent and unified application is not ensured?

Subjects authorised to request preliminary rulings are courts of Member States (Krommendijk 2017, 1362). However, the situation in relation to authorised subjects is not simple. Thus it may seem that the provision of Article 267(3) of the Treaty on the Functioning of the European Union (ex Article 234 of the Treaty on the European Community) has been elaborated through the case-law of the Court of Justice because it is through that provision that the criteria have been set for determining what can be considered under the term ‘court’. And in that sense, the term ‘court’ has been interpreted very extensively. It is supported by the judgement of the Court of Justice in case C - 53/03 *Synetairismos Farmakopoion Aitolias & Akarnanias (Syfait) and Others v GlaxoSmithKline plc and GlaxoSmithKline AEVE* [2000] ECR 2005 I-04609, where paragraph 29 states, *inter alia*, that according to the settled case-law, in order to determine whether a body making a reference is considered as a court or tribunal in terms of the Treaty on the European Union, the Court takes account of several factors, such as whether the body is established by law, whether it is permanent, whether its jurisdiction is compulsory, whether its procedure is *inter partes*, whether it applies rules of law and whether it is independent. The Court took the same position in judgements C-54/96 *Dorsch Consult* [1997] ECR I-4961, paragraph 23, C-110/98 & C-147/98 *Gabalfrisa and Others* [2000] ECR I-1577, paragraph 33, Case C-195/98 *Österreichischer Gewerkschaftsbund* [2000] ECR I-10497, paragraph 24, and Case C-516/99 *Schmid* [2002] ECR I-4573, paragraph 34. A national court may refer a question to the Court of Justice only if proceedings are pending before it and if it is asked to decide in the proceedings. Actions of national judges, in terms of favouring the approach to the Court of Justice, is “conditioned by the measure in which they identify with the role of judges of the Court of Justice, as well as the level of trust in institutions of the European organization” (Glavina 2020, 52).

In regard to direct complaints proceedings brought before the Court by the European Commission or Member States, we should be reminded that the problematics of the non-compliance of national regulations of European organisation law has been gaining importance since 1984, when the European Commission, under Article 226 of the Treaty on the European Community, started delivering to the European Parliament regular annual reports on the number and type of infringements of Union law by Member States. It was those early reports that warned about a systematic non-compliance between Member States (König and Luetgert 2008, 163-194). Namely, the European Commission is the key institution that takes care of the application of Union law, which is visible in Article 17 of the Treaty of the European Union. Further, the Commission has the right and obligation to ensure an effective application of Union law, and in that context, the main Treaty provisions regarding this matter are considered to be provisions of Article 258 of the Treaty on the Functioning of the European Union (ex Article 226 of the Treaty on the European Community – the law infringement procedure) and provisions of Article 260 of the same Treaty referring to financial sanctions. “In essence, the basic provisions under which the Commission or the Member States initiate infringement proceedings have remained unchanged from those of the

Treaty of Rome.” Peers 2012, 33-34). On the other hand, the Court of Justice is of the position that national courts should interpret national law in accordance with Union law as much as possible (Rodin 2011, 2-13). “While in preliminary ruling proceedings the Court of Justice can balance between the national identity and fundamental freedoms or side with the national court, in proceedings for the infringement of Union law there is no such possibility. To side in proceedings for the infringement of Union law would lead to leaving the final decision to national bodies that would, of course, decide in favour of Member States.” (Rodin 2012, 32).

“Since its establishment, the EU has been an example of deep integration and driver of changes, and has created a unique identity by the ability to create innovative solutions for achieving social equality and provision of quality services.” (Franc 2020, 314). Regarding the Directive on services in the internal market, which entered into force on 28 December 2006, Member States committed to adopting laws and other regulations necessary for the alignment with this secondary source of law by 28 December 2009 (Timmerman 2009, 3-51). In this part, it is important to understand that “promoting the freedom to provide services case-by-case was a task the Court of Justice fulfilled long before secondary legislation was recognised as necessary in this area.” (Veith 2008, 168). The objective of the Directive is to make a difference between the general area of regulating the freedom to provide services in the internal market from individual sectoral areas, codify the previous case-law of the Court of Justice of the European Union that interprets relevant provisions of the Treaties, determine the obligation of simplifying administrative procedures in the area of the free provision of services and order greater transparency, promote conditions for introducing authorization schemes for the provision of services, introduce a black list of prohibited requirements that limit the freedom to provide services, and regulate conditions under which Member States can limit freedom to provide services and regulate the conditions of administrative cooperation between the Union and Member States in the field of services (Snell 2020, 335-347). The Directive introduces rules seeking to protect consumers by removing obstacles in the cross-border exchange of services caused by regulations of Member States (Minico and Viggiano 2017, 128-146).

In late-2019 ten years passed from the expiration of the deadline for transposing the Directive on services in Member States of the European organisation, and it is only appropriate to get acquainted with two chosen judgements of the Court of Justice from 2020 referring to the interpretation of particular provisions of the Directive. Therefore, in the following, within three separate titles, we elaborate the chosen cases, after which key observations will be presented.

1. DISCRIMINATION IN ACQUISITION OF AGRICULTURAL LAND

The Court of Justice of the European Union, on 11 June 2020, gave a very interesting judgement in case C-206/19, “KOB” SIA v Madonas novada pašvaldības Administratīvo aktu strīdu komisija. The main proceedings were held before the Latvian Administrative District Court in Riga following a complaint from the company “KOB” SIA. It is a company seated in Latvia performing the agricultural activity, whose managing board consists of one person, a German national, who has the right of self-representation. The ownership shares in this company are held by another three companies registered in Latvia, whose owners are also German nationals. Submitting the complaint was preceded by the conclusion of the sales contract, through which the company “KOB” SIA purchased the land of 8.10 ha, and asked for the approval for entering it into the registry of estate acquisition. However, competent bodies of the Latvian District Madonas refused the request for the entry, so the company submitted a complaint, believing that Latvian national regulations on terms of acquiring agricultural land lead to discrimination based on nationality and oppose to guarantees of fundamental freedoms from Articles 18, 49 and 63 of the Treaty on the Functioning of the European Union and Article 45 of the EU Charter of Fundamental Rights. According to Latvian regulations, a legal entity may acquire ownership of agricultural land in Latvia, but if that person is represented or is under control of a national of another Member

State, two preconditions must be met for acquisition. Firstly, a foreign national, as an EU citizen, must register their residence in Latvia, which means that they want to spend more than three months there. Secondly, a foreign national must prove the knowledge of the Latvian language at B2 level, which corresponds to mastering the language to at least converse on everyday subjects and professional matters.

The Latvian court submitted a reference to the Court of Justice of the European Union for a preliminary ruling in relation to the compliance of national regulations with European Union law. Namely, as already mentioned, according to Latvian regulations, foreign nationals are not prohibited from acquiring the ownership of agricultural land, but they must meet the previously listed preconditions when legal entities represent or are controlled by nationals of another Member State. The national court pointed out that the same conditions, under the same circumstances, applied to acquiring the ownership of agricultural land in Latvia by nationals of the Member States of the European Economic Area and Swiss Confederation. In the reference submitted to the Court of Justice, it expressed its understanding of the compliance of national and EU regulations, thereby reminding of paragraph 80 of the judgement in case C-47/08, *Commission v Belgium*, EU:C:2011:334, according to which the purpose of Article 43 of the Treaty on the European Community was to ensure that all nationals of all Member States who established themselves in another Member State to pursue activities there as self-employed persons received the same treatment as nationals of that State, and to prohibit any discrimination on grounds of nationality resulting from the national legislation. Also, the court indicated that Article 49 of the Treaty on the Functioning of the European Union stipulated the obligation that all nationals of all Member States who established themselves in another Member States to exercise an independent activity, received the same treatment as nationals of that State. The Court seems to have been aware that in this case „Union citizenship should be considered as a legal intervention in the rights, status and relationship of the inhabitants of the Union.” (Davies 2019, 676). It also reminded of the judgement of the Court of Justice in case C-452/01, *Ospelt and Schlössle Weissenberg*, EU:C:2003:493, in which the Court took the position that even though Article 345 of the Treaty on the Functioning of the European Union did not question the possibility of Member States to foresee special measures regulating the acquisition of land ownership, such measures must comply with Union law, including acts on non-discrimination, freedom of establishment and free movement of capital. The national court also pointed to the Commission Interpretative Communication on the Acquisition of Farmland and European Union Law (2017/C 350/05) according to which the right to the acquisition, use or dispose of agricultural land must comply with principles of the free movement of capital, stipulated by Article 63 of the Treaty on the Functioning of the European Union, and pointed out that the European Commission, however, given the special nature of agricultural land, recognised to national bodies the possibility of introducing certain restrictions to achieve objectives, such as keeping traditional forms of agricultural land management, keeping the population in rural areas, fight against pressure on land, or managing green areas and landscapes. The national court asked the Court of Justice to answer whether the regulation of the Member State obliging legal persons whose one or more members together had more than half of voting rights in the company and all persons entitled to represent that company were nationals of other Member States, to submit certificates of registering the residence in Latvia for their members and representatives (who are EU citizens) and a document proving the knowledge of the official language of the Member State corresponding to at least B2 level, in order to acquire the ownership of agricultural land, complied with EU acts, especially with Articles 18, 49 and 63 of the Treaty on the Functioning of the European Union. Four questions should be answered – whether the restrictions introduced to protect the legitimate public interest are compatible with goals of the European Union; whether the restrictions also refer to nationals of Latvia; whether the restrictions referring to foreign nationals are proportionate, i.e. whether they are more adequate for achieving the objective pursued by national regulations;

whether the restrictive measure complies with fundamental rights from the Treaty (justification test) (Wallerman Ghavanini 2020, 897).

The Court of Justice primarily stated, when determining “whether the case fell within the scope of the EU law, which is a common and first step when it comes to the application of European Union law” (Havelka 2014, 132), that Article 345 of the Treaty on the Functioning of the European Union, to which the national court referred, established the principle of neutrality of the Treaties in terms of regulating ownership in Member States. Namely, according to the provision of this Article, in no way do Treaties question rules regulating the ownership system in Member States. However, according to the assessment of the Court, the provision of the Article does not result in exempting the existing regulation of ownership in Member States from the basic rules of the Treaty on the Functioning of the European Union. So, even though that provision does not question the possibility of Member States to legally regulate the manner of trading with and acquiring the ownership of agricultural and forestry land, such regulation has to be aligned with non-discrimination rules and rules of freedom of establishment (Barnard & Snell 2020, 461-467) and free movement of capital. In that regard, the Court of Justice referred the national court to the judgement in case C-52/16 and C-113/16, *SEGRO and Horváth*, paragraph 51, EU:C:2018:157. So, national regulations must comply with Union acts on non-discrimination, freedom of establishment and free movement of capital, which are also crucial for deciding on the reference of the competent Latvian court. The Court of the European organisation also reminded of its earlier case-law regarding the freedom of movement, according to which when a certain national measure referred to more fundamental freedoms at the same time, it was principally considered only in relation to one of them if it appeared that the other freedoms were ancillary in the context of the subject case, and in that sense, it made a reference to the judgement in case C-580/15, *Van der Weegen and others*, paragraph 25, EU:C:2017:492. Concerning the objective of the subject national regulations, the Court of Justice indicated that in the specific case, from the reference for a preliminary ruling, it was evident that the company “KOB” SIA sought to acquire agricultural land in Latvia to use, i.e. to exploit it for economic purposes, so it was not clear whether the national regulations should be assessed through Article 49 or Article 63 of the Treaty on the Functioning of the European Union. On such occasion, to determine whether the subject of the main proceedings fell within the scope of one or the other provision, the Court took into account the factual elements of the specific case, just as in case C-375/12, *Bouanich*, paragraph 30, EU:C:2014:138.

In the view of the Court of Justice, this case should be resolved primarily based on provisions on the right to freedom of establishment, and not based on provisions on the free movement of capital, as the national court identified in its request. Along with the said, it should be understood that since Article 49 of the Treaty on the Functioning of the European Union foresees a special rule on non-discrimination, Article 18 of the Treaty relied on by the national court cannot be applied in this case. Besides, the Court recalled that any national measure in the field completely harmonised at the Union level should be assessed in relation to provisions of secondary sources of law, and not in relation to provisions of primary law, and in that sense referred to case C-205/07, *Sysbrechts and Santurel Inter*, EU:D:2008:730, paragraph 33. Specifically, the Court indicated that it was primarily necessary to make a connection with the Directive on services since in accordance with Article 1(1) of that secondary source of law, general rules are established that facilitate the exercise of the freedom of establishment to service providers, while Chapter III (Article 2 to 15) regulates the freedom of establishment for service providers. Articles 9 to 13 of the Directive on services determine the requirements under which national regulations of Member States may determine the obligation of acquiring authorisations for performing service activities. As already determined in relation to Article 14 of the Directive, containing the list of “prohibited” requirements within the framework of exercising the freedom of establishment, it should be considered that Articles 9 to 13 of the Directive provide for exhaustive harmonisation concerning the services falling within its scope of application and that in that sense it is necessary to refer to

the judgement in joint cases C-458/14 and C-67/15, *Promoimpresa* and others, EU:C:2016:558, p. 60. and 61 in which the Court has already taken such position. So, the court decided to examine the national regulation in the light of provisions of Chapter III of the Directive on services and concluded that from the order for reference of the national court arose that the regulation of Latvia implemented the procedure in which the requirements for acquiring the ownership of a legal person of agricultural land in Latvia were determined. In that context, the acquisition of a written certificate was also required, that the land in question would be used continuously for agricultural purposes. There is no doubt that such regulation could be associated with the “authorisation scheme” from Article 4, paragraph 6 of the Directive on services, i.e. with introducing the procedure which the provider or recipient of services must follow in order to obtain the authorisation for performing a service activity from a competent body. According to Article 9(1) of the Directive, Member States are still limited in relation to prescribing requirements in the previously stated sense – primarily, such scheme cannot be discriminatory in relation to a service provider, which means that it has to comply with point (a) of Article 10(2) of the Directive. Also, Article 14 of the Directive foresees that Member States shall not condition the access to or the exercise of a service activity in their territory. In accordance with point 1 of this Article, especially prohibited are discriminatory requirements based directly or indirectly on nationality, as well as the requirement that persons holding the share capital or members of the provider’s management or supervisory bodies be a resident within the territory. In that respect, the Court held that it followed both from the wording of Article 14 of Directive on services and from the general structure of that Directive that no justification could be given for the requirements listed in the national regulation. As regards the case in the main proceedings, specific conditions foreseen for nationals of other Member States are not foreseen for nationals of Latvia, and the national regulation leads to direct discrimination based on nationality, and the regulation is contrary to Articles 9, 10 and 14 of the Directive on services, so it is not necessary to examine whether it is contrary to Article 63 of the Treaty on the Functioning of the European Union. So, the national regulation that conditions the right of a legal person, whose one or more members together have more than half of voting rights, as well as persons entitled to represent that person are nationals of other Member States, to acquire the ownership of agricultural land in the territory of that Member State, by, first, submitting a certificate of registration of residence of that Member State and, second, a document demonstrating that they have a knowledge of the official language of that Member State corresponding to a level which enables them to at least converse on everyday subjects and on professional matters, derogates from Articles 9, 10 and 14 of the Directive on services in the internal market.

2. MULTIDISCIPLINARY PERFORMANCE OF ACTIVITIES

For legal persons accounting information are of utmost importance (Vanstraelen and Schelleman 2017, 565-584). “The objective of each undertaking, i.e. of each legal person, is to operate successfully. The success of a business can be best seen from presented financial reports if the financial reports represent a credible image of income position and assets of an undertaking. Business data will serve to both internal and external information users as a good basis for making economic decisions, i.e. taking appropriate actions.” (Vuković Perduv and Ćeklić and Ćeklić 2018, 110-111) This is typical for all Member States (Ćwiakała- Małys 2020, 545-555), and exactly because of the importance of the accounting profession, it is important to be introduced with the position taken by the Court of Justice of the European Union in terms of the compatibility of jointly performing accounting with other activities.

In March 2015, the European Commission asked the Kingdom of Belgium for information on the national regulation in the accounting field based on which authorised accountants were prohibited to perform the accounting activity together with certain other activities. Specifically, the focus was on provisions of the Code of ethics of the *Institut Professionnel des Comptables et Fiscalistes*

Agréés (IPCF), under which performing operations from the artisanal, agricultural or commercial sector were incompatible with performing the accounting activity. The Commission found that the provisions did not comply with the EU law, specifically with Article 25 of the Directive on services in the internal market and Article 49 of the Treaty on the Functioning of the European Union. The Kingdom of Belgium believed that its regulation was not contrary to the EU law, and in that sense replied to the letter of warning and the reasoned opinion delivered by the Commission. Following the Member State's declaration on the reasoned opinion, in July 2017 the Commission decided to submit a complaint to the Court of Justice against the Kingdom of Belgium for the infringement of Union law and did not change its decision even after the State, in August 2017, delivered a new IPCF code of ethics. The complaint was submitted in June 2018, and oral statements of the Commission and Kingdom of Belgium were presented on a hearing from 23 May 2019. In its argumentation, the Commission stressed out that the objective of Article 25 of the Directive on services was to enable Member States the provision of multidisciplinary services, and that in the Kingdom of Belgium in force was a regulation contrary to such commitments, and until the IPCF code of ethics was amended, in that Member State it had been prohibited for accountants to perform their activity in conjunction with any artisanal, agricultural or commercial activity, on the one hand, and the activity of insurance intermediaries or agents, estate agents or any banking or financial activity service, on the other. In terms of the new code of ethics, the Commission reminded that the regulation was submitted after the deadline for delivering an answer to the reasoned opinion and that the infringement of Union law did not cease with its adoption, since Article 21(2) of the new code of ethics did not derogate from Article 21(3) of the old. The Commission stated that the requirements limiting the performance of regulated professions were analysed and assessed in accordance with point (a) of Article 25(2) of the Directive on services and that any type of limitation could be accepted only if justified by the specific nature of each profession. Absolute prohibition of jointly exercising the accounting activity, on the one hand, and the activities of insurance intermediaries or agents, or of estate agents, or with any banking or financial services activity, on the other hand, overcame what was unnecessary for ensuring the respect of the rules of ethics of the accounting profession, which, according to the Commission's opinion, was not a necessary measure, since there were more flexible measures (such as internal procedures) whose introduction might prevent the conflict of interest as regards the transfer of information, and guarantee the proper application of the rules of professional secrecy. Therefore, according to the Commission's opinion, the absolute prohibition was not proportionate to the objective pursued, so reasons of the Kingdom of Belgium could not be accepted, justifying the lack of introducing internal procedures in the previously stated manner by the need for introducing new administrative burdens, as well as ex post review. Along with the said, the Commission found that the Kingdom of Belgium was wrong to refer to the judgement in case C-309/99 *J. C. J. Wouters, J. W. Savelbergh and Price Waterhouse Belastingadviseurs BV v Algemene Raad van de Nederlandse Orde van Advocaten*, intervener: *Raad van de Balies van de Europese Gemeenschap* ECLI:EU:C:2002:98, because the approach adopted by the Court in that judgement did not apply to this case. Regarding Article 21(1) and (2) of the IPCF code of ethics, stating that the profession of an accountant was incompatible with any artisanal, agricultural or commercial activity, except where professional chambers determined otherwise, the Commission submitted that this provision should be examined within the scope of Article 25 of Directive on services. Namely, this institution of the European organization found disputable that the Member State attempted to amnesty the prohibition from Article 21(1) of the code of ethics by claiming that in accordance with Article 21(2) of the code of ethics professional chambers had the discretion to derogate from it, i.e. to decide not to introduce the prohibition in certain cases. Namely, as stated by the Commission, the provision on discretion was kept in the new code of ethics (Article 21), while in terms of necessity and proportionality of introduced restrictions, the provisions of the new code of ethics did not determine in which situations joint exercise of any artisanal, agricultural or commercial activity or, under the new wording, "any other activity", could lead to

conflicts of interest. Thus, the new regulation continues to put clients, other service providers and society as a whole into an unfavourable position. Although the Commission admitted that accountants in the Kingdom of Belgium had an increased level of involvement as regards a category of undertakings, it nevertheless maintained that their function had not changed significantly.

In its argumentation, the Kingdom of Belgium submitted that Article 25 of the Directive on services did not prevent Member States to restrict, under certain conditions, the joint exercise of certain regulated professions, also recalling that the said Article belonged to Chapter V of the Directive relating to “Quality of Services,” meaning that it was primarily dedicated to consumer protection. Restrictions, according to the opinion of this Member State, should be introduced when ensuring impartiality, independence and integrity of the regulated professions was necessary. In the attempt to additionally strengthen its argument, Belgium pointed out that it was especially important to bear in mind the fact that estate agents, insurance intermediaries and stockbrokers were remunerated on a commission basis, with the amount of the commission potentially being higher than the fees received for accounting services, such that a conflict of interest might arise. It also pointed out that accountants must make greater efforts to ensure compliance with the obligation of professional secrecy, because violation of this obligation led to criminal liability, while in other professions this was not the case. Belgium also opposed the Commission’s opinion in terms of proportionality of the subject restrictions, saying, *inter alia*, that the restriction from Article 21 of the code of ethics was proportionate because it did not introduce general and absolute prohibition for the joint exercise of all multidisciplinary activities, but only for strictly determined activities. In terms of impartiality of accounting with any artisanal, agricultural or commercial activity, the Kingdom of Belgium emphasised that Article 21 of the IPCF code of ethics allowed for the possibility of derogating from the prohibition by an authorisation granted by professional chambers, provided that two conditions were met - on the one hand, that the accounting activity was ancillary, and on the other, that the independence and impartiality of an accountant were not jeopardised. The Member State maintained that Article 21 of the new IPCF code of ethics provided that authorisation would always be given, upon a written request addressed to the professional chambers, for the profession of an accountant to be exercised in conjunction with other, broadly defined, activities, provided that the independence and impartiality of the accountant were not jeopardised. The criteria for granting the authorisation were non-discriminatory, familiar in advance and limited to only those from Article 25 of the Directive on services. Accordingly, this provision introduces a system under which permission is always granted and can be denied only if the condition of independence is not respected, which is now the only precondition to be fulfilled. The Member State contested the Commission’s opinion on the judgement in case C-309/99 J. C. J. Wouters.

In its ruling, when it comes to the scope of the complaint, the Court of Justice of the European Union stated that the period before the expiration of the deadline specified in the reasoned opinion was relevant for determining the infringement of EU law in this case and that the Court could not take into account any subsequent changes. In that sense, it recalled the judgement in case C-729/17 *Commission v Hellenic Republic*, p. 36, ECLI:EU:C:2019:534 in which it had already taken such position, i.e. it had determined that the existence of the violation of the obligation should be estimated in relation to the situation in a Member State after the expiration of the period determined in the reasoned opinion and that the Court could not take into account any subsequent changes. The subject matter of the dispute could not be extended subsequently, for otherwise, it would constitute a breach of the proceedings. In so far as the Commission imputed, in its application and its reply, the complaints which it initially made in its reasoned opinion also to the new IPCF code of ethics, the Court determined whether such use implied altering the subject matter of the action. In the first place, it noted, and it is not disputed by the parties, that the scope of Article 21(2) of the new IPCF code of ethics was identical to that of Article 21(3) of the old IPCF code of ethics. Those two provisions provided, in essence, that the activities of an insurance

broker or agent, or an estate agent, except for the activity of a managing agent, and any banking and financial services activities requiring registration with the Financial Markets and Services Agency were always regarded as jeopardising the independence and impartiality of an external IPCF accountant. In the second place, while Article 21(2) of the old IPCF code of ethics provided that the executive chambers of the IPCF (the “professional chambers”) had the discretion to authorise exercising the accounting profession in conjunction with any artisanal, agricultural and commercial activities, if such derogation did not jeopardise the IPCF accountant’s independence and impartiality and that the latter activity was ancillary, Article 21(1) of the new IPCF code of ethics provided, in general terms, that the exercise of multidisciplinary activities by an IPCF accountant were to be authorised by the professional chambers, provided that the accountant’s independence and impartiality were not jeopardised. It is clear that, in comparison with Article 21(2) of the old IPCF code of ethics, it no longer listed the professional activities for which an IPCF accountant must seek authorisation in order to be able to exercise them jointly with the profession of IPCF accountant, thus broadening the scope of the activities referred to, and that it no longer contained any condition relating to the ancillary nature of such activity. Thus the Court stressed out that, in so far as Article 21(1) of the new IPCF code of ethics significantly altered the system of granting authorisations for exercising the profession of an accountant in conjunction with other professional activities, the content of that provision could not be regarded as identical to that of Article 21(1) and (2) of the old IPCF code of ethics. So, since the Commission’s complaints also related to Article 21(1) of the new IPCF code of ethics, this altered the subject matter of the complaint. By deciding on the said, the Court dismissed the complaints relating to the infringement of the provisions of Article 49 of the Treaty on the Functioning of the European Union and Article 25 of Directive on services, in so far as those complaints related to Article 21(1) of the new IPCF code of ethics, as unallowed, and engaged in examining only the compatibility of Article 21(1) to (3) of the old IPCF code of ethics and Article 21(2) of the new IPCF code of ethics with Article 25 of Directive on services and Article 49 of the Treaty on the Functioning of the European Union. In that regard, the Court decided on two complaints of the Commission – the first regarding the infringement of Article 25 of the Directive on Services, and the second regarding the infringement of Article 49 of the Treaty on the Functioning of the European Union. The first complaint consisted of two parts (the first part referring to the infringement as a result of Article 21 (1) of the old IPCF code of ethics and Article 21(2) of the new IPCF code of ethics, and the second on the infringement caused by Article 21(1) and (2) of the old IPCF code of ethics). When it comes to the first part of the complaint, the Court recalled that, in accordance with point (1) of Article 25(1) of the Directive on services, Member States needed to ensure that service providers were not required to exercise certain, specific activities or to be prohibited from jointly or in partnership performing different activities. However, subparagraph 2 of Article 25 (2) of the Directive stipulates that service providers may be made subject to such requirements exceptionally, under certain conditions. A Member State which relies on an overriding reason relating to the public interest or, the prohibition laid down in point (a) of the second subparagraph of Article 25(1) of Directive, in order to establish that the prohibition on multidisciplinary activities that it has introduced is necessary for ensuring the independence and impartiality of IPCF accountants, must submit precise evidence substantiating its arguments. The Court argueded this by recalling the judgement in case C-377/17, *Commission v Germany*, EU:C:2019:562., p. 74 (Vandendaele 2019).

When it comes to the relevance of the judgement in the *Wouters* case, the Court considered the reasoning set out in that judgment could not be applied to the present case. In the *Wouters* case the Court, *inter alia*, ruled that the accounting profession could not be equated with that of a lawyer, since the former did not include representation before courts, and accountants could act only as experts in their field of profession but did not have a legal mandate to represent their clients before the courts.

The Court did not support the argument that the determined prohibition was proportionate, since it related exclusively to strictly defined activities for which it was presumed that their joint exercise might lead to conflicts of interests because a commission received for those specifically defined activities was higher than the fees derived from the profession of an accountant. The reason for the lack of support is related to the founded hypothesis that such possibility (the conflict of interest) also exists in other activities that are not the subject of the prohibition, which can be exercised together with the accounting activity under the condition of acquiring authorisation. Here is important to point out that according to the settled case-law, as stated by the Court of Justice, the burden of proof on a Member State cannot extend to requiring the Member State to prove, positively, that no other conceivable measure could enable that objective to be attained under the same conditions. However, the Court pointed out that Belgium still had the obligation to challenge in substance and detail the information produced by the Commission and the conclusions drawn. In the part of the jurisprudence of the Court of Law, in this part the following judgements should be recalled, in case C-398/14, *Commission v Portugal*, EU:C:2016:61, p. 48 and in case C-433/15, *Commission v Italy*, EU:CC2018:31, p. 44. Further, the Court pointed out that Kingdom of Belgium had not convincingly called into question the arguments put forward by the Commission that an ex post review by the professional chambers would constitute a less restrictive measure for attaining the objective of guaranteeing the independence and impartiality of IPCF accountants, and the arguments put forward by the Member State in terms of that measure being less effective did not, in themselves, show that such review would not be appropriate for achieving that objective. Finally, in the part in which Belgium stated practical difficulties of implementing alternative measures suggested by the Commission, it was indisputable that Member States could not rely on practical, administrative or financial difficulties to justify failure to fulfil obligations arising under EU law. That is why the Court determined that the first part of the Commission's complaint was grounded, i.e. that Article 21(3) of the old IPCF code of ethics and Article 21(2) of the new IPCF code of ethics were contrary to Article 25 of the Directive on services in the internal market.

When it comes to the second part of the complaint, the Court considered that regulating that joint exercise of the profession of IPCF accountants was incompatible with any artisanal, agricultural or commercial activity, unless otherwise determined by professional chambers, derogated from point (a) of the second subparagraph of Article 25(1) of the Directive. It should be understood that the subject provision of the Directive does not foresee the possibility of conditioning the exercise of regulated professions together with other activities if the other activity is characterised as ancillary. Also, although the Kingdom of Belgium claimed that professional chambers, at the request, in practice almost always granted authorisations for performing multidisciplinary activities, the wording of Article 21(2) of the old code of ethics arose that professional chambers in that regard had discretion not limited by any criteria, which gave them considerable latitude in refusing a request for granting an authorisation or revoking an authorisation previously granted. Therefore, the Court determined that Article 21(2) of the old code of ethics did not comply with point (a) of the second subparagraph of Article 25(1) of the Directive on services.

When speaking of the second complaint of the Commission based on the infringement of Article 49 of the Treaty on the Functioning of the European Union, the court refused the argument of Belgium that stated that Article 49 of the Treaty did not apply in this case because the Commission had not proven the existence of the cross-border element. Regarding whether the Commission's complaint was well-founded, the Court recalled that Article 49 precluded any national measure which, even though applicable without discrimination on grounds of nationality, could hinder or render less attractive the exercise by EU citizens of the freedom of establishment guaranteed by the Treaty. In that sense, the Court recalled the judgement in case C-268/15, *Ullens de Schooten*, EU:C:2016:874, p. 49 (Krommendijk 2019). Namely, even if the conditions laid down by the Belgian regulation apply in the same way to accountants established in Belgium as to those from the other Member States, they could prevent the latter category from being established in Belgium.

Therefore, the Court found that the requirements of the Belgian regulations constituted a restriction on the freedom of establishment in terms of Article 49 of the Treaty (Kainer 2019). By restricting, through national regulations, accountants to perform accounting activities together with the activities of insurance intermediaries or agents, estate agents or any banking or financial services activities and by authorising through these regulations the chambers of the Institute for Tax Advisers and Accountants to restrict the joint exercise of the accounting activity in conjunction with any artisanal, commercial or agricultural activity, the Kingdom of Belgium has failed to fulfil its obligations under Article 25 of Directive on services and Article 49 of the Treaty on the Functioning of the European Union.

CONCLUSION

From the two cases previously presented, it is quite clear that judgements of the Court of Justice of the European Union are important for crucial life matters of legal persons operating in the territory of the European organisation. The instrument of harmonisation with national regulations in both cases is the Directive on services on the internal market as an act of codification of the case-law of the Court of Justice in the field of the free movement of services and freedom of establishment that preceded its adoption.

In the case of acquiring land in Latvia, the national court quite clumsily refers to EU regulations and case-law of the Court of Justice, and the interesting thing is that it does not mention the secondary source of law that is crucial for resolving the subject case, i.e. it does not mention the Directive on services at all. After all, the choice of Treaty provisions and interpretative points of view of the national court and the Court of Justice are quite different, the point of view of the latter being decisive and final. The reference to this secondary source of the law of the European organisation is made by the Court of Justice, giving it, in accordance with its settled case-law, as a harmonization measure, an advantage in relation to the primary law. Namely, although no EU secondary legislation refers to acquiring agricultural land, i.e. Member States have the competence and discretion in regulating the subject matter, fundamental principles of the Treaties must be respected, primarily fundamental freedoms and non-discrimination based on nationality.

With multidisciplinary activities, the Court reminds of the importance of Article 49 of the Treaty on the Functioning of the European Union because it guarantees and contributes to removing national measures which might, even when applied without discrimination on grounds of nationality, make it more difficult or less attractive to exercise the right to the freedom of establishment by EU citizens. Besides, the Court of Justice strengthens old rules that Member States cannot rely on practical, administrative or financial difficulties to justify the failure to meet obligations arising under Union law, and affirms the provisions of the Directive on services that reduce the possibility of conditioning the exercise of regulated professions in conjunction with other activities as much as possible, and insists on presenting precise evidence for supporting arguments if there is conditioning. So, every national regulation that restricts accountants from exercising the accounting activity in conjunction with activities of insurance intermediaries or agents, or of estate agents, or with any banking or financial services activity, as well as regulations authorising professional chambers of the Institute for Tax Advisors and Accountants to prohibit joint exercise of accounting activities with any artisanal, commercial or agricultural activity, derogates from provisions of Article 25 of the Directive on services and Article 49 of the Treaty on the Functioning of the European Union.

APPENDIX

- CJEU C-54/96 Dorsch Consult [1997] ECR I-4961, paragraf 23.
- CJEU C-110/98 & C-147/98 Gabalfria and Others [2000] ECR I-1577, paragraf 33.

- CJEU C-195/98 Österreichischer Gewerkschaftsbund [2000] ECR I-10497, paragraf 24.
- CJEU C-309/99 J. C. J. Wouters, J. W. Savelbergh and Price Waterhouse Belastingadviseurs BV v Algemene Raad van de Nederlandse Orde van Advocaten, intervenier: Raad van de Balies van de Europese Gemeenschap ECLI:EU:C:2002:98.
- CJEU C-516/99 Schmid [2002] ECR I-4573, paragraf 34.
- CJEU C-452/01, Ospelt i Schlössle Weissenberg. EU:C:2003:493.
- CJEU C-53/03 Synetairismos Farmakopoion Aitolias & Akarnanias (Syfait) and Others v GlaxoSmithKline plc and GlaxoSmithKline AEVE [2000] ECR 2005 I-04609, paragraf 29.
- CJEU C-205/07, Sysbrechts i Santurel Inter, EU:D:2008:730, paragraf 33.
- CJEU C-47/08, Commission v Belgium, EU:C:2011:334, paragraf 80.
- CJEU C-375/12, Bouanich, EU:C:2014:138, paragraf 30.
- CJEU C-398/14, Commission v Portugal, EU:C:2016:61, paragraf 48.
- CJEU C-458/14 i C-67/15, Promoimpresa and others, EU:C:2016:558, para. 60. & 61.
- CJEU C-268/15, Ullens de Schooten, EU:C:2016:874, paragraf 49.
- CJEU C-433/15, Commission v Italy, EU:CC2018:31, paragraf 44.
- CJEU C-580/15, Van der Weegen and others, EU:C:2017:492, paragraf 25.
- CJEU C-52/16 i C-113/16, SEGRO i Horváth, EU:C:2018:157, paragraf 51.
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- CJEU - Opinion of Advocate General Szpunar, Case C-384/18, European Commission v Kingdom of Belgium, ECLI:EU:C:2019:852.
- CJEU C-384/18, Commission v Belgium (Accountants), ECLI:EU:C:2020:124.
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PREDUZETNIŠTVO U POST COVID USLOVIMA

Rezime: *Pandemija Covid je prva planetarna pandemija sa još neistraženim trendovima, mogućim promjenama i posljedicama. Planeti i čovječanstvu je postavljen izazov u traženju brzih, globalnih, jedinstvenih rješenja, jer se prvi put dešava da neka socijalna pojava jednako šokira i pogađa sve: bogate i siromašne, razvijene i nerazvijene, uspješne i neuspješne, perspektivne i one koji to, do sada, nisu bili. Preduzetništvo je ekonomski fenomen, djelatnost, aktivnost i ima slične karakteristike: ne bira prostor, vrijeme, zakonski ambijent, uslove. Preduzetništvo je spasonosni alat u službi čovjeka, bez obzira na pol, godine, nacionalnost, stepen obrazovanja, mjesto stanovanja, ono je pokretač svakog ekonomskog razvoja i rasta i ima za cilj da zadovolji ljudske potrebe. Preduzetništvo svuda i uvijek traži najnoviju, često i nemoguću kombinaciju rizika, prijetnji, prilika. Ono je kreativan odgovor, inovativno rješenje za nove izazove, prepreke, nova inicijativa za stvaranje novih proizvoda i novih usluga. Što su prilike nepovoljnije, riskantnije to je veći izazov za prave preduzetnike. U tom kontekstu treba prihvatiti i ovu novu, lošu globalnu situaciju, koja je proizvod čovjekovog pogrešnog odnosa prema prirodnim resursima, okolini, klimi, drugom čovjeku i prema samom sebi. Globalna nezainteresovanost savremenog čovjeka za svakodnevna stradanja u Svijetu, za nepravde, glad i siromaštvo, za bolesne i nemoćne, za nezaposlene, uz orgije vulgarnosti, pohlepe „super bogatih“ i „super uspješnih“, je moralo rezultirati globalnom „opomenom“, kakav je i COVID 19. Jedno od mogućih rješenja za ublažavanje negativnih posljedica COVID 19 pandemije mogla bi biti humana, pozitivna, stvaralačka pandemija - PREDUZETNIŠTVO 21.*

Ključne riječi: COVID 19, preduzetništvo, menadžment, društvena odgovornost, ekologija

JEL klasifikacija: E 16, E24, G 35

UVOD

Pandemija Covid pripada konglomeratu postmodernih izazova, rizika i prijetnji bezbjednosti sa razornim reperkusijama nepoznatih razmjera (Nešković 2020). Dodatni izazov je što su posljedice nepoznate savremenoj nauci, što povećava odgovornost zdravstvenog sektora u pogledu metoda liječenja i obuzdavanja širenja i masovnog obolijevanja. U ovakvoj situaciji, možda, najvažniji zadatak dobija korporativna društvena odgovornost, koja bi trebala obezbijediti održiv privredni rast u novonastalim uslovima i to na taj način što će uskladiti brigu o opstanku preduzeća, radnicima i njihovim porodicama te o prirodnoj i društvenoj sredini. Najviše su pogođene države u kojima je pandemija bila najteža i koje se većinom oslanjaju na globalno tržište, svjetsku trgovinu, turizam, izvoz roba i strano finansiranje. Jačina udara se razlikuje od regiona do regiona, ali očita je ranjivost svih globalnih tržišta i ekonomija. Zatvaranja preduzeća, nezaposlenost,

prekidi u školovanju i teškoće u primarnoj zdravstvenoj zaštiti, vjerovatno će imati dugotrajne efekte na razvoj ljudskih resursa.

„Ovo je veoma zabrinjavajuće, jer će kriza vjerovatno ostaviti dugotrajne posljedice i dovesti do krupnih globalnih izazova. Prva stavka na dnevnom redu je rješavanje hitnih globalnih zdravstvenih i ekonomskih pitanja. Uz to, globalna zajednica se mora ujediniti kako bi se pronašao način za snažniji oporavak, kako bi izbjegli da se još veći broj ljudi suoči sa siromaštvom i nezaposlenošću”, naglasila je Ceyla Pazarbasioglu, potpredsjednica Svjetske banke za ujednačen rast, finansije i institucije.

Društvena odgovornost preduzeća i pojedinaca se proširuje u novonastalim uslovima: nije dovoljno da preduzeća uredno ispunjavaju svoje obaveze prema državi, zakonu i radnicima, nego se mora dodati i povećana briga o okolini, o prirodnoj i socijalnoj sredini, jer COVID 19 je, pored drugih faktora, i ekološka opomena, a to je da smo u trci za profitom zapostavili i ugrozili ambijent u kojem živimo i poslujemo. Tako korporativna društvena odgovornost postaje odgovorna za skladno funkcionisanje svih učesnika u privređivanju: preduzeća, lokalne zajednice, države, odnosno, postaje odgovorna za podizanje društvene i ekološke etike na nivo na kome se vraća sklad svih stejkholdera privređivanja i preduzetništva. U tom smislu se razvoj tehnologija, a koji je neminovan, treba humanizirati, a to znači podrediti čovjeku, zbog koga i nastaje i razvija se, jer čovjek je subjekt svih ekonomskih i društvenih procesa, ali je i krajnji korisnik i uživatelj rezultata tehničko-tehnološkog razvoja. U ovom novom prirodnom, poslovnom i kulturnom ambijentu je potrebno redizajnirati i pojam preduzetništva i uslove i puteve njegovog nastanka i razvoja. To redizajniranje treba ići u pravcu početnih strategija, ciljeva, misija i vizija u koje preduzetnik ugrađuje vrijednosti koje na duži period obezbjeđuju održivost njegovog biznisa. Ekološka etika, humanost, briga o zajednici i radnicima se stavlja ispred dosadašnjeg osnovnog motiva: ličnog interesa i profita (Antonijević i Đuričić 2014).

1. POST COVID EKONOMSKI POSLOVNI AMBIJENT

Covid 19 je samo još jedna dodatna pojava koja opominje društvo da se živi u svijetu u kome je sve više povratnih sprega i da predviđanje događaja, pojava i procesa postaje sve više upitno, jer je previše iznenadnih momenata, nepredvidljivih, ali sa dalekosežnim posljedicama. Bilo je kroz istoriju razvoja ekonomije i društva procesa koji su zaustavljali ili preokretali ekonomske i društvene tokove: smrtonosne bolesti, ratovi, zemljotresi, poplave, suše... Čovjek ih je savladavao upravo razvojem tehnologija koje su obećavale da priroda posustaje i da će čovjek ovladati prirodom i potčiniti je sebi i svojim mega i giga prohtjevima. Životni standard je rastao, čovjek je sve duže živio i obećavana je uspješna borba protiv mnogih bolesti. COVID 19 je došao kao prva nova i nepredvidljiva katastrofa, koji nismo prihvatili ozbiljno i skoro svi smo mislili da će poslije prvog talasa opadati, da neće rezultirati ozbiljnijim posljedicama, osim pojačanog umiranja. Pandemija COVID 19 je uticala da cijena nafte ide u minus usljed naglog smanjenja potražnje, a koja je posljedica naglog smanjenja privrednih aktivnosti i socijalnih kretanja, sa teorijom „ostanite kod kuće uočava se da je prava katastrofa ne pandemija korona virusa i broj oboljelih i umrlih, nego glad, koja se do kraja 2020. godine udvostručava u Svijetu i zahvata preko 250 miliona stanovnika planete Zemlje“ (Gans 2020). Pogođene su mnoge grane privrede, a posebno turizam, saobraćaj, ugostiteljstvo, mnoge trgovine, razne agencije i druge uslužne djelatnosti. Distribucija hrane od proizvođača do potrošača na globalnom nivou postaje problem, jer pucaju lanci snabdijevanja na internacionalnom nivou, prvenstveno zbog zatvaranja zemalja, ekonomija, transporta. Ljudi se zatvaraju u svoje domove, raste apatija i anksioznost, nasilje u porodici i među vršnjacima, raste korišćenje opojnih sredstava usljed nezaposlenosti i besposlenosti. „Crni labud“ je termin za pojave koje su potpuno neočekivane, ali sa dalekosežnim posljedicama. Crni labud kruži svijetom i prijeti nedostatkom hrane i osnovnih životnih namirnica za sve veći broj ljudi na

Zemlji, a distribucija hrane postaje problem, jer pandemija dovodi do problema izvoza i uvoza, čuvanja hrane u dugim čekanjima procedura i granica.

Koliki je bio efekat COVID 19, do kraja 2020. godine govori tabela 1.

Tabela 1. Poređenje COVID 19 i drugih pandemija u odnosu na BDP zemalja (Stefanović 2020, 81)

Epidemija/pandemija	Najviše pogođene zemlje	Prosječna promjena u rastu BDP-a u najviše pogođenim zemljama
Španska gripa (1918-1929)	Kina, Indija, Indonezija, Rusija, SAD	0,8%
SARS (2002-2004)	Kanada, Kina, Hong Kong, Singapur	3,1%
H1N1-Svinjska gripa (2009-2010)	Australija, Kina, Meksiko, Tajland, SAD	-2,5%
MERS-(2012)	Iran, Jordan, Južna Koreja, Saudijska A. UAE	- 3,7%
Ebola (2014-2016)	Gvineja, Liberija, Sijera Leone	- 8,6%
Covid 2020	Cijeli Svijet – globalna pandemija	-8,7%
Svjetska ekonomska kriza (2008-2009)	Cijeli Svijet – globalna kriza	Bogati - 3,7%, Ostali -3,3%

Analiza navedene tabele pokazuje da je korona virus izazvala najveći pad BDP-a u svijetu, a i siromašnim zemljama i mnogo više, a još gore je što se krajnji efekti ne mogu predvidjeti, jer se već govori o novom obliku sličnog ili još goreg virusa koji hara Svijetom. Dakle, ovo nije slučajna pojava niti pojava koja obećava prolaznost, kako su prošle, u tabeli navedene pandemije, nego se prije može pretpostaviti da je ovo samo početak nove ere života planete Zemlje i nas na njoj, koji će biti okarakterisan situacijom da „nikada više neće biti kao što je bilo“. Ovo je opomena svima, a posebno novim preduzetnicima, koji će poslovati u tim novim uslovima i koji će u njima, slabosti i prijetnje pretvarati u svoje poslovne izazove, prilike i šanse. Posmatrano sa stanovišta preduzetništva, situacija sa korona virusom se neće moći smiriti i kada bi došli uslovi za to, jer su mnogi preduzetnici upravo ovu situaciju prepoznali kao svoju priliku i šansu razvoja novih biznisa. Farmaceutska industrija naglo napreduje (Alon 2020) i otvara put da postane vodeća grana privrede u Svijetu i da pretekne IT i automobilsku industriju. To znači, da ljudima neće biti „dozvoljeno“ da ozdrave, jer industrija zaštitnih sredstava, lijekova, vakcina i pratećeg materijala postaje kao i industrija oružja u linearnoj ekonomiji (dosadašnja ekonomija), kojoj je otvaranje ratnih žarišta uslov opstanka.

2. PREDUZETNIŠTVO U POST COVID PERIODU

Da li je i na koji način moguće obezbijediti visoke zarade danas u „postmodernom“ i COVID 19 poslovnom ambijentu?

Preduzetništvo je privredni fenomen koji stimulise i aktivira kreativnost, inovativnost, pospješuje radni i životni uspjeh pojedinca, podstiče ekonomski rast društva i obezbjeđuje zaposlenost, otvaranje novih radnih mjesta i opšte dobro svima. Ono je temelj održivog života na planeti.

Šta je zajedničko velikim preduzetnicima: Napolenu, Tesli, Pupinu, Pikasu, Bil Gejtsu, Đokoviću, Ronaldu? Nije obrazovanje, nije hrabrost, nije gomila znanja, jer je svaki od navedenih na svoj poseban način postigao uspjeh! A pogotovo niko od njih nije postigao uspjeh ugrožavajući prirodnu, društvenu, radnu, socijalnu i moralnu sredinu u kojima su živjeli ili radili. Ili im to nije bila namjera, jer su neki njihovi izumi proizveli takav utisak, samo zbog toga što su upotrijebljeni

u takvom biznisu. Svi su oni imali ili željeli nešto više, nešto šire, nešto globalno, nešto drugo i li nešto što niko ne može. To je taj osnovni san i moto svakog preduzetnika u prvoj fazi preduzetništva, gdje novi preduzetnik traži svoju „zvijezdu pod kapom nebeskom“. Iz toga je moguće izvući zaključak za buduće preduzetnike, koji trebaju prvo imati svoj san, onda cilj pa energiju, istrajnost i želju da dođu do tog trona. Potrebno je da se novi preduzetnik izdigne iznad dosadašnjeg osnovnog (često i jedinog) cilja preduzetništva – postizanja što većeg profita. Novi preduzetnik treba da se orijentise šire, da u svoje ciljeve ugradi i postizanje humanog i pozitivnog za lokalnu zajednicu, državu, regiju ili još šire. Takva orijentacija preduzetnicima povećava publicitet i medijsko interesovanje, a onda i pozitivan stav lokalne zajednice, a onda i svih stejkholdera, a to sve umanjuje ogromna sredstva ulagana u marketing u linearnoj ekonomiji. Budući preduzetnici, ako žele uspjeh na duži period, trebaju u svoju početnu viziju ugraditi momenat etičnosti prema prirodi, brigu o radnicima i društvenoj zajednici i širim globalnim ciljevima i tim metodama obezbjeđivati održivost na duži period. Ovakva orijentacija budućih preduzetnika je nužna i iz perspektive potrošača, jer je ekološka etičnost, humanost i odgovornost prema prirodi i čovjeku sve više propagirana i prihvaćena kod mladih potrošača, klijenata i kupaca. Dakle, profit i korporativna društvena odgovornost (Duvnjak 2020, 51) su sve više u pozitivnoj korelaciji, gdje profit ne treba biti osnovni (ili jedini) cilj preduzetništva, kako je bilo u linearnoj ekonomiji, čije mjesto zauzima cirkularna ekonomija, koja se sve više propagira u savremenoj literaturi, jer je cirkularna ekonomija jedini put održivoj ekonomiji.

Sljedeći momenat koji treba biti obavezan dio početnih vizija u preduzetništvu je menadžment rizika ili procjena rizika, obzirom na to da se svijet globalno i lokalno sve više i sve brže mijenja i naprosto je nemoguće predvidjeti procese i odnose, pojave i krize koje će se pojaviti kao faktor preduzetništva. Ne znamo kakve će sve biti posljedice COVID 19, očekuju se i druge pandemije, a i priroda sve više prijeti: klimatske promjene, ozonske rupe, globalno zagrijavanje, prezagušenost otpadom. Zato će menadžment rizika i prepoznavanja novih uslova i pretvaranje u poslovne izazove te prilagođavanje biznisa njima biti važan preduslov uspješnog poslovanja u post covid periodu ili preciznije rečeno, u pandemijskom periodu razvoja društva i ekonomije.

Jedan od najviše zanemarenih faktora uspjeha preduzetništva u našim uslovima je promjena odnosa prema radnicima. Naši prvi preduzetnici su zaista zanemarili važnost ljudskog faktora za uspjeh preduzetništva, misleći da su vlasnici i tehnologije ključni akteri biznisa, tako da je odnos prema radnicima brzo pao i doveo do situacije da radnici imaju manje sigurnosti, nego u bilo kojoj staroj kapitalističkoj državi. To je dovelo do iznenadnog i brzog odliva radnika svih profila i struka, a posebno radničke inteligencije, što je ogromna šteta za preduzetnike, ali i državu, koja je uložila u njihovo obrazovanje. Već nekoliko decenija je prisutna takva tendencija i sada je postala ozbiljna kočnica svakog biznisa i preduzetništva na našim prostorima. Dok u razvijenom kapitalizmu evropskih zemalja vlasnici sve više uvlače radnike u menadžment i vlasništvo, kako bi ih zadržali, svjesni da su oni važni faktori njihove uspješnosti i nosioci preduzeća, u našim zemljama se skoro ništa ne ulaže u zapošljavanje radnika, a onda u njihovo zadržavanje, razvoj i napredovanje. U socijalizmu se kvalitetnim radnicima, rijetkim i potrebnim strukama davale stipendije, plaćale škole i poklanjao stan, kako bi ostali u firmi, što je novim preduzetnicima nepoznato razmišljanje. Zadržavanje talenata i ulaganje u menadžment ljudskih resursa, na ove i nove načine, mora biti orijentacija svakog budućeg preduzetništva (Antonijević i Đuričić 2017; Lugonja i Knežević i Grumi 2017). Odgovornost na zadržavanju talenata je na menadžerima koji trebaju da se bave radnicima od njihovog prijema na adekvatno radno mjesto pa do brige o napredovanju radnika, pravilnom nagrađivanju i podsticanju na inovativnost i odanost preduzeću.

3. GDJE SU NOVA PODRUČJA POST COVID PREDUZETNIŠTVA?

Ono sa čim preduzetnici trebaju računati su i nove pandemije, jer će budućnost čovječanstva biti s njima suočena, gdje je COVID 19 samo prva globalna opomena. To znači da će biti u problemu zavisnost od uvoza, globalnih kretanja, jer će izolacije, zatvaranja i zaključavanja ekonomija biti prisutne u budućnosti poslovanja. Za preduzetnike to znači orijentaciju na lokalnu ekonomiju, ekonomiju malog obima i usluge lokalnom stanovništvu. Bijeg iz velikih urbanih konglomerata, u kojima je i bez pandemija postalo nemoguće živjeti, što pokazuju i ostale iznenadne pojave u prirodi: poplave, zemljotresi, povećavanja nivoa mora, treba biti orijentacija budućih stanovnika planete. U takvim sredinama je sve postalo problem: smeće, buka, prevoz, a zelenilo se mjeri u kubnim centimetrima, po glavi stanovnika. U Kairu ima samo 12cm² zelenila po glavi stanovnika, gdje smo vidjeli da su građani hodali sa maskama po gradu prije desetak godina. Nema ljudi na zemlji previše, ali su loše raspoređeni, to jest koncentrisani su u velike gradove i neke regije i u tim sredinama nije moguća ni fizička ni socijalna distanca. Nema dovoljno čiste vode, vazduha, zelenila, slobodnih prostora za rekreaciju, vrijeme se troši u putu i nabavci osnovnih životnih namirnica. Ruralne sredine, okoline gradova i prostori netaknute prirode postaju sve važnije područja stanovanja i života, a to za preduzetnike znači biznis, bilo u proizvodnji ili uslugama. Dakle, orijentacija na proizvodnju zdrave i čiste hrane, pitke vode i usluge u tim novim sredinama su prilike i šanse za nove preduzetnike. Od turizama će biti aktuelni: sportsko-rekreativni turizam u prirodi, dakle u ruralnim sredinama, ekoturizam, agroturizam, post covid rehabilitacioni turizam, koji kombinuje čistu prirodu, zdravu hranu, duhovnu i fizičku kondiciju, hodočasni turizam, planinski, banjski i turizam na vodama i oko voda.

Standard života će u cijelom svijetu, zbog ove pandemije i budućih pandemija globalno padati, a to znači da preduzetnik mora razmišljati kako stvarati profit sa manje ulaganja, sa manjim troškovima i otpadom i naravno, kako poslovati sa manjim profitom pa su opet proizvodnje i usluge u ruralnim sredinama povoljnije, prvenstveno zbog nižih komunalnih troškova. Manji su i troškovi radne snage, koja živi na svojim imanjima i zaposlenje u selu im dolazi kao dodatni prihod.

Područja u koje treba usmjeravati preduzetničke ideje su sektori koji iskazuju preoterećenost u vrijeme korona krize kao: zdravstvo, komunalne službe, policija, vojska i svi ekološki sektori, usmjeren na očuvanje sredine u kojoj sve sve dešava (Cvetković i Jovović 2018; Šupuković 2019). Dakle treba se orijentisati na biznise koji brinu o čovjeku i njegovom zdravlju, jer će GMO i fast food izgubiti na važnosti i ostati nužnost samo najsiromašnijih dijelova Svijeta. *Slow food*, suverenitet hrane i briga o čovjeku, će postati imperativ svih budućih biznisa, bilo da se radi o čovjeku stanovniku, čovjeku konzumentu ili o čovjeku radniku. Podatak da je već milijarda i po zaštitnih maski dospjela u mora i okeane, je samo dodatak ovoj priči i novim prilikama za biznise u oblasti reciklaže otpada i pretvaranja smeća u resurse. Traganje za alternativnim izvorima energije, čistim tehnologijama, eko gorivima su oblasti koje već imaju pozitivna iskustva u razvijenim zemljama i mogu biti provjereni izazovi za naše buduće preduzetnike. Preduzetnik budućnosti mora implementirati brigu o prirodi, smanjenju otpada, reciklažu i traženje jedinstva i sklada između svih aktera: prirode, čovjeka, društva i tehnologija u sve svoje strategije biznisa i preduzetništva. Takvo ponašanje i poslovanje će obezbijediti dugoročan opstanak na ekonomskom turbulentnom tržištu svega: biznisa, ideja, radne snage, resursa i otpada. Ovakvim poslovanjem će se budući preduzetnici na startu usmjeravati u humanom smislu i biti ekonomski i društveno prihvaćeni u lokalnoj zajednici, što je bitno za zemlje u tranziciji, koje mogu izbjeći mnoge bolesti „razvijenih“ i „uspješnih“. Novi preduzetnici trebaju ovu pandemiju koristiti kao veliku opomenu i prirode i društva, jer sa takvim iskustvom neće pasti u zamke budućih pandemija raznih vrsta, jer priroda je u problemu i čovjeku neće moći oprostiti sve nedaće koje joj je nanio svojom nemilosrdnom trkom za više i više, jeftinije i brže, a sve na račun ekosistema, kao našeg jedinog staništa. Preduzetništvo budućnosti mora poštovati kriterije održivosti, održivog razvoja, a to znači da zadovoljava potrebe sadašnjosti, ali da ne ugrožava zadovoljavanje potreba budućih generacija. To je taj skladan odnos čovjeka i prirode, ekologije i privrede i društveni ambijent u kome su

izbalansirani ekonomski, socijalni i faktori zaštite prirode. Uslov da poslovni subjekt bude u konceptu održivog razvoja je da bude profitabilan, a da komunikacija na relaciji poslovni sistem – društvo bude dvosmjerna, sa istim poslovnim interesima. Takvo ponašanje je i korporativna odgovornost unutar poslovnog sistema, ali i sa organima vlasti i nevladinim sektorom. Uz navedeno je vrlo bitno da je obezbjeđena klima u radnoj sredini u kojoj su radnici slobodni, kreativni i inovativni i da se to vrednuje i cijeni, jer tu leže korijeni i prepoznavanje kriza i njihovog rješavanja.

ZAKLJUČAK

Pandemije će sve više oblikovati ekonomski, politički i društveni aspekt budućeg čovjekovog bitisanja na ovoj planeti Zemlji. Njene posebnosti su u neregularnoj cikličnosti, što otežava sve: predviđanje, analizu, umanj enje posljedica, posebno njihovog uticaja na čovjeka, floru, faunu i generalno na životnu i radnu sredinu.

Iz navedenog se može zaključiti da je planeta Zemlja ušla u novu geološku epohu koju su geolozi definisali kao antropocen.

Globalno otopljanje mijenja stanje u zemlji, vazduhu i vodama, koje se komplikuje sve većim prisustvom smeća, otpada raznih vrsta, koje se ne zbrinjava na adekvatan način, a pandemija COVID 19, je taj započeti proces zbrinjavanja još usporila, usporavanjem i ostalih ekonomskih aktivnosti. Čak je količina otpada i povećana proizvodnjom ogromnih količina smeća od zaštitnih sredstva od pandemije, medicinskog otpada i povećanog otpada pakovanja povećanjem narudžbi i dostava po domaćinstvima, a zbog umanjenog kretanja i skraćenog rada trgovine i zatvaranja ugostiteljstva. Zbog ovih novih situacija raste važnost nove vrste menadžmenta, koji se zove „Savremeni kontroling 21. vijeka“ (Simić i Marković i Mujanović 2020, 128), a koji obuhvata važne aspekte menadžmenta: intuicija, predviđanje, procjena, psihologija, sve u cilju predviđanja društvenih i ekonomskih kretanja u budućnosti, kako bi se ekonomski efekti postizali sa više rada, a manje trošenja resursa, kako materijalnih tako i energetskih, jer su resursi u prirodi ograničeni. Ovaj kontroling žonglira 3 osnovna parametra društveno-ekonomskog progressa: rast, razvoj i dobit, kreirajući strategije održivog razvoja na duge staze, uzimajući u obzir i rizike (kakva je i pandemija), koji mogu zaustaviti, usporiti ili preorijentisati taj razvoj. Budući interni marketing treba da se mnogo više fokusira na ljudske resurse, koji su jednako važni kao i prirodni i materijalni, jer od njihove posvećenosti i motivacije mnogo više zavisi uspjeh preduzetništva, nego se to mislilo u prošlom vijeku linearne ekonomije.

Cirkularna ekonomija mora preuzeti mjesto dosadašnjoj linearnoj ekonomiji i biti način privređivanja budućih preduzetnika, koji će proizvoditi zadržavajući repromaterijal, resurse i proizvode što duže u lancu proizvodnje i nastojati proizvoditi sa što manje otpada, odnosno da svaki otpad iz jedne djelatnosti postane resurs za drugu. Preduzetništvo treba da postane način razmišljanja i stil života. „Preduzetništvo i održiv razvoj su nauka i umjetnost, odnosno umjetnost i nauka, oni su spasonosni alat 21. vijeka“ (Aleksić i Kojić 2014).

Razvoj ekološke svijesti, etike i ekološkog poslovnog morala treba biti sastavni dio svih ekonomskih i poslovnih strategija jer budući preduzetnik je čovjek mnogo empatičniji od prethodnih preduzetnika i sa tog aspekta se očekuje da on bude humaniji, kako prema sebi, tako i prema drugom čovjeku, a onda i prema prirodi i zajednici u kojoj posluje da bi živio. Očekivati je da budući preduzetnik bude i manje pohlepan i da mu profit neće biti jedini i krajnji cilj biznisa, jer je takav čovjek vrlinski čovjek, čovjek sa humanim vrlinama i mnogo korisniji i bolji primjer preduzetnika kojeg treba slijediti i koji svojim ponašanjem i preduzetništvom može biti uzor mladim preduzetnicima. Istraživanja pokazuju da se samodisciplina može vrlo korisno upotrijebiti u biznisu (Stefanović 2020).

Osnova novog korporativnog menadžmenta će biti procjena koristi i štete inovacionih procesa i to na duži rok: koristi za preduzetnika i štete za prirodu, sredinu i čovjeka. Posebno se treba orijentisati na brigu o čovjeku, radniku, jer se pokazalo da je radnik sa svojim kompetencijama nezamjenjiv i da je on, a ne vlasnik, ključna karika svih preduzetničkih aktivnosti. Mjerilo uspješnosti preduzeća će biti sklad u razvoju biznisa i njegovih ljudskih potencijala te briga o lokalnoj zajednici, u kući u kojoj se sve dešava: prirodi, staništu, lokalnoj sredini ili ekosistemu. Budući biznisi trebaju koristiti iskustva COVID 19, a to znači da se razvijaju u oblastima koje su u ovoj pandemiji preopterećene: lokalni nivo, ruralna područja, zdravstvene oblasti, komunalne usluge, briga o starijim članovima društva, rehabilitacije od pandemija u čistoj sredini, sa zdravom hranom iz okruženja. Svi oblici zavisnosti u lancima proizvodnje mogu biti smetnja te orijentacija treba biti domaća ekonomija, ekonomija malog obima koja se odvija uz punu podršku lokalne vlasti i države koja preko medija razvija ovakav pristup preduzetništvu, kako svojim strategijama tako i primjerima dobre i pozitivne prakse. Podaci govore da je orijentacija na domaći turizam u toku 2020. godine, podstaknut vaučerima i zabranama kretanja, bio vrlo važna karika ekonomskog razvoja Republike Srpske i BiH, što je imalo višestruku koristi: upoznavali smo svoju domovinu i postali pravi njeni ambasadori, jer kako da pričamo šta imamo ako to nismo vidjeli i doživjeli. Neke destinacije domaćeg turizma su čak pokazala porast broja ljetnih turista, npr. Trebinje, Jahorina i sl.

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ENTREPRENEURSHIP IN POST COVID CONDITIONS

Summary: *The Covid pandemic is the first planetary pandemic with still unexplored trends, possible changes and consequences. The goal is set to the planet and humanity with the aim of finding fast, global, unique solutions, it is for the first time that a social phenomenon shocks and affects everyone equally: rich and poor, developed and underdeveloped, successful and unsuccessful, prosperous and those who were not so far. Entrepreneurship is an economic phenomenon, business, activity, and has similar characteristics: it does not choose space, time, legal environment and conditions. Entrepreneurship is a saving tool in the service of a man, regardless of gender, age, nationality, level of education, place of residence, it is the agitator of all economic development and growth and aims to meet human needs. Everywhere and always, entrepreneurship seeks the latest, often impossible combination of risks, threats, opportunities. It is a creative response, an innovative solution to new challenges, obstacles, a new initiative to create new products and new services. The more unfavorable the opportunities, the more risky and greater the challenge for real entrepreneurs are. In this context, this new, bad global situation should be accepted, which is the product of man's wrong attitude towards natural resources, the environment, the climate, another man and himself. The global disinterest of modern man for everyday suffering in the world, for injustice, hunger and poverty, for the sick and weak, for the unemployed, with orgies of vulgarity, greed of the "super rich" and "super successful", must have resulted in a global "warning" such as COVID. One possible solution for relaxation of the negative consequences of the COVID 19 pandemic could be a human, positive, creative pandemic - ENTREPRENEURSHIP 21.*

Key words: COVID 19, entrepreneurship, management, social responsibility, ecology

JEL klasifikacija: E 16, E 24, G 35

INTRODUCTION

The Covid pandemic belongs to a conglomeration of postmodern challenges, risks and security threats with devastating repercussions of unknown proportions (Nešković 2020). An additional challenge is that the consequences are unknown to modern science, which increases the responsibility of the health sector in terms of methods of treating and curbing the spread and mass disease. In this situation, perhaps the most important task is given to the corporate social responsibility, which should ensure sustainable economic growth in the new conditions by harmonising the care for the survival of companies, workers and their families, and the natural and social environment. The countries most affected are those where the pandemic was the worst and which mostly rely on the global market, world trade, tourism, exports of goods and foreign

financing. The strength of the impact varies from region to region, but the vulnerability of all global markets and economies is obvious. Business closures, unemployment, school interruptions and difficulties in primary health care are likely to have long-term effects on human resource development.

"This is rather worrying, since the crisis is likely to have long-term consequences and lead to major global challenges. The first item on the agenda is addressing urgent global health and economic issues. In addition, the global community must unite to find a way to a stronger recovery, to avoid even more people facing poverty and unemployment" stressed Ceyla Pazarbasioglu, the Vice President of the World Bank for Equal Growth, Finance and Institutions.

The social responsibility of companies and individuals is expanding in the new conditions: it is not enough for companies to properly fulfill their obligations to the state, law and workers, but must also add increased care for the environment, natural and social environment, because COVID 19, among others factors, is also an environmental warning, and that is that in the race for profit we have neglected and endangered the environment in which we live and do business. Thus, corporate social responsibility becomes responsible for the harmonious functioning of all participants in business: companies, local communities, the state, i.e. it becomes responsible for raising social and environmental ethics to the level at which the harmony of all business and entrepreneurship stakeholders returns. In this sense, the development of technology, which is inevitable, should be humanised, which means subordinate to man, because of whom it arises and develops, since the man is the subject of all economic and social processes, but is also the end user and enjoyer of the results of technical-technological development. In this new natural, business and cultural environment, it is necessary to redesign the concept of entrepreneurship and the conditions and ways of its origin and development. This redesign should go in the direction of initial strategies, goals, missions and visions in which the entrepreneur incorporates values that ensure the sustainability of the business for a longer period. Environmental ethics, humanity, care for the community and workers are placed before the previous basic motive: personal interest and profit (Antonijević and Đuričić 2014)..

1. POST COVID ECONOMIC BUSINESS ENVIRONMENT

Covid 19 is just another additional phenomenon that warns society to live in a world where there is more and more feedback and that predicting events, phenomena and processes is becoming more and more questionable, because there are too many sudden moments, unpredictable, but with far-reaching consequences. It has been through the history of economic and social development processes that stopped or reversed economic and social flows: deadly diseases, wars, earthquakes, floods, droughts ... Man overcame them precisely by developing technologies that promised that nature would give up and that man would master by nature and subdue her to herself and her mega and giga desires. The standard of living was rising, man was living longer and longer, and a successful fight against many diseases was promised. COVID 19 came as the first new and unpredictable catastrophe, which we did not take seriously and almost all of us thought that after the first wave it would decline, that it would not result in more serious consequences, except for increased dying. The COVID 19 pandemic has led to a drop in oil prices due to a sharp decline in demand, which is the result of a sharp decline in economic activity and social trends, with the theory of "stay at home". The real disaster is not the coronavirus pandemic and the number of sick and dead famine, which will double in the world by the end of 2020 and affect over 250 million inhabitants of the planet Earth "(Gans 2020). Many branches of the economy were affected, especially tourism, traffic, catering, many shops, various agencies and other service activities. The distribution of food from producers to consumers on a global level is becoming a problem, because supply chains are breaking down on an international level, primarily due to the closure of countries,

economies, transport. People are locked in their homes, apathy and anxiety are growing, violence in the family and among peers, the use of narcotics is growing due to unemployment and unemployment. "Black swan" is a term for phenomena that are completely unexpected, but with far-reaching consequences. The black swan is circulating the world and threatening a shortage of food and basic foodstuffs for a growing number of people on Earth, and food distribution is becoming a problem as the pandemic leads to export and import problems, keeping food in long waits for procedures and borders. Table 1 shows the effect of COVID 19 by the end of 2020.

Table 1. Comparison of COVID and other pandemics in relation to countries' GDP (Stefanović 2020, 81)

Epidemic / pandemic	Most affected countries	Average change in GDP growth in the most affected countries
Spanish flu (1918-1929)	China, India, Indonesia, Russia, USA	0,8%
SARS (2002-2004)	Canada, China Hoang Kong, Singapore	3,1%
H1N1-Swine flu (2009-2010)	Australia, China, Mexico, Thailand, USA	-2,5%
MERS- (2012)	Iran, Jordan, South Korea, Saudi A. UAE	- 3,7%
Ebola (2014-2016)	Guinea, Liberia, Sierra Leone	- 8,6%
Covid 2020	The Whole World - A Global Pandemic	-8,7%
World economic crisis (2008-2009)	The whole world - a global crisis	The rich – 3,7%, The other -3,3%

The analysis of the existing table shows that the Corona virus caused the biggest drop in GDP in the world, and much more in poor countries, and even worse, the end effects cannot be predicted, because there is already talk of a new form of a similar or worse virus that plagues Europe. So, this is not a random phenomenon or a phenomenon that promises transience, as past pandemics are listed in the table, but rather it can be assumed that this is just the beginning of a new era of life on planet Earth and us on it, which will be characterised by a situation that "it will never be as it used to." This is a warning to everyone, and especially to new entrepreneurs, who will operate in these new conditions and who will turn weaknesses and threats into their business challenges, opportunities and chances. From the point of view of entrepreneurship, the situation with the Corona virus will not be able to calm down even if the conditions for that come, because many entrepreneurs have recognised this situation as their opportunity and chance to develop new businesses. The pharmaceutical industry is advancing rapidly (Alon 2020) and is paving the way to become the world's leading industry and to overtake the IT and automotive industries. This means that people will not be "allowed" to recover, because the industry of protective equipment, drugs, vaccines and accompanying materials is becoming like the industry of weapons in a linear economy (previous economy), for which the opening of hotspots is a condition for survival.

2. ENTREPRENEURSHIP IN THE POST COVID PERIOD

Is it possible to provide high earnings today in the "postmodern" and COVID 19 business environment?

Entrepreneurship is an economic phenomenon that stimulates and activates creativity, innovativeness, enhances the work and life success of an individual, encourages economic growth

of society and provides employment, job creation and the common good for all. It is the foundation of sustainable life on the planet.

What do big entrepreneurs such as Napoleon, Tesla, Pupin, Picasso, Bill Gates, Djokovic, Ronaldo have in common? It is not education, it is not courage, and it is not a pile of knowledge, because each of the above has achieved success in its own special way! And especially none of them achieved success by endangering the natural, work, social and moral environment in which they lived or worked. Or it was not their intention, because some of their inventions made such an impression, just because they were used in such a business. They all had or wanted something more, something wider, something global, something else or something that no one else can. It is the basic dream and motto of every entrepreneur in the first phase of entrepreneurship, where a new entrepreneur is looking for his "star under the heaven". From this we can draw a conclusion for future entrepreneurs, who should first have their dream, then the goal, then the energy, perseverance and desire to reach that throne. It is necessary for the new entrepreneur to rise above the previous basic (often the only) goal of entrepreneurship – achieving the highest possible profit. The new entrepreneur needs to orient more broadly, to incorporate into goals the achievement of humane and positive for the local community, state, region or even wider. Such an orientation for entrepreneurs increases the media interest and positive attitude of the local community, and then all the stakeholders, who change the huge funds invested in marketing in a linear economy. Future entrepreneurs, if they want to succeed for a longer period, should incorporate in their initial vision a moment of ethics towards nature, care for workers and the social community and wider global goals, if they want to ensure sustainability for a longer period. Such an orientation of future entrepreneurs is necessary from the perspective of consumers, because environmental ethics, humanity and responsibility towards nature and man, are increasingly propagated and accepted by young consumers, clients and customers. Thus, profit and corporate social responsibility (Duvnjak 2020, 51) are increasingly in a positive correlation, where profit should not be the basic (or the only) goal of entrepreneurship, as it was in a linear economy, but on the contrary, to increasingly propagated in modern literature, circular and sustainable economy.

The next moment that should be a mandatory part of the initial visions in entrepreneurship is risk management, or risk assessment, given that the world is changing more and more globally and locally and it is simply impossible to predict the processes and relationships, phenomena and crises that will emerge as the entrepreneurship factor. We do not know what the consequences of COVID 19 will be, other pandemics are expected, and nature is increasingly threatening: climate change, ozone holes, global warming, and waste congestion. Therefore, risk management and recognising new conditions and turning them into business challenges, and adapting business to them will be an important prerequisite for successful business in the postcovid period, or more precisely, in the pandemic period of development of society and economy.

One of the most neglected factors for the success of entrepreneurship in our conditions is the change in attitudes towards workers. Our first entrepreneurs really neglected the importance of the human factor for the success of entrepreneurship, thinking that owners and technology are key actors in business, so the attitude towards workers fell rapidly and led to a situation where workers have less security than in any old capitalist state. It led to a sudden and rapid outflow of workers of all profiles and professions, especially workers' intelligence, which is a huge damage for entrepreneurs, but also for the state, which has invested in their education. Such a tendency has been present for several decades and now it has become a serious brake on every business and entrepreneurship in our area. While in the developed capitalism of European countries, owners are increasingly involving workers in management and ownership, in order to keep them, aware that they are important factors in their success and business bearers, in our countries almost nothing is invested in hiring workers and then retaining them, their development and advancement. Under socialism, quality workers, rare and necessary professions were given scholarships, paid for schools and an

apartment was given to them in order to keep them in the company, which is a concept unknown to new entrepreneurs. Thus, retaining talent and investing in human resource management must be the orientation of any future entrepreneurship (Antonijević and Đuričić 2017; Lugonja and Knežević and Grumi 2017). The responsibility for retaining talent lies with the managers who need to deal with workers from their admission to an adequate job, to caring for the advancement of workers, proper rewarding and encouraging innovation and loyalty to the company.

3. WHERE ARE THE NEW AREAS OF POST COVID ENTREPRENEURSHIP?

What entrepreneurs need to reckon with are new pandemics, because the future of humanity will be faced with them, where COVID 19 is only the first global warning. This means that there will be a problem of dependence on imports, global trends, because isolations, closures and lockdowns of economies will be present. For entrepreneurs, this means focusing on the local economy, small-scale economy and services to the local population. Escape from large urban conglomerates, in which it has become impossible to live even without pandemics, as shown by other sudden phenomena in nature: floods, earthquakes, rising sea levels, should be the orientation of future inhabitants of the planet. In such environments, everything has become a problem: garbage, noise, transportation, and greenery is measured in cubic centimeters, per capita. The fact is that in Cairo a resident has only 12cm² of greenery per capita, where we saw that citizens walked with masks around the city about ten years ago. There are no too many people on earth, but they are poorly distributed, i.e. they are concentrated in big cities and some regions, and neither physical nor social distance is possible in those areas. There is not enough clean water, air, greenery, free spaces for recreation, time is spent traveling and procuring basic foodstuffs. Rural environments, urban environments and areas of untouched nature are becoming increasingly important areas of housing and living, and for entrepreneurs this means business, whether in production or services. Therefore, the orientation towards the production of healthy and clean food, drinking water and services in these new environments are opportunities for new entrepreneurs. From tourism will be current: sports and recreational tourism in nature, i.e. in rural areas, ecotourism, agrotourism, post covid rehabilitation tourism, which combines pure nature, healthy food, spiritual and physical condition, pilgrimage tourism, mountain, spa and water and around the water tourism.

The standard of living all over the world, due to this pandemic and future pandemics, will fall globally, which means that the entrepreneur must think about how to make a profit with less investment, less costs and waste and of course, how to do business with less profit, so production and services in rural areas are more favorable, primarily due to lower utility costs. The costs of labour force, which live on their estates, are also lower, and employment in the village comes as additional income.

Areas in which entrepreneurial ideas should be directed are sectors that show congestion during the corona crisis, such as: health, utilities, police, army and all environmental sectors, focused at preserving the environment in which everything happens (Cvetković and Jovović 2018; Šupuković 2019).

So we need to focus on businesses that care about man and his health, because GMO and fast food will lose their importance and remain a necessity only for the poorest parts of the world. Slow food, food sovereignty and caring for man, will become an imperative of all future businesses, whether it is a man resident, a man consumer or a man worker. The fact that a billion and a half protective masks have already reached the seas and oceans is just an addition to this story and new opportunities for businesses in the field of waste recycling and turning waste into resources. The search for alternative energy sources, clean technologies, eco fuels are areas that already have positive experiences in developed countries and can be proven challenges for our future entrepreneurs. The entrepreneur of the future must implement care for nature, waste reduction,

recycling and the search for unity and harmony between all actors: nature, man, society and technology in all his business and entrepreneurship strategies. Such behavior and business will ensure long-term survival in an economically turbulent market of everything: business, ideas, labour, resources and waste. With such a business, future entrepreneurs will initially be guided in a humane sense and be economically and socially accepted in the local community, which is important for countries in transition, which can avoid many diseases of "the developed" and "the successful". New entrepreneurs should use this pandemic as a great warning to both nature and society, because with such an experience they will not fall into the traps of future pandemics of various kinds, because nature is in trouble and it will not be able to forgive men all the troubles caused with the relentless race for more and more, cheaper and faster, all at the expense of the ecosystem as our only habitat. Entrepreneurship of the future must respect the criteria of sustainability, sustainable development, which means that it meets the needs of the present, but does not jeopardise the satisfaction of the needs of future generations. It is this harmonious relationship between man and nature, ecology and economy and the social environment in which economic, social and nature protection factors are balanced. The condition for a business entity to be in the concept of sustainable development is to be profitable, and for communication between the business system and the society to be two-way, with the same business interests. Such behavior is also a corporate responsibility within the business system, but also with the authorities and the non-governmental sector. In addition to the above, it is very important that a climate is provided in the work environment in which workers are free, creative and innovative, and that this is valued and appreciated, because that is where the roots and recognition of crises and their solutions lie.

CONCLUSION

Pandemics will increasingly shape the economic, political, and social aspects of man's future existence on this planet Earth. Its peculiarities are in irregular cyclicality, which complicates everything: forecasting, analysis, mitigation of consequences, especially their impact on humans, flora, and fauna and in general on the living and working environment.

From the above, it can be concluded that the planet Earth has entered a new geological epoch, which geologists have defined as the Anthropocene. Global warming is changing the situation in the ground, air and water, which is complicated by the growing presence of garbage, waste of various types, which is not adequately disposed. The COVID 19 pandemic has slowed the ongoing disposal process by slowing down other economic activities. The amount of waste has even increased with the production of huge quantities of garbage from pandemic protection, medical waste and increased packaging waste by increasing orders and deliveries to households, due to reduced movement and shortened working hours for trade and closure of catering. Due to these new situations, a new type of management, called "Modern Controlling of the 21st Century" (Simić and Marković and Mujanović 2020, 128) is needed. It includes important aspects of management: intuition, prediction, assessment, psychology, all in order to predict social and economic trends in future, in order to achieve economic effects with more work and less consumption of resources, both material and energy, as natural resources are limited. This controlling juggles three basic parameters of socio-economic progress: growth, development and profit, creating strategies for sustainable development in the long run, taking into account the risks (such as a pandemic), which can stop, slow down or reorient that development. Future internal marketing should focus much more on human resources, which are just as important as natural and material, because the success of entrepreneurship depends much more on their commitment and motivation than was thought in the last century of linear economy.

The circular economy must take the place of the current linear economy and be a way of earning for future entrepreneurs, who will produce retaining raw materials, resources and products for as

long as possible in the production chain and try to produce with as little waste as possible, i.e. that every waste from one activity becomes a resource for another. Entrepreneurship should become a way of thinking and a way of life. "Entrepreneurship and sustainable development are science and art, i.e. art and science, they are the saving tool of the 21st century" (Aleksić and Kojić 2014).

The development of environmental awareness, ethics and environmental business morality should be an integral part of all economic and business strategies, because the future entrepreneur is a much more empathetic man than previous entrepreneurs and from that aspect he is expected to be more humane, both to himself and to others, and then to nature and the community in which he/she operates so as to live, not the other way around. It is to be expected that the future entrepreneur will be less greedy and that his/her profit will not be the only and ultimate goal of business, since such a human is a virtuous human, a human with human virtues and an entrepreneur who can be a role model for young entrepreneurs. The research shows that self-discipline can be very useful in business (Stefanović 2020).

The basis of the new corporate management will be the assessment of the benefits and harms of innovation processes in the long run: benefits for the entrepreneur and harms to nature, the environment and man. Special attention should be paid to the care of the person, the worker, because it has been shown that the worker with his competencies is irreplaceable and that he, and not the owner, is the key link of all entrepreneurial activities. The measure of a company's success will be harmony in the development of the business and its human resources, and care for the local community, in the house where everything happens: nature, habitat, local environment or ecosystem. Future businesses should use the experience of COVID 19, which means that they should be developing in areas that are congested in this pandemic: local level, rural areas, health areas, utilities, care for the elderly, rehabilitation from pandemics in a clean environment, with healthy food from the environment. All forms of dependence in production chains can be a hindrance, and the orientation should be to the domestic economy, a small scale economy that takes place with the full support of local authorities and the state that develops this approach to entrepreneurship through the media, both with their strategies and examples of good and positive practice.

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- A Real Shock (Covid-19 Pandemic) - Impact on the Financial Crisis in the Company and the Economy as a Whole [3](#)
 - Agreements on Assignment and Distribution of Property During Lifetime [13](#)
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 - Business Controlling function in respect to the Transformation Process of Digital Business [16](#)
 - Current Moment in Selected Area of Global Finance in Light of Neoliberalism, Fourth Industrial Revolution and Digital Time [6](#)
 - iznenadni događaj(COVID-19 pandemija)- uticaj na finansijsku krizu u preduzeću i privredu u cjelini [4](#)
 - Modern Slavery as Global Phenomenon [11](#)
 - Moderno ropstvo kao globalni fenomen [12](#)
 - Motivacija i barijere ženskom preduzetništvu u Srbiji i Bosni i Hercegovini [1](#)
 - Motivation and Barierrrs for Female Entrepreneurs in Serbia and Bosnia and Hercegovina [2](#)
 - Poslovna funkcija kontrolinga u odnosu na proces digitalne transformacije poslovanja [15](#)
 - Pravna priroda Ustavnog suda [9](#)
 - Sensitivity Analysis and Scenario Method for Evalution of Efficiency of Investment Projects in Risk Conditions [8](#)
 - Stanje kontrolnog okruženja u Bosni i Hercegovini-Empirijsko istraživanje [17](#)
 - Status of Control Environment in Bosnia and Herzegovina - Empirical Study [18](#)
 - The Legal Nature of the Constitutional Court [10](#)
 - Ugovor o ustupanju i raspodjeli imovine za života [14](#)
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