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ČASOPIS ZA POSLOVNU TEORIJU I PRAKSU

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## EFEKTI SDI NA IZVOZNU KOMPONENTU REPUBLIKE SRPSKE

**Rezime:** *Strane direktnе investicije (SDI) predstavljaju najznačajniji dio međunarodnih tokova kapitala. U periodu od 2000. god. do danas u Republici Srpskoj su donosene brojne mјere i olakšice, liberalizovano ulaganje i prenos kapitala, sa željom da se omogući što veći priliv stranih investicija. Na osnovu dostupnih podataka skupljenih iz više izvora može se zaključiti da je privatizacija bila glavno polje kroz koje su stizale investicije u privredu Republike Srpske, što impicira da je bilo nedovoljno realizovanih investicionih projekata koji bi bili izvozne prirode. U samom radu bice analizirano koliko SDI utiču na izvoz Republike Srpske primjenom proste linearne regresije.*

**Ključne riječi:** strane direktnе investicije (SDI), fiskalna politika, prosta linearna regresija

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### UVOD

Strane direktnе investicije se najkraće mogu definisati kao ulaganje stranog kapitala od strane investitora (kompanije) iz jedne zemlje u preduzeće (kompaniju) druge zemlje sa ciljem ostvarivanja zajedničkih interesa. U literaturi se mogu naći različiti složeniji načini definisanja stranih direktnih investicija. Tako po jednima „strane direktnе investicije, predstavljaju direktno investiranje u preduzeće u inostranstvu u cilju sticanja trajne kontrole nad proizvodnjom, trgovinom i finansijama preduzeća u koje se ulaže“ (Nesterović 2015, 273). Iz ugla investitora prisustvo na željenim tržištima, povoljni uslovi snabdijevanja sirovinama, radnom snagom i energijom, profitabilni plasman proizvoda i usluga, neizbjegni su faktori u donošenju odluke o investiranju. Navedeni faktori su, obično, obezbjeđeni za ulagače direktnim stranim investicijama od strane zemlje domaćina, koja se iz ugla investitora smatra stranim tržištem na kojem investitor raspoređuju svoje poslovne funkcije šireći na taj način svoju globalnu mrežu. Ono što je bitno naglasiti je mogući domino efekat, odnosno činjenica da direktna strana ulaganja mogu povećati ulazak drugih multinacionalnih kompanija (MNK), koje su u poslovnim vezama sa incijalnim ulagačem i koje ga slijede na svim drugim tržištima. Naime, uspješno ulaganje jedne kompanije signalizira ostalim MNK da postoji povoljna investiciona klima u zemlji domaćinu i da se smanjuje rizik ulaganja. Direktna strana ulaganja stimulišu domaće investicije ukoliko postoji komplementarnost u proizvodnji domaćih kompanija i filijala. U takvom okruženju strane filijale i domaće kompanije uspostavljaju stabilne veze, iz kojih domaće kompanije stvaraju dodatni motiv da realizuju nove projekte i ulažu dodatna sredstva. Ono što je potrebno napomenuti da praksa zemlje domaćina pokazuje da filijale stranih kompanija imaju veću sklonost ka investiranju nego domaće te na taj način povećavaju investicije u zemlji domaćinu.

Kada se govori o efektima priliva stranih direktnih investicija ne može da se ne naglasi komponenta investicionog paketa koja je u funkciji obezbjeđenja olakšanog pristupa prekograničnim tržištima i jačanja izvoznih aktivnosti zemlje domaćina. Tome doprinosi

činjenica da su strane afilijacije obično više izvozno orijentisane od domaćih preduzeća i da njihova sklonost ka izvozu raste proporcionalno dužini vremena obavljanja poslovne aktivnosti na stranoj destinaciji. Naime, u situaciji kada strani investitor obezbjeđuje inpute za svoju proizvodnju na lokalnom tržištu, SDI indirektno povezuju lokalnog dobavljača sa tržištim u inostranstvu na kojima se plasira aktuelni assortiman ponude. Angažovanjem inostranog kapitala u izgradnju kapaciteta za snabdijevanje domaćeg tržišta robom koja se ranije uvozila i, na taj način supstitucijom uvoza, stvaraju se uslovi za poboljšanje trgovinskog bilansa zemlje domaćina. Pružanjem informacija o svojim matičnim ekonomijama, a često i lobiranjem za povlašćeni položaj izvoznika iz zemlje korisnika ulaganja, multinacionalne kompanije olakšavaju ulazak i prodor domaćih proizvođača na strana tržišta, što obično povećava izvoz, čime se smanjuje deficit spoljnotrgovinske razmjene, odnosno povećava neto izvoz.

Efekat na spoljnu trgovinu, konkretnije na izvoz, je za zemlje u tranziciji, kao što je npr. BiH, posebno značajan, obzirom na to da je jedna od zajedničkih karakteristika ovih zemalja visok deficit bilansa tekućih transakcija, koji je prouzrokovao deficitom trgovinskog bilansa. Postoje dva načina za pokriće ovog deficit-a: zaduživanje u inostranstvu, na koje se ne treba oslanjati, obzirom na već veliku zaduženost zemalja ovog regionalnog priliva stranih direktnih investicija. Iako priliv SDI iz ugla pokriće deficit-a izgleda dosta primamljivije po Kovačeviću, na SDI ne treba prvenstveno gledati kao na izvor kapitala za pokriće ovog deficit-a, već na mogućnosti koje ove investicije pružaju u stimulisanju izvoza (Kovačević 2013, 131-162). Na taj način bi se sa jedne strane smanjio deficit, a sa druge strane bi devizni priliv od izvoza omogućio finansiranje neravnoteže platnog bilansa.

## 1. EFEKTI DIREKTNIH STRANIH INVESTICIJA NA FISKALNU POLITIKU

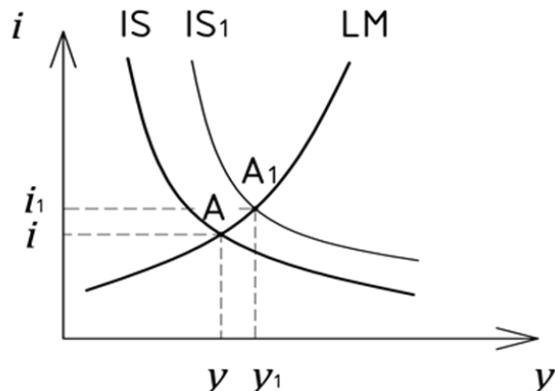
Zemlje u razvoju uglavnom karakterišu dvije vrste fiskalnih politika. U takvim zemljama određeni fiskalni podsticaji smatrani su se prvom načinom stimulisanja privatnog preduzetništva, na način da određeni vidovi podsticaja stoje na raspolažanju stranim investitorima, da investiraju svoje proizvodne pogone u zemlji domaćina. Dosadašnja praksa (Šinik i Ljubojević 2017) je pokazala da takva fiskalna politika iz ugla zemlje domaćina zaista može povećati priliv inostranog kapitala, ali da su te pogodnosti za strane investitore ograničene. Drugi segment fiskalne politike predstavljala je mobilizacija prirodnih resursa u svrhu finansiranja javnih rashoda. Prema Krugmanu, kakva god da je preovladavajuća ekonomska ideologija, ekonomski razvoj i socijalni napredak manje razvijene zemlje uveliko zavisi od sposobnosti fiskalne politike da generiše dovoljno prihoda da bi se finansirali ekspanzivni programi javne potrošnje (Krugman i Venables 1995, 866).

Iskustva govore da ovakav vid poslovanja inokapitala ne donosi prihode u određene oblasti, prvenstveno oblasti zdravstva, obrazovanja i drugih socijalnih aktivnosti. S druge strane, sve zemlje u razvoju su suočene sa problemom rastućeg fiskalnog deficit-a. Javni rashodi su znatno veći od javnih prihoda što je posljedica razvojnih programa i neočekivanih negativnih uticaja spolja, koji su u vrijeme globalizacije neizbjegni. Javni prihodi najvećim dijelom zavise od potencijala oporezivanja, a potencijal oporezivanja neke zemlje uopšteno, zavisi od pet faktora:

- Nivoa realnog prihoda po stanovniku;
- Nivoa nejednakosti u raspodjeli prihoda;
- Industrijske strukture ekonomije i značaj pojedinih tipova ekonomske aktivnosti;
- Socijalnih, političkih i institucionalnih postavki u relativnoj moći pojedinih sektora;
- Administrativnoj kompetentnosti i integritetu državnih organa.

Da bi postale interesantnije za strane investitore, zemlje u razvoju su morale smanjiti fiskalne namete sa ciljem privlačenja većeg obima stranog kapitala. Povećan priliv stranih investicija dovodi do pomjerenja krivulje investicija IS u položaj IS<sub>1</sub>, što znači da se pojavila nova

ravnotežna tačka ( $A_1$ ). Ovakav razvoj događaja dovodi do povećanja domaćeg proizvoda i kamatnih stopa, što je vidljivo na sljedećoj slici.



Grafikon 1. Uticaj stranih direktnih investicija na fiskalnu politiku u zemlji koja uvozi kapital  
(Busse i Hefeker 2007, 397-415)

Vođenje fiskalne politike na ovaj način može pronaći svoje opravdanje u prilivu stranih direktnih investicija u cilju unapređenja privrede, bez obzira na određene negativne refleksije. Prilikom odlučivanja o najboljem načinu za ubiranje potrebnog javnog prihoda, razne države su snazile na razne načine i iz te prakse su ustanovljeni neki opšti principi. Saglasno nobelovcu Džozefu Štiglicu postoji pet prihvatljivih karakteristika dobrog poreskog sistema:

- Ekonomski efikasnost: poreski sistem ne bi trebao da ometa efikasnu alokaciju resursa;
- Jednostavnost u administrativnom pogledu: poreski sistem bi trebao da bude jednostavan i relativno jeftin za provođenje;
- Fleksibilnost: poreski sistem treba da bude sposoban da na izmjenjene ekonomске okolnosti, lako reaguje, čak u nekim slučajevima automatski;
- Politički odgovoran poreski sistem treba da bude formulisan tako da pojedinci mogu da provjere šta plaćaju i procjene koliko tačno taj sistem podržava njihov performans;
- Pravednost: poreski sistem mora pravedno da se odnosi prema različitim pojedincima (Stiglitz 1979, 803).

Problematika djelovanja fiskalne politike na ekonomski razvoj ogleda se u sektorskoj orijentaciji investicija u stimulisanju tehničko-tehnološkog procesa posredstvom fiskalnih olakšica i oslobođanja koje nameće inostrani kapital. Fiskalna politika zemlje u razvoju treba da mobilise akumulaciju i da je upućuje fiskalnim mehanizmom u proizvodne grane privrede. Ona djeluje preko uvoza kapitala i tehnologije na ekonomski razvoj. Ukoliko dolazi do smanjenja poreza zemalja postaje atraktivna za privlačenje stranih investicija i privlačenje već postojećeg investicionog kapitala u stalna sredstva i reinvestiranje ostvarene dobiti u nova investiranja. Ono što je bitno, smanjivanje poreza se mora vršiti selektivno sa orijentacijom na pojedine industrijske grane koje se žele istaknuti u prvi plan kod inoinvestitora, jer poreska stopa mora postojati da bi država ubirala javne prihode. Te prihode država investira u infrastrukturu, stvarajući odgovarajući poslovni ambijent i finansirajući neprofitabilne sektore.

Svaka poreska reforma ima unaprijed postavljeno nekoliko ciljeva od kojih je najvažniji podsticanje stvaranja bogatstva. Takva vizija treba da doprinese smanjenju ukupnog poreskog opterećenja, smanjenju udjela države u privrednim aktivnostima, posticanju rasta akumulacije i kapitala. Teoretski posmatrano, oporezivanje po definiciji koči rast na tri načina:

- Pretjerano oporezivanje može iskriviti izbor između oporezivih i neoporezovanih djelatnosti;
- Previsoko oporezivanje dohotka isključuje izvor između sadašnje i buduće proizvodnje i favorizujući sadašnju potrošnju i isključujući štednju;
- Preoštvo oporezivanje dohotka obuzdava sklonost ka preuzimanju rizika i oslabljuje međunarodnu konkurenčiju (Ristić i Ristić 2015).

U kreiranju oporezive politike, poreski stimulansi zauzimaju centralno mjesto. Naime, bez fiskalnih nameta inostrani kapital ne bi imao značajan uticaj na ekonomski razvoj. Iz tog razloga fiskalnoj politici i fiskalnom oporezivanju mora se brižljivo pristupiti i to u skladu sa zahtjevima u privredi, sa strategijom, prioritetima zemlje i inostranih ulagača sa ciljevima razvoja. Na taj način može se kreirati poželjna poreska struktura i ostvariti poželjan nivo javnih prihoda.

## 2. EFEKTI DIREKTNIH STRANIH INVESTICIJA NA IZVOZ

Privlačenje direktnih stranih investicija, predstavlja osnovni uslov za povećanje proizvodnje i izvoza zemalja domaćina do nivoa koji bi toj zemlji omogućio stabilan ekonomski rast (Duvnjak 2018), kao i uspješno servisiranje dugova te je stoga jedan od osnovnih ciljeva kreatora ekonomске politike upravo stvaranje investicione klime koja pogoduje privlačenju stranih ulagača (Šušić i Spasojević 2016, 121). Ovo iz razloga što priliv sredstava putem direktnih stranih investicija predstavlja ne samo priliv kapitala, već i stvaranje osnove za povećanje trgovinskih tokova, ekonomskog rasta i razvoja i kreiranje novih radnih mjeseta, povećanje proizvodnje i na kraju povećanje izvoza. Republika Srpska, odnosno BiH kao zemlja u tranziciji, ima potrebu za povećanjem priliva stranih direktnih investicija jer bi ove investicije, ako se pravilno sektorski usmjere, trebale biti pokretač ekonomskog rasta zemlje u narednom periodu. Obzirom na trenutni, još uvjek nizak nivo domaće štednje iz koje bi se samostalno finansirao razvoj, te nedostatke savremene tehnologije, kao i odgovarajućeg upravljačkog znanja, pomenuti nedostaci mogu se nadoknaditi dolaskom stranih investitora, koji bi donijeli nova znanja, iskustva i tehnološki napredak. Upravo stoga, privlačenje stranih investitora i prilagođavanje njihovim zahtjevima kroz ubrzan proces reformi, jedan je od ključnih zadataka koji стоји pred BiH i njenim entitetima.

U teorijskom smislu strane direktnе investicije smatraju se za najkvalitetniji izvor finansiranja deficitu tekućeg računa. Prednost stranih direktnih investicija u odnosu na, primjera radi, portfolio investicije, je činjenica da SDI predstavljaju mnogo stabilniji finansijski tok, obzirom na to da je investicije u osnovna sredstva daleko teže povući u odnosu na investicije u vlasničke, odnosno dužničke hartije od vrijednosti. Ovdje je moguće postaviti pitanje: Kakav je uticaj stranih direktnih investicija na platni bilans određene zemlje? Sudeći po izvještaju UN/ECE u periodu 1990-2002. godine rast stranih direktnih investicija značajno je pomogao finansiranju rastućih deficitu tekućeg bilansa tokom perioda tranzicije u zemljama istočne Evrope, jer nije bilo ugrožavanja budućeg rasta zbog predviđenih odliva. Isti izvještaj procjenjuje da je oko 86% deficitu tekućeg dijela platnog bilansa (koji se učetvorostručio tokom devedesetih) zemalja istočne Evrope, u periodu 1997-1999. godine, finansirano putem SDI (UN/ECE 2001). Primjera radi, Mađarska, Češka i Poljska, kao zemlje sa najvećim prilivima SDI tih godina, mogu su, zahvaljujući baš tim prilivima, da održe i smanje nivo svoje spoljne zaduženosti. To je, sa svoje strane, značajno poboljšalo kreditnu sposobnost ovih zemalja u očima potencijalnih investitora, što je, takođe, bio značajan benefit. Naime, bolji kreditni rejting zemlje donosi u nju veći priliv kapitala, koji treba da doprinese većem

privrednom rastu. Saglasno tome, veći potencijal privrednog rasta privlači nova kapitalna ulaganja, čime se stvara podloga za ostvarivanje dugoročnog rasta. Svakako da pomenuti efekti nastupaju sa određenim vremenskim zakašnjenjem, ali to ne umanjuje njihov značaj.

Dodatna prednost stranih direktnih investicija u odnosu na ostale investicije (kratkoročni trgovачki krediti i kratkoročni, srednjoročni i dugoročni finansijski krediti, koji stvaraju obaveze po osnovu otplate kredita) je što ne uvećavaju dug. Ono što predstavlja problem je da bez obzira što ne uvećavaju dug, SDI dovode do odliva kapitala po osnovu repatrijacije profita, što sa povećanjem kumulativnog nivoa stranih direktnih investicija i promjenama u finansijskom ciklusu stranih preduzeća može drastično uticati na strukturu tekućeg računa.

Mada se kao prednost stranih direktnih investicija u odnosu na kredite iz inostranstva obično navodi da SDI ne podrazumijevaju značajnije odlive u budućnosti koji mogu ugrožavati tekući bilans i privredni rast u tim periodima, često se zaboravlja da i SDI imaju svoje odlive, koji nastaju kao rezultat repatrijacije profita i situacija kada filijale otplaćuju anuitete po osnovu pozajmica od svojih centrala (što se tretira kao klasičan kredit).

Kada je tekući bilans u pitanju u posljednjih deset godina, pogotovo u posljednjih nekoliko, primjetan je manji spoljnotrgovinski deficit (neto izvoz) pogotovo u Republici Srpskoj, koji je u 2017. godini dostigao svoj istorijski minimum. S druge strane, deficit BiH posljednjih nekoliko godina stagnira krećući se oko 3.5 miliona evra. Ovo dalje pokazuje da se srazmerno izvozu u Bosni i Hercegovini povećava i uvoz tako da deficit spoljnotrgovinske razmjene ostaje jedan od najvećih problema BiH privrede, što pokazuje i sljedeća tabela i dijagram.

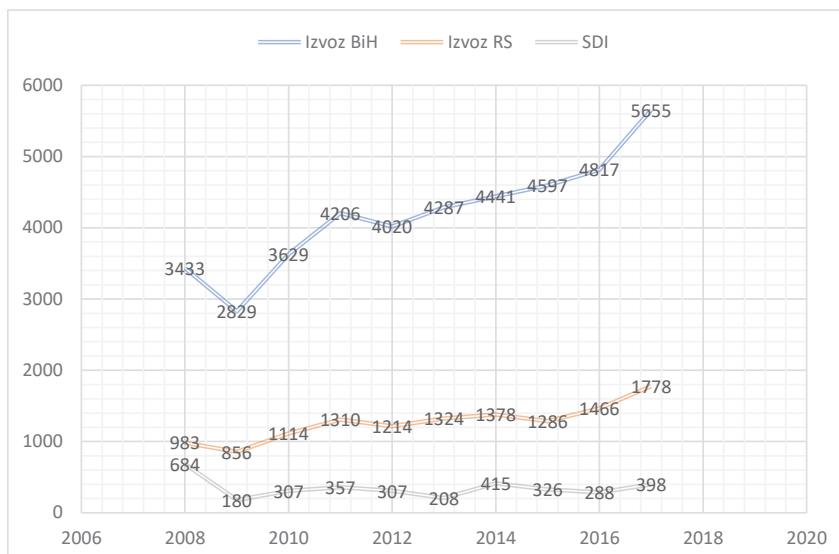
Tabela 1. Izvoz RS i BiH i tokovi SDI u BiH u milionima evra u periodu 2008 -2017. god.  
(Centralna banka BiH 2018)

Godina	Izvoz RS	Izvoz BiH	SDI
2008	983	3,433	684
2009	856	2,829	180
2010	1,114	3,629	307
2011	1,310	4,206	357
2012	1,214	4,020	307
2013	1,324	4,287	208
2014	1,378	4,441	415
2015	1,286	4,597	326
2016	1,466	4,817	288
2017	1,778	5,655	398

Iz prethodne tabele lako je uočiti da je u prethodnih deset godina došlo do povećanja izvoza, kako u Republici Srpskoj, tako i u BiH. Ako 2009. godinu uzmemosmo kao godinu u kojoj je refleksija svjetske ekonomske krize na našem području doživljela vrhunac, onda je povećanje izvoza 2017. godine u odnosu na 2008. godinu u Republici Srpskoj iznosilo oko 108% (107,78%), dok je u BiH to povećanje iznosilo oko 100% (99,89%). U pomenutom periodu, tokovi stranih direktnih investicija su stagnirali krećući se u intervalu između 180 i 415 miliona evra.

Svjetska ekonomska kriza je dobrano uticala na priliv stranih direktnih investicija u Republici Srpskoj, odnosno Bosni i Hercegovini, što se osjetilo ne samo kod nas i u regionu, već je to bio i globalni trend. Bez obzira što se svjetska ekonomija nalazi na putu oporavka, visina SDI od 684 miliona evra iz 2008. godine u sljedećih deset godina nije ni približno dostignuta i

uglavnom se svih tih godina kretala oko polovine te cifre, što se najbolje može vidjeti iz sljedećeg dijagrama.



Grafikon 2. Izvoz RS i BiH i tokovi SDI u milionima evra u periodu 2008-2017. god.

(Autor na osnovu podataka Centralne banke BiH)

Sa dijagrama je, takođe, lako zaključiti da je izvoz Republike Srpske, odnosno Bosne i Hercegovine u posljednjih deset godina rastao nezavisno od stagniranja stranih ulaganja.

Iz teorijskog ugla strane direktnе investicije mogu da utiču na rast izvoza zemlje domaćina i na posredan način jer dolazi do izvoza inostrane afilijacije. Dodatno, kao neki od posrednih načina uticaja SDI na rast izvoza mogu se navesti (Vukšić 2013, 353):

- Rast izvoznih mogućnosti domaćih kompanija usvajanjem tehnologije, novih znanja, novih proizvodnih procesa kompanije, što prije svega predstavlja rezultat veće konkurenčije u sektoru u kom je došla nova firma ili sektoru inputa kojim se snabdijeva novo preduzeće;
- Proizvodnja nove palete proizvoda od nove kompanije, a koji predstavljaju jeftinije i/ili kvalitetnije inpute u procesu proizvodnje domaćih firmi, što utiče na porast produktivnosti i konkurentnosti domaćih kompanija;
- Lobiranje nove kompanije za bolji tretman izvoza zemlje u kojoj je došlo do priliva SDI ili pružanje značajnih informacija, podatka o zemlji porijekla SDI.

Po Bubanji, kada se posmatra oblik SDI, najpovoljniji efekat na izvoz se ostvaruje u slučaju vertikalnih investicija gdje strani investitor pojedine faze u procesu proizvodnje premješta u drugu zemlju vođen niskim troškovima radne snage, geografskom blizinom, bogatstvom resursa, itd. (Travica and Jošanov and Kajan and Vidas- Bubanja and Vuksanovicg 2007). Sa druge strane, horizontalne SDI koje su motivisane obezbjeđenjem tržišta, skoro da ne doprinose povećanju izvoza, jer je u slučaju ovih investicija cilj stranog investitora da proširi tržište za svoje proizvode prodajući ih u zemlji domaćinu.

Ono što je moguće zaključiti, na osnovu izloženog, je da se impuls povećane efektivne agregatne tražnje (kao posljedica bilo priliva stranog kapitala, bilo fiskalnog impulsa) manje u Republici Srpskoj, a više u Bosni i Hercegovini, u većoj mjeri prenosi na povećanje uvoza, nego na podsticaj domaće proizvodnje, bez obzira što postoje pozitivni izvozni trendovi.

Novoizgrađeni kapaciteti, bez obzira koji dio SDI bio u pitanju, dodatno obezbeđuju bolje snabdijevanje domaćeg tržišta sa kvalitetnijom robom. Viškovi roba i usluga se izvoze pa se na taj način poboljšava i imidž zemlje domaćina. Iz teorije je poznato da države sa malim i nedovoljno razvijenim tržištima, tipa Republike Srpske, odnosno BiH, obično nisu u mogućnosti da same pokrenu proizvodnju koju obilježavaju znatni fiksni troškovi te da se ne ostvaruju efekti ekonomije obima, iako strane direktnе investicije omogućavaju zemlji domaćinu da se njena privreda (o)proba u industrijsama sa većim nivoom proizvodnje i visokim fiksnim troškovima.

Za Republiku Srpsku, odnosno BiH značajno bi bilo da poveća priliv tzv. Greenfield investicija u realni sektor, uz selektivno usmjeravanje prema granama koje mogu doprinijeti povećanju izvoza. Ove investicije pružaju veće mogućnosti za transfer strane tehnologije u domaću privredu, i otvaraju puteve za prelivanje naprednih tehnologija u ostale segmente domaće privrede. Profesionalizam kadrova koji upravljaju kompanijama u stranom vlasništvu uliva nadu da bi se i to moglo prenositi na domaća preduzeća u njihovim poslovnim kontaktima sa ovim kompanijama. Sem povećanja robnog izvoza, ulaganja u profesionalne usluge, povezane sa izvozom robe, takođe, mogu doprinijeti povećanju izvoza. Mjerama ekonomske politike treba usmjeravati SDI prema sektorima koji mogu postati okosnica izvoza u narednim godinama. Takođe, povezivanje domaćih malih i srednjih preduzeća (MSP) sa stranim kompanijama može proširiti mrežu uslužnih aktivnosti koje domaća MSP mogu izvršiti za potrebe stranih partnera.

### **3. ZAVISNOST IZVOZA REPUBLIKE SRPSKE OD STRANIH DIREKTNIH INVESTICIJA**

Strana direktna ulaganja u Republiku Srpsku ni izbliza nisu dovoljna niti su kvalitetno sektorski raspoređena. Iz teorijskog ugla Republika Srpska bi mogla da postane poželjna destinacija za strana direktna ulaganja, jer obezbeđuje osnovne uslove za profitabilnost investicionog projekta. Naime, Republiku Srpsku, pogotovo u posljednje vrijeme, karakteriše makroekonomska stabilnost ,stabilan, iako nedovoljan priliv SDI, povoljan tretman stranih investitora, stimulativna poreska politika, pozitivan odnos prema SDI, slobodan pristup tržištima jugoistočne Evrope i EU, relativno jeftina i dobro obučena radna snaga, prirodni resursi i dr. Tako da je za očekivati povećan priliv SDI u budućnosti. Svakako da bi povećan priliv SDI pozitivno uticao na povećanje proizvodnje, a tim i povećanje izvoza, odnosno smanjenje spoljnotrgovinskog deficit-a.

Na ovom mjestu ćemo potražiti zavisnost izvoza Republike Srpske od stranih direktnih investicija u posljednjih desetak godina (period od 2008. do 2018. godine) metodom proste linearne regresije.

Prosta linearna regresija se koristi za modeliranje međusobne zavisnosti između dvije promjenjive (variable) na način da se linearna jednačina prilagodi podacima. Pri tome se jedna promjenjiva smatra zavisnom, a druga eksploratornom (nezavisnom, deskriptivnom).

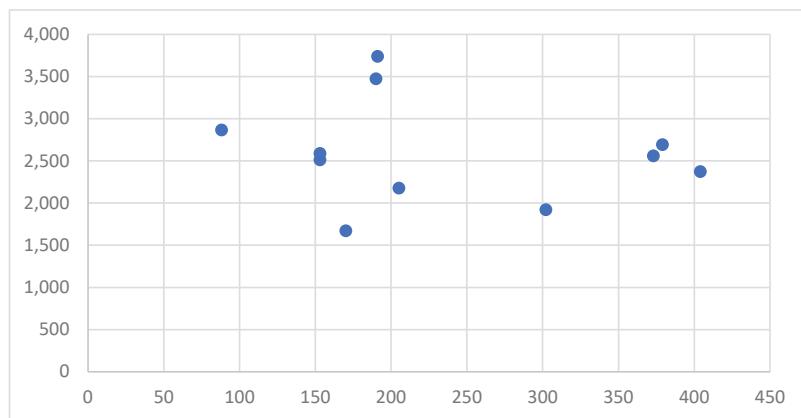
Tabela 2. Izvoz Republike Srpske i strane direktnе investicije (Zavod za statistiku Republike Srpske i Ministarstvo finansija Republike Srpske)

Godina	Izvoz RS u milionima KM	SDI u milionima KM
2008	1,922	302
2009	1,673	170
2010	2,178	205
2011	2,561	373
2012	2,373	404

2013	2,588	153
2014	2,694	379
2015	2,514	153
2016	2,866	88
2017	3,476	190
2018	3,741	191

Postojanje povezanosti ne mora da implicira da je jedna promjenjiva uzrok promjene druge, već samo da postoji neka vrsta značajne povezanosti među njima. Jedan od korisnih instrumenata za istraživanje povezanosti je tzv. prikaz parova vrijednosti u dvodimenzionom koordinatnom sistemu, odnosno kriva raspršenja.

Na sljedećem dijagramu data je kriva raspršenja.



Grafikon 3. Kriva raspršenja (Autor)

Ukoliko se na grafikonu ne vidi nikakva značajna povezanost (ukoliko su tačke nepravilno razasute po koordinatnom sistemu), linearna aproksimacija ne mora imati smisla. Iz prethodne tabele i dijagrama je lako vidjeti da je u posmatranih jedanaest godina izvoz, uglavnom, rastao, dok su strane direktne investicije, uglavnom, stagnirale i da ne postoji lako uočljiva veza između rasta izvoza i veličine SDI po pojedinim godinama. Inače, povezanost između dvije pojave može se razlikovati po jačini povezanosti. Postoji više načina određivanja najboljih parametara aproksimacijskog pravca za skup podataka dobivenih eksperimentalnim mjeranjem jedan od njih koji se i najčešće koristi je metod najmanjih kvadrata.

Tabela 31. Koeficijenti regresije po metodu najmanjih kvadrata (Autor)

SDI (x) u milijard. KM	Izvoz RS (y) u milijard. KM	xy	x <sup>2</sup>	y <sup>2</sup>
0.302	1.922	0.580	0.091	3.694
0.170	1.673	0.284	0.029	2.799
0.205	2.178	0.446	0.042	4.744
0.373	2.561	0.955	0.139	6.559
0.404	2.373	0.959	0.163	5.631
0.153	2.588	0.396	0.023	6.698
0.379	2.694	1.021	0.144	7.258
0.153	2.514	0.385	0.023	6.320

0.088	2.866	0.252	0.008	8.214
0.190	3.476	0.660	0.036	12.083
0.191	3.741	0.715	0.036	13.995
$\sum x = 2.607$	$\sum y = 28.586$	$\sum xy = 6,654$	$\sum x^2 = 0.735$	$\sum y^2 = 77.994$

Vrijednosti aritmetičkih sredina  $\bar{x}$  i  $\bar{y}$  su:

$$\bar{x} = \frac{\sum x}{n} = \frac{\sum 3.761}{11} = 0.237$$

$$\bar{y} = \frac{\sum y}{n} = \frac{\sum 25.586}{11} = 2.599$$

Ako uzmemo naš primjer onda je prosječan godišnji izvoz Republike Srpske u periodu 2008-2018. godine iznosio 2.56 milijardi KM, dok su prosječne godišnje strane direktnе investicije iznosile 237 miliona KM.

Vrijednost koeficijenata  $SP_{xy}$ ,  $SK_{xx}$ ,  $SK_{yy}$

$$SP_{xy} = \sum xy - \frac{\sum x \sum y}{n} = 6.654 - \frac{74.524}{11} = -0.121$$

$$SK_{xx} = \sum x^2 - \frac{(\sum x)^2}{n} = 0.735 - \frac{(2.607)^2}{11} = 0.117$$

$$SK_{yy} = \sum y^2 - \frac{(\sum y)^2}{n} = 77.994 - \frac{(28.586)^2}{11} = 3.707$$

Koristeći najčešće korišćenu metodu najmanjih kvadrata

$$b = \frac{SP_{xy}}{SK_{xx}} = \frac{-0.121}{0.117} = -1.035 \quad a = \bar{y} - b\bar{x} = 2.599 - (-1.035 * 0.237) = 2.84$$

Tako da je

$$y = 2.84 - 1.035x$$

Koeficijent proste linearne korelacije između dve promjenljive u uzorku, r se izračunava kao:

$$r = \frac{n \sum xy - \sum x \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} * \sqrt{n \sum y^2 - (\sum y)^2}} = \frac{SP_{xy}}{\sqrt{SK_{xx} SK_{yy}}} = \frac{-0.121}{\sqrt{0.117 * 3.707}} = -0.184$$

$$r^2 = 0.034$$

Vrijednost r = - 0.184 ukazuje da u uzorku od 11 godina postoji veoma slaba (neznatna) negativna korelaciona veza između priliva SDI i izvoza Republike Srpske, odnosno da priliv stranih direktnih investicija u posljednjih jedanaest godina nije značajnije uticao na porast izvoza Republike Srpske.

Vrijednost  $r^2$  naziva se koeficijent determinacije i ukazuje da je uticaj stranih direktnih investicija na godišnji izvoz Republike Srpske ispod 3.5% (3.4%), odnosno da statistički nije značajan.

Ovdje je važno napomenuti da su se strana direktna ulaganja u Republiku Srpsku, uglavnom, odnosila na bankarski i telekomunikacioni sektor, a ne u proizvodnju, tako da je njihov iznos imao neznatan uticaj na izvoz Republike Srpske.

Standardna greška regresije je ocjena standardne devijacije slučajne greške, s i iznosi:

$$s = \sqrt{\frac{SK_{yy} - bSP_{xy}}{n - 2}} = \sqrt{\frac{3.707 - [-1.035 * (-0.121)]}{11 - 2}} = 0.398$$

Ovakav neznatan uticaj stranih direktnih investicija na izvoz Republike Srpske bi u skorijoj budućnosti mogao biti promijenjen, jer su po novom Zakonu o stranim ulaganjima (Sl. glasnik RS 21/18) strani ulagači izjednačeni sa domaćim ulagačima i imaju ista prava i obaveze kao i domaći ulagači, a mogu i osnovati poslovni subjekt u Republici Srpskoj pod istim uslovima koji važe za domaće ulagače. Takođe, u skladu sa navedenim zakonom strani ulagači:

- Imaju pravo da investiraju i reinvestiraju dobit u bilo koji sektor privrednih i neprivrednih djelatnosti u Republici Srpskoj i to u istom obliku i pod istim uslovima propisanim zakonima Republike Srpske i BiH za domaće ulagače;
- Mogu sticati pravo svojine na nepokretnostima u skladu sa propisima o stvarnim pravima;
- Imaju pravo da vrše transfer sredstava koja nastanu kao rezultat njihovog ulaganja u Republiku Srpsku, bez ograničenja, u svakoj slobodnoj konvertibilnoj valutu;
- Mogu bez ograničavanja zapošljavati radnike iz inostranstva, ukoliko nije drugačije određeno posebnim propisima kojim se uređuju oblasti rada i zapošljavanja stranih lica.

Nadati se da će liberalizacija stranih direktnih ulaganja u skorijoj budućnosti dati ozbiljnije rezultate. Kao najatraktivnije privredne grane za direktne strane investicije u Republici Srpskoj u ovom trenutku slove: poljoprivreda i prehrambena industrija, šumarstvo i drvna industrija, metaloprerađivački sektor, turizam, rudarska industrija i građevinarstvo.

## ZAKLJUČAK

Strane direktnе investicije predstavljaju želju bilo koje zemlje, pogotovo onih koje se nalaze u fazi tranzicije pa tako i Republike Srpske, koja je u deficitu po pitanju sopstvenog kapitala, znanja, tehnologije, izvoznih kanala i dr. Pozitivna strana SDI koju svi priželjkuju je povećanje proizvodnje, rast plata, zaposlenosti, izvoza, tehničke i menadžerske sposobnosti, poreskih prihoda, prevazilaženje domaćeg monopolija i porast konkurenциje. Kada je riječ o uticaju SDI na izvoz Republike Srpske, prema dobijenim rezultatima po osnovu koeficijenta proste linearne korelacije, izračunata vrijednost  $r = -0,184$  ukazuje da u uzorku od 11 godina postoji veoma slaba negativna koreaciona veza između priliva stranih direktnih investicija i izvoza Republike Srpske, što znači da priliv investicija u posljednih 11 godina nije značajno uticao na porast izvoza iz Republike Srpske. Vrijednost  $r^2$  se naziva koeficijent determinacije i ukazuje da je uticaj stranih direktnih investicija na godišnji izvoz Republike Srpske manji od 1% (oko 0,02%), što statistički nije značajno.

Uopšteno, dobra iskorišćenost SDI u privredi zemlje zavisi od sektora gdje su one uložene, otvorenosti tržišta i njegove veličine, okruženja i nekih drugih faktora, koji su, prevashodno, rezultat ekonomskog politika. Osnovni motiv dolaska i poslovanja stranih investitora u Republici Srpskoj često nije u skladu sa razvojnim potrebama zemlje te je potrebno adekvatno pozicionirati SDI sa ekonomskim politikama i strategijama, u smislu da je potrebno preduzimati temeljne reforme poslovнog okruženja, što se u poljednje vrijeme i radi.

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## EFFECTS OF FDI IN THE EXPORT COMPONENT OF THE REPUBLIC OF SRPSKA

**Summary:** *FDIs represent the most important part of international capital flows. In the period from 2000 to date, a numerous measures and facilities, liberalized investments and transfer of capital have been made in the Republic of Srpska, with the aim to enable the greatest inflow of foreign investments. Based on the available data collected from several sources, it can be concluded that privatization was the main field through which investments in the economy of the Republic of Srpska came, which implies that there were insufficiently realized investment projects that would be of exporting nature. This paper analyzes the effect of FDI on the export of the Republic of Srpska by using free linear regression.*

**Key words:** *foreign direct investment (FDI), fiscal policy, free linear regression.*

**JEL classification:** *F21*

### INTRODUCTION

Foreign direct investment can be defined in short as investment of foreign capital by investors (companies) from one country to a company in another country in order to achieve common interests. In the literature, various, more complex ways of defining foreign direct investments can be found. Thus, according to one "foreign direct investment, they represent direct investment in a foreign company in order to obtain permanent control over the production, trade and finance of the enterprises in which they invest" (Nesterović 2015, 273). From the perspective of the investors, the presence in the desired markets, favorable conditions of supply of raw materials, labor and energy, profitable placement of products and services are inevitable factors in making a decision on investing. These factors are usually provided to investors by foreign direct investment by a host country that, from the perspective of investors, is considered to be a foreign market where the investor is deploying his business functions, thereby expanding his global network. What is important to emphasize is a possible domino effect, that is, the fact that foreign direct investment can increase the entry of other multinational companies (MNCs) that are in business relations with an initial investor and which follow it in all other markets. Namely, the successful investment of one company signals to the other MNCs that there is a favorable investment climate in the host country, and the risk of investment is reduced. Foreign direct investment stimulates domestic investment if there is complementarity in the production of domestic companies and affiliates. In such an environment, foreign affiliates and domestic companies establish stable relationships, from which domestic companies create an additional motivation for realizing new projects and investing additional funds. It is worth noting that the practice of the host country shows that the affiliates of foreign companies have a greater tendency to invest than domestic ones, thus increasing investment in the host country.

When it comes to the effects of foreign direct investment inflows, one can not emphasize the component of an investment package that is in the function of providing easier access to cross-border markets and strengthening the export activity of the host country. This is due to the fact that foreign affiliates are usually more export-oriented than domestic companies and their tendency to export increases in proportion to the length of time they conduct business on a foreign destination. Namely, in a situation where a foreign investor provides inputs for his production in the local market, FDI indirectly connects local suppliers with overseas markets where the current range of offers is placed. By engaging foreign capital in capacity building for supplying the domestic market with goods that have been previously imported and thus substituting imports, conditions are created for improving the trade balance of the host country. Providing information about their parent economies, and often lobbying for the privileged position of exporters from the country of beneficiaries of investments, multinational companies facilitate the entry and penetration of domestic producers into foreign markets, which usually increases exports, which therefore reduces the deficit of foreign trade, and increases net exports.

The effect on foreign trade, in particular on exports, is for countries in transition, such as, for example, B&H, especially important given that one of the common characteristics of these countries is a high deficit of the balance of current transactions caused by the deficit of the trade balance. There are two ways to cover this deficit: foreign borrowing, which should not rely on the already high indebtedness of countries in this region, and the inflow of foreign direct investment. Although the FDI inflows from the coverage of the deficit look much more attractive to Kovačević, the FDI does not need primarily to be looked at as the source of capital for covering this deficit, but rather on the opportunities that these investments provide in stimulating exports (Kovačević 2013, 131-162). This way, on the one hand, the deficit would be reduced, and on the other hand, the foreign exchange inflow from exports would enable the financing of the imbalance of the balance of payments.

## 1. THE EFFECTS OF DIRECT FOREIGN INVESTMENTS ON FISCAL POLICIES

Developing countries are mainly characterized by two types of fiscal policies. In such countries, certain fiscal incentives were considered the first way to stimulate private entrepreneurship in the way that certain types of incentives are available to foreign investors, to invest their production facilities in the host country. Previous practice (Šinik and Ljubojević 2017) has shown that such fiscal policy from the corner of the host country can indeed increase the inflow of foreign capital, but that those benefits for foreign investors are limited. The second segment of fiscal policy was mobilization of natural resources for the purpose of financing public expenditures. According to Krugman, whatever the prevailing economic ideology, the economic development and social progress of a less developed country largely depends on the ability of fiscal policy to generate enough revenue to finance expansive public spending programs (Krugman and Venables 1995, 866).

Experiences show that this kind of business does not bring incomes into certain areas, primarily in the fields of health, education and other social activities. On the other hand, all developing countries face the problem of rising fiscal deficits. Public expenditures are significantly higher than public revenues as a result of development programs and unexpected negative external influences that are inevitable in the time of globalization. Public revenues largely depend on the potential of taxation, and the potential of taxation of a country in general depends on five factors:

- the level of real income per resident,
- levels of inequality in the distribution of income,
- the industrial structure of the economy and the importance of certain types of economic activity,
- social, political and institutional settings in the relative power of individual sectors,

- administrative competence and integrity of state authorities.

In order to become more interesting for foreign investors, developing countries had to reduce fiscal taxation with the aim of attracting a larger volume of foreign capital. The increased inflow of foreign investments leads to shifting the IS investment curve to the IS<sub>1</sub> position, which means that a new equilibrium point (A<sub>1</sub>) has emerged. Such an evolution of events leads to an increase in domestic product and interest rates, as can be seen in the following picture.

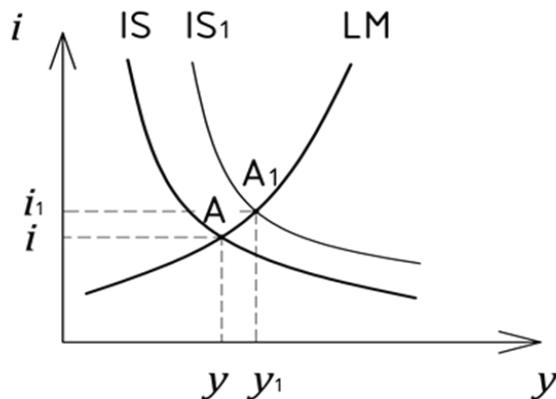


Chart 1. The impact of foreign direct investment on fiscal policy in the country that imports capital  
(Busse and Hefeker 2007, 397-415)

Fiscal policy management in this way can find its justification in the flow of foreign direct investment in order to improve the economy, regardless of some negative reflections.

When deciding on the best way to collect the necessary public revenue, various countries have managed in various ways and some general principles have been established from this practice. According to Nobel Prize winner Joseph Stiglitz, there are five acceptable characteristics of a good tax system:

- economic efficiency: the tax system should not interfere with the efficient allocation of resources;
- simplicity in the administrative view: the tax system should be simple and relatively inexpensive to implement;
- flexibility: the tax system should be able to respond easily to changed economic circumstances, even in some cases automatically;
- A politically responsible tax system should be formulated so that individuals can check what they pay and estimate how exactly this system supports their performance;
- equity: the tax system must treat different individuals fairly (Stiglitz 2003, 465).

The problems of the effects of fiscal policy on economic development are reflected in the sectoral orientation of investments in stimulating the technical and technological process through fiscal easement and exemption imposed by foreign capital. The fiscal policy of the developing country should mobilize accumulation and be referred to the fiscal mechanism in the production branches of the economy. It operates through the import of capital and technology to economic development. If there is a reduction in the taxation of the countries, it becomes attractive for attracting foreign investments and attracting already existing investment capital into fixed assets and reinvesting realized profits into new investments. What is important is that tax cuts must be carried out selectively with a focus on individual industries that want to be pointed out to the forefront with foreign investors, as the tax rate must exist for the state to collect public revenues. These revenues are invested in the

infrastructure of the state, creating the suitable business environment and financing non-profitable sectors.

Every tax reform has several predetermined objectives, the most important of which is to encourage the creation of wealth. Such a vision should contribute to reducing the overall tax burden, reducing the state's share in economic activities, achieving growth in accumulation and capital. In theory, taxation by definition limits growth in three ways:

- Excessive taxation may distort the choice between taxable and non-taxable activities,
- Excessive income taxation excludes the source of current and future production and favors current consumption and excluding savings,
- Stricter taxation of income prevents the tendency to take risks and weakens international competition (Ristić and Ristić, 2016).

In creating a taxable policy, tax incentives take center stage. Namely, without fiscal charges, foreign capital would not have a significant impact on economic development. For this reason, fiscal policy and fiscal taxation must be carefully monitored in accordance with the requirements in the economy, with the strategy, priorities of the country and foreign investors with development goals. In this way, a desirable tax structure can be created and a desirable level of public revenue can be achieved.

## 2. THE EFFECTS OF FOREIGN DIRECT INVESTMENT ON EXPORTS

Attracting foreign direct investments is a basic requirement for increasing the production and export of host countries to a level that would allow stable economic growth in that country (Duvnjak 2018), as well as successful servicing of debts, and therefore one of the main goals of the economic policy makers is creating an investment climate that favors attracting foreign investors (Šušić and Spasojević 2016, 121). This is because the inflow of funds through direct foreign investments represents not only the inflow of capital, but also the creation of a basis for increasing trade flows, economic growth and development and creating new jobs, increasing production and ultimately increasing exports. The Republic of Srpska, or B&H as a country in transition, needs to increase the inflow of foreign direct investment, as these investments, if properly targeted, would be the driver of the country's economic growth in the upcoming period. In view of the current, still low level of domestic savings from which the development of the finances should be independently financed, as well as the shortcomings of modern technology, as well as the corresponding management knowledge, the mentioned shortcomings can be compensated by the arrival of foreign investors, which would bring new knowledge, experience and technological advances. Therefore, attracting foreign investors and adapting to their demands through an accelerated reform process is one of the key tasks facing B&H and its entities.

In theory, foreign direct investment is considered to be the best source of financing the current account deficit. The advantage of foreign direct investments in relation to, for example, portfolio investment is the fact that FDIs represent a much more stable financial flow, since investments in fixed assets are far more difficult to withdraw than investments in equity or debt securities. Here it is possible to ask the question: What is the impact of foreign direct investments on the balance of payments of a particular country? According to the UN / ECE report in the period 1990-2002. the growth of foreign direct investments significantly helped finance the growing current account deficit during the transition period in the countries of Eastern Europe, as there was no threat to future growth due to the planned outflows. The same report estimates that around 86% of the current account deficit (which has been tripled during the 1990s) of Eastern European countries in the period 1997-1999 was financed through FDI (UN/ECE 2001). For example, Hungary, the Czech Republic and Poland, as the countries with the highest inflows of FDI in those years, could, thanks to such inflows, maintain and reduce their level of external indebtedness. This, in turn, significantly improved the creditworthiness of these countries in the eyes of potential investors, which was also a

significant benefit. Namely, a better credit rating of a country brings a higher inflow of capital into country itself which should contribute to greater economic growth. Accordingly, the higher potential of economic growth attracts new capital investments, thus creating a basis for achieving long-term growth. Certainly, the mentioned effects occur with a certain time delay, but this does not diminish their significance.

The additional advantage of foreign direct investment in relation to other investments (short-term trade credits and short-term, medium-term and long-term financial loans that create liabilities based on repayment of loans) is that they do not increase the debt. What is the problem is that, regardless of the fact that they do not increase the debt, FDIs lead to capital outflows based on repatriation of profits, which with the increase in the accumulative level of foreign direct investments and changes in the financial cycle of foreign companies can drastically affect the structure of the current account.

Although the advantage of foreign direct investment in relation to loans from abroad is usually stated that FDI does not imply significant outflows in the future that could jeopardize the current balance and economic growth in these periods, it is often forgotten that FDIs also have their outflows that result from repatriation profit and situation when affiliates repay annuities based on loans from their own central offices (which is treated as a classic loan).

When the current balance is in question for the last ten years, especially in the last few years, a smaller foreign trade deficit (net exports) is notable, especially in the Republic of Srpska, which has reached its historic minimum in 2017. On the other hand, the BiH deficit has stagnated over the past few years, moving around 3.5 million Euros. This further shows that the proportionate exports to Bosnia and Herzegovina are also increasing, so that the foreign trade deficit remains one of the biggest problems of B&H economy, as shown in the following table and diagram.

Table 1. Exports of RS and B&H and FDI flows in B&H in millions of Euros in the period 2008 - 2017. (Central Bank of B&H)

Year	Export of RS	Export of B&H	FDI
2008	983	3,433	684
2009	856	2,829	180
2010	1,114	3,629	307
2011	1,310	4,206	357
2012	1,214	4,020	307
2013	1,324	4,287	208
2014	1,378	4,441	415
2015	1,286	4,597	326
2016	1,466	4,817	288
2017	1,778	5,655	398

From the previous table, it is easy to notice that in the past ten years there has been an increase in exports, both in the Republic of Srpska and in B&H. If we take 2009 as the year when the reflection of the world economic crisis peaked in our area, the increase in exports in 2017 compared to 2008 in the Republic of Srpska was around 108% (107.78%), while in B&H it was about 100% (99.89%). In the mentioned period, the flows of foreign direct investments stagnated, ranging between 180 and 415 million Euros.

The global economic crisis has had a notable influence on the inflow of foreign direct investments in the Republic of Srpska, that is, Bosnia and Herzegovina, which was felt not only in our country and in the region, but it was also a global trend. Regardless of the fact that

the world economy is on its way to recovery, the level of FDI of 684 million Euros from 2008 during the last ten years has not been nearly reached, and it has generally been around half of the highest level all these years, which is best seen in the next diagram.

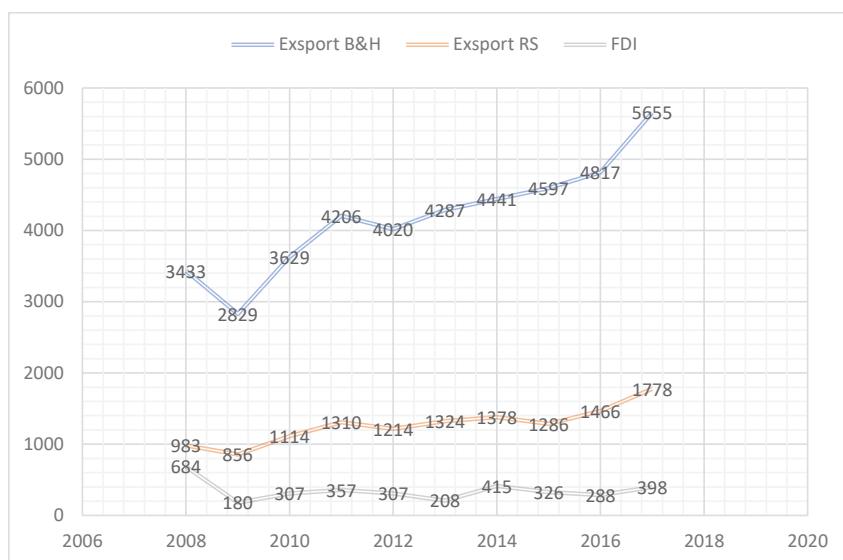


Chart 2. Export of RS and B&H and FDI flows in millions of Euros in the period 2008 -2017.  
(Author based on the data of the Central bank B&H)

It is also easy to conclude from the diagram that the export of the Republic of Srpska, or Bosnia and Herzegovina, have grown in the last ten years, regardless of the stagnation of foreign investments.

From the theoretical point of view, foreign direct investment may affect the growth of the export of the host country in an indirect way, as foreign affiliates are exported. In addition, as some of the indirect ways of influencing FDI on export growth can be reported (Vukšić 2013, 353):

- The growth of the export opportunities of the domestic companies by adopting technology, new knowledge, new production processes of the company, which represents the result of greater competition in the sector where the new company has arrived or the input sector to supply the new company;
- production of a new range of products from a new company, which are cheaper and / or better inputs in the process of production of domestic companies, which affects the increase in productivity and competitiveness of domestic companies;
- lobbying a new company to better treat the export of a country where FDI inflows or providing important information, data on the country of origin of FDI

According to Bubanj, when looking at the FDI format, the most favorable effect on exports is achieved in the case of vertical investments where the foreign investor transfers some phases in the production process to another country driven by low labor costs, geographical proximity, resource wealth, etc. (Travica and Jošanov and Kajan and Vidas- Bubanja and Vuksanovicg 2007). On the other hand, horizontal FDIs that are motivated by market securing almost do not contribute to the increase in exports, as in the case of these investments, the foreign investor's goal is to expand the market for their products by selling them in the host country.

What is possible to conclude on the basis of the above is that the impulse of the increased effective aggregate demand (as a consequence of any inflow of foreign capital from a fiscal impulse) is less in the Republic of Srpska, and more in Bosnia and Herzegovina, to a large extent transfers to an increase in imports rather than an incentive to domestic production, regardless of the fact that there are positive export trends. Newly built capacities, regardless of which part of FDI was in question, additionally provide better supply of domestic markets with better quality goods. Excess goods and services are exported, thus improving the image of the host country. It is known from the theory that countries with small and insufficiently developed markets, such as the Republic of Srpska, or B&H, are usually not able to start production themselves, which are characterized by significant fixed costs, and that the effects of economies of scale are not realized, although foreign direct investments allow the host country that its economy is tested in industries with a higher level of production and high fixed costs.

For the Republic of Srpska, or B&H, it would significantly increase the influx of the so-called Greenfield investment in the real sector, with selective targeting towards branches that can contribute to increased exports. These investments provide greater opportunities for transferring foreign technology to the domestic economy, and open up ways to spill advanced technologies into other segments of the domestic economy. The professionalism of personnel managing foreign-owned companies inspires hope that this could be transferred to domestic companies in their business contacts with these companies. Apart from the increase in merchandise exports, investment in professional services related to the export of goods can also contribute to the increase in exports. Measures of economic policy should direct FDI towards sectors that can become the backbone of exports in the coming years. Also, connecting local SMEs with foreign companies can expand the network of service activities that domestic SMEs can perform for the needs of foreign partners.

### **3. DEPENDENCY ON EXPORT OF THE REPUBLIC OF SRPSKA FROM FOREIGN DIRECT INVESTMENTS**

Foreign direct investment in the Republic of Srpska is neither adequate nor high quality sector-wide distributed. From a theoretical point of view, the Republic of Srpska could become a preferred destination for foreign direct investment, as it provides basic conditions for the profitability of an investment project. Specifically, the Republic of Srpska is characterized by macroeconomic stability in the last period, although the insufficient FDI inflow, favorable foreign investors' treatment, stimulative tax policy, positive attitude towards FDI, free access to Southeast European and EU markets, relatively cheap and well-trained workforce, natural resources etc, so it is expected to increase the FDI inflow in the future. Surely an increased FDI influx would positively affect the increase in production, and therefore the increase in exports, respectively, it would positively affect the reduction of foreign trade deficit.

In this place we will look for the dependence of the Republic of Srpska exports from foreign direct investments in the last ten years (period from 2008 to 2018) by the method of free linear regression.

Free linear regression is used to model interdependence between two variables in a way that the linear equation is adjusted to the data. In doing so, one variable is considered dependent, and the other is exploratory (independent, descriptive).

Table 2. Export of Republic of Srpska and Foreign Direct Investment (Statistical Office of the Republic of Srpska and the Ministry of Finance of the Republic of Srpska)

Year	Export of RS in millions of BAM	FDI in millions of BAM
2008	1,922	302
2009	1,673	170
2010	2,178	205
2011	2,561	373
2012	2,373	404
2013	2,588	153
2014	2,694	379
2015	2,514	153
2016	2,866	88
2017	3,476	190
2018	3,741	191

The existence of connection does not necessarily imply that one variable is the cause of the change of the other, but only that there is some kind of significant connection between them. One of the useful tools for researching connectivity is the so-called. displaying pairs of values in a two-dimensional coordinate system, or the scatter curve.

The following diagram shows the diffusion curve

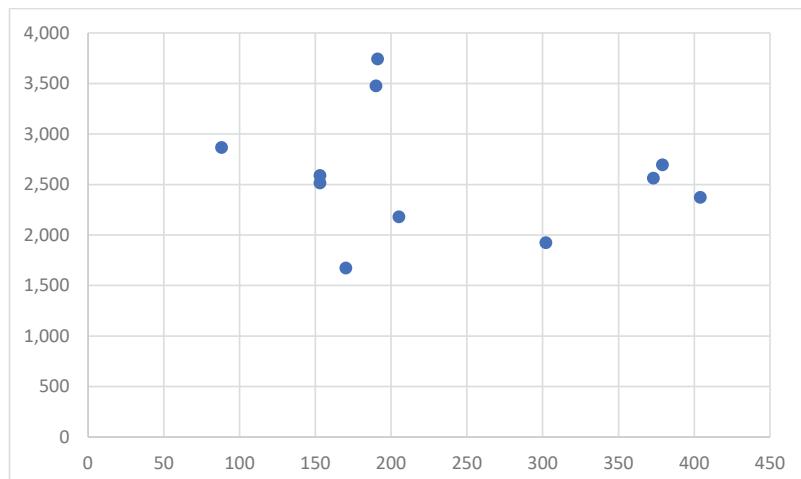


Chart 3. Scattering curve (Author)

If there is no significant connection on the graph (if the points are incorrectly distributed by the coordinate system), the linear approximation does not make sense. It is easy to see from the previous table and diagram that exports in the observed eleven years have generally grown, while foreign direct investments have mostly stagnated and there is no easily visible link between export growth and FDI size through particular years. Otherwise, the connection between the two phenomena can vary by the strength of the connection. There are several ways of determining the best parameters for the approximate direction for a set of data obtained by experimental measurement, one of which is most commonly used is the least squares method.

Table 3. Regression coefficients by the method of renting squares (Author)

FDI (x) in billions of BAM	Export RS (y) in billions of BAM	xy	x <sup>2</sup>	y <sup>2</sup>
0.302	1.922	0.580	0.091	3.694
0.170	1.673	0.284	0.029	2.799
0.205	2.178	0.446	0.042	4.744
0.373	2.561	0.955	0.139	6.559
0.404	2.373	0.959	0.163	5.631
0.153	2.588	0.396	0.023	6.698
0.379	2.694	1.021	0.144	7.258
0.153	2.514	0.385	0.023	6.320
0.088	2.866	0.252	0.008	8.214
0.190	3.476	0.660	0.036	12.083
0.191	3.741	0.715	0.036	13.995
$\sum x = 2.607$	$\sum y = 28.586$	$\sum xy = 6,654$	$\sum x^2 = 0.735$	$\sum y^2 = 77.994$

Source: Author based on data from several sources (Statistical Office of the Republic of Srpska and the Ministry of Finance of the Republic of Srpska)

The values of the arithmetic meanings  $\underline{x}$  and  $\underline{y}$  are:

$$\bar{x} = \frac{\sum x}{n} = \frac{3.761}{11} = 0.237$$

$$\bar{y} = \frac{\sum y}{n} = \frac{25.586}{11} = 2.599$$

If we take our example then the average annual export of the Republic of Srpska in the period 2008-2018 is 2.56 billion of BAM, while the average annual foreign direct investments amounted to 237 million of BAM.

Value of the coefficients  $SP_{xy}$ ,  $SK_{xx}$ ,  $SK_{yy}$

$$SP_{xy} = \sum xy - \frac{\sum x \sum y}{n} = 6.654 - \frac{74.524}{11} = -0.121$$

$$SK_{xx} = \sum x^2 - \frac{(\sum x)^2}{n} = 0.735 - \frac{(2.607)^2}{11} = 0.117$$

$$SK_{yy} = \sum y^2 - \frac{(\sum y)^2}{n} = 77.994 - \frac{(28.586)^2}{11} = 3.707$$

Using the most commonly used method of the smallest squares

$$b = \frac{SP_{xy}}{SK_{xx}} = \frac{-0.121}{0.117} = -1.035 \quad a = \underline{y} - b\underline{x} = 2.599 - (-1.035 * 0.237) = 2.84$$

So it is

$$y = 2.84 - 1.035x$$

The coefficient of free linear correlation between the two variables in the sample, r is calculated as:

$$r = \frac{n \sum xy - \sum x \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} * \sqrt{n \sum y^2 - (\sum y)^2}} = \frac{SP_{xy}}{\sqrt{SK_{xx} SK_{yy}}} = \frac{-0,121}{\sqrt{0,117 * 3,707}} = -0,184$$

$$r^2 = 0,034$$

Value  $r = -0.184$  indicates that in the sample of 11 years, there is a very weak (insignificant) negative correlation between the FDI inflows and the export of the Republic of Srpska, ie that the inflow of foreign direct investments in the last eleven years did not significantly affect the growth of exports of the Republic of Srpska.

The value of  $r^2$  is called the coefficient of determination and indicates that the impact of foreign direct investments on the annual export of the Republic of Srpska is below 3.5% (3.4%), that is statistically not significant.

It is important here to mention that foreign direct investments in the Republic of Srpska mainly relate to banking and telecommunication sector, and not to production, so that their amount has had a minor impact on the export of Republika Srpska.

The standard error of regression is the estimate of the standard deviation of the random error,  $s$  and is:

$$s = \sqrt{\frac{SK_{yy} - bSP_{xy}}{n-2}} = \sqrt{\frac{3.707 - [-1.035 * (-0.121)]}{11-2}} = 0.398$$

Such a small influence of foreign direct investments on the export of the Republic of Srpska could be changed in the near future because, according to the new Law on Foreign Investments (Official Gazette RS 21/18), foreign investors are equated with the domestic investors and have the same rights and obligations as domestic investors, and they can also establish a business entity in the Republic of Srpska under the same conditions that apply to domestic investors. Also in accordance with the above law foreign investors:

- have the right to invest and reinvest profit in any sector of economic and non-commercial activities in the Republic of Srpska, in the same form and under the same conditions prescribed by the laws of Republika Srpska and B&H for domestic investors;
- they can acquire property rights in real estate in accordance with the regulations on real rights;
- have the right to transfer incurred funds as a result of their investment in the Republic of Srpska, without limitation, in any free convertible currency
- they may, without limitation, employ workers from abroad, unless otherwise specified by special regulations governing the areas of work and employment of foreign persons.

It is hoped that the liberalization of foreign direct investment in the near future will give more serious results. As the most attractive sectors for foreign direct investments in the Republic of Srpska, at the moment are the following: agriculture and food industry, forestry and wood industry, metalworking sector, tourism, mining and construction.

## CONCLUSION

Foreign direct investments represent the desire of any country, especially those that are in the transition phase, as well as Republic of Srpska, which is in deficit in terms of its own capital, knowledge, technology, export channels, etc. The positive side of FDI, which everyone wants, is to increase production, increase salaries, employment, exports, technical and management training, tax revenues, overcoming domestic monopoly and the increase of competition. When it comes to the impact of FDI on exports of the Republic of Srpska according to the obtained results based on the coefficient of free linear correlation, the calculated value  $r = -0.184$  indicates that in the sample of 11 years there is a very poor negative correlation between the inflow of foreign direct investments and exports of Republic of Srpska, which means that the inflow of investments in the last 11 years did not significantly affect the growth of exports from the Republic of Srpska. The value of  $r^2$  is called the coefficient of determination and indicates that the impact of foreign direct investments on the annual export of the Republic of Srpska is less than 1% (about 0.02%), which is statistically not significant.

Generally, the good utilization of FDI in the country's economy depends on the sector where they are invested, the openness of the market and its size, the environment and some other factors that are primarily the result of economic policy. The basic motive for the arrival and operation of foreign investors in the Republic of Srpska is often not in line with the development needs of the country, and it is necessary to position the FDI with economic policies and strategies in the sense that it is necessary to undertake fundamental reforms of the business environment, which has lately been done.

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## EFIKASNOST EKOLOŠKIH POREZA U EVROPSKOJ UNIJI

**Rezime:** *U ovom istraživanju na osnovu fundamentalnih postavki empirijskih nalaza drugih autora koji su istraživali i testirali efikasnost ekoloških poreza, odnosno njihovu izdašnost te dokazivanjem novih saznanja iz ove oblasti nastojaće se dati teorijski doprinos. Uzimajući u obzir nalaze do kojih su drugi autori došli i nova saznanja do kojih se došlo u radu definisano je sljedeće istraživačko pitanje na koje će se pokušati dati odgovor:*

*Da li uvođenje ekoloških poreza u zemljama EU ima efekte na smanjenje zagađenosti, smanjenje emisije CO<sub>2</sub>, smanjenje proizvodnje i potrošnje energije?*

*Odgovorom na ovo pitanje ocijeniće se da li su ekološki porezi u EU efikasni. Kako bi se ova povezanost ispitala i testirala, korišćeni su dostupni sekundarni podaci o ekološkim porezima i zagađenju u EU. Podaci su preuzeti sa zvanične statistike EU, Eurostat, za period od 2007. godine do 2015. godine te su podaci i dostupni u ovoj bazi.*

*Nakon prikupljanja i obrade podataka, metodom korelacije i regresije testirana je povezanost između ukupnih ekoloških poreza prikupljenih na nivou EU, koji predstavljaju nezavisnu varijablu i potrošnje energije po domaćinstvu, emisije CO<sub>2</sub> i proizvodnje primarne energije, koji predstavljaju zavisne varijable. U radu je ispitano da li veći prihodi po osnovu ekoloških poreza smanjuju potrošnju energije i emisiju štetnog CO<sub>2</sub> u prirodu. Primjenom metode korelacije i regresije došlo se do zaključka da su u EU, u periodu od 2007. godine do 2015. godine, ekološki porezi uticali na smanjenje proizvodnje i potrošnje energije kao i emisiju CO<sub>2</sub>.*

**Ključne riječi:** *ekološki porezi, emisija, Evropska unija, zagađenje*

**JEL klasifikacija:** *H23*

### UVOD

Ekološki porezi predstavljaju savremeni oblik poreza, koji se uvodi poreske sisteme, a za cilj imaju uticaj na ponašanje privrednih subjekata, ali i fizičkih lica prema životnoj sredini. Tačnije, uvođenje ekoloških poreza ima za cilj da spriječi pogoršanje čovjekove životne sredine, okoliša. Intenzivna upotreba prirodnih resursa posljednjih dekada ostavila je trag čovjeka na zemlji, koji se ogleda kroz potrošene i uništene prirodne resurse. Upravo iz tih razloga sve više država poklanja pažnju upravljanju i zaštiti životne sredine. Sve zemlje EU su implementirale određene instrumente, ekološke poreze, nakande i slične namete sa ciljem da se uspostavi i implementira EU politika okoliša.

Prva zemlja u Evropi koja je uvela ekološke poreze bila je Švedska, koja je ove poreze implementirala 1990. godine. Primarna svrha je bila da se stimuliše zaposlenost. Ključni princip ovih reformi bio je usmjerjen ka reduciraju poreza na rad (Heine i drugi 2012). Nekoliko godina nakon ovih mjera, počinju se uvoditi porezi na životnu sredinu i u drugim zemljama EU. Prva reforma u ovom domenu je implementirana u aprilu 1999. godine, dok su naredni koraci poduzeti od 2000. do 2003. godine. Primaran cilj uvođenja ovih poreza u Njemačkoj bio je da se smanji potrošnja energije i štetne emisije gasova u prirodu, kao i da se promovišu nove tehnologije te da se više investira u inovacije. Prihodi od ovih poreza su

korišćeni kao doprinos penzijskom osiguranju (Bach i drugi 2002). Ujedno, ovim mjerama je kreiran značajno veliki broj novih poslova (oko 250.000 u 2003. godini), odnosno rast od oko 0,75% (European Environment Agency 2011). Analizirajući ekonomsku literaturu, koja izučava okvir ekoloških poreza, primjećuje se da se ovi porezi uvode uglavnom sa ciljem da se izbjegnu i prevaziđu problemi u životnoj sredini, poput zagađenja ili klimatskih promjena. Takvi instrumenti su klasifikovani kao mehanizam koji je zasnovan na podsticajima, jer se tvrdi da porezi stvaraju podstrek za kompanije, pojedince, agente da se uzdrže od zagađenja iznad nivoa koji je „društveno prihvatljiv“ internalizujući eksterne troškove. Ovi porezi mogu da budu mnogo efikasniji nego tzv. komandno-kontrolni mehanizmi, dok administrativni troškovi ovih poreza teže da budu niži.

Zagađenost je primjer negativne eksternalije koja treba da bude korigovana, pri čemu porezi, takse i naknade mogu uticati na zagađivače da troškove zagađenja internalizuju te da ih obuhvate kroz cijene njihovih proizvoda i usluga, čime ih prenose na konačne kupce. To znači da bi potrošači, zbog većih cijena, manje koristili takve proizvode, što će značiti i njihovu slabiju proizvodnju. Ipak, u realnosti ove debate i tokovi su mnogo složeniji. Nije jednostavno dostići društveno optimalan ishod i ne postoji jasna formula za uspostavljanje efikasne poreske stope (Parry i Small 2004). Takođe, pojedine studije su pokazale da ekološki porezi mogu imati i neke negativne i neželjene posljedice. Tako, na primjer (Wier i drugi 2005), dolaze do zaključka da ekološki porezi u Danskoj imaju neželjene posljedice u smislu distributivnog efekta, te su se ovi porezi pokazali regresivnim. Do sličnih nalaza dolaze i autori (Brannlund i Nordstrom 2004), potom, (West i Williams 2004) na primjerima Švedske i SAD-a. Ovakvi nalazi jačaju važnost kompenzatorskog mehnizma koji treba da se usvoji uporedno sa uvođenjem ovih poreza.

Ekološki porezi imaju i političke troškove koji komplikuju njihovu implementaciju. Uprkos tome, zemlje su uvodile ove poreze, iako njihovo uvođenje nije bilo zbog razloga održavanja životne sredine, ali su sa njima postupali slično kao sa porezima za životnu sredinu. Jedan od najčešćih oblika ovih poreza jesu porezi na korišćenje fosilnih goriva (nafta i benzin) koji su široko rasprostranjeni, često zbog toga što osiguravaju visoki nivo fiskalnih prihoda (Miller i Vela 2013).

Efikasnost i distribucijski efekti ovih poreza su u mnogim studijama analizirani i istraženi. Ipak, pored toga, ekološki porezi su stalno ograničavajući agenti u ekonomiji, koji mogu uticati na potrošnju fosilnih goriva i potrošnju drugih zagađivača.

U ovom istraživanju daje se pregled empirijskih nalaza drugih autora, koji su istraživali i testirali efikasnost ekoloških poreza, odnosno njihovu izdašnost. Uzimajući u obzir nalaze do kojih su drugi autori došli, definisemo sljedeće istraživačko pitanje na koje ćemo pokušati dati dogovor:

- Da li uvođenje ekoloških poreza u zemljama EU smanjuje zagađenost izraženu kroz smanjenje emisije CO<sub>2</sub>, smanjenu proizvodnju i potrošnju energije?

Odgovorom na ovo pitanje ocijenićemo da li su ekološki porezi u EU efikasni. Poreski oblici kao i poreske stope ekoloških poreza variraju od zemlje do zemlje.

Dok neke zemlje uvođe visoke stope ovih poreza, kao dio njihove ekološke politike, druge mogu davati visoke subveznice za korišćenje fosilnih goriva ili korišćenje nekih drugih zagađivača, odnosno mogu se ponašati potpuno suprotno (Miller i Vela 2013). Ove razlike se vrlo lako prepoznaju kada se poredi nivo prihoda po osnovu ekoloških poreza. Ukoliko se analiziraju dostupna istraživanja o efikasnosti ekoloških poreza može se primijetiti da postoje nalazi koji potvrđuju njihovu efikasnost, odnosno dokazuju da uvođenje poreza na životnu sredinu može biti način za efikasno kontrolisanje zagađenja, iako postoje i drugaciji nalazi. Vođeni ovim nalazima, odlučili smo da istražimo stepen izdašnosti ekoloških poreza u zemljama EU, odnosno da istražimo da li ekološki porezi u EU utiču na smanjenje zagađenosti.

## 1. METODOLOGIJA

Prilikom istraživanja i sačinjavanja istraživanja korišćeno je nekoliko naučnih metoda istraživanja. Pimjenu je našla induktivno-deduktivna metoda, koja predstavlja metodu zaključivanja i dokazivanja (Duvnjak 2018). Induktivna metoda predstavlja sistemsku primjenu induktivnog načina zaključivanja, kojim se na temelju analize pojedinačnih činjenica dolazi do zaključka o opštem sudu te se od zapažanja konkretnih pojedinačnih slučajeva dolazi do opštih zaključaka. Deduktiva metoda predstavlja sistemsku primjenu deduktivnog načina zaključivanja u kojem se iz opštih sudova izvode posebni i pojedinačni zaključci.

Metoda analize je, takođe, u istraživanju našla primjenu. Ovdje se radi o postupku naučnog istraživanja kroz raščlanjivanje složenih pojmove, sudova i zaključaka na njihove jednostavnije sastavne dijelove i elemente.

U istraživanju je primijenjena i komparativna metoda, kojom se uočavaju sličnosti, zajednička obilježja ili različitosti među događajima, pojavama ili objektima. Prilikom obrade podataka primijenjena je statistička metoda korelacije i regresije.

Kako bi se odgovorilo na postavljeno istraživačko pitanje, prikupljeni su dostupni sekundarni podaci sa zvanične statistike Eurostat-a. Preuzeti su podaci o ukupnoj emisiji CO<sub>2</sub> za sve zemlje EU kao i za prikupljene poreze po osnovu emisije EO<sub>2</sub> na nivou EU. Emisija CO se posmatra kroz tri varijable i to:

- Potrošnja energije po domaćinstvu na nivou EU;
- Ukupna emisija CO<sub>2</sub> za sve zemlje EU;
- Proizvodnja primarne energije na nivou EU.

Analizirani period je od 2007. godine do 2015. godine. Podaci su obrađeni primjenom statističke metode korelacije i regresije. Nezavisnu varijablu predstavljaju prikupljeni ekološki porezi na nivou EU tokom analiziranog perioda, dok su zavisne varijable potrošnja energije po domaćinstvu na nivou EU, ukupna emisija CO<sub>2</sub> za sve zemlje EU i proizvodnja primarne energije na nivou EU. Korelacijom se ispituje povezanost između analiziranih varijabli, dok se regresijom ispituje jačina veze. Ključno je ispitati da li veći prihodi po osnovu ekoloških poreza smanjuju potrošnju energije i emisiju štetnog CO<sub>2</sub> u prirodu.

## 2. REZULTATI ISTRAŽIVANJA

### 2.1. Pregled literature

#### 2.1.1. Razvoj politike ekoloških poreza u EU

Ekonomski instrumenti, uključujući i politiku oporezivanja, mogu da pomognu kreatorima politika na putu zadovoljenja ciljeva koji se postavljaju u politici životne sredine. Efikasnost ekonomskog instrumenta zavisi od izabranih instrumenata koji se implementiraju (Costantini i Mazzanti 2012). EU je svjetski lider u projektovanju, pristupanju i implementiranju striktnih politika okoliša (Costantini i Mazzanti 2012). Uprkos tome, pojavile su se brojne zabrinutosti i potencijalni neželjeni efekti uticaja poreske reforme i uvođenja poreza na životnu sredinu po zaposlenost, distribuciju dohotka, ekonomski rast i izvoz. Efikasnost uvođenja poreza na životnu sredinu zavisi od nekoliko komponenti: poreske baze, poreske stope, poreske politike (Costantini i Mazzanti 2012).

Dizajniranje poreza na okolinu (odnosno primjena poreskih stopa, način primjene i širina obuhvata), kao i njihova implementacija, su različiti među EU zemljama. Razlike među državama su najčešće rezultat pristupa koji se primjenjuje. Neke države se fokusiraju na suženu poresku bazu, dok ostale usvajaju mnogo širu bazu (Institute for European Environmental Policy 2013).

Na primjer, većina EU zemalja primjenjuje poreze na automobile, odnosno na potrošnju goriva, što je jedan od najvažnijih elemenata okolinske politike, kojom se nastoji dostići ciljani nivo u klimatskoj politici. Litvanija i Estonija su dvije zemlje koje nisu primijenile poreze na vozila. Poljska i Bugarska koriste poreze na vozila, ali bez diferencijacije u odnosu na štetnu emisiju CO<sub>2</sub>. Polazeći od toga, ove četiri zemlje, kako smatra Evropska komisija, mogu da prošire njihovu poresku bazu, uključujući i poreze na vozila u njihov poreski sistem. Takođe, to bi njima pomoglo i prilikom redukcije misije CO<sub>2</sub> iz vozila.

Isti ekološki porezi, kao i porezi na emisiju CO<sub>2</sub>, bi trebali biti primjenjeni prema svim poreskim obveznicima i na sve energetske proizvode, sa ciljem da se osigura efektivnost ekonomskog sektora.

U svakom slučaju, praksa je među zemljama i poreskim modelima drugačija. Značajno različita primjena ekoloških poreza među zemljama članicama EU zapravo pokazuje da u ovom segmentu ne postoji harmonizacija (Kurtinaitytė-Venediktovienė et al. 2014).

Evolucija ekoloških poreza u EU je jedna od ključnih, odnosno jedna od najvažnijih pitanja u dijelu pristupa i efikasnosti politike životne sredine. Tabela broj 1. pokazuje razvoj politike ekoloških poreza u posljednje četiri dekade u EU.

Tabela 1. Hronološki tok poreza na okolinu (Kurtinaitytė-Venediktovienė et al. 2014)

Korisnički troškovi					
Namjenski troškovi					
Fiskali porezi na okolinu					
Ekološke poreske reforme					
Zelene poreske provizije					
Strategija EU 2020					
<i>Godine</i>	1970	1980	1990	2000	2020

Korisničke naknade i namjenski toškovi su preovladavali do sredine XX vijeka, što predstavlja inicijalne korake ekološke politike. Tokom perioda 1990-2000. godine, fokus je pomjeren na fiskalne poreske okvire i ekološke poreze, ekloške reforme. Dva ključna cilja ovih aktivnosti bila su promovisanje javnih i političkih diskusija o životnoj sredini i ekonomskoj značajnosti, kao i korišćenje komunikacijskih aktivnosti sa ciljem da se razvije sveobuhvatni okvir poreske reforme u domenu životne sredine. U tom kontekstu „zelene poreske komisije“ su imale značajnu ulogu u podršci ovog sistema u mnogim državama (European Environment Agency 2010). Od 2010. godine sve se snažnije naglašava pomjerenje ka EU strategiji 2020. Primaran cilj strategije EU 2020 jeste uključivanje ekonomskih, društvenih i agende životne sredine u jedan zajednički uspješan mod. Ova strategija zasnovana je na sljedećem (Council of the European Union 2010):

- Stopa zaposlenosti 75% radno sposobnog stanovništva;
- 3% EU GDP-ja treba da se investira u istraživanje i inovacije;
- 20/20/20 je klimatski i energetski cilj (smanjenje emisije gasova sa efektom staklene bašte za najmanje 20%, udio finalne potrošnje energije iz obnovljivih izvora da se poveća za 20% i energetski zadovoljavajuća stopa od 20%);
- Poboljšanje nivoa obrazovanja (smanjenje broja onih koji napuštaju osnovno obrazovanje i povećan udio građana koji su završili tercijalno ili neko ekvivalentno obrazovanje);

- Pomocija socijalne inkluzije, uključujući i redukciju siromaštva.

### *2.1.2. Teškoće u implementiranju ekoloških poreza*

Barijere u implementiranju ekoloških poreza su, prema nekim studijama, uglavnom kognitivne i bhevioralne (Dresner i drugi 2006). Ovi nalazi pokazuju da je sam termin „porez“ percipiran u negativnoj konotaciji te da ima i takve efekte po javnu percepciju i prihvatljivost kada je u pitanju ekološki okvir.

Do sličnih zaključaka dolaze i drugi autori (McCaffery i Baron 2003) koji su u istraživanju testirali sam termin „porez“ te su zaključili da uvijek, kada se nešto označava porezom, to često izaziva negativan stav ljudi prema tome.

Jedno istraživanje koje je provedeno (Kallbekken i Aasen 2010) imalo je za cilj da uporedi šeme ekološih poreza sa različitim opcijama preraspodjele prihoda. Rezultati istraživanja ukazuju da ne postoje značajne razlike u popularnosti među šemama zbog iznenađujuće velikog broja glasova protiv poreza. Štaviše, skoro polovina glasača je izrazila protivljenje poreskim šemama, koje bi, čak, isle i u njihovu materijalnu korist i što bi sveukupnu dobrobit povećalo. Pored ovakvih neprihvatanja poreza, još jedna barijera koja se pojavljuje jeste barijera političke prirode. Po pitanju političkih determinanti, mnoge studije naglasile su važnost povjerenja vlade u prihvatljivost i uvođenje poreza na okoliš. Clinch (Clinch 2006) je proveo istraživanje u kojem je analizirao političko pitanje poreza na okoliš te je pokazano da postoji nedostatak povjerenja od strane Vlade, što je ključna prepreka u svim zemljama kada je u pitanju uvođenje ekoloških poreza, što je posebno izraženo u slučaju kada se analiziraju prihodi prikupljeni kroz oporezivanje.

Uprkos postojećem teorijskom konsenzusu o ekonomskim i ekološkim racionalnostima u pogledu ekoloških poreza, implementacija ovog poreza i zakona, kao i rezultati njihove primjene, su i dalje limitirani brojnim problemima političke i javne prihvatljivosti. Zaista, mnoge inicijative, koje su bile usmjerene ka oporezivanju emisije CO<sub>2</sub> kroz poreze, nisu imale dovoljnju podršku javnosti i političara zbog međusobno suprotnih stavova – dok se jedni protive povećanju poreza i povećanju sredstava za implementiranje klimatskih politika, drugi izražavaju sumnju u efektivnost ovog fiskalnog instrumenta (Sénit, 2012).

Ograničenja efikasne primjene, implementacije ekoloških poreza su primarno, kognitivne prirode i povezani su time kako kreatori politika tradicionalno zamišljaju oporezivanje (koje je primarno vođeno budžetskim inicijativama). Niska prihvaćenost oporezivanja ekoloških poreza, a među njima naročito poreza na emisiju CO<sub>2</sub>, je i rezultat političkih odluka i tehničkog oblikovanja instrumenata. U Francuskoj se, na primjer, modalitet ovog oblika oporezivanja odnosi na poresku osnovnicu i mehanizam za recikliranje, koji je od strane vlade dogovoren, dok je uz istovremeno poboljšanje političke izvodivosti otvoren put za neprestane rasprave oko ispravnosti oporezivanja, kao i pogoršanja društvene prihvatljivosti poreza. Konačno, politički faktori, poput administrativnih konfliktata i siromašnog marketinga od strane političara po ovom pitanju, imali su značajan uticaj po slabo prihvatanje politike oprezivanja emisije CO<sub>2</sub> u Francuskoj (Sénit 2012).

### *2.1.3. Efektivnost ekoloških poreza*

Ukoliko se analizira dostupna literatura o efektima ekoloških poreza po životnu sredinu, one se, uglavnom, svode na poreze na emisiju štetnog CO<sub>2</sub>, koji se naplaćuje na fosilna goriva i druge proizvode prema njihovom sadržaju ugljika, sa ciljem da se emisija CO<sub>2</sub> smanji.

Bruvoll i Larsen su proveli istraživanje u kojem su analizirali efekte poreza na emisiju karbona po stepen emisije ovog gasa u Norveškoj (Bruvoll i Larsen 2004). Oni su došli do zaključka da uvođenje poreza ne emisiju CO<sub>2</sub> ima umjereni efekat po redukciju CO<sub>2</sub> te da doprinosi smanjenju ove emisije za 2%. Redukcija emisije po jedinici GDP-ija je značajna, ali ipak, glavni efekat je bio u dijelu redukcije energetskog intenziteta i procesa emisije.

Glavni argument, koji većina studija dijeli, jeste taj da uvođenje poreza na CO<sub>2</sub> ima multi pozitivan efekat po životnu sredinu, ukoliko su ovi porezi praćeni i porezima na energetski intezivne industrije i ukoliko se primjenjuju u sektorima sa visokim stepenom neelastične tražnje (Miller i Vela 2013).

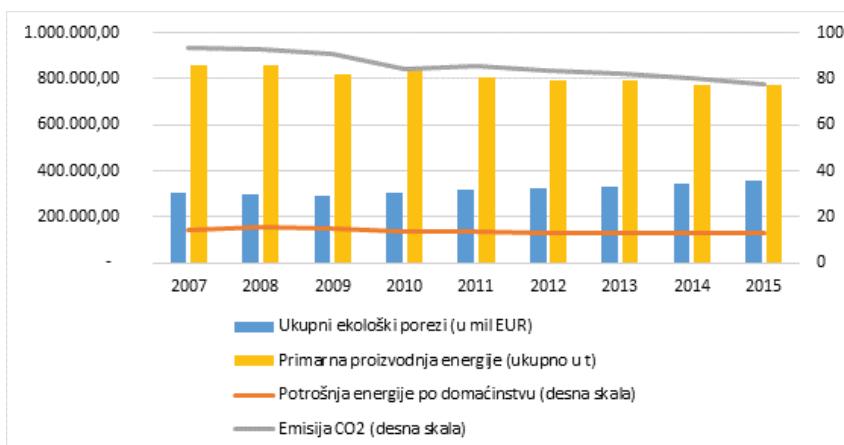
U studijama, koje su provede sa ciljem da procijene efekte poreza na korišćenje energije i CO<sub>2</sub> u poreskom sistemu Japana, autori Nakata i Lamont (2001) podržavaju ideju da se ovi porezi odgovarajući instrument za smanjenje emisije CO<sub>2</sub>.

Wissema i Dellink (2007) provode slično istraživanje na primjeru Irske i dolaze do zaključka da smanjenje emisije CO<sub>2</sub> za 25% od 1998. godine može biti dostignuto uvođenjem poreza na CO<sub>2</sub> u visini od 10 do 15% po toni CO<sub>2</sub>. Di Cosmo i Hyland (2011), takođe, analiziraju slučaj Irske, ali koriste drugačiji scenario za poreze sa ciljem da odrede uticaje energetske tražnje i emisije karbon dioksida. U scenariju, u kojem se porez na CO<sub>2</sub> povećava na 21,5 eura u 2012. godini, na 41 euro u 2025. godini, autori dolaze do zaključka da CO<sub>2</sub> emisija biva smanjena za 861.000 tona u odnosu na slučaj kada se ne primjenjuje porez na emisiju CO<sub>2</sub>.

Pojedini autori naglašavaju važnost poreza na fosilna goriva. Na primjer, Sterner (2007) je pokazao da postoji pozitivna veza, odnosno pozitivan dugoročni efekat između poreza na fosilna goriva u Evropi i smanjenje tražnje za ovim gorivima kao i smanjene emisije ugljen dioksida. Autor objašnjava da je emisija CO<sub>2</sub> smanjena za više od polovine uvođenjem visokih stopa poreza na goriva, dok je sadržaj ugljen monoksida u atmosferi smanjen za više od 1 ppm. Na isti način, Yan i Crookes (2009) objašnjavaju važnost istraživanja u kojem su analiziraju uticaj poreza na fosilna goriva i uticaj na povećano korišćenje vozila i tražnje za energijom u Kini. Prema njihovim nalazima, uvođenje poreza vodi smanjenju tražnje za energijom za 16,3%, za 18,5% se smanjuje tražnja za benzinom, a za 16,2% se smanjuje emisija GHG do 2030. godine u poređenju sa standardnim stanjem i scenarijom.

## 2.2. Rezultati empirijskog istraživanja

Nakon analiziranje dostupne literature, koja ukazuje da ekološki porezi mogu, ali i ne moraju imati uticaj na smanjenje zagađenja, ispitano je da li postoji izdašnost ekoloških poreza u EU u smislu smanjene upotrebe energije. Primjenom metode regresije i korelacije ispitano je da li postoji povezanost između ukupnih ekoloških poreza prikupljenih na nivou EU i stepena emisije CO<sub>2</sub>, stepen proizvodnje i potrošnje energije u zemljama EU.



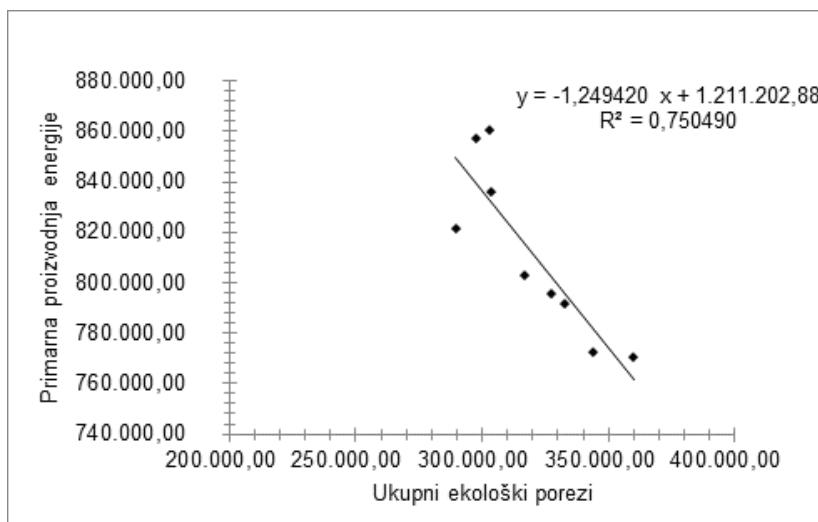
Slika 1. Ekološki porezi, emisija CO<sub>2</sub>, proizvodnja i potrošnja energije u EU od 2007. godine do 2015. godine (Eurostat)

Ukupni ekološki porezi, odnosno ukupna vrijednost prikupljenih ekoloških poreza je tokom posmatranog peroda postepeno povećana, kako se primjećuje iz date slike. Primarna proizvodnja energije je imala tendenciju pada, kao i potrošnja energije po domaćinstvu i emisija CO<sub>2</sub>. Analizirajući ovakav prikaz može se zaključiti da su porezi, ekološki porezi doprinijeli, smanjenju emisije štetnih tvari u prirodu, odnosno, moglo bi se reći da su ekološki porezi bili izdašni. Veza među ovim varijablama ispitana je korelacijom i regresijom. Tabela broj 2. prikazuje matricu korelacijske analiziranih varijabli.

Tabela 2. Matrica korelacijske analizirane (Autor)

	Ukupni ekološki porezi	Potrošnja energije po domaćinstvu	Emisija CO <sub>2</sub>	Primarna proizvodnja energije
Ukupni ekološki porezi	1,000			
Potrošnja energije po domaćinstvu	-0,831	1,000		
Emisija CO <sub>2</sub>	-0,890	0,910	1,000	
Primarna proizvodnja energije	-0,866	0,871	0,898	1,000

Između ekoloških poreza i potrošnje energije po domaćinstvu, emisije CO<sub>2</sub> i primarne proizvodnje energije postoji visoka negativna korelacija. To znači da sa rastom ekoloških poreza dolazi do smanjenja korišćenja energije i emitovanja štetnih tvari u prirodu. Nakon što je ocijenjeno postojanje snažne negativne korelacije, regresijskom analizom je ispitana jačina i smjeri ove veze, kako pokazuju slike koje slijede.



Slika 2. Regresijski model: ekološki porezi i primarna proizvodnja energije (Autor)

Tabela 3. Statistika regresije - ekološki porezi i primarna proizvodnja energije (Autor)

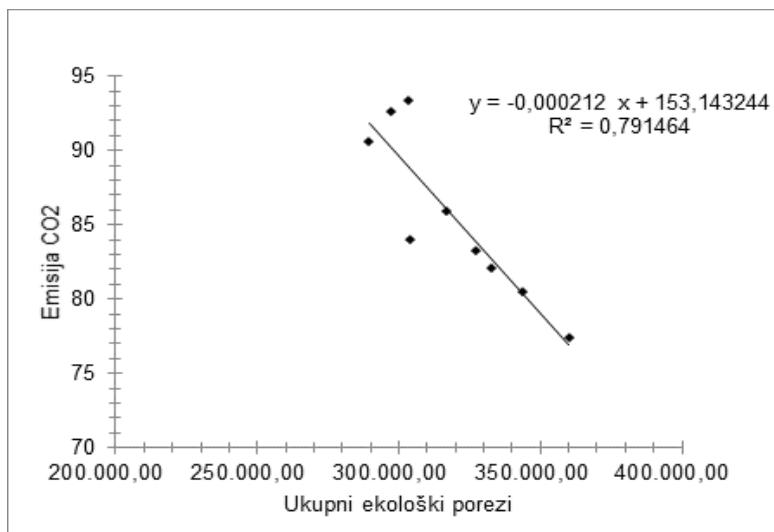
<i>Regression Statistics</i>	
Multiple R	0,866308
R Square	0,75049
Adjusted R Square	0,714846
Standard Error	18029,66
Observations	9

## ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	6,84E+09	6,84E+09	21,05503	0,002518
Residual	7	2,28E+09	3,25E+08		
Total	8	9,12E+09			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	1211203	87172,83	13,89427	2,36E-06	1005072	1417334
Ekološki porezi	-1,24942	0,272289	-4,58858	0,002518	-1,89328	-0,60556

Podaci potvrđuju postojanje linearne negativne veze između ekoloških poreza i primarne proizvodnje energije. Slika broj 3. pokazuje model regresije koji testira vezu ekoloških poreza i emisije CO2.



Slika 3. Regresijski model: ekološki porezi i emisija CO2 (Autor)

Tabela 4. Statistika regresije - ekološki porezi i emisija CO2 (Autor)

**SUMMARY OUTPUT**

<i>Regression Statistics</i>	
Multiple R	0,889642
R Square	0,791464
Adjusted R Square	0,761673
Standard Error	2,719428
Observations	9

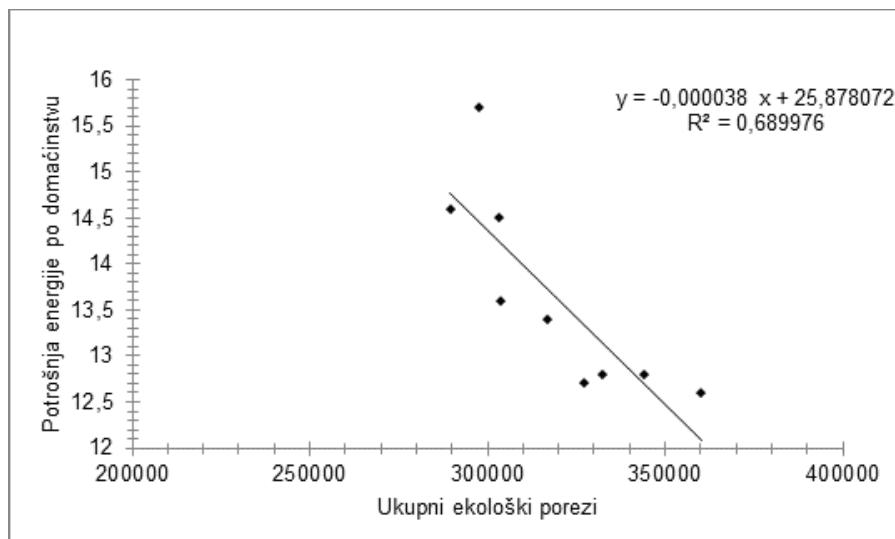
**ANOVA**

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	196,473	196,473	26,56731	0,001318
Residual	7	51,76703	7,395291		
Total	8	248,24			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	153,1432	13,14835	11,64734	7,77E-06	122,0523	184,2341
Ekološki porezi	-0,000021	4,11E-05	-5,15435	0,001318	-0,00031	-0,00011

Regresijskom analizom je pokazano da između ekoloških poreza i emisije CO<sub>2</sub> postoji linearna negativna veza.

Slika broj 4. pokazuje regresijski model koji testira vezu ekoloških poreza i potrošnje energije po domaćinstvu.



Slika 4. Regresijski model: ekološki porezi i potrošnja energije po domaćinstvu (Autor)

Tabela 5. Statistika regresije - ekološki porezi i potrošnja energije po domaćinstvu (Autor)

<b>SUMMARY OUTPUT</b>					
<i>Regression Statistics</i>					
Multiple R	0,830648				
R Square	0,689976				
Adjusted R Square	0,645687				
Standard Error	0,643164				
Observations	9				
<b>ANOVA</b>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	6,444379	6,444379	15,57893	0,005553
Residual	7	2,895621	0,41366		
Total	8	9,34			
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Upper 95%</i>
Intercept	25,87807	3,109677	8,321787	7,08E-05	18,52485 33,23129
Ekološki porezi	-3,8E-05	9,71E-06	-3,94701	0,005553	-6,1E-05 -1,5E-05

Dobijeni rezultati potvrđuju postojanje linearne negativne veze između ekoloških poreza i potrošnje energije po domaćinstvu.

### 3. ANALIZA

Rezultati empirijskog istraživanja, testirani metodom korelacije i regresije, potvrđuju nalaze istraživanja koji su pokazali da ekološki porezi utiču na smanjenje potrošnje energije. U ovom slučaju, testirali smo povezanost između ukupnih ekoloških poreza u EU i njihovog uticaja na proizvodnju energije, emisiju CO<sub>2</sub> i potrošnju energije od srane domaćinstva. Nalazi se sljedeći:

- Ekološki porezi utiču na smanjenje primarne proizvodnje energije. To je dokazano korelacijom (-0,866), kao i regresionom analizom, koja je pokazala da među ovim varijablama postoji negativna veza. To znači da rast ekoloških poreza utiče na smanjenje poizvodnje energije. Ovaj uticaj poreza na proizvodnju energije objašnjen je sa 75% varijabiliteta, odnosno 75% varijacija primarne proizvodnje energije je objašnjeno ekološkim porezima. Regresijski model, koji je ovom prilikom prikazan, je pouzdan, na što ukazuje nizak nivo pokazatelja F singnificance kod ANOVA testa, koji je manji od 0,05, jer je regresija rađena uz nivo puzdanosti od 95%, dok su koeficijent regresije, takođe, visoko pouzdani, na što ukazuje vrijednost p-valute za regresijske elemente, koji je, takođe, u oba slučaja manji od 0,05.
- Ekološki porezi utiču na smanjenje emisije CO<sub>2</sub>, kako je dokazano modelom regresije. Dobijeni rezultati pokazuju da među ovim varijablama postoji negativna linearna veza, što znači da sa rastom ekoloških poreza dolazi do smanjenja emisije CO<sub>2</sub>. Koeficijent determinacije je visok i iznosi 79%, čime je potvrđena i pouzdanost modela regresije. Koeficijent determinacije pokazuje da je ukupna varijacija emisije CO<sub>2</sub> objašnjena sa 79% varijacijama u ekološkim porezima. Model regresije je pouzdan prema mjerama koje su prikazane tabelom broj 4.
- Ekološki porezi utiču na potrošnju energije po domaćinstvu u EU. Model regresije dokazuje da između ove dvije varijable postoji linearna negativna povezanost. Koeficijent determinacije iznosi 68,99%, što je prilični visoko. Ovaj podatak pokazuje da je ukupna varijacija potrošnje energije objašnjena sa 68,99% varijacijama ekoloških poreza. Model regresije, prikazan tabelom broj 5. je pouzdan.

## ZAKLJUČAK

U ovom istraživanju na osnovu pregleda empirijskih nalaza brojnih autora te na osnovu empirijskog istraživanja autora primjenom naučne metodologije, ispitana je efikasnost ekoloških poreza. Efikasnost se, u ovom slučaju, analizirala na način da se ocijeni koliko su ekološki porezi uticali na smanjenje emisije štetnih tvari u prirodnu sredinu. U zavisnosti od vremenskog perioda koji je analiziran, ekonomija koja je uzeta u analizu, mnogi autori su dolazili do različitih zaključaka. Neki su pokazali da ekološki porezi, zaista, vode smanjenju emisije štetnih tvari u prirodu, čime se postiže puni efekat, dok su drugi došli do zaključka da ovi porezi nemaju takav efekat. U kontekstu ovih istraživanja istražila se dostupna literatura te se provelo empirijsko istraživanje sa ciljem da se dobije odgovor na pitanje da li uvođenje ekoloških poreza u zemljama EU smanjuje zagađenost izraženu kroz smanjenje emisije CO<sub>2</sub>, smanjenu proizvodnju i potrošnju energije?

Ovo pitanje je testirano na način da su se prikupljeni ekološki porezi, na nivou EU od 2007. godine do 2015. godine, stavili u odnos sa proizvodnjom energije, potrošnjom energije i emisijom CO<sub>2</sub>, takođe u analiziranom periodu. Primjenom metode korelacije i regresije došlo se do zaključka da u EU, u periodu od 2007. godine do 2015. godine, ekološki porezi utiču na smanjenje proizvodnje i potrošnje energije, kao i emisiju CO<sub>2</sub>.

Ipak, važno je ukazati i na ograničenja ovih analize. U prvom redu, serija podataka odnosno vremenski interval je prilično kratak za ocjene ovog tipa. To znači da ukoliko bi serija podataka bila duža, moguće je da bi se dobili drugačiji rezultati. Takođe, u analizu su uključene sve zemlje EU, te ukoliko bi se analizirale pojedinačne zemlje rezultati bi mogli biti drugačiji. Takođe, u ovom istraživanju testiran je uticaj ekoloških poreza na tri varijable te ukoliko bi se analizirale neke druge varijable, mogli bi se dobiti drugačiji rezultati.

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## EFICIENCY OF ENVIRONMENTAL TAXES IN THE EUROPEAN UNION

**Summary:** This research will attempt to give a theoretical contribution on the basis of the fundamental postulates of the empirical findings of other authors, who examined and tested the efficiency of environmental taxes and their abundance, and by verifying the new findings in this field. Taking into consideration the findings of other authors and the new findings obtained in this research, we have defined the following research question, to which we will try to provide an answer:

Does the introduction of environmental taxes in the EU countries have any effect on the reduction in pollution, reduction in CO<sub>2</sub> emissions, reduction in the production and consumption of energy?

By answering this question, we will assess whether the environmental taxes in the EU are efficient. In order to examine and test this correlation, we used the available secondary data on the environmental taxes and pollution in the EU. The data were taken from the official EU statistics, Eurostat, for the period from 2007 to 2015, and the data are therefore accessible in this database.

After collecting and analysing the data, we used the correlation and regression method to test the correlation between the total environmental taxes collected at the EU level, which represent the independent variable, and the household energy consumption, CO<sub>2</sub> emissions and primary energy production, which represent the dependent variables. The paper examined whether higher income from environmental taxes reduces the energy consumption and the emissions of harmful CO<sub>2</sub> in the environment. By using the correlation and regression method, we came to the conclusion that the environmental taxes in the EU in the period from 2007 to 2015 had an effect on reducing the production and consumption of energy and on CO<sub>2</sub> emissions.

**Key words:** environmental taxes, emissions, European Union, pollution

**JEL classification:** H23

### INTRODUCTION

Environmental taxes represent a modern form of tax, which is introduced in tax systems, and their objective is to exert influence on the behaviour of business entities, but also of natural persons towards the environment. Specifically, the introduction of environmental taxes aims at preventing the deterioration of the environment. The intensive use of natural resources in the last several decades has left a human footprint on the ground, which is reflected through the exhausted and destroyed natural resources. For these exact reasons, the number of countries paying attention to environmental management and protection has been increasing. All the EU countries have implemented certain instruments, environmental taxes, charges and similar levies with a view to establishing and implementing the EU environmental policy.

The first European country which introduced environmental taxes was Sweden, which implemented these taxes in 1990. The primary objective was to stimulate employment. The key principle of these reforms was orientated towards the reduction of the labour tax (Heine et al. 2012). Several years after these measures, the other EU countries also started introducing environmental taxes. The first reform in this domain was implemented in April 1999, and the

next steps were taken between 2000 and 2003. The primary objective of the introduction of such taxes in Germany was to reduce the energy consumption and the harmful gas emissions in the environment, and to promote the new technologies and increase the investments in innovations. The income from these taxes were used as a contribution to the pension insurance (Bach et al. 2002). At the same time, these measures resulted in a significant number of new jobs (around 250,000 jobs in 2003), i.e. in the growth of around 0.75% (European Environment Agency 2011). The analysis of the literature in the field of economics which studies the framework of environmental taxes shows that these taxes are mainly introduced with a view to avoiding and overcoming the problems in the environment, such as pollution or climate change. Such instruments are classified as a mechanism based on incentives, because it is suggested that taxes create incentives for companies, individuals and agents to refrain from pollution above the level which is “socially acceptable” by internalising the external costs. These taxes may be much more efficient than so-called command and control mechanisms, while the administrative costs of these taxes tend to be lower.

Pollution is an example of a negative externality which should be corrected, whereby taxes, fees and charges may affect the polluters to internalise the costs of pollution and to include them in the prices of their products and services, by which they transfer them to the final buyers. It means that consumers, due to higher prices, would use such products to a lesser extent, which would result in their lower production. Nevertheless, such debates and flows are much more complex in practice. It is not easy to reach a socially optimum outcome, and there is no clear formula for the introduction of an efficient tax rate (Parry and Small 2004). Apart from that, some studies have revealed that environmental taxes may also have some negative and unwanted effects. For example, Wier et al. (Wier et al. 2005) came to the conclusion that the environmental taxes in Denmark had unwanted effects in terms of the distributional effect, and these taxes therefore proved to be regressive. Other authors in Sweden (Brannlund and Nordstrom 2004) and the USA (West and Williams 2004) had similar findings. Such findings strengthen the importance of the compensatory mechanism which should be adopted along with the introduction of these taxes.

Environmental taxes also have the political costs which complicate their implementation. Nevertheless, the countries introduced these taxes, although they were not introduced for the reason of preservation of the environment, but they treated them in a similar manner as the taxes for the environment. One of the most frequent forms of these taxes are taxes on the use of fossil fuels (petroleum and gasoline), which are widespread, often because they ensure a high level of fiscal income (Miller and Vela 2013).

The efficiency and the distributional effects of these taxes have been analysed and examined in many studies. Nevertheless, environmental taxes are permanently restricting agents in economy, which may affect the consumption of fossil fuels and the consumption of other pollutants.

This research gives an overview of the empirical findings of other authors, who examined and tested the efficiency of environmental taxes, as well as their abundance. Taking into consideration the findings of other authors, we define the following research question to which we will try to provide an answer:

- Does the introduction of environmental taxes in the EU countries reduce the pollution by reducing CO<sub>2</sub> emissions and reducing the level of production and consumption of energy?

By answering this question, we will assess whether the environmental taxes in the EU are efficient. The tax forms and tax rates of environmental taxes vary from country to country.

While some countries introduce high rates of these taxes, as part of their environmental policy, other countries may provide high subsidies for the use of fossil fuels or the use of some other pollutants, i.e. they may behave in a completely opposite manner (Miller and Vela 2013). These differences are quite easily detected when the income level is compared on the basis of environmental taxes. When analysing the available studies on the efficiency of

environmental taxes, it is evident that there are findings which confirm their efficiency, i.e. which verify that the introduction of environmental taxes may result in efficient pollution control, although there are different findings as well. Guided by these findings, we have decided to examine the level of abundance of the environmental taxes in the EU countries, i.e. to explore whether the environmental taxes in the EU have an effect on reducing pollution.

## 1. METHODOLOGY

In the research and the development of the research, we used several scientific research methods. We applied the inductive-deductive method, which represents the method of conclusion and verification (Duvnjak 2018). The inductive method represents systematic application of the inductive manner of conclusion, whereby the analysis of individual facts results in the conclusion on the general judgment, and the perception of specific individual cases results in drawing general conclusions. The deductive method represents systematic application of the deductive manner of conclusion, whereby specific and individual conclusions are drawn from general judgments.

The analysis method was also used in the research. It is the procedure of scientific research through a breakdown of the complex notions, judgments and conclusions in their smaller integral parts and elements.

The comparative method was also applied in the research, in order to detect similarities, joint features or differences between events, occurrences or objects. The data were analysed using the statistical method of correlation and regression.

In order to answer the research question, we took the available secondary data from the official Eurostat statistics. We also used the data on the total CO<sub>2</sub> emissions for all the EU countries, and the data for the collected taxes on the basis of CO<sub>2</sub> emissions at the EU level. Emissions of CO<sub>2</sub> are viewed through the following three variables:

- Household energy consumption at the EU level;
- Total CO<sub>2</sub> emissions for all the EU countries;
- Primary energy production at the EU level.

The analysed period is the period from 2007 to 2015. The data were analysed using the statistical method of correlation and regression. The independent variable referred to the collected environmental taxes at the EU level in the analysed period, while the dependent variables included the household energy consumption at the EU level, the total CO<sub>2</sub> emissions for all the EU countries and the primary energy production at the EU level. The relation between the analysed variables was tested by correlation, and the strength of the relation was tested by regression. It is of crucial importance to examine whether higher income from environmental taxes results in reducing the energy consumption and the emissions of harmful CO<sub>2</sub> in the environment

## 2. RESEARCH RESULTS

### 2.1. Overview of literature

#### 2.1.1. Development of the environmental tax policy in the EU

The economic instruments, including the taxation policy, may assist the policymakers in the path towards satisfying the objectives set in the environmental policy. The efficiency of the economic instrument depends on the selected instruments which are implemented (Costantini and Mazzanti 2012). The EU is the world leader in designing, approaching and implementing strict environmental policies (Costantini and Mazzanti 2012). Nevertheless, there have been numerous concerns and potential unwanted effects of the impact of the tax reform and the

introduction of environmental taxes on employment, income distribution, economic growth and export. The efficiency of the introduction of environmental taxes depends on several components: tax base, tax rate, tax policy (Costantini and Mazzanti 2012).

The design of environmental taxes (i.e. the application of tax rates, the manner of application, and the scope) and their implementation are different among the EU countries. The differences among the countries are mostly the result of the applied approach. Some countries focus on a narrow tax base, while other countries adopt a much broader base (Institute for European Environmental Policy 2013).

For example, most EU countries apply taxes on cars, i.e. on fuel consumption, as one of the most important elements of the environmental policy, which attempts to reach the target level in the climate policy. Lithuania and Estonia are two countries which have not applied taxes on cars. Poland and Bulgaria use taxes on cars, but without differentiation in relation to harmful CO<sub>2</sub> emissions. Based on that, the European Commission believes that these four countries may expand their tax base by including taxes on cars in their tax system. That could also help them in terms of the reduction in CO<sub>2</sub> emitted by cars.

The same environmental taxes, as well as taxes on CO<sub>2</sub> emissions, should be applied to all taxpayers and to all energy products, with a view to ensuring the effectiveness of the economic sector.

In any case, the practice among the countries and the tax models is different. The significantly different application of environmental taxes among the EU member countries actually shows that there is no harmonisation in this segment (Kurtinaitytė-Venediktovienė et al. 2014).

The evolution of environmental taxes in the EU is one of the crucial, i.e. one of the most important issues in the part of approach and efficiency of the environmental policy. Table 1 shows the development of the environmental tax policy in the EU in the last four decades.

Table 1. Chronology of environmental taxes (Kurtinaitytė-Venediktovienė et al. 2014)

User costs					
Allocated costs					
Fiscal environmental taxes					
Environmental tax reforms					
Green tax commissions					
EU 2020 Strategy					
Years	1970	1980	1990	2000	2020

The user charges and the allocated costs predominated until the middle of the 20<sup>th</sup> century, which represents the initial environmental policy steps. During the period 1990-2000, the focus was shifted to fiscal tax frameworks and environmental taxes, and environmental reforms. The two key objectives of these activities were promotion of public and political discussions on the environment and the economic significance, as well as the use of communication activities with a view to developing a comprehensive framework of the tax reform in the domain of the environment. In that context, the “green tax commissions” had an important role in providing support for this system in many countries (European Environment Agency 2010). As of 2010, there has been an increased emphasis on the orientation towards the EU 2020 Strategy. The primary objective of the EU 2020 Strategy is inclusion of the

economic, social and environmental agendas in a common successful mode. This strategy is based on the following (Council of the European Union 2010):

- Employment rate of 75% of the able-bodied population;
- 3% of the EU's GDP should be invested in research and innovations;
- The "20/20/20" is the climate and energy target (cut in greenhouse gas emissions by at least 20%, an increase in the share of the final consumption of energy from renewable sources by 20%, and the satisfactory energy efficiency ratio of 20%);
- Improvement of the education level (a decrease in the number of early school leavers, and an increase in the number of people who have completed a tertiary or equivalent education);
- Promotion of social inclusion, including the reduction of poverty.

### *2.1.2. Difficulties in the implementation of environmental taxes*

According to some studies, the barriers in the implementation of environmental taxes are mainly cognitive and behavioural (Dresner et al. 2006). These findings show that the very term "tax" is perceived with a negative connotation, and that such are also its effects on public perception and acceptance in terms of the environmental framework.

Other authors came to similar conclusions (McCaffery and Baron 2003), who tested the very term "tax" in their research and concluded that whenever something is labelled as a tax, it often causes a negative attitude of people towards it.

The research conducted by Kallbekken and Aasen aimed at comparing the environmental tax schemes with different options of income redistribution (Kallbekken and Aasen 2010). The research results indicate that there are no major differences in popularity between the schemes due to a surprisingly high number of votes against the tax. Moreover, almost one half of the voters opposed to the tax schemes, which would even bring them material benefit and increase the overall benefit. Apart from such cases of opposition to taxes, another barrier which occurs is the barrier of a political nature. In terms of political determinants, many studies emphasised the importance of the government's trust in the acceptance and introduction of the environmental tax. Clinch (Clinch 2006) conducted research in which he analysed the political issue of the environmental tax, and he concluded that there was lack of the Government's trust, which is the key barrier in all the countries as regards the introduction of environmental taxes, and which is particularly pronounced when analysing the income collected through taxation.

Irrespective of the existing theoretical consensus on the economic and environmental rationalities in terms of environmental taxes, the implementation of this tax and the law, as well as the results of their application, are still limited by numerous problems related to political and public acceptance. Indeed, many initiatives towards the taxation of CO<sub>2</sub> emissions through taxes did not have sufficient support among the public and the politicians due to the opposing attitudes – while one side opposes the increase in taxes and the increase in the funds for the implementation of the climate policies, the other side expresses doubts about the effectiveness of this fiscal instrument (Sénit 2012).

The limitations of the efficient application and implementation of environmental taxes are primarily of a cognitive nature and they are associated by how policymakers traditionally envisage taxation (which is primarily guided by budget initiatives). The low level of acceptance of the taxation of environmental taxes, and particularly the tax on CO<sub>2</sub> emissions, is also the result of political decisions and technical design of instruments. In France, for example, the modality of this form of taxation refers to the tax base and the recycling mechanism, which is agreed upon by the government, while the simultaneous improvement of the political feasibility opens the path for endless discussions on the justifiability of taxation, as well as the deterioration of the social acceptance of the tax. Finally, the political factors, such as administrative conflicts and poor marketing by the politicians on this issue, had a

great deal of influence on the poor acceptance of the policy of taxation of CO2 emissions in France (Sénit 2012).

### *2.1.3. Effectiveness of environmental taxes*

If the available literature on the effects of environmental taxes on the environment is analysed, they mainly come to taxes on the harmful CO2 emissions, which is charged for fossil fuels and other products based on their carbon content, with a view to reducing CO2 emissions.

Bruvoll and Larsen conducted research in which they analysed the effects of carbon taxes on the level of emissions of this gas in Norway (Bruvoll and Larsen 2004). They came to the conclusion that the introduction of the tax on CO2 emissions had a moderate effect on the reduction in CO2, and that it contributed to the reduction in this emission by 2%. The emission reduction per unit of GDP is significant, but the main effect was still in the part of the reduction in the energy intensity and the emission process.

The main argument shared by most of the studies is that the introduction of the tax on CO2 has zero positive effect on the environment, if these taxes are accompanied by taxes on energy intensive industries and if they are applied in sectors with a high level of inelastic demand (Miller and Vela 2013).

In the studies conducted with a view to estimating the effects of the taxes on the use of energy and CO2 in the tax system of Japan, the authors Nakata and Lamont support the idea that these taxes are an appropriate instrument for the reduction in CO2 emissions (Nakata and Lamont 2001).

Wissema and Dellink conducted similar research on the example of Ireland and they came to the conclusion that the reduction in CO2 emissions by 25% as of 1998 may be reached by introducing the tax on CO2 in the amount of 10 to 15% per tonne of CO2 (Wissema and Dellink 2007). Di Cosmo and Hyland also analysed the case of Ireland, but they used a different scenario for taxes with a view to determining the effects of energy demand and CO2 emissions (Di Cosmo and Hyland 2011). In the scenario in which the tax on CO2 increases to 21.5 euros in 2012, and to 41 euros in 2025, the authors came to the conclusion that CO2 emissions are reduced by 861,000 tonnes in comparison with the case when the tax on CO2 emissions is not applied.

Some authors emphasise the importance of tax on fossil fuels. For example, Sterner showed that there was a positive correlation, i.e. a positive long-term effect, between the tax on fossil fuels in Europe and the decrease in the demand for these fuels, as well as the reduced CO2 emissions (Sterner 2007). The author explains that the CO2 emissions were reduced by more than one half after the introduction of high rates of the fuel tax, while the content of CO2 in the atmosphere was reduced by more than 1 ppm. Similarly, Yan and Crookes explain about the importance of the research in which they analysed the effect of the tax on fossil fuels and the effect on the increase in the use of vehicles and the energy demand in China (Yan and Crookes 2009). According to their findings, the introduction of the tax leads to a decrease in the energy demand by 16.3%, a decrease in the gasoline demand by 18.5%, and a decrease by 16.2% in GHG emissions by 2030 in comparison with the standard situation and scenario.

## **2.2. Empirical research results**

After analysing the available literature, which indicates that environmental taxes may or may not have an impact on the reduction in pollution, we examined if the environmental taxes in the EU were abundant in terms of reducing the use of energy. By applying the method of regression and correlation, we examined if there is any relation between the total environmental taxes collected at the EU level and the level of CO2 emissions, as well as the levels of production and consumption of energy in the EU countries.

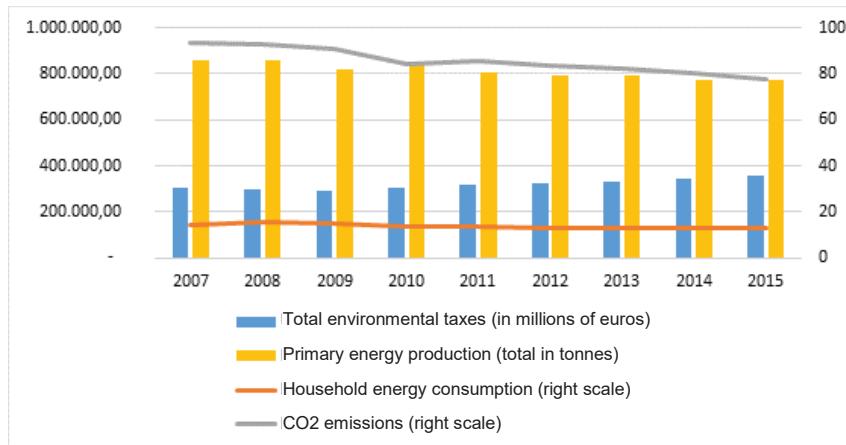


Image 1. Environmental taxes, CO2 emissions, production and consumption of energy in the EU from 2007 to 2015 (Eurostat)

The total environmental taxes, i.e. the total value of the collected environmental taxes increased gradually during the observed period, as shown in the given image. The primary energy production was on a downward trend, as well as the household energy consumption and the CO2 emissions. By analysing such a presentation, it is possible to come to the conclusion that the environmental taxes contributed to the reduction in the emission of harmful substances in the environment, i.e. it is suggested that the environmental taxes were abundant. The relation between these variables was tested by correlation and regression. Table 2 shows the matrix of correlation between the analysed variables.

Table 2. Correlation matrix (Author)

	Total environmental taxes	Household energy consumption	CO2 emissions	Primary energy production
Total environmental taxes	1,000			
Household energy consumption	-0,831	1,000		
CO2 emissions	-0,890	0,910	1,000	
Primary energy production	-0,866	0,871	0,898	1,000

There is a high negative correlation between the environmental taxes and the level of household energy consumption, CO2 emissions and primary energy production. It means that the growth in the environmental taxes results in the reduction in the use of energy and the level of emissions of harmful substances in the environment. After confirming that there is a strong negative correlation, a regression analysis was conducted to examine the strength and the direction of this relation, as shown in the images below.

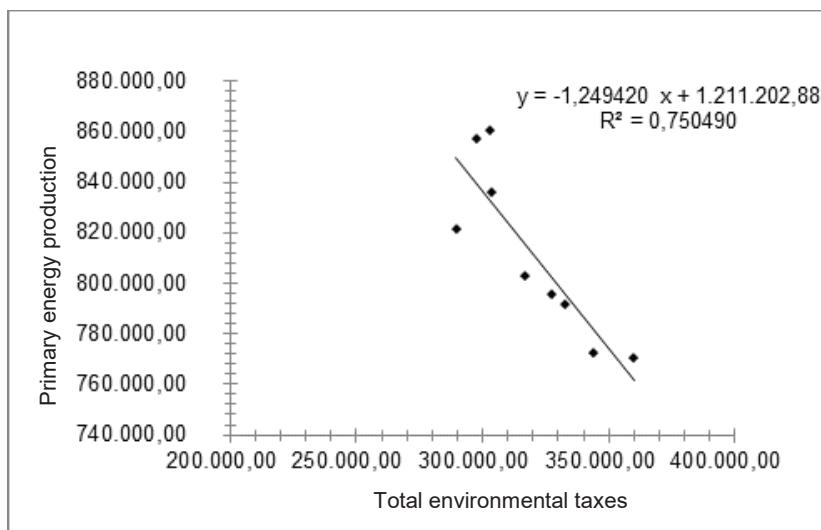


Image 2. Regression model: environmental taxes and primary energy production (Author)

Table 3. Regression statistics – environmental taxes and primary energy production (Author)

<i>Regression Statistics</i>	
Multiple R	0,866308
R Square	0,75049
Adjusted R Square	0,714846
Standard Error	18029,66
Observations	9

## ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	6,84E+09	6,84E+09	21,05503	0,002518
Residual	7	2,28E+09	3,25E+08		
Total	8	9,12E+09			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	1211203	87172,83	13,89427	2,36E-06	1005072	1417334
Environmental taxes	-1,24942	0,272289	-4,58858	0,002518	-1,89328	-0,60556

The data confirm that there is a linear negative correlation between the environmental taxes and the level of primary energy production. Image 3 shows the regression model which tests the correlation between the environmental taxes and the level of CO2 emissions.

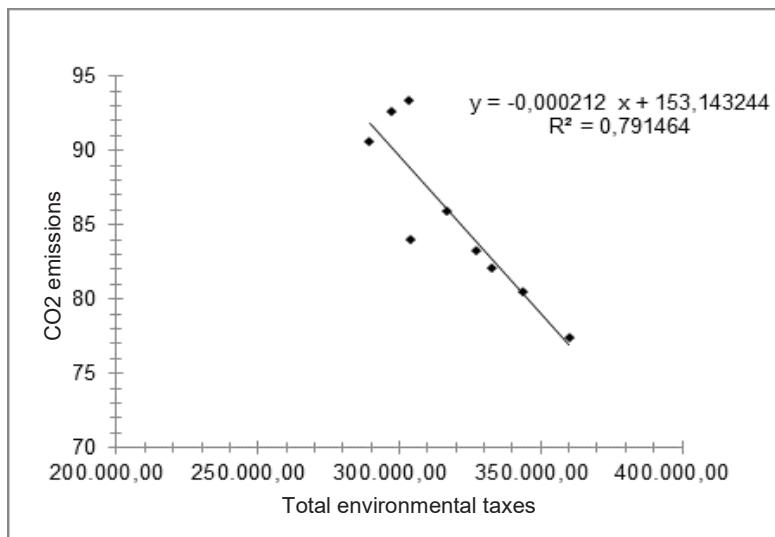


Image 3. Regression model: environmental taxes and CO2 emissions (Author)

Table 4. Regression statistics – environmental taxes and CO2 emissions (Author)

**SUMMARY OUTPUT**

<i>Regression Statistics</i>	
Multiple R	0,889642
R Square	0,791464
Adjusted R Square	0,761673
Standard Error	2,719428
Observations	9

**ANOVA**

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	196,473	196,473	26,56731	0,001318
Residual	7	51,76703	7,395291		
Total	8	248,24			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	153,1432	13,14835	11,64734	7,77E-06	122,0523	184,2341
Environmental taxes	-0,00021	4,11E-05	-5,15435	0,001318	-0,00031	-0,00011

The regression analysis showed that there is a linear negative correlation between the environmental taxes and the level of CO2 emissions.

Image 4 shows the regression model which tests the correlation between the environmental taxes and the level of household energy consumption.

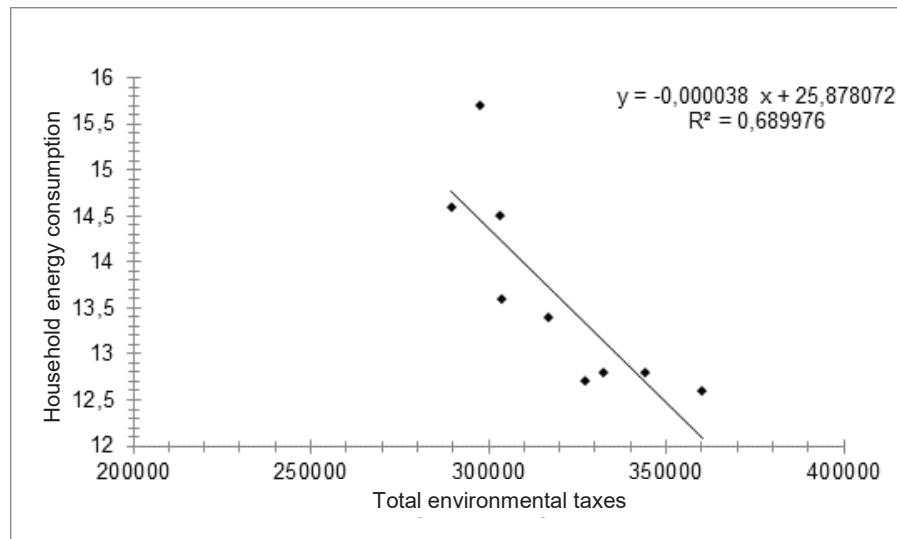


Image 4. Regression model: environmental taxes and household energy consumption (Author)

Table 5. Regression statistics – environmental taxes and household energy consumption (Author)

**SUMMARY OUTPUT**

<i>Regression Statistics</i>	
Multiple R	0,830648
R Square	0,689976
Adjusted R Square	0,645687
Standard Error	0,643164
Observations	9

**ANOVA**

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	6,444379	6,444379	15,57893	0,005553
Residual	7	2,895621	0,41366		
Total	8	9,34			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	25,87807	3,109677	8,321787	7,08E-05	18,52485	33,23129
Environmental taxes	-3,8E-05	9,71E-06	-3,94701	0,005553	-6,1E-05	-1,5E-05

The obtained results confirm that there is a linear negative correlation between the environmental taxes and the level of household energy consumption.

### 3. ANALYSIS

The empirical research results, tested by the method of correlation and regression, confirm the findings of the studies which showed that environmental taxes have an effect on the reduction in the energy consumption. In this case, we tested the correlation between the total environmental taxes in the EU and their effect on energy production, CO<sub>2</sub> emissions and household energy consumption. The findings are as follows:

- Environmental taxes have an effect on the reduction in the primary energy production. That is verified by the correlation (-0,866), as well as by the regression analysis, which showed that there is a negative correlation between these variables. It means that the growth in environmental taxes has an effect on the reduction in the energy production. This impact of taxes on the energy production is explained by 75% of variability, i.e. a total of 75% of variations of the primary energy production was explained by environmental taxes. The regression model presented on this occasion is reliable, which is indicated by the low level of the F significance indicator during the ANOVA test, which is below 0.05, because the regression was done with the reliability level of 95%, while the regression coefficients are also highly reliable, which is indicated by the p-value for the regression elements, which is also below 0.05 in both cases.
- Environmental taxes have an effect on the reduction in the level of CO<sub>2</sub> emissions, which was verified by the regression model. The obtained results show that there is a negative linear correlation between these variables, which means that the growth in environmental taxes results in the reduction in CO<sub>2</sub> emissions. The determination coefficient is high, and it totals 79%, which confirms the reliability of the regression model. The determination coefficient shows that the total variation of CO<sub>2</sub> emissions is explained by 79% variations in environmental taxes. The regression model is reliable according to the measures shown in Table 4.
- Environmental taxes have an effect on the household energy consumption in the EU. The regression model verifies that there is a linear negative correlation between these two variables. The determination coefficient totals 68.99%, which is quite high. This shows that the total variation of the energy consumption is explained by 68.99% variations of environmental taxes. The regression model presented in Table 5 is reliable.

### CONCLUSION

On the basis of an overview of the empirical findings of numerous authors, and on the basis of the author's empirical research conducted by applying the scientific methodology, this research examined the efficiency of environmental taxes. In this case, the efficiency was analysed by estimating the degree to which environmental taxes had an impact on the reduction in the emission of harmful substances in the environment. Depending on the time period which was analysed and the economy used in the analysis, many authors came to different conclusions. Some of them showed that environmental taxes indeed result in the reduction in the emission of harmful substances in the environment, which produces a full effect, while others came to the conclusion that these taxes do not have such an effect. In the context of these studies, we examined the available literature and conducted empirical research with a view to obtaining the answer to the question whether the introduction of environmental taxes in the EU countries reduces pollution demonstrated through the reduction in CO<sub>2</sub> emissions, and through reduced production and consumption of energy.

This question was examined by drawing a comparison between the collected environmental taxes at the EU level from 2007 to 2015 and the levels of energy production, energy consumption and CO<sub>2</sub> emissions in the analysed period. By applying the method of correlation and regression, we came to the conclusion that the environmental taxes in the EU,

in the period from 2007 to 2015, had an effect on the reduction in the production and consumption of energy and the CO<sub>2</sub> emissions.

However, it is important to emphasise the restrictions of this analysis. First of all, the series of data and the time interval were quite short for the evaluation of this type. It means that if the series of data was longer, the obtained results might be different. In addition to that, the analysis included all the EU countries, and if the analysis included individual countries, the results might be different. Apart from that, this research tested the impact of environmental taxes on three variables, and if some other variables were analysed, the obtained results might be different.

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## PENZIJSKI FONDOVI KAO GENERATOR RAZVOJA FINANSIJSKOG TRŽIŠTA

**Rezime:** *Cilj rada je da se dovedu u vezu kreditni rejting zemlje i razvijenost finansijskog tržišta. Istovremeno, dovećemo u vezu strukturu i veličinu penzijskih fondova i razvijenost finansijskog tržišta po zemljama. Razvijenost tržišta iskazuje se uz pomoć FD indeksa, veličinu penzijskih fondova kao veličinu u odnosu na BDP, strukturu penzijskih fondova kao učešće akcija ili obveznica u odnosu na ukupnu imovinu i u odnosu na BDP, a veličina fondova iskazuje se u odnosu na BDP zemlje. Istraživačko pitanje glasi: „Da li veličina i struktura penzijskih fondova utiče na razvijenost finansijskog tržišta u zemlji?“ Istraživanje se odnosi na traženje odgovora na pitanje kakva je zavisnost između strukture i veličine penzijskih fondova, s jedne strane i razvijenosti finansijskog tržišta, s druge strane. Predmet istraživanja je analiza svih penzijskih fondova, finansijskog tržišta, kreditnog rejtinga i veličine BDP-a u razvijenim zemljama i zemljama u razvoju. Dobijeni odgovor na istraživačko pitanje može ukazati na pravac promjene regulative koja bi stimulativno ili destimulativno djelovala na razvoj penzijskih fondova u zemljama u razvoju. Metode korišćene u radu su analiza i sinteza prethodnih istraživanja i teoretskih nalaza te pregled studija slučaja, da bi zaključci bili izvučeni metodom indukcije. Doprinos rada ogleda se u tome što su objašnjene mogućnosti koje penzijski fondovi svojom strukturon i veličinom nude razvoju finansijskog tržišta u zemlji. Rezultat istraživanja pokazuje da penzijski fondovi mogu biti značajna podrška za finansiranje razvoja države, lokalnih zajednica, ali da između određenih pojava poput veličine i strukture fondova i veličine ekonomije i razvijenosti finansijskog tržišta, odnosno, finansijskog razvoja, postoji tek slaba determinacija.*

**Ključne riječi:** *penzijski fondovi, investicioni fondovi, razvoj finansijskog tržišta*

**JEL klasifikacija:** *C82, D53, E44, G15, 016*

### UVOD

Tražeći odgovor na pitanje poželjne strukture i veličine penzijskih fondova analizirana je struktura i veličina penzijskih fondova u svijetu. Upoređena je struktura ulaganja penzijskih fondova u svijetu sa akcentom na strukturu portfelja i djelovanje Penzijskog rezervnog fonda Republike Srpske i Evropskog dobrovoljnog penzijskog fonda Republike Srpske. Tendencija je da se kroz detaljnu analizu strukture penzijskih fondova u svijetu, utvrde pravilnosti između veličine i strukture penzijskih rezervnih fondova i veličine i stepena razvoja finansijskog tržišta odnosno zemlje i BDP-a. S tim u vezi, glavna hipoteza glasi: „Veličina i struktura penzijskih fondova ima uticaj na veličinu i strukturu finansijskog sistema određene zemlje“. Dakle, zaključivano je metodom indukcije - od pojedinačnih iskustava ka opštim. Iz glavne hipoteze proizilaze pomoćne hipoteze:

H1: „Veće učešće vlasničkih hartija od vrijednosti u portfeljima penzijskih fondova ima pozitivan uticaj na razvijenost finansijskog tržišta“.

H2: „Veće učešće dužničkih hartija od vrijednosti u portfeljima penzijskih fondova ima pozitivan uticaj na razvijenost finansijskog tržišta”.

H3: „Veće učešće vlasničkih hartija od vrijednosti u portfeljima penzijskih fondova ima pozitivan uticaj na BDP zemlje”.

H4: „Veće učešće dužničkih hartija od vrijednosti u portfeljima penzijskih fondova ima pozitivan uticaj na BDP zemlje”.

H5: „Veličina penzijskih fondova u odnosu na BDP ima pozitivan uticaj na razvijenost finansijskog tržišta”.

H6: „Veličina penzijskih fondova ima pozitivan uticaj na BDP zemlje”.

Cilj je da ponudimo preporuke za kreiranje optimalne strukture i veličine penzijskih fondova na tržištima u razvoju, odnosno, da ponudimo pravac razvoja penzijskih fondova.

## 1. PRETHODNO ISTRAŽIVANJE

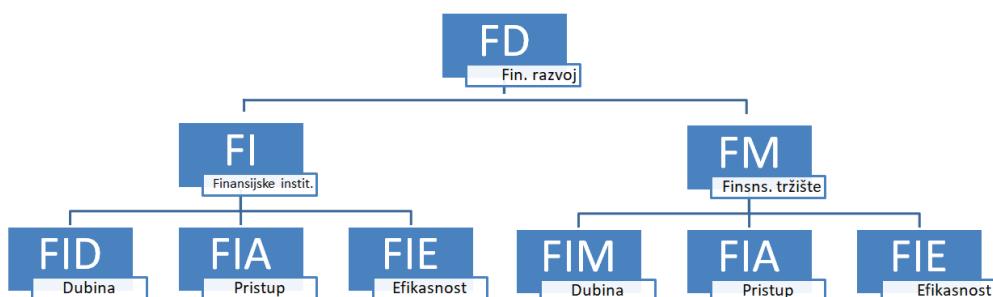
Veliki broj autora se bavio procjenom uticaja finansijskog razvoja na ekonomski rast, nejednakost i ekonomsku stabilnost (Levine 2005; Demirgüt-Kunt and Levine 2009). Finansijski razvoj uključuje poboljšanja u funkcijama koje obezbeđuju finansijski sistemi kao: (I) udruživanje štednje; (II) izdvajanje kapitala za produktivne investicije; (III) praćenje tih investicija; (IV) diversifikaciju rizika i (V) razmjena dobara i usluga (Levine 2005). Svaka od ovih finansijskih funkcija može uticati na odluke o štednji i investicijama i na efikasnost raspodjele sredstava. Kao rezultat toga, finansije utiču na akumulaciju kapitala i ukupnu faktorsku produktivnost tj. na tri faktora koji određuju ekonomski rast. U mjeri u kojoj finansijski razvoj smanjuje asimetrije informacija i finansijska ograničenja i promoviše podjelu rizika, razvoj može povećati sposobnost finansijskih sistema da apsorbuju šokove i smanje pojačavanje ciklusa kroz finansijski akcelerator (Bernanke i Gertler i Gilchrist 1999), smanjujući makroekonomsku volatilnost i nejednakost.

Većina empirijske literature od sedamdesetih godina prošlog vijeka približava finansijski razvoj dvjema mjerama finansijske dubine - odnosom privatnih kredita prema BDP-u i, u manjoj mjeri, kapitalizacijom tržišta akcija, takođe u odnosu sa BDP-om. Na primjer, u uticajnoj studiji na industrijskom nivou Rajan i Zingales (Rajan i Zingales 1998) koriste obje mjeru kako bi pokazali da viši finansijski razvoj olakšava ekonomski rast. Na strani makroekonomskе volatilnosti, finansijski razvoj, mjeren privatnim kreditima prema BDP-u banaka i drugih finansijskih institucija, igra značajnu ulogu u ublažavanju nestabilnosti proizvodnje, potrošnje i rasta investicija, ali samo do određene tačke. Većina istraživača u ovoj oblasti koristi varijacije ovih mjera da ispita ulogu finansijskog sistema u ekonomskom razvoju.

Finansijski sektori su se razvili širom svijeta i moderni finansijski sistemi su postali isprepleteni višedimenzionalnim procesima. Na primjer, dok su banke i dalje obično najveće i najvažnije na tržištu, postoje i investicioni banke, osiguravajuća društva, investicioni fondovi, penzioni fondovi, kompanije za ulaganje rizičnog kapitala i mnoge druge vrste nebanskarskih finansijskih institucija, koji dobijaju značajnu ulogu na finansijskom tržištu. S tim u vezi, finansijska tržišta su se razvila na načine koji omogućavaju pojedincima i firmama da diversifikuju svoju štednju, a da kompanije mogu prikupljati novac emisijom akcija, obveznica i finansijskih derivata, zaobilazeći tradicionalna bankarska kreditiranja. Konstelacija takvih finansijskih institucija i tržišta olakšava pružanje finansijskih usluga. Osim toga, važna karakteristika finansijskih sistema ogleda se u pristupu novcu i efikasnosti. Veliki finansijski sistemi imaju ograničenu upotrebu ako nisu dostupni dovoljno velikom broju stanovništva i kompanija. Čak i ako su finansijski sistemi značajni i imaju širok doseg, njihov doprinos ekonomskom razvoju bio bi ograničen ako bi bili rasipni i neefikasni. Ovo su potvrdili Čihak i dr. (Čihak i drugi 2012) te Aizenman, Jinjarak i Park (Aizenman i Jinjarak i Park 2015). Prema tome, raznolikost finansijskih sistema u različitim zemljama

podrazumijeva da je potrebno sagledati višestruke pokazatelje za mjerjenje finansijskog razvoja.

Da bi se prevazišli nedostaci pojedinih indikatora, kao zamjena za finansijski razvoj, stvoreno je mnoštvo indeksa koji pokazuju kako su razvijene finansijske institucije i finansijska tržišta u smislu njihove dubine, pristupa i efikasnosti, što kulminira konačnim indeksom finansijskog razvoja (slika 1). Ovaj indeks je prvobitno razvijen u kontekstu napomene MMF-a za diskusiju o osoblju „Preispitivanje finansijskog produbljivanja: stabilnost i rast na tržišima u razvoju“ (Sahay i drugi 2015). Podindeksi i konačni ukupni indeks izgrađeni su za 183 zemlje u rasponu od 1980. i 2013. godine. Finansijski razvoj se definiše kao kombinacija dubine (veličina i likvidnost tržišta), pristupa (sposobnost pojedinaca i kompanija da pristupe finansijskim uslugama) i efikasnosti (sposobnost institucija da pružaju finansijske usluge uz niske troškove i održive prihode, i nivo aktivnosti tržišta kapitala). Ovaj široki multidimenzionalni pristup definisanju finansijskog razvoja prati matricu karakteristika finansijskog sistema koju je razvio Čihák sa saradnicima (Čihák i drugi 2012).



Grafikon 1. Piramida indeksa finansijskog razvoja (IMF staff, bazirano na Čihák and et al. 2012)

Doprinos FD indeksa je višestruk. Prvo, dopunjavaju se statistike Svjetske banke, tj. ažurirana verzija Globalne baze podataka za finansijski razvoj (Global Financial Development Database - GFDD), koju su uveli Čihak i koautori, sa dodatnim podacima iz baze podataka o dužničkim hartijama od vrijednosti Banke međunarodnih poravnjanja (BIS), onda baze podataka Dealogic korporativnog duga (Dealogic corporate debt database) i MMF-ova anketa o finansijskom pristupu. Osim toga, pregled razvoja finansijskog tržišta se sumira kroz informaciju u nekoliko jednostavnih indeksa. Imajući u vidu bogatstvo informacija o svojstvima finansijskog sistema - postoji 105 različitih indikatora u GFDD i 46 indikatora u FinStats. Sudeći po tome, nije moguće pratiti sve ove različite pokazatelje pojedinačno, posebno u empirijskom radu. Čak i da je to bilo moguće, nijedan pojedinačni indikator, kada bi se koristio sam, ne bi pružio sveobuhvatno razumijevanje nivoa finansijskog razvoja. Podindeksi i konačni indeks povezuju ove različite pokazatelje i omogućavaju sveobuhvatnu procjenu pojedinih karakteristika finansijskih sistema i ukupnog nivoa finansijskog razvoja. Kao rezultat toga, indeksi dozvoljavaju da se utvrdi gdje su nedostaci u finansijskom razvoju nedoslijedni ili koji aspekti finansijskog razvoja utiču na makroekonomski rezultate, koji bi zatim mogli biti detaljnije istraženi koristeći raščlanjene podatke od FinStats ili GFDD. FD indeks pokazuje kako se novi indeksi upoređuju sa tradicionalnim mjerama i ključnim stilizovanim činjenicama o finansijskom razvoju širom svijeta. U diskusiji ćemo se osvrnuti na neka ograničenja i nedostatke indeksa, s ciljem da pokažemo u kojoj mjeri struktura i veličina penzijskih fondova utiče na rezultat indeksa. Cilj je da utvrdimo da li se „kopiranjem“ određene zemlje po strukturi i veličini indeksa moguće dodatno razviti finansijsko tržište. S tim u vezi, kao termin „tržište u razvoju“ podrazumijevamo zemlje koje odlikuju institucionalne turbulencije, nizak nivo korporativnog upravljanja i ekonomskog

razvoja u odnosu na razvijene zemlje. Hoskisson i saradnici kao zemlje u tranziciji izdvajaju sve zemlje zapadnog Balkana (Hoskisson i drugi 2000, 249-267). Ilustracije radi, institucionalno nasleđe komunizma na tim tržištima ogleda se kroz veliku, nedisciplinovanu i neefikasnu administraciju, birokratizovan pristup institucija i korupciju (Haramija i Njavro 2016). Naime „Birokratizovana i restriktivna vlast otvorila je put korupciji i mitu državnih službenika jer se većini građana činilo da je to jedini put do ostvarenja želenog cilja” (Dimitrova-Grajzl i Simon 2010, 206). Već i letimičan pregled zavoda za statistiku zemalja zapadnog Balkana potvrđuje nastavak takve prakse, odnosno rast zaposlenih u oblastima koje se finansiraju iz budžeta: u administraciji, javnoj upravi, obrazovanju i umjetnosti. S druge strane, očigledno se smanjenje broj zaposlenih u prerađivačkoj industriji. Osim toga, relevantna istraživanja potvrđuju i visok nivo korupcije kao posljedica komunističkog sistema u novim članicama EU u odnosu na „stare” članice (Transparency International 2016). Takođe, kada se posmatraju istraživanja povjerenja u institucije, zemlje u tranziciji su na dnu takvih listi (Bjørnskov 2007). Takođe, u svim malim i otvorenim ekonomijama, poput država koje čine zapadni Balkan, sposobnosti monetarne politike su ograničena brojnim faktorima (Benazić i Rami 2016, 1039). Dakle, paralelno sa slabim razvojem finansijskog tržišta, kritika tranzicije zasniva se na činjenici značajnog povećanja siromaštva i propadanja, uglavnom, srednjeg sloja (Cifrić 1996, 137).

Elaborirajući tržišta u razvoju zapažamo da, kao i u svim zemljama zapadnog Balkana tako i u Bosni i Hercegovini (BiH), neekonomski faktori u regiji igraju najvažniju ulogu u determinisanju vrijednosti trgovine između zemalja (Trivić i Klimczak 2015, 57). Ekomska nestabilnost proizlazi iz „Čestih reformi u kojima su potpuno zanemareni ekonomski rast i društveni uticaj promjena, niskih stopa domaćih i stranih ulaganja, spoljnotrgovinskog deficitia i niske stope BDP-a” (Duvnjak 2018, 198). Na primjer, u BiH postoji niz socijalno-ekonomskih pitanja, koja još nisu riješena, a čije unapređenje podrazumijeva složena i zahtjevna rješenja (Amidžić i drugi 2016, 57). Takođe, mnogi kupci javnih preduzeća vidjeli su privatizaciju kao priliku da steknu određenu imovinu bez preduzetničkih aktivnosti i/ili stvaranja nove vrijednosti. Kao posljedica takvih poteza, mnoštvo bivših javnih preduzeća je ugašeno nakon dugotrajnog procesa stečaja. U boljoj varijanti još postoje, ali je tržišna vrijednost takvih preduzeća značajno manja u odnosu na onu od prije nekoliko godina. Kao posljedica, veliki broj radno sposobnih ljudi je bez posla, a nova radna mjesta nisu otvorena (Šokčević i Dugalić 2007).

Tržište kapitala u BiH prošlo je faze od uspostavljanja obje berze, uspon, pad i ponovno razbuđivanje kroz povećan značaj dužničkih hartija od vrijednosti, ali je ono po strukturi tržišnog materijala, broju tržišnih instrumenata još uvijek nerazvijeno i neaktivno. Takođe, bankarski sektor je na srednjem nivou razvijenosti i na njemu su zastupljeni osnovni agregati. Uprkos tome, uprkos svim ograničenjima, institucionalni investitori na domaćim berzama mogu da stvore portfolio hartija od vrijednosti koji bi im dao željeni prinos uz malu izloženost tržišnom riziku (Grujić 2017, 437). Takav interes institucionalnih investitora, uz stabilnost nacionalne valute i deviznog kursa može da predstavlja poželjnu karakteristiku finansijskog tržišta. Međutim, upravo fiksni devizni kurs može da stvori iluziju. Bosna i Hercegovina je 1999. godine usvojila sistem „monetarnog odbora” (*currency board*). Istini za volju, ovaj potez je dao rezultate na polju smanjenja inflacije u zemlji i predstavlja je značajan doprinos sređivanju stanja u finansijskom sektoru. Monetarni odbor podrazumijeva nepromjenjivo fiksni devizni kurs, posjedovanje deviznih rezervi u stabilnoj valuti na nivou neophodnom da se pokrije količina (štampanog i kovanog) novca te neograničenu internu konvertibilnost tj. mogućnost pretvaranja domaćeg novaca u valutu rezervi (i obrnuto) po fiksnom kursu. U tom smislu, vezivanje konvertibilne marke za evro predstavljalo je „Sidro koje je čuvalo BiH brod od nepotrebnog lutanja na olujnom moru tranzicije”. Dužničke krize i iskustva zemalja u tranziciji u posljednjih dvadesetak godina ukazuju na činjenicu da ulazak stranog kapitala uz zaduživanje na stranim tržištima može da dovede zemlju do velikih problema. Na primjer, fiksiranje deviznog kursa, iako nepopularno, ipak predstavlja određenu sigurnost sistema.

Napuštanje fiksног devizног kursа u BiH dovelо bi depresijе konvertibilne marke u odnosu na snažne valute. Kao posljedica toga, dugovi iskazani u dolarima ili evrima porasli bi u odnosu na BDP.

Govoreći o razvoju domaćeg finansijskog tržišta možemo reći da na domaćem tržištu obveznice sve više dobijaju na značaju. Iskustva sa razvijenih tržišta pokazuju da je sekundarno tržište municipalnih obveznica znatno pasivnije te manje likvidno u odnosu na tržište akcija ili tržište državnih obveznica, što u određenoj mjeri može predstavljati nedostatak ovog finansijskog instrumenta. Osim toga, kao izražen nedostatak i opasnost pribavljanja novca putem emisije municipalnih obveznica navodi se činjenica da je ovaj finansijski instrument nerazvijen u pogledu tržišta te da je procedura pribavljanja novca za emitenta značajno duža u poređenju sa bankarskim kreditom. Naime, od dana donošenja odluke o zaduzivanju, pa do objave odluke o prijemu obveznica na službeno berzansko tržište, prođe čak i po nekoliko mjeseci. Iskustva razvijenih tržišta kapitala, ali i zemalja u tranziciji, pokazuju da municipalne obveznice, osim što osvježavaju i diversificuju tržište, povećavaju konkurentnost među finansijskim instrumentima. Osim lokalnih zajednica, direktnе koristi ima država što je jedan od sinergetskih efekata pojavlјivanja municipalnih obveznica na tržištu kapitala. Istovremeno, prirodno je da se broj „manjih“ preduzeća koja su, „silom zakona“ – privatizacijom, listirana na berzi, smanji pod uticajem izmijenjene zakonske regulative. Ona podrazumijeva da većinski vlasnik, koji u preduzeću ima 95 odsto vlasništva, može da kupi preostali dio, da promijeni pravnu formu preduzeća i da ga delistira. Takođe, manji broj listiranih preduzeća ne znači manje razvijeno tržište kapitala. Berze u regionu imaju veći broj listiranih akcija nego berze u Austriji, Sloveniji, Češkoj, Poljskoj, Mađarskoj, a promet na tim berzama je neuporedivo manji, nego na evropskim berzama. Na primjer, na Bečkoj berzi je listirano 98 akcija a 3.304 obveznica. Osim toga, na ovoj berzi je 4.826 strukturnih proizvoda. Dakle, prirodno je da se broj listiranih akcija smanjuje, a paralelno sa tim, raste ponuda obveznica. Govoreći o domaćem tržištu moramo istaći da u BiH postoje samo dva penzijska fonda: Penzijski rezervni fond Republike Srpske i Evropski penzijski dobrovoljni fond. Oba su sa sjedištem u Banjaluci i primarno su orijentisana na Banjalučku berzu. Prema metodologiji OECD-a, Penzijski rezervni fond Republike Srpske je *Sovereign Pension Reserve Fund* (OECD 2018), dok je Evropski penzijski dobrovoljni fond *Social Security Reserve Fund*. Razlika je u „punjenju“ fonda. *Sovereign Pension Reserve Fund* predstavljaju zatvorene investicione fondove, a *Social Security Reserve Funds* se pune po osnovu „ulazaka“ novih članova u fond. Ukupna imovina kojom upravljaju iznosi oko 240 miliona evra od čega je oko 92 miliona u gotovini, obveznicama, depozitima i trezorskim zapisima, a ostatak u akcijama i nekorporativnoj imovini.

## 2. METODOLOGIJA

U radu su posmatrani podaci koje je dao *The National Bureau of Economic Research* (The National Bureau of Economic Research 2019), Organizacija za ekonomsku saradnju i razvoj (Organizacija za ekonomsku saradnju i razvoj 2019) te podaci o kreditnim rejtingozima zemalja objavljene od strane tri najpoznatije rejting agencije na svijetu. Za svaku posmatranu zemlju uzeti su u obzir procenat aktive penzijskih fondova u vlasničkim, u dužničkim hartijama od vrijednosti, procenat aktive u gotovini i depozitima kao i procenat ulaganja u ostale klase aktive i nekorporativna imovina. Istovremeno posmatrani su iznos BDP-a za svaku zemlju te iznos FD indeksa, ali i veličina penzijskih fondova kao procenat od BDP-a. Na kraju, iskazan je kreditni rejting za svaku zemlju u skladu sa dobijenim rejtingom od agencija: Moody's, S&P i Fitch. Na kraju, tamo gdje je to bilo moguće iskazani su kreditni rejtinzi za svaki pojedinačni rejting (*Prime* - prvoklasni rejting; *High grade* - visok kreditni rejting; *Upper medium grade* - gornji srednji razred; *Lower medium grade* - niži srednji razred; *Non-investment grade* - neinvesticioni razred; *Speculative* - spekulativne obveznice te *Highly speculative* - visoko spekulativne obveznice).

Tabela 1. Prikaz strukture i veličine penzijskih fondova, pokazatelja razvijenosti tržišta i BDP-a po zemljama (OECD 2018)

Država	Vlasničke hov	Dužničke hov	Gotovina i depoziti	CIS	Ostalo	BDP	FD Index	Imovina kao % od BDP-a	Moody's ratings	S&P ratings	Fitch ratings	Opis	
Australija	58,25	4,79	11,22	25,74	1.427,767	0,85	130,17	Aaa	AAA	AAA	Prime		
Austrija	35,45	44,36	7,05	13,14	459,401	0,64	6,04	Aa1	AA+	AA+	High grade		
Belgija	41,49	45,12	5,74	7,65	536,055	0,58	7,80	Aa3	AA-	AA-	High grade		
Kanada	30,50	31,74	4,29	33,48	1.733,706	0,86	154,70	Aaa	AAA	AAA	Prime		
Cile	40,83	58,40	2,23	0,54	299,887	0,47	72,04	A1	A+	A+	Upper medium grade		
Češka	0,57	76,89	19,12	2,14	1,28	244,540	0,37	8,83	A1	AA-	AA-	Upper medium grade	
Danska	25,65	29,86	2,01	4,12	38,37	354,683	0,64	218,53	Aaa	AAA	AAA	Prime	
Estonija	36,13	59,45	4,05	0,36	29,527	0,33	17,54	A1	AA-	AA-	Upper medium grade		
Finska	39,46	27,95	3,46	29,13	276,553	0,66	60,49	Aa1	AA+	AA+	High grade		
Francuska	38,12	22,39	34,49	5,01	2.794,696	0,76	-	Aa2	AA	AA	High grade		
Njemačka	6,20	51,94	3,82	38,05	4.029,140	0,70	6,89	Aaa	AAA	AAA	Prime		
Grčka	11,39	58,67	7,81	20,81	1,32	218,057	0,54	0,75	B1	B+	BB-	Highly speculative	
Mađarska	7,15	60,11	3,70	26,62	2,42	156,393	0,44	5,94	Baa3	BBB	BBB	Lower medium grade	
Island	30,50	43,98	9,99	15,54	26,684	0,54	164,55	A3	A	A	Upper medium grade		
Irska	32,30	40,90	2,90	23,90	366,448	0,69	184,65	A2	A+	A+	Upper medium grade		
Izrael	18,13	65,10	7,12	9,64	365,599	0,57	59,03	A1	AA-	AA-	Upper medium grade		
Italija	20,08	44,96	6,17	28,80	2.086,911	0,80	-	Baa3	BBB	BBB	Lower medium grade		
Japan	10,46	30,44	8,04	51,06	5.070,626	0,87	28,83	A1	A+	A+	Upper medium grade		
Južna Koreja	3,12	44,21	16,58	6,29	29,80	1.655,608	0,86	30,06	Aa2	AA	AA-	High grade	
Latvija	27,85	61,66	7,13	3,36	34,286	0,29	13,81	A3	A	A	Upper medium grade		
Litvanija	45,92	46,20	5,20	2,67	52,468	0,26	7,20	A3	A	A-	Upper medium grade		
Luksemburg	29,11	60,04	4,12	6,72	68,993	0,75	2,92	Aaa	AAA	AAA	Prime		
Meksiko	21,52	75,64	0,88	1,96	1.199,264	0,41	26,63	A3	BBB+	BBB+	Upper medium grade		
Holandija	31,70	43,60	3,28	21,42	909,887	0,71	184,15	Aaa	AAA	AAA	Prime		
Novi Zeland	33,23	23,75	6,97	34,47	1,59	205,997	0,61	25,77	Aaa	AA	AA	Prime	
Norveška	36,94	54,18	2,37	6,52	441,439	0,69	10,48	Aaa	AAA	AAA	Prime		
Poljska	85,23	7,41	5,92	0,01	1,43	549,478	0,47	10,12	A2	A-	A-	Upper medium grade	
Portugalija	20,43	58,14	6,31	15,11	237,962	0,69	11,41	Baa3	BBB	BBB	Lower medium grade		
Slovačka	2,24	57,81	12,05	23,51	4,39	106,940	-	-	A2	A+	A+	Upper medium grade	
Slovenija	1,88	59,58	12,28	24,60	1,66	54,969	0,39	6,92	Baa1	A+	A-	Lower medium grade	
Španija	13,20	45,48	11,00	21,83	8,50	1.437,047	0,88	13,57	Baa1	A-	A-	Lower medium grade	
Švedska	13,92	14,52	0,90	65,23	5,43	554,659	0,72	90,20	Aaa	AAA	AAA	Prime	
Švicarska	31,10	30,64	5,01	33,25	709,118	0,94	-	Aaa	AAA	AAA	Prime		
Turska	13,07	50,45	25,16	11,32	713,513	0,83	14,30	Baa3	B+	BB	speculative		
Velika Britanija	13,14	27,97	2,15	28,47	28,27	2.808,899	0,82	105,30	Aa2	AA	AA	High grade	
Sjedinjene Američke Države	32,95	21,58	2,37	33,29	9,81	20,513,000	0,87	145,27	Aaa	AAA	AAA	Prime	

Družava	Vlasničke hov	Dužničke hov	Gotovina i depoziti	CIS	Ostalo	BDP	FD Index	Imovina kao % od BDP-a	Moody's ratings	S&P ratings	Fitch ratings	Opis	
Namibija	65,08	24,01	8,11	2,81	14,148	0,45	91,66	Bal	BB+	Non-investment grade			
Hong Kong	63,44	20,93	11,50	4,14	360,315	0,73	43,52	Aa2	AA+	High grade			
Mauricijus	55,95	32,39	8,73	2,92	14,033	0,43	4,69	Baa1	0	0	Lower medium grade		
Pakistan	49,31	34,11	-	16,58	306,987	0,23	0,06	B3	B-	B-	Highly speculative		
Papua Nova Gvineja	42,96	23,62	11,17	-	16,53	0,23	18,01	B2	B+	B+	Highly speculative		
Peru	42,56	43,56	6,04	7,45	238,944	0,38	22,67	A3	BBB+	BBB+	Upper medium grade		
Malavi	41,78	37,14	9,82	-	11,26	6,885	0,08	11,82	0	0	Highly speculative		
Kolumbija	40,37	49,48	2,24	-	7,91	336,940	0,44	25,28	Baa2	BBB-	Lower medium grade		
Jamaika	33,48	52,61	1,23	12,68	15,424	0,27	28,51	B3	B+	B+	Highly speculative		
Trinidad i Tobago	32,34	43,35	6,18	18,12	23,284	0,34	19,76	Bal	BBB+	0	Non-investment grade		
Sjeverna Makedonija	30,31	61,34	8,20	0,15	12,374	0,28	9,40	0	BB-	BB	speculative		
Armenija	28,07	41,06	29,97	0,90	12,533	0,25	1,90	B1	0	B+	Highly speculative		
Rumunija	22,97	68,29	8,66	0,98	239,440	0,31	4,85	Baa3	BBB-	BBB-	Lower medium grade		
Zambija	22,33	21,78	8,00	7,63	40,27	25,778	0,12	3,48	0	B-	Highly speculative		
Hrvatska	21,90	73,42	4,38	0,30	59,971	0,41	26,79	Ba2	BBB-	BBB+	speculative		
Kenija	19,83	40,39	4,24	35,53	89,591	0,19	13,13	0	B+	B+	Highly speculative		
Južna Afrika	19,54	9,32	3,99	15,85	51,30	0,62	95,30	Baa3	BB	BB+	Lower medium grade		
Tajland	18,35	56,41	12,27	11,97	0,99	490,120	0,73	7,06	Baa1	BBB+	BBB+	Lower medium grade	
Bugarska	17,40	60,87	5,85	12,87	3,01	63,651	0,38	12,92	Baa2	BBB-	BBB-	Lower medium grade	
Indonezija	17,33	45,17	27,78	9,72	1,005,268	0,36	1,88	Baa2	BBB-	BBB-	Lower medium grade		
Uganda	16,77	72,62	4,68	5,93	27,835	0,12	9,29	0	B	B+	Highly speculative		
Malta	12,27	11,29	4,93	28,48	43,03	14,270	0,57	42,00	A3	A-	A+	Upper medium grade	
Rusija	11,49	68,83	14,83	-	4,85	1,576,488	0,51	6,06	Baa3	BBB-	BBB-	Lower medium grade	
Indija	11,25	84,49	2,55	-	1,72	2,689,992	0,41	1,05	Baa2	BBB-	BBB-	Lower medium grade	
Nigerija	10,67	76,14	10,05	3,14	397,472	0,24	6,54	0	B	B+	B+	Highly speculative	
Surinam	10,16	33,71	18,48	1,36	36,29	0,22	11,28	B2	B	B-	B-	Highly speculative	
Malezija	9,36	79,47	6,61	1,48	3,07	347,290	0,66	0,32	A3	A-	A-	Upper medium grade	
Brazil	8,51	35,93	0,10	-	55,46	1,909,386	0,57	24,59	Ba2	BB-	BB-	speculative	
Srbija	8,49	84,14	7,37	-	47,564	0,27	0,81	0	BB	BB	BB	speculative	
Egipat	7,41	71,82	2,82	-	17,95	249,471	0,31	1,74	B3	B+	B+	Highly speculative	
Maldivi	3,75	91,10	5,15	-	4,809	0,18	9,28	0	0	B+	B+	Highly speculative	
Kostarika	3,04	92,05	3,42	-	1,49	60,816	0,27	18,83	B1	B+	B+	Highly speculative	
Gana	1,74	69,57	13,89	1,22	13,58	51,815	0,15	5,39	0	B	B	Highly speculative	
Panama	0,37	55,05	43,37	-	1,21	66,031	0,35	0,87	Baa1	BBB	BBB	Lower medium grade	
Singapur	0,18	-	-	-	96,60	346,621	0,71	80,22	Aaa	AAA	AAA	Prime	
Uruguay	0,17	77,57	6,78	-	15,48	60,933	0,25	27,40	Baa2	BBB	BBB-	Lower medium grade	
Dominikanska Republika	-	99,86	0,90	-	0,14	81,103	0,18	12,44	Ba3	BB-	BB-	speculative	
Albanija	-	94,74	3,37	-	1,89	15,121	0,21	0,11	B1	B+	0	Highly speculative	

Država	Vlasničke hrov	Dužničke nov	Gotovina i depoziti	CIS	Ostalo	BDP	FD Index	Imovina kao % od BDP-a	Moody's ratings	S&P ratings	Fitch ratings	Opis
Bosna i Hercegovina	44,88	34,59	7,66	-	12,88	18,170	0,26	7,03	B3	B	0	Highly speculative

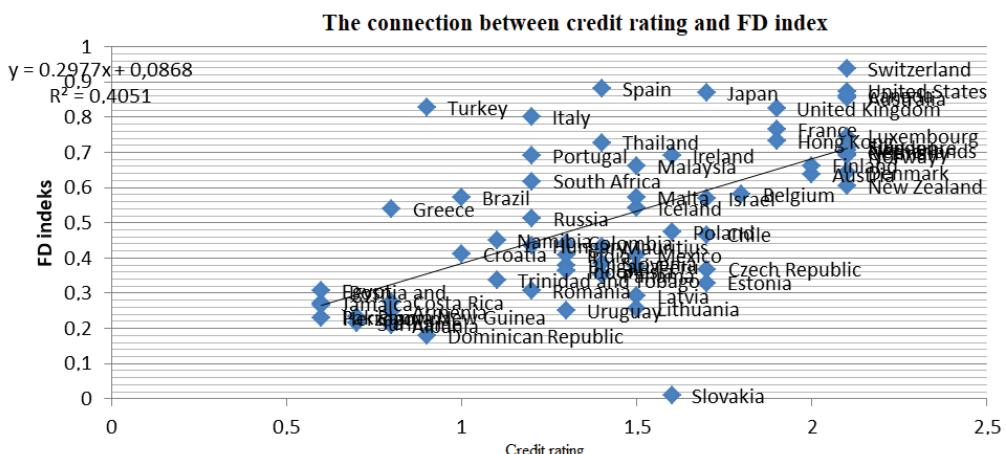
Koristeći program Excel iskazani su koeficijent korelacija i determinacije za sljedeće varijable:

- X osa - kreditni rejting zemlje i Y-osa razvijenost tržišta (FD indeks);
- X osa - učešće vlasničkih hartija u fondovima i Y-osa razvijenost tržišta (FD indeks);
- X osa - učešće dužničkih hartija u fondovima i Y-osa razvijenost tržišta (FD indeks);
- X osa - učešće vlasničkih hartija u fondovima i Y-osa iznos BDP-a;
- X osa - učešće dužničkih hartija u fondovima i Y-osa iznos BDP-a;
- X osa - veličine penzijskih fondova u odnosu na BDP i Y-osa razvijenost tržišta (FD indeks);
- X osa - veličine penzijskih fondova u odnosu na BDP i Y-osa iznos BDP-a.

### 3. REZULTATI I DISKUSIJA

Zapažamo da je funkcija rastuća,  $y=0,2977x+0,0868$ , a da je vrijednost  $R^2=0,4051$ , tj. koeficijent determinacije iznosi 40,51, odnosno korelacija između dvije posmatrane varijable je 0,64 (Grafikon 2) što znači da postoji slaba veza između kreditnog rejtinga zemlje, odnosno rejtinga državnih obveznica i razvijenosti finansijskog tržišta. Istom metodologijom dalje su upoređeni (Tabela 2):

- a) Učešće vlasničkih hartija u fondovima i razvijenosti tržišta (FD indeksa);
- b) Učešće dužničkih hartija u fondovima i razvijenosti tržišta (FD indeksa);
- c) Učešće vlasničkih hartija u fondovima i BDP-a;
- d) Učešće dužničkih hartija u fondovima i BDP-a;
- e) Veličine penzijskih fondova u odnosu na BDP i razvijenosti tržišta (FD indeksa);
- f) Veličine penzijskih fondova u odnosu na BDP i BDP-a.



Grafikon 2. Prikaz veze između rejtinga zemlje i razvijenosti tržišta (Autor)

Tabela 2. Korelacija i determinacija posmatranih veličina po zemljama (Autor)

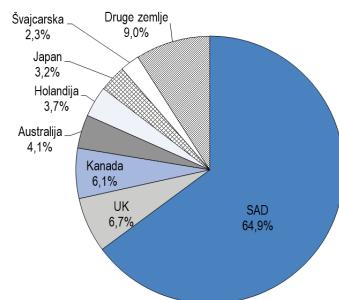
Odnos	korelacija	koeficijent determinacije
Učešće vlasničkih hartija u fondovima i razvijenosti tržišta (FD indeksa)	13,0%	1,7%
Učešće dužničkih hartija u fondovima i razvijenosti tržišta (FD indeksa)	-39,3%	15,5%
Učešće vlasničkih hartija u fondovima i BDP-a	0,8%	0,0%
Učešće dužničkih hartija u fondovima i BDP-a	-19,6%	3,9%
Veličina penzijskih fondova u odnosu na BDP i razvijenosti tržišta (FD indeksa)	43,1%	18,6%
Veličina penzijskih fondova u odnosu na BDP i BDP-a	26,8%	7,2%

Primjećujemo da ne postoji značajna korelacija niti determinacija između posmatranih varijabli. Međutim, kada zemlje grupišemo po rejtingu dobijenom od rejting agencije u iste grupe (Prime, High grade, Upper medium grade, Lower medium grade, Non-investment grade, Speculative, Highly speculative) dolazimo do značajno drugačijih rezultata. Kada rezultate iz glavne tabele prilagodimo po grupama dobijamo sljedeći prikaz.

Tabela 3. Prikaz strukture i veličine penzijskih fondova, pokazatelja razvijenosti tržišta i BDP-a po zemljama po grupama zemalja prema kreditnom rejtingu (Autor)

Opis rejtinga	Vlasničke hov	Dužničke hov	Gotovina i depoziti	Druga imovina	Ostalo	BDP	FD Index	Imovina kao % BDP-a
Prime	27,48	33,33	4,13	34,28	26,41	2.607.917	0,75	87,44
High grade	33,46	33,27	11,57	17,38	16,73	1.270.218	0,72	36,17
Upper medium grade	27,75	50,55	6,68	11,13	11,31	595.750	0,46	43,88
Lower medium grade	17,37	54,76	11,03	16,25	9,73	680.803	0,50	14,08
Non-investment grade	48,71	33,68	7,14	0,00	10,47	18.716	0,39	55,71
Speculative	13,71	67,52	7,54	0,00	11,23	470.651	0,42	14,72
Highly speculative	20,78	55,63	8,86	3,88	13,42	89.728	0,23	8,66

Zapažamo da zemlje sa spekulativnim kreditnim rejtingom imaju gotovo dvije trećine u dužničkim hartijama od vrijednosti, a zemlje sa neinvesticionim rangom imaju gotovo pola imovine u dužničkim hartijama od vrijednosti. Važno je naglasiti da razvijene zemlje imaju više investicionih alternativa pa više od trećine imovine ulažu u druge oblike imovine. Iz ovoga možemo zaključiti da se penzijski fondovi u razvijenim zemljama radije izlažu rizičnim finansijskim instrumentima. S druge strane, zemlje koje su u posttranzpcionom periodu, prirodno, imaju mnogo više vlasničkih hartija od vrijednosti na tržištu te im i fondovi ulažu više u ove hartije. Na kraju, analizirajući sortirane rezultate ne treba izgubiti iz vida i efekte geografske diverzifikacije. Naime, fondovi u skandinavskim zemljama su poznati po tome što značajno ulažu na druga razvijena tržišta. S tim u vezi kada posmatramo geografsku distribuciju imovine penzijskih fondova zapažamo da je oko 2/3 imovine uloženo na tržište SAD-a.



Grafikon 3. Prikaz tržišta na koja ulažu penzijski fondovi (OECD 2018)

S obzirom na to da navedene analize sprovedemo ponovo, samo na osnovu grupe u kojoj određene zemlje pripadaju (*prime, high grade, upper medium grade, lower medium grade, non-investment grade, speculative i highly speculative*), dolazimo do značajno drugačijih rezultata. Novi rezultati su posljedica činjenice da na X-osi imamo samo sedam veličina, što u

velikoj mjeri povećava koeficijent korelacije i determinacije između posmatranih pojava, jer je „raspršenost“ manja. Naime, gradacija kreditnog rejtinga zanemaruje napomenu rejtinga koju daje rejting agencija poput „stabilan“, „negativan“ ili „na posmatranju“.

Tabela 4. Prikaz gradacije kreditnog rejtinga i opisa grupe (Autor)

Agencija Moody's	Agencija S&P	Agencija Fitch	Opis grupe kojom zemlje pripadaju
Aaa	AAA	AAA	Prime
Aa1	AA+	AA+	High grade
Aa2	AA	AA	
Aa3	AA-	AA-	
A1	A+	A+	Upper medium grade
A2	A	A	
A3	A-	A-	
Baa1	BBB+	BBB+	Lower medium grade
Baa2	BBB	BBB	
Baa3	BBB-	BBB-	
Ba1	BB+	BB+	Non-investment grade
Ba2	BB	BB	Speculative
Ba3	BB-	BB-	
B1	B+	B+	Highly speculative
B2	B	B	
B3	B-	B-	
Caa1	CCC+	CCC	Substantial risks
Caa2	CCC		Extremely speculative
Caa3	CCC-		In default with little prospect for recovery
Ca	CC		
C	C		
/	D	DDD	In default
/		DD	
		D	

Zapažamo da postoji slaba veza između učešća dužničkih hartija u fondovima i razvijenosti tržišta (koeficijent korelacije je -0,604, a koeficijent determinacije je 0,365), veličine penzijskih fondova u odnosu na BDP i razvijenosti tržišta (0,631; 0,398) te veličine penzijskih fondova u odnosu na BDP i BDP-a (0,696; 0,485).

Tabela 5. Korelacija i determinacija posmatranih veličina po grupama zemalja prema kreditnom rejtingu (Autor)

Osnos	Po grupama	
	korelacija	koeficijent determinacije
Učešće vlasničkih hartija u fondovima i razvijenosti tržišta (FD indeksa)	15,0%	2,2%
Učešće dužničkih hartija u fondovima i razvijenosti tržišta (FD indeksa)	-60,4%	36,5%
Učešće vlasničkih hartija u fondovima i BDP-a	-5,2%	0,3%
Učešće dužničkih hartija u fondovima i BDP-a	-48,3%	23,3%
Veličina penzijskih fondova u odnosu na BDP i razvijenosti tržišta (FD indeksa)	63,1%	39,8%
Veličina penzijskih fondova u odnosu na BDP i BDP-a	69,6%	48,5%

Posmatrajući dobijene rezultate možemo tvrditi da postoji slaba veza između učešća dužničkih hartija u fondovima i razvijenosti tržišta, veličine penzijskih fondova u odnosu na BDP i razvijenosti tržišta te veličine penzijskih fondova u odnosu na BDP i veličine BDP-a. Na primjer, penzijski fondovi u zemljama sa *Prime* kreditnim rejtingom imaju oko trećine portfelja u dužničkim hartijama, dok zemlje nešto slabijeg rejtinga imaju gotovo pola imovine u dužničkim hartijama od vrijednosti.

Posmatrajući strukturu portfelja penzijskih fondova, kako na razvijenim, tako i tržištima u razvoju ističemo da je prirodno je da penzijski fond ima barem trećinu portfelja u obveznicama. Preneseno na okvire Republike Srpske možemo tvrditi da je, na primjer, Penzijski rezervni fond Republike Srpske po svojoj formi i načinu funkcionisanja zatvoreni

investicioni fond, osnovan posebnim zakonom te se od investicionih fondova razlikuje po tome što ima samo jednog osnivača-vlasnika - Fond PIO Republike Srpske i osnovan je u obliku akcionarskog društva kojim upravlja Društvo za upravljanje, čiji je jedini osnivač/vlasnik, takođe, Fond PIO. Kao takav, penzijski fond može biti generator razvoja lokalnih zajednica, jer po svom prospektu i investicionoj politici može da ulaze u obveznice koje emituju lokalne zajednice. Važna je uloga penzijskih fondova u uspjehu emisije obveznica na tržistima u razvoju. Dakle, penzijski fondovi imaju značajan uticaj i mogu biti značajna podrška za finansiranje razvoja lokalnih zajednica. Istovremeno, ulaganje u penzijski fond, po principu ulaganja u treći stub penzijskog osiguranja, ima i sinergetski efekat kada se iskoriste poreske olakšice. Pri ulaganju u penzijske fondove poreskim olakšicama se stimulišu poslodavci i radnici da formiraju štednju za treće doba kada dolazi do pada raspoloživog prihoda te građani koji imaju ovaj vid štednje neće vršiti toliko socijalni pritisak na budžet u budućnosti budući da imaju dodatne prihode. Drugo, zakonska ograničenja ulaganja te investiciona politika EPF koja iz njih proizilazi je prilično konzervativna i primarno oslonjena (što je važna karakteristika svim penzijskim fondovima u svijetu) na ulaganje u dugoročne državne hartije od vrijednosti).

S druge strane, penzijski fondovi jednostavno moraju da ulože značajan dio imovine kojom upravljaju u obveznice, dakle i u municipalne, čime se direktno povećava prilika za razvoj opštine. Investicioni cilj penzijskog fonda je svuda isti - realizacija kontinuiranog i stabilnog prinosa od ulaganja u hartije od vrijednosti. Investicioni horizont ulaganja penzijskih fondova je dugi rok. Sudeći po tome, municipalne obveznice predstavljaju gotovo idealan instrument za ulaganje penzijskih fondova. Sudeći samo po tome, penzijski fondovi mogu se posmatrati kao generator razvoja lokalnih zajednica, ali ne i tržišta kapitala. Bez sumnje, finansiranje projekata koji se odnose na ekonomski razvoj, lokalne zajednice može da se obezbijedi emisijom obveznica u kojoj mogu da učestvuju i penzijski investicioni fondovi. Uprkos navedenom, treba imati u vidu da, kao posljedica geografske diverzifikacije, koju preferiraju penzijski fondovi podstiče se ulaganje u već razvijena tržišta. S tim u vezi, penzijski fondovi se ne mogu sami po sebi posmatrati kao generator razvoja finansijskog tržišta.

## ZAKLJUČAK

Rad pokazuje da se finansijski razvoj zemlje definiše kao kombinacija dubine, pristupa tržištu i efikasnosti tržišta. S ciljem da se utvrdi u kojoj mjeri penzijski fondovi i kako utiču na finansijski razvoj, odnosno na ekonomski rast pokazano je da penzijski fondovi u zemljama sa *Prime* kreditnim rejtingom imaju oko trećinu portfelja u dužničkim hartijama, dok zemlje nešto slabijeg rejtinga imaju gotovo pola imovine u dužničkim hartijama od vrijednosti. Osim toga, rad ukazuje na to da razvijena finansijska tržišta karakteriše široka lepeza instrumenata za ulaganje, kao i derivata, što olakšava disperziju i diverzifikaciju. Takođe, posmatrajući pristup finansijskim instrumentima i efikasnost tržišta, možemo tvrditi da se fondovi na razvijenim tržištima radije izlažu rizičnim hartijama od vrijednosti od obveznica.

Dovodeći u vezu učešće vlasničkih hartija od vrijednosti u portfeljima penzijskih fondova i razvijenost finansijskog tržišta zaključeno je da je korelacija 13,0%, a determinacija 1,7%. Kada se grupišu zemlje po investicionom rejtingu na *prime*, *high grade*, *upper medium grade*, *lower medium grade*, *non-investment grade*, *speculative* i *highly speculative* utvrđeno je da postoji korelacija od 15,0%, a determinacija od 2,2%. Prema tome, ne postoji čak ni slaba veza između učešće vlasničkih hartija od vrijednosti u portfeljima penzijskih fondova i razvijenosti finansijskog tržišta.

Korelacija učešća dužničkih hartija od vrijednosti u portfeljima penzijskih fondova i nivoa razvijenosti finansijskog tržišta iznosi 11,5%, a determinacija je 1,3%. Slično, kada posmatramo zemlje po investicionim rejtingu zapazićemo korelaciju od 8,9%, odnosno determinaciju od 0,8%. Prema tome, ne možemo tvrditi ni da veće učešće dužničkih hartija od

vrijednosti u portfeljima penzijskih fondova ima pozitivan uticaj na razvijenost finansijskog tržišta.

Posmatrajući učešće vlasničkih hartija od vrijednosti u portfeljima penzijskih fondova i iznos BDP-a zemlje, utvrđeno je da postoji negativna korelacija odnosno -39,3%, a koeficijent determinacije je 15,5%. Kada posmatramo po grupama ova veza je još značajnija (-60,4% i 36,5%) i možemo reći da postoji negativna slaba veza između ove dvije pojave.

Slično je i sa vezom učešća dužničkih hartija od vrijednosti i BDP-a. Na osnovu analize dostupnih podataka utvrđeno je da je korelacija između učešća dužničkih hartija od vrijednosti u portfeljima penzijskih fondova i BDP-a zemlje negativna i iznosi -39,7%. Prema tome, determinacija je 15,7%. Kada zemlje grupišemo po kreditnom rejtingu dobijamo da je korelacija -60,2%, a determinacija 36,2%. Na osnovu toga možemo zaključiti da postoji slaba negativna veza između ove dvije pojave. Na kraju, utvrđeno je da ne postoji gotovo nikakva veza između veličine penzijskih fondova u odnosu na BDP i razvijenosti finansijskog tržišta. Koeficijent korelacije među pojedinačnim zemljama je 0,8%, a kada posmatramo po kreditnom rejtingu, onda je 5,2%. Značajnija veza postoji imajući u obzir veličine penzijskih fondova i BDP-a zemlje, ali i ona se ne može nazvati slabom. Postoji korelacija od -19,6%, odnosno -48,3%, kada posmatramo zemlje prema kreditnom rejtingu. U skladu sa navedenim, tek djelimično su potvrđene treća i četvrta pomoćne hipotezu koje glase: "Veće učešće vlasničkih hartija od vrijednosti u portfeljima penzijskih fondova ima pozitivan uticaj na BDP zemlje" i "Veće učešće dužničkih hartija od vrijednosti u portfeljima penzijskih fondova ima pozitivan uticaj na BDP zemlje".

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## PENSION FUNDS AS A GENERATOR OF DEVELOPMENT OF THE FINANCIAL MARKET

**Summary:** *The aim of the paper is to relate the credit rating of the country and the development of the financial market. At the same time, we will analyze the structure and size of pension funds and the development of the financial market by country. The research question is: "Does the size and structure of pension funds has any influence on the development of the financial market in the country?" The research deals with finding a response to the question of the dependence between the structure and size of pension funds on one side and the development of the financial market on the other. The subject of the research is an analysis of all pension funds, financial markets, credit rating and GDP in developed countries and in emerging markets. The obtained response to the research question may point to the direction of regulatory change that would stimulate or dissipate the development of pension funds in emerging markets. The methods used in this paper are the analysis and synthesis of previous research and theoretical findings, and an overview of case studies, to make conclusions drawn by the induction method. The contribution of the work is reflected in the fact that pension funds have been explained by their structure and size offering the development of the financial market in the country. The results show that pension funds can be significant support for state development, financing of local communities, but there are only weak determinations between the size and structure of the funds and the size of the economy and between the development of the financial market and the development of the market.*

**Key words:** pension funds; investment funds, financial market development

**JEL classification:** C82, D53, E44, G15, 016

### INTRODUCTION

Searching for the answer to the question of the preferred structure and size of pension funds, the structure and size of pension funds in the world have been analyzed. The structure of investment of pension funds in the world with an emphasis on the structure of the portfolio and the functioning of the Pension Reserve Fund of the Republic of Srpska and the European Voluntary Pension Fund of Republika Srpska were compared. The tendency of this paper is to through a detailed analysis of the structure of pension funds in the world, determine the regularity between the size and structure of pension reserve funds and the size and degree of development of the financial market, that is, the country and GDP. In this regard, the main hypothesis is: "The size and structure of pension funds have an impact on the size and structure of the financial system of a particular country." Thus, the method of induction was used - from individual experiences to general. From the main hypothesis arises the auxiliary hypothesis:

H1: "Greater participation of equity securities in pension funds' portfolios has a positive impact on the development of the financial market."

H2: "Greater participation of debt securities in pension funds' portfolios has a positive impact on the development of the financial market."

H3: "Greater participation of equity securities in pension funds' portfolios has a positive impact on the GDP of the country."

H4: "Greater participation of debt securities in pension funds' portfolios has a positive impact on the GDP of the country."

H5: "The size of pension funds in relation to GDP has a positive impact on the development of the financial market."

H6: "The size of pension funds has a positive impact on the GDP of the country."

The aim of this paper is to offer recommendations for creating the optimal structure and size of pension funds in developing markets, that is, to offer the direction of development of pension funds.

## 1. PREVIOUS RESEARCH

A large body of literature has developed to assess the impact of financial development on economic growth, inequality, and economic stability (Levine 2005; Demirguc-Kunt and Levine 2009; Dabla-Norris and Srivisal 2013). Financial development involves improvements in such functions provided by the financial systems as: (i) pooling of savings; (ii) allocating capital to productive investments; (iii) monitoring those investments; (iv) risk diversification; and (v) exchange of goods and services (Levine 2005). Each of these financial functions can influence saving and investment decisions and the efficiency with which funds are allocated. As a result, finance affects the accumulation of physical and human capital and total factor productivity – the three factors that determine economic growth. To the extent that financial development reduces informational asymmetries and financial constraints and promotes risk sharing, it can enhance the ability of financial systems to absorb shocks and reduce the amplification of cycles through the financial accelerator (Bernanke and Gertler and Gilchrist 1999), lowering macroeconomic volatility and inequality.

Most of the empirical literature since the 1970s approximates financial development by two measures of financial depth – the ratio of private credit to GDP and, to a lesser extent, by stock market capitalization, also as a ratio to GDP. For example, in an influential industry-level study Rajan and Zingales (Rajan and Zingales 1998) use both measures to show that more financial development facilitates economic growth. More recently, Arcand, Berkes and Panizza (Arcand and Berkes and Panizza 2012) use credit to GDP ratio to establish that there is a threshold above which financial development no longer has a positive effect on economic growth. On the macroeconomic volatility side, Dabla-Norris and Srivisal (Dabla-Norris and Srivisal 2013) find that financial development, as measured by private credit to GDP from banks and other financial institutions, plays a significant role in dampening the volatility of output, consumption, and investment growth, but only up to a certain point. Most researchers in this field use variations of these two measures to examine the role of the financial system in economic development.

And yet, financial development is a multidimensional process. With the passage of time, financial sectors have evolved across the globe and modern financial systems have become multifaceted. For example, while banks are typically the largest and most important, investment banks, insurance companies, mutual funds, pension funds, venture capital firms, and many other types of nonbank financial institutions now play substantive roles. Similarly, financial markets have developed in ways that allow individuals and firms to diversify their savings, and firms can now raise money through stocks, bonds, and wholesale money markets, by-passing traditional bank lending. The constellation of such financial institutions and markets facilitates the provision of financial services. Furthermore, an important feature of financial systems is their access and efficiency. Large financial systems are of limited use if they are not accessible to a sufficiently large proportion of the population and firms. Even if financial systems are sizeable and have a broad reach, their contribution to economic

development would be limited if they were wasteful and inefficient. This point is made also, for example, in Čihák et al. and Aizenman, Jinjarak and Park (Čihák et al. 2012; Aizenman, Jinjarak and Park 2015). The diversity of financial systems across countries implies that one needs to look at multiple indicators to measure financial development.

To overcome the shortcomings of single indicators as proxies for financial development, a large number of indices that summarize how developed financial institutions and financial markets are in terms of their depth, access, and efficiency, culminating in the final index of financial development has been created (Figure 1). These indices were originally developed in the context of the IMF Staff Discussion Note “Rethinking Financial Deepening: Stability and Growth in Emerging Markets” (Sahay et al. 2015). This paper presents and explains the methodology that underpins them. The sub-indices and the final overall index are constructed for 183 countries on annual frequency between 1980 and 2013. Financial institutions include banks, insurance companies, mutual funds, and pension funds. Financial markets include stock and bond markets. Financial development is defined as a combination of depth (size and liquidity of markets), access (ability of individuals and companies to access financial services), and efficiency (ability of institutions to provide financial services at low cost and with sustainable revenues, and the level of activity of capital markets). This broad multi-dimensional approach to defining financial development follows the matrix of financial system characteristics developed by Čihák (Čihák et al. 2012).

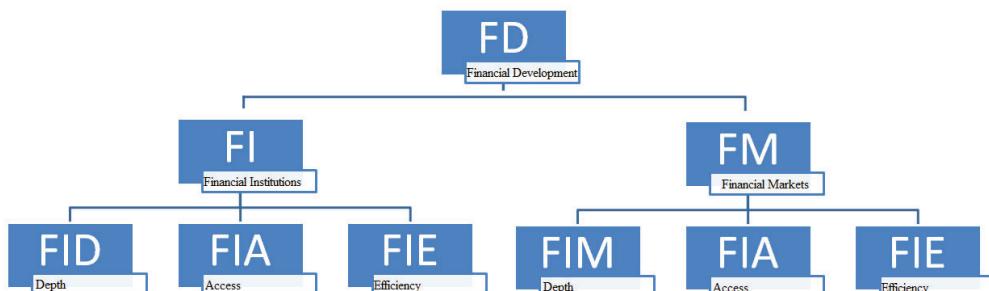


Chart 1. Pyramid of the Financial Development Index (IMF staff, bazirano na Čihák and et al. 2012)

The contribution of this paper is quite distinct. First, we supplement the World Bank FinStats, a more updated version of the Global Financial Development Database (GFDD) introduced by Čihák and co-authors, with additional data from the Bank of International Settlements (BIS) debt securities database, Dealogic corporate debt database, and IMF Financial Access Survey. Second, we summarize this diverse information in several easy to use indices. Given the wealth of information on financial system properties – there are 105 distinct indicators in GFDD and 46 indicators in FinStats – it is not feasible to track all of these different indicators individually, especially in empirical work. And even if it were possible, not one single indicator, when taken on its own, would offer a comprehensive understanding of the level of financial development. The sub-indices and the final index pull together these various indicators and allow a comprehensive assessment of particular features of financial systems and the overall level of financial development. As a result, the indices allow to pin down where deficiencies in financial development lie or which aspects of financial development affect macroeconomic performance, which could then be investigated in greater detail using the disaggregated data from FinStats or GFDD.

In the discussion, we will look at some of the constraints and shortcomings of the index in order to show to what extent the structure and size of pension funds influence the index result. The goal is to determine whether by replicating a certain country by the structure and size of the index, it is possible to further develop the financial market. In this regard, the term

"emerging market" means countries that are characterized by institutional turbulence, low level of corporate governance and economic development in relation to developed countries. Hoskisson and associates mark all the countries of the Western Balkans as the countries in transition (Hoskisson et al. 2000, 249-267). For the sake of illustration, institutional legacy of the communism is reflected in a large, undisciplined and ineffective administration, a bureaucratic approach of the institutions and corruption. So, a workplace in the state administration was a source of safety and influence (Haramija and Njavro 2016).

'A bureaucratised and restrictive authority has opened the door to corruption and bribery of public services because most citizens seem to believe that it is the only way to get things done' (Dimitrova-Grajzl and Simon 2010, 206). Even a glance at the agencies for statistics of the West Balkans countries confirms the prolongation of such practice, i.e. the increase in number of employees in the budget funded areas of administration, public authorities, education and art. On the other hand, there is an obvious decrease in number of employees in the processing industry. Besides, relevant researches also show a high level of corruption in the new EU member states as opposed to the *old* ones as a consequence of the communist regime (Transparency International 2016). Also, when observing the trust in institutions researches, countries in transition are always at the bottom of such lists (Bjørnskov 2007). Also, in small and open economies, such as countries in Western Balkans, monetary policy abilities are limited by many constraints (Benazić and Rami 2016, 1039). Therefore, in parallel with the weak development of the financial market, the criticism of the transition is based on the fact of significant increase of poverty and degradation, mostly of the middle class (Cifrić 1996, 137).

By comparing developing markets, we notice that, as in all Western Balkan countries as well as in Bosnia and Herzegovina, non-economic factors in the region play the most important role in determining the value of trade between countries (Trivić and Klimczak 2015, 57). The economic instability results from "frequent reforms, where the economic growth and the social impact of changes were completely ignored, low rates of domestic and foreign investment, foreign trade deficit and low rates of GDP" (Duvnjak 2018, 198). For example, there is a line of social and economic questions which are not yet answered and whose improvement implies complicated and demanding solutions (Amidžić et al. 2016, 57). Also, many buyers of the public companies saw the privatisation as an opportunity to gain certain asset without any entrepreneurial activities and/or creation of new value. As a result of such measures, a great deal of former public companies was closed after a lengthy insolvency proceeding. In the case of better luck, such companies still exist but their market value is significantly lower than it was a couple of years ago. As a result, a high percentage of working age people lost their jobs and new workplaces were never opened (Šokčević and Dugalić 2007).

The capital market in the country has gone through stages from establishment of the both stock exchange markets to the rise and fall and awakening again through the increased value of debt securities, but in the terms of market material and the number of market instruments it is still undeveloped and inactive. Moreover, the banking sector is at a medium level or development with basic aggregates in it (Serdar 2015, 127). In spite of that fact, in spite of all the limitations, institutional investors can create a security portfolio in local stock markets which would provide them with the wanted yield with only a little exposure to the market risk (Grujić 2017, 437). That sort of interest from institutional investors, along with the stability of domestic currency and foreign exchange rate, can represent a desired feature of a financial market. However, it is precisely the fixed foreign exchange rate that can create an illusion. In 1999 Bosnia and Herzegovina adopted a system of *currency board*. To tell the truth, this move has given results in the field of country's inflation reduction representing a significant contribution to the regulation of the finance sector. Currency board implies constantly fixed exchange rate, foreign-exchange reserve in a stable currency at a level sufficient to cover the amount of money (in paper and coins) and unlimited internal convertibility, i.e. the ability to

convert domestic money into the currency of the reserve (and vice-versa) at a fixed rate. In this regard the binding of the BAM to the EUR has been an *anchor keeping the Bosnia and Herzegovina vessel from unnecessary wandering across the stormy seas of transition*. Debt crisis situations and the experience of transitional countries in the last twenty years or so point to the fact that the entry of foreign capital with borrowing from foreign markets can lead a country to big problems. For example, even though the fixing of exchange rate is rather unpopular, it still presents a certain security to the system. Abandoning of the fixed exchange rate in Bosnia and Herzegovina would lead to depreciation of the BAM in relation to stronger currencies. As a consequence, the debts expressed in dollars or euros would rise in relation to the GDP.

Talking about the development of the domestic financial market, it is a fact that bonds are gaining in importance on the domestic market. Experiences from developed markets show that the secondary market of municipal bonds is significantly more passive and less liquid in relation to the stock market or the government bond market which to some extent may be the lack of this financial instrument. In addition, as a clear lack and danger of obtaining money through the issuance of municipal bonds, the fact that this financial instrument is underdeveloped in terms of the market, and that the procedure for obtaining money for the issuer is significantly longer compared to the bank loan. Namely, from the date of making the decision on borrowing, until the announcement of the decision on admission of bonds to the official stock exchange market, it passes even after several months. Experiences of developed capital markets, as well as countries in transition, show that municipal bonds, in addition to refreshing and diversifying the market, increase competitiveness among financial instruments. In addition to local communities, there is a direct benefit for the state, which is one of the synergetic effects of the appearance of municipal bonds on the capital market. At the same time, it is natural that the number of "smaller" companies, which is "listed by the law" - privatized, listed on the stock exchange - is reduced under the influence of the amended legislation. It implies that the majority owner who holds 95 percent of the ownership in the company can buy the rest, change the legal form of the company and delist it. Also, a smaller number of listed companies does not mean a less developed capital market. Stock markets in the region have more listed shares than the stock exchanges in Austria, Slovenia, the Czech Republic, Poland, Hungary and the turnover on those exchanges is incomparably lower than on European stock exchanges. For example, 98 shares were listed on the Vienna Stock Exchange and 3,304 bonds were listed. In addition, there are 4,826 structural products on this stock exchange. So, it is natural that the number of listed shares decreases, and parallel with this, the offer of bonds is growing. Speaking about the domestic market, we must point out that in BiH there are only two pension funds: the Pension Reserve Fund of Republika Srpska and the European Pension Voluntary Fund. Both are based in Banja Luka and are primarily oriented to the Banja Luka Stock Exchange. According to the OECD methodology, the Pension Reserve Fund of the Republika Srpska is the Sovereign Pension Reserve Fund (OECD 2018) while the European Pension Fund is a Social Security Reserve Fund. The difference is in the "filling" of the fund. Sovereign Pension Reserve Fund is a closed-end investment fund, and Social Security Reserve Funds are charged on the basis of "entry" of new members into the fund. The total assets they manage are about 240 million euros, of which about 92 million are in cash, bonds, deposits and treasury bills and the rest in shares and uncorrelated property.

## 2. METHODOLOGY

The paper presents the data provided by The National Bureau of Economic Research (The National Bureau of Economic Research 2019), Organization for Economic Co-operation and Development (Organization for Economic Co-operation and Development 2019), and data on credit ratings of countries published by the three most famous rating agencies in the world.

For each observed country, the percentage of assets of pension funds in equities, debt securities, the percentage of assets in cash and deposits, as well as the percentage of investments in other classes of assets and in uncorrelated assets were taken into account. At the same time, the amount of GDP for each country, the amount of the FD index, and the size of pension funds as a percentage of GDP were observed. In the end, a credit rating for each country was presented in accordance with the ratings obtained from the agencies: Moody's, S & P and Fitch. In the end, where possible, credit ratings for each individual rating were presented (Prime - first-class rating; High grade; upper credit rating; Upper medium grade; upper middle class; Lower medium grade; lower middle class; Non-investment grade; - non-investment grade; speculative - speculative bonds and Highly speculative - high speculative bonds).

Table 1. Overview of structure and size of pension funds, indicators of market development and GDP by country (OECD 2018).

State	Equity	Bills and bonds	Cash and deposits	CIS	Other	GDP	FD Index	Assets as a % of GDP	Moody's ratings	S&P ratings	Fitch ratings	Description	
Australia	58,25	4,79	11,22	25,74	1.427,767	0,85	130,17	Aaa	AAA	AAA	Prime		
Austria	35,45	44,36	7,05	13,14	4,59,401	0,64	6,04	Aa1	AA+	AA+	High grade		
Belgium	41,49	45,12	5,74	7,65	536,055	0,58	7,80	Aa3	AA-	AA-	High grade		
Canada	30,50	31,74	4,29	33,48	1,733,706	0,86	154,70	Aaa	AAA	AAA	Prime		
Chile	40,83	58,40	0,23	0,54	299,887	0,47	72,04	A1	A+	A+	Upper medium grade		
Czech Republic	0,57	76,89	19,12	2,14	1,28	244,540	0,37	8,83	A1	AA-	AA-	Upper medium grade	
Denmark	25,65	29,86	2,01	4,12	38,37	354,683	0,64	218,53	Aaa	AAA	AAA	Prime	
Estonia	36,13	59,45	4,05	0,36	29,527	0,33	17,54	A1	AA-	AA-	Upper medium grade		
Finland	39,46	27,95	3,46	29,13	276,553	0,66	60,49	Aa1	AA+	AA+	High grade		
France	38,12	22,39	34,49	5,01	2,794,696	0,76	-	Aa2	AA	AA	High grade		
Germany	6,20	51,94	3,82	38,05	4,029,140	0,70	6,89	Aaa	AAA	AAA	Prime		
Greece	11,39	58,67	7,81	20,81	1,32	2,18,057	0,54	0,75	B1	B+	BB-	Highly speculative	
Hungary	7,15	60,11	3,70	26,62	2,42	156,393	0,44	5,94	Baa3	BBB	BBB	Lower medium grade	
Iceland	30,50	43,98	9,99	15,54	26,684	0,54	164,55	A3	A	A	Upper medium grade		
Ireland	32,30	40,90	2,90	23,90	366,448	0,69	184,65	A2	A+	A+	Upper medium grade		
Israel	18,13	65,10	7,12	9,64	365,599	0,57	59,03	A1	AA-	AA-	Upper medium grade		
Italy	20,08	44,96	6,17	28,80	2,086,911	0,80	-	Baa3	BBB	BBB	Lower medium grade		
Japan	10,46	30,44	8,04	51,06	5,070,626	0,87	28,83	A1	A+	A+	Upper medium grade		
South Korea	3,12	44,21	16,58	6,29	29,80	1,655,608	0,86	30,06	Aa2	AA	AA-	High grade	
Latvia	27,85	61,66	7,13	3,36	34,286	0,29	13,81	A3	A	A	Upper medium grade		
Lithuania	45,92	46,520	5,20	2,67	52,468	0,26	7,20	A3	A	A-	Upper medium grade		
Luxembourg	29,11	60,04	4,12	6,72	68,993	0,75	2,92	Aaa	AAA	AAA	Prime		
Mexico	21,52	75,64	0,88	1,96	1,199,264	0,41	26,63	A3	BBB+	BBB+	Upper medium grade		
Netherlands	31,70	43,60	3,28	21,42	909,887	0,71	184,15	Aaa	AAA	AAA	Prime		
New Zealand	33,23	23,75	6,97	34,47	1,59	205,997	0,61	25,77	Aaa	AA	AA	Prime	
Norway	36,94	54,18	2,37	6,52	441,439	0,69	10,48	Aaa	AAA	AAA	Prime		
Poland	85,23	7,41	5,92	0,01	1,43	549,478	0,47	10,12	A2	A-	A-	Upper medium grade	
Portugal	20,43	58,14	6,31	15,11	237,962	0,69	11,41	Baa3	BBB	BBB	Lower medium grade		
Slovakia	2,24	57,81	12,05	23,51	4,39	106,940	-	-	A2	A+	A+	Upper medium grade	
Slovenia	1,88	59,58	12,28	24,60	1,66	54,969	0,39	6,92	Baa1	A+	A-	Lower medium grade	
Spain	13,20	45,48	11,00	21,83	8,50	1,437,947	0,88	13,57	Baa1	A-	A-	Lower medium grade	
Sweden	13,92	14,52	0,90	65,23	5,43	554,659	0,72	90,20	Aaa	AAA	AAA	Prime	
Switzerland	31,10	30,64	5,01	33,25	709,118	0,94	-	Aaa	AAA	AAA	Prime		
Turkey	13,07	50,45	25,16	11,32	713,513	0,83	14,30	Baa3	B+	BB	speculative		
United Kingdom	13,14	27,97	2,15	28,47	28,27	2,808,899	0,82	105,30	Aa2	AA	AA	High grade	
United States	32,95	21,58	2,37	33,29	9,81	20,513,000	0,87	145,27	Aaa	AAA	AAA	Prime	

State	Equity	Bills and bonds	Cash and deposits	CIS	Other	GDP	FD Index	Assets as a % of GDP	Moody's ratings	S&P ratings	Fitch ratings	Description
Namibia	65,08	24,01	8,11	2,81	14,148	0,45	91,66	Bal	BB+	BB+	Non-investment grade	
Hong Kong	63,44	20,93	11,50	4,14	360,315	0,73	43,52	Aa2	AA+	AA+	High grade	
Mauritius	55,95	32,39	8,73	2,92	14,033	0,43	4,69	Baa1	0	0	Lower medium grade	
Pakistan	49,31	34,11	-	16,58	306,987	0,23	0,06	B3	B-	B-	Highly speculative	
Papua New Guinea	42,96	23,62	11,17	-	16,53	0,23	18,01	B2	B+	B+	Highly speculative	
Peru	42,56	43,56	6,04	-	7,45	0,38	22,67	A3	BBB+	BBB+	Upper medium grade	
Malawi	41,78	37,14	9,82	-	11,26	0,08	11,82	0	0	B-	Highly speculative	
Colombia	40,37	49,48	2,24	-	7,91	0,44	25,28	Baa2	BBB-	BBB	Lower medium grade	
Jamaica	33,48	52,61	1,23	-	12,68	0,27	28,51	B3	B	B+	Highly speculative	
Trinidad and Tobago	32,34	43,35	6,18	-	18,12	0,34	19,76	Bal	BBB+	0	Non-investment grade	
Northern Macedonia	30,31	61,34	8,20	-	0,15	0,28	9,40	0	BB-	BB	speculative	
Armenia	28,07	41,06	29,97	-	0,90	0,25	1,90	B1	0	B+	Highly speculative	
Romania	22,97	68,29	8,66	-	0,08	0,31	4,85	Baa3	BBB-	BBB-	Lower medium grade	
Zambia	22,33	21,78	8,00	7,63	40,27	0,12	3,48	0	B-	B-	Highly speculative	
Croatia	21,90	73,42	4,38	-	0,30	0,41	26,79	Ba2	BBB-	BBB+	speculative	
Kenya	19,83	40,39	4,24	-	35,53	0,19	13,13	0	B+	B+	Highly speculative	
South Africa	19,54	9,32	3,99	-	51,30	0,62	95,30	Baa3	BB	BB+	Lower medium grade	
Thailand	18,35	56,41	12,27	11,97	0,99	0,73	7,06	Baa1	BBB+	BBB+	Lower medium grade	
Bulgaria	17,40	60,87	5,85	12,87	3,01	0,38	12,92	Baa2	BBB-	BBB-	Lower medium grade	
Indonesia	17,33	45,17	27,78	-	9,72	0,36	1,88	Baa2	BBB-	BBB-	Lower medium grade	
Uganda	16,77	72,62	4,68	-	5,93	0,12	9,29	0	B	B+	Highly speculative	
Malta	12,27	11,29	4,93	28,48	43,03	0,57	42,00	A3	A-	A+	Upper medium grade	
Russia	11,49	68,83	14,83	-	4,85	0,51	6,06	Baa3	BBB-	BBB-	Lower medium grade	
India	11,25	84,49	2,55	-	1,72	0,41	1,05	Baa2	BBB-	BBB-	Lower medium grade	
Nigeria	10,67	76,14	10,05	-	3,14	0,24	6,54	0	B	B+	Highly speculative	
Suriname	10,16	33,71	18,48	1,36	36,29	0,22	11,28	B2	B	B-	Highly speculative	
Malaysia	9,36	79,47	6,61	1,48	3,07	0,66	0,32	A3	A-	A-	Upper medium grade	
Brazil	8,51	35,93	0,10	-	55,46	0,57	24,59	Ba2	BB-	BB-	speculative	
Serbia	8,49	84,14	7,37	-	4,7,564	0,27	0,81	0	BB	BB	speculative	
Egypt	7,41	71,82	2,82	-	17,95	0,31	1,74	B3	B+	B+	Highly speculative	
Maldives	3,75	91,10	5,15	-	4,809	0,18	9,28	0	0	B+	Highly speculative	
Costa Rica	3,04	92,05	3,42	-	1,49	0,27	18,83	B1	B+	B+	Highly speculative	
Ghana	1,74	69,57	13,89	1,22	13,58	0,15	5,39	0	B	B	Highly speculative	
Panama	0,37	55,05	43,37	-	1,21	0,35	0,87	Baa1	BBB	BBB	Lower medium grade	
Singapore	0,18	-	-	-	96,60	0,71	80,22	Aaa	AAA	AAA	Prime	
Uruguay	0,17	77,57	6,78	-	15,48	0,25	27,40	Baa2	BBB	BBB-	Lower medium grade	
Dominican Republic	-	99,86	0,90	-	0,14	0,18	12,44	Ba3	BB-	BB-	speculative	
Albania	-	94,74	3,37	-	1,89	0,21	0,11	B1	B+	0	Highly speculative	

State	Equity	Bills and bonds	Cash and deposits	CIS	Other	GDP	FD Index	Assets as a % of GDP	Moody's ratings	S&P ratings	Fitch ratings	Description
Bosnia and Herzegovina	44,88	34,59	7,66	-	12,88	18,170	0,26	7,03	B3	B	0	Highly speculative

Using the Excel program, the correlation coefficients and determinations for the following variables are presented as follows :

- X-axis - country credit rating and Y-axis market development (FD index)
- X-axis - participation of equity securities in funds and Y-axis market development (FD index)
- X-axis - the share of debt securities in funds and Y-axis market development (FD index)
- X axis - participation of equity securities in funds and Y-axis amount of GDP
- X-axis - the share of debt securities in funds and Y-axis amount of GDP
- X-axis - the size of pension funds in relation to GDP and Y-axis market development (FD index)
- X-axis - the size of pension funds in relation to GDP and Y-axis amount of GDP

### 3. RESULTS AND DISCUSSION

We noticed that the function is increasing,  $y = 0.2977x + 0.0868$  and that the value of  $R^2 = 0.4051$  ie the determination coefficient is 40.51 or the correlation between the two observed variables is 0.64 (Chart 2) a which presents weak link between the credit rating of the country, ie the rating of government bonds and the development of the financial market. The same methodology was further compared (Table 2):

- a) participation in stocks and market development (FD index)
- b) participation of debt securities in funds and market development (FD index)
- c) participation in equity securities and in GDP
- d) participation of debt securities in funds and GDP
- e) the size of pension funds in relation to GDP and market development (FD index)
- f) the size of pension funds in relation to GDP and GDP

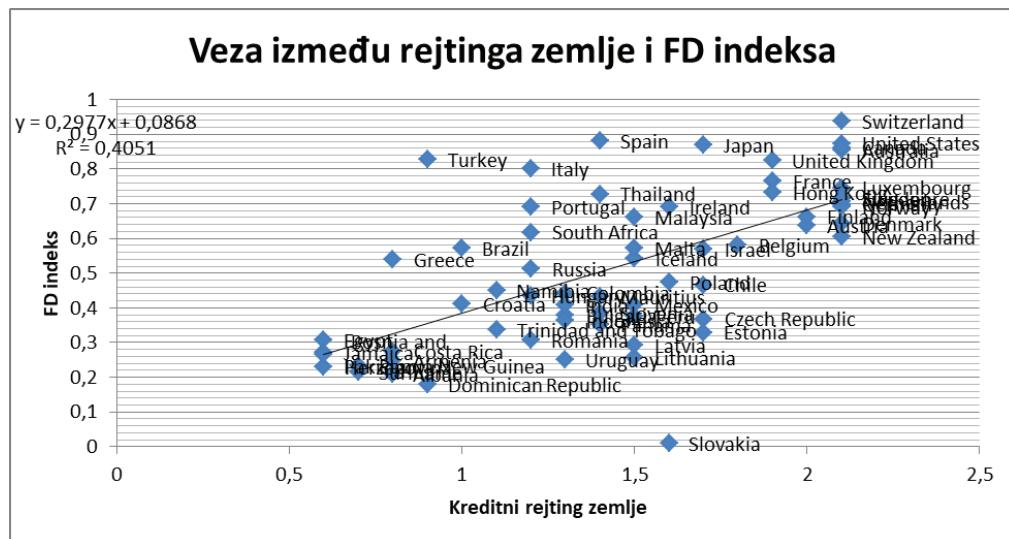


Chart 2. View link between country rating and market development (Author)

Table 2. Correlation and Determination by Country (Author)

Relationship	Correlation	Determination
participation in equity funds and market development (FD index)	13.0%	1.7%
participation of debt securities in funds and market development (FD index)	-39.3%	15.5%
participation in equity and GDP holdings	0.8%	0.0%

the participation of debt securities in funds and GDP	-19.6%	3.9%
the size of pension funds in relation to GDP and market development (FD index)	43.1%	18.6%
the size of pension funds in relation to GDP and GDP	26.8%	7.2%

It is noticed that there is no significant correlation nor determination between the observed variables. However, when countries are grouped by rating from a rating agency to the same groups (Prime, High grade, Upper medium grade, Low medium grade, Non-investment grade, Speculative, Highly speculative), we come to significantly different results. When the results from the main table are adjusted by groups, we get the following view.

Table 3. Overview of the structure and size of pension funds, indicators of market development and GDP by country by country groups according to credit rating (Author)

Rating description	Equity securities	Debt securities	Cash and deposits	Other assets	Other	GDP	FD Index	Assets as% of GDP
Prime	27.48	33.33	4.13	34.28	26.41	2,607,917	0.75	87.44
High grade	33.46	33.27	11.57	17.38	16.73	1,270,218	0.72	36.17
Upper medium grade	27.75	50.55	6.68	11.13	11.31	595.750	0.46	43.88
Lower medium grade	17.37	54.76	11.03	16.25	9.73	680.803	0.50	14.08
Non-investment grade	48.71	33.68	7.14	0.00	10.47	18.716	0.39	55.71
Speculative	13.71	67.52	7.54	0.00	11.23	470.651	0.42	14.72
Highly speculative	20.78	55.63	8.86	3.88	13.42	89.728	0.23	8.66

We noticed that countries with speculative credit rating have almost two-thirds in debt securities and non-investment countries have almost half of their assets in debt securities of value. It is important to emphasize that developed countries have more investment alternatives, and more than a third of their assets invest in other forms of property. From this, we can conclude that pension funds in developed countries are more likely to be exposed to risky financial instruments. On the other hand, countries in the post-transition period, naturally, have many more equity securities than the market, and the funds invest more in these securities. Finally, analyzing sorted results should not be lost from the vision and effects of geographical diversification. Namely, funds in Scandinavian countries are well known for investing significantly in other developed markets. In this regard, when considering the geographic distribution of the pension fund assets, we note that about 2/3 of the assets were invested in US markets.

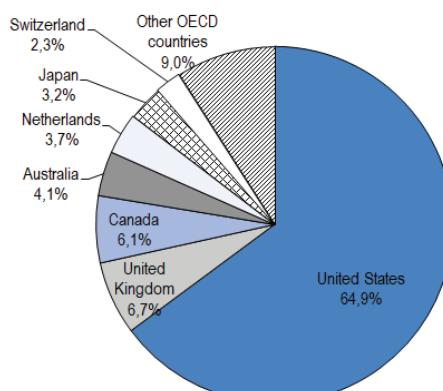


Chart 3. Markets in which pension funds invest (OECD 2018)

Considering that these analyses are carried out again only based on the group in which certain countries belong (prime, high grade, lower medium grade, lower medium grade, non-investment grade, speculative and highly speculative), we come to significantly different results. New results are a consequence of the fact that in the X-axis we have only seven sizes, which greatly increases the correlation coefficient and the determination between the observed phenomena because the "scattering" is smaller. Namely, the rating of the credit rating neglects the rating of rating agencies, such as "stable", "negative" or "on track".

Table 4. Credit rating grading and group description (Author)

Agency Moody's	Agency S&P	Agency Fitch	Description
Aaa	AAA	AAA	Prime
Aa1	AA+	AA+	High grade
Aa2	AA	AA	
Aa3	AA-	AA-	
A1	A+	A+	Upper medium grade
A2	A	A	
A3	A-	A-	
Baa1	BBB+	BBB+	Lower medium grade
Baa2	BBB	BBB	
Baa3	BBB-	BBB-	
Ba1	BB+	BB+	Non-investment grade
Ba2	BB	BB	Speculative
Ba3	BB-	BB-	
B1	B+	B+	Highly speculative
B2	B	B	
B3	B-	B-	
Caa1	CCC+	CCC	Substantial risks
Caa2	CCC		Extremely speculative
Caa3	CCC-		In default with little prospect for recovery
Ca	CC		
C	C		
/	D	DDD	In default
/		DD	
		D	

We noticed that there is a weak link between debt securities participation in the funds and market development (the correlation coefficient is -0.604 and the coefficient of determination is 0.365), the size of pension funds in relation to GDP and market development (0.631; 0.398), and the size of pension funds compared to GDP and GDP (0.696, 0.485).

Table 5. Correlation and determination of observed sizes by groups of countries according to credit rating (Author)

Relationship	Correlation	Determination
participation in equity funds and market development (FD index)	15.0%	2.2%
participation of debt securities in funds and market development (FD index)	-60.4%	36.5%
participation in equity and GDP holdings	-5.2%	0.3%
the participation of debt securities in funds and GDP	-48.3%	23.3%
the size of pension funds in relation to GDP and market development (FD index)	63.1%	39.8%
the size of pension funds in relation to GDP and GDP	69.6%	48.5%

Analyzing the obtained results, we can argue that there is a weak link between debt securities participation in the fund and market development, the size of pension funds in relation to GDP and market development, and the size of pension funds in relation to GDP and the size of GDP. For example, pension funds in countries with Prime Credit Rating have about one-third of their portfolio debt securities while countries with a somewhat weaker rating have almost half of their assets in debt securities of value.

Observing the structure of the portfolio of pension funds both in developed and emerging markets, it is natural that the pension fund has at least one-third of the debtor in bonds. Transferred to the Republika Srpska framework we can argue that, for example, the Pension Fund of the Republic of Srpska in its form and manner of functioning is a closed investment fund, which is established by a special law, and from investment funds differs in that there is only one founder-owner - the PIO Fund Republic of Srpska and was established in the form of a joint stock company controlled by the Management Company, whose sole founder/owner is also the PIO Fund. As such, the pension fund can be a generator of local community development because it can invest in bonds issued by the local community in its prospectus and investment policy. The role of pension funds in the success of issuing bonds in emerging markets is important. Thus, pension funds have a significant impact and can be a significant support to finance the development of local communities. At the same time, investment in a pension fund, on the principle of investing in the third installment of pension insurance, also has a synergistic effect when using tax relief. When investing in pension funds, tax incentives stimulate employers and workers to create savings for the third time when disposable income falls, and citizens who have this kind of savings will not make so much social pressure on the budget in the future as they have additional income. Secondly, the legal investment constraints and the EPF investment policy that emerges from them is quite conservative and primarily supported (an important feature of all pension funds in the world) on investing in long-term government securities.

On the other hand, retirement funds simply have to invest a significant part of the assets they manage in bonds, and therefore in municipal ones, thus directly increasing the opportunity for municipal development. The investment objective of the pension fund is everywhere - the realization of a continuous and stable return on investment in securities. The investment horizon of investment of pension funds is a long time. Judging by this, municipal bonds represent an almost ideal instrument for investing pension funds. Judging by this, pension funds can be seen as a generator of local community development, but not capital markets. Without a doubt, funding for projects related to economic development, the local community, can be secured by issuing bonds in which pension funds can also participate. Despite this, it should be borne in mind that, as a consequence of geographical diversification, which is preferred by the pension funds, the investment in the already developed markets is encouraged. In this connection, the pension funds can not by themselves be considered as a generator of financial market development.

## CONCLUSION

The paper shows that the country's financial development is defined as a combination of depth, market access, and market efficiency. In order to determine to what extent the pension funds and how they affect financial development and economic growth, it is shown that the pension funds in the countries with Prime credit rating have about one-third of the portfolios in debt securities, while countries with somewhat lower rating have almost half of the assets in debt securities of value. In addition, the trend suggests that developed financial markets are characterized by a wide range of investment instruments as well as derivatives, facilitating dispersion and diversification. Also, given the approach to financial instruments and the efficiency of the market, we can claim that funds in developed markets are more exposed to risky bonds.

Relating to equity holdings in pension fund portfolio and financial market development, the correlation was 13.0% and the determination was 1.7%. When a group of countries ranked by investment grade, high grade, upper middle grade, lower middle grade, non-investment grade, speculative and highly speculative, there is a correlation of 15.0% and a 2.2% determination. Therefore, there is not even a weak link between the participation of equity securities in the portfolio of pension funds and the development of the financial market.

The correlation of the participation of debt securities in the portfolio of pension funds and the level of development of the financial market is 11.5% and the determination is 1.3%. Similarly, when we look at the country's investment rating, we observe a correlation of 8.9% or a 0.8% determination. Hence, we can not claim that the greater participation of debt securities in the portfolio of pension funds has a positive impact on the development of the financial market.

Considering the participation of equity securities in the portfolio of pension funds and the amount of GDP of the country, there is a negative correlation, ie -39.3%, and the determination coefficient is 15.5%. When we look at groups this relationship is even more significant (-60.4% and 36.5%) and we can say that there is a negative weak link between these two phenomena.

Similarly, there is a link between the participation of debt securities and GDP. Based on the analysis of available data, it was found that the correlation between the participation of debt securities in the portfolio of pension funds and the GDP of the country is -39.7%. Therefore, the determination is 15.7%. When we group the country by credit rating we get the correlation -60.2% and the determination of 36.2%. Based on this we can conclude that there is a weak negative link between these two phenomena. Finally, it has been established that there is virtually no link between the size of pension funds in relation to GDP and the development of the financial market. The coefficient of correlation between individual countries is 0.8% and when we consider credit rating it is 5.2%. The most significant link is the size of the pension funds and the GDP of the country, but it can not be called a weak one. There is a correlation of -19.6%, or -48.3% when we look at countries according to credit rating. In accordance with the aforementioned, the third and fourth auxiliary hypotheses have been partially confirmed: "Greater participation of equity securities in portfolio of pension funds has a positive impact on the GDP of the country" and "Greater participation of debt securities in portfolio of pension funds has a positive impact on the GDP of the country".

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## SAVREMENI ASPEKTI OGLAŠAVANJA U DIGITALNOM MARKETING OKRUŽENJU

**Rezime:** *Predmet istraživanja u ovom radu je savremeno oglašavanje u digitalnom marketing okruženju, gdje istražujemo i objašnjavamo značaj, vrste i smjerove oglašavanja u sve bržem razvoju društva i promjenama koje se dešavaju u kontinuiranom razvoju digitalnog okruženja. Cilj istraživanja je utvrditi kako, primjenom digitalne tehnologije, na najbolje načine marketing stiže do ciljne grupe potrošača kao krajnji cilj promocije i brendiranja te na kraju rezultira povećanjem prodaje proizvoda i usluga. Rezultatima istraživanja potvrđena se postavljena hipoteza da svjetski globalni trendovi u ekspanziji savremenih tehnologija nisu zaobišli ni oglašavanje u marketingu turističkih organizacija koje svoje usluge/proizvode u savremenom oglašavanju razvijaju korišćenjem digitalnih tehnologija. S toga je u radu analizirana i prikazana komparacija savremenih aspekata oglašavanja u digitalnom marketing okruženju Turističke organizacije grada Trebinje i Turističke organizacije grada Banja Luka.*

**Ključne riječi:** oglašavanje, digitalno okruženje, upravljanje marketingom, informacione tehnologije, upravljanje poslovanjem

**JEL klasifikacija:** M10, M15, M21, M31, M37

### UVOD

U Bosni i Hercegovini, kao i u mnogim nerazvijenim privredama, osjeća se uticaj trendova oglašavanja koji dominiraju u razvijenim zemljama svijeta. Njihov uticaj na domaću poslovnu praksu pristiže sa izvjesnim zakašnjenjem. Zato je potrebno dobro poznavati trendove i uključiti se blagovremeno. Razvojem komunikacionih tehnologija i boljim uvidom u svijest i navike krajnjih kupaca ili korisnika usluga, uloga marketinga postaje sve veća. Današnji razvoj Interneta i informacionih tehnologija utiče na mijenjanje načina upravljanja poslovanjem, mijenjanje načina poslovanja te oglašavanja proizvoda i usluga. Internet je postao dostupan gotovo svima pa su mogućnosti za plasiranje ideja preko Interneta veoma raznolike i široke. Digitalni marketing, odnosno marketing putem digitalnih komunikacionih kanala, osvojio je svjetsko tržište. Do krajnjih kupaca ili korisnika proizvoda i usluga treba stići brzo, djelovati efikasno i isporučiti im važan i potreban sadržaj. To nam omogućavaju digitalni marketing kanali. S toga će u radu biti predstavljena analiza rezultata istraživanja utemeljena na komparaciji savremenih aspekata oglašavanja u digitalnom marketing okruženju Turističke organizacije grada Trebinje i Turističke organizacije grada Banja Luka. Turističke

organizacije traže načine kako bi upravljale sadašnjim ekonomskim događajima i pripremile se za veoma složeno globalno okruženje. Stalno se pitaju: Kako biti i ostati konkurentan? Kako biti uspješniji od drugih? U ovom radu sugeriramo da više koriste informacione tehnologije, a posebno baze znanja i poslovnu inteligenciju za poboljšanje konkurentnosti u svojoj djelatnosti. Naučna istraživanja ovog multidisciplinarnog područja godinama prate kontinuirani rast digitalnog marketinga i predviđaju njegovo dalje napredovanje.

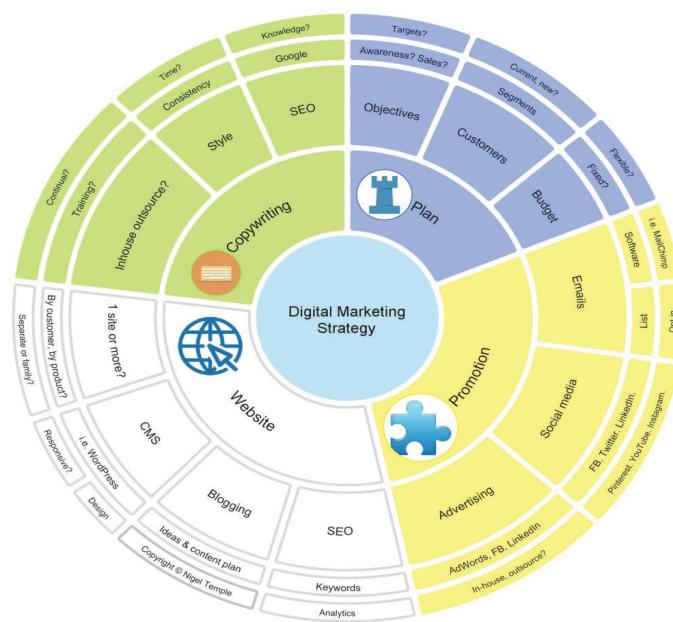
## 1. METODOLOGIJA ISTRAŽIVANJA

U ovom naučno-istraživačkom radu predmet istraživanja predstavlja savremeno oglašavanje u digitalnom marketing okruženju u kojem istražujemo i analiziramo značaj, vrste i smjerove oglašavanja u sve bržem razvoju društva kao cjeline i stalnim promjenama koje se dešavaju u dinamičnom digitalnom okruženju. Cilj rada je da utvrdimo kako primjenom digitalne tehnologije, na najbolje načine, marketing dospije do ciljne grupe potrošača/korisnika usluga, kao cilja promocije i brendiranja te na kraju prodaje proizvoda i usluga. U skladu sa formulisanim predmetom i ciljem istraživanja postavili smo istraživačku hipotezu da svjetski globalni trendovi u ekspanziji savremenih tehnologija nisu zaobišli ni oglašavanje u marketingu turističkih organizacija koje svoje usluge/proizvode u savremenom oglašavanju razvijaju korišćenjem digitalnih tehnologija. Prikupljanje primarnih podataka je izvršeno metodom ispitivanja putem provođenja strukturisanog intervjua sa namjerno odabranim uzorkom – kompetentnim ispitanicima. Pored naučne metode ispitivanja u primarnom istraživanju korišćene su i druge metode primjerene ovoj vrsti istraživanja u pojedinim dijelovima rada, a to su: deskriptivna, kauzalna, metoda opservacije, komparacije i analize. Prospektivno istraživanje je provedeno u vremenu od 01.01. do 28. 02. 2019. godine u dvije Turističke organizacije Republike Srpske. Izabran je grad Trebinje sa juga i grad Banja Luka sa sjevera Republike Srpske. Prikupljeni podaci su obrađeni pomoću najnovije verzije statističkog programa IBM SPSS Version 23. Rezultati istraživanja su precizno dati u nastavku, a na osnovu kojih su izvedeni zaključci o uticaju globalnih trendova i ekspanziji savremenih tehnologija, na savremene aspekte oglašavanja turističkih organizacija u digitalnom marketing okruženju.

## 2. ANALIZA DIGITALNOG MARKETINGA SA ASPEKTA OGLAŠAVANJA

Osnovne prednosti digitalnog marketinga su mnogostrukе, a kreću se od njegove masovne prilagodljivosti različitim tržišnim segmentima pa do potpune personalizacije različitih proizvoda, usluga i komunikacionih poruka putem jeftinih digitalnih kanala distribucije. S toga je digitalni marketing trenutno najučinkovitiji oblik oglašavanja u međunarodnom poslovanju. Analizom digitalnog marketinga u okviru digitalnog marketing okruženja utvrdili smo veoma značajne prednosti koje su utemeljene na stvaranju interakcija sa velikim brojem kupaca na različitim lokacijama (Grbavac i Grbavac 2014). Na taj način se ostvaruje veliki broj kontakata putem kojih dolazimo do bitnih saznanja vezanih za bolje razumijevanje i zadovoljenje potreba kupaca, odnos prema određenom brendu, kada su najotvoreniji za konzumiranje reklamnih poruka, koji komunikacioni uređaj koriste, a skoro sve ove aktivnosti se mogu mjeriti i pratiti (Tešanović i drugi 2018). Organizacije svoju poslovnu strategiju trebaju prilagoditi, suptilno izabrati odgovarajuću digitalnu marketing strategiju i odabratи one kanale koji najbolje zadovoljavaju njihove potrebe radi ostvarenja ciljeva digitalnog marketinga (Slika 1).

Prilikom dizajniranja strategije digitalnog marketinga važno je uobziriti tehnološku strukturu organizacije, znanja, vještine i podrška zaposlenima, utvrditi prikladnost proizvoda ili usluge za online oglašavanje, granica integracije digitalnog marketinga i postojeće strategije (Durzmaz and Efendioglu 2016, 34).



Slika 1. Digital marketing strategy, Nigel Temple, The Marketing Compass, UK (Google 2019)

Razlikujemo četiri faze digitalnog marketinga. Prva faza predstavlja fazu privlačenja i pridobijanja kupaca da posjete web stranicu organizacije, koristeći tehnike optimizacije web stranice (SEO), oglašavanje na pretraživačima, e-mail i mobilni marketing, marketing društvenih mreža te viralni marketing. Druga faza je faza prilagođavanja potrošačima sa ciljem ostvarenja prodajnih ciljeva putem tako dizajnirane web stranice koja treba privući što više kupaca nudeći lakoću naručivanja i različite mogućnosti plaćanja. Optimizacija medija i mjerjenje rezultata predstavljaju treću fazu digitalnog marketinga u kojoj se vrši testiranje učinkovitosti web stranice, procjenjuju se rezultati, a od velike važnosti je korišćenje ključnih riječi. Četvrta faza je faza zadovoljstva kupaca u kojoj trenutne kupce nastojimo prevesti u stalne kupce (Weinlich i Semeradova 2014, 11).

Ciljevi digitalnog marketinga najčešće mogu da budu: povećanje prodaje, povećanje broja posjeta web stranici, blagovremeno informisanje sadašnjih i potencijalnih kupaca, komunikacija i približavanje kupcima radi povećanja njihovog interesovanja i angažovanja, povećanje vrijednosti i optimizacija oglašavanja (Tešanović i Knežević 2015). Vezano za ciljeve digitalnog marketinga, možemo razlikovati više njegovih cjelina od kojih su najznačajnije: optimizacija stranica za pretraživače (SEO), marketing društvenih mreža, kontekstualno oglašavanje (SEM), mobilni marketing, analiza web stranica, upravljanje odnosima sa klijentima (CRM), sadržajni marketing, YouTube i video oglašavanje (Kotler and Kartajaya and Setiawan 2016). Najbolja sredstva digitalnog marketinga koja omogućuju najbolja marketing rješenja su: marketing sadržaja (blogovi i infoilustracije), marketing na društvenim mrežama (Facebook, Instagram, Twitter, LinkedIn, Google+), optimizacija za web pretraživače, marketing na pretraživačima, marketing novosti, oglašavanje putem banera, Internet marketing, elektronske knjige te sponzorisani članci (Tešanović i Radivojević 2015). U skladu sa predmetom i ciljem istraživanja analiziraćemo pojedina sredstva digitalnog marketinga primjerena turističkim organizacijama u kojima smo

proveli istraživanje, a to su: optimizacija stranica za pretraživače (SEO), kontekstualno oglašavanje (SEM), optimizacija sadržaja društvenih mreža (SMO).

Svi mi na Internetu pretražujemo putem pretraživača u koji upisujući određeni pojam dobijemo niz rezultata poredanih po kvalitetu web sajta i važnosti (Stanojević 2011).

Pojedini korisnici Interneta su inertniji te ne vrše prelistavanje stranica dobijenih rezultata pretraživanja. Takođe, svaki pretraživač formira i nudi svoj redoslijed rezultata svrstavajući ih po kvalitetu, važnosti i značaju. (Kukobat i Tešanović i Kukić 2016). Cilj svake organizacije treba da bude da u očima svakog od pretraživača bude najmjerođavnija i najkvalitetnija za proizvode ili usluge koje nudi, u odnosu na konkurenčiju koja se, takođe, trudi da što bolje predstavi svoje proizvode i usluge i da bude ispred, u rezultatima pretraživanja (SERP). Iz navedenog razloga web stranica organizacije treba da bude što bolje rangirana/pozicionirana za najbitnije i najtraženije ključne riječi i fraze u rezultatima pretraživanja (Vilić i Dujaković 2015). Od krucijalnog značaja je upravo dolazak na prvu stranicu Google, Yahoo ili nekog drugog pretraživača u zavisnosti od vrste proizvoda i usluga ili drugih bitnih ino-rezultata pretraživanja, u zavisnosti od jezika ciljnog auditorijuma (Radivojević i Tešanović i Stevandić 2015). Svaka web stranica i njen vlasnik, koji putem nje predstavlja svoje proizvode i usluge, treba da teži ka što boljoj poziciji u rezultatima pretraživanja, tj. što većoj vidljivosti. U eri digitalizacije medija za masovno komuniciranje najviše posjetilaca i korisnika ima Internet, tako da će pozicija web stranice na prvoj stranici Google donijeti više posjetilaca i kupaca od skupe reklame u udarnim terminima nacionalnih televizija.



Slika 2. The Eight Website Keys, Nigel Temple, The Marketing Compass, UK (Google 2019)

Detaljnom analizom web stranice neke organizacije ili web stranice konkurenčije, otpočinjemo proces optimizacije stranice za pretraživače (SEO). Rezultatima analize dobijemo koje su to ključne riječi i pojmovi koji privlače najviše posjetilaca i koliko je vremena potrebno da web stranica bude dovedena na prvu stranicu pretraživača. Optimizacija web stranice za pretraživače predstavlja najmoćnije sredstvo digitalnog marketinga, tj. tehniku digitalnog marketinga koja brzo i pouzdano donosi željeni rezultat u kratkom roku

(Kozić Rađenović 2014). U procesu analize web stranice možemo razlikovati pet faza: istraživanje konkurenčije, istraživanje i primjena ključnih riječi, optimizacija na stranicama, strukturisanje web stranice, praćenje rezultata i optimizacija rezultata (Weinlich i Semeradova 2014). Kontekstualno oglašavanje ili SEM saobraćaj se smatra najvažnijim izvorom Internet komuniciranja, jer je usmjeren na određeni tržišni segment. Kupci ili klijenti koriste svakodnevno pretraživače kako bi pronašli adekvatno rješenje za svoj problem ili odgovor na neko pitanje. SEM je širi pojam od SEO, jer sadrži SEO, plaćene oglase i ostale servise vezane za pretraživače i često se koristi kako bi se opisali određeni postupci vezani za istraživanje, objavu i rangiranje/pozicioniranje web stranice na pretraživačima. Organizacija koja vodi posao na Internetu treba biti vidljiva i u organskim (neplaćenim) i u plaćenim poveznicama, što znači da joj trebaju i SEO i SEM (Bellman i drugi 2011). Rezultati analize nam potvrđuju da optimizacija sadržaja društvenih mreža (SMO) predstavlja ključni dio web strategije upravljanja online reputacijom (engl. On-line Reputation Management) ili upravljanja reputacijom na pretraživačima (engl. Search Engine Reputation Management) koje koriste organizacije koje vode brigu o svojoj prisutnosti i rangiranju na Internetu putem društvenih medija, kao što su blogovi, forumi, online servisi i web stranice.

### **3. MARKETING DRUŠTVENIH MREŽA I OGLAŠAVANJE**

Društvene mreže omogućavaju brojne marketinške aktivnosti, kao što su primjena marketinga od usta do usta, istraživanje tržišta, kreiranje i provjera ideja, razvoj novih proizvoda, unapređenje odnosa s kupcima, sve oblike komunikacionih aktivnosti i promocije. Popularnost društvenih mreža svakodnevno raste i danas su rijetki oni koji ih ne koriste (Parlov i Perkov i Sičaja 2015). Društvene mreže predstavljaju platformu koja omogućava komunikaciju s potencijalnim kupcima ili klijentima. Da bi kompanija bila primijećena i izdvojila se od konkurenčije, njen profil bi trebao biti aktivан, što znači da bude uključena u različite forumske sadržaje, komentare i učestvuje u različitim anketama (Jovičić i Kukobat i Tešanović 2018). Ukoliko se promoviše proizvod ili usluga ili se samo promoviše kompanija, ova vrsta marketinga predstavlja veoma moćnu metodu da kompaniju učini profitabilnjom i to za kraće vrijeme u odnosu na korišćenje neke druge promotivne metode (Đukić 2018). Istraživanja u zadnjih nekoliko godina pokazuju da se široki auditorij sve češće okreće društvenim mrežama zbog traženja povoljnije kupovine, potrage za popustima te najčešće na taj način dolazi u dodir s brendovima koji se promovišu na društvenim mrežama.

Prema Lisabonskoj agendi za razvoj i zapošljavanje, inovacije i razvoj informacionih tehnologija predstavljaju dvije najvažnije komponente konkurentskog razvoja Evropske unije (Didero 2009). U savremenim uslovima poslovanja pred turističku kompaniju postavlja se izazov stabilnog ekonomskog rasta i očuvanja dosadašnje pozicije (ili napredovanja) u globalnoj ekonomiji, koju odlikuje visoka konkurentnost i stalne tehnološke promjene (Knežević i Šaula i Dujaković 2014). Zbog toga moraju unaprijediti nivo primjene novih tehnologija u turističkim kompanijama i prilagoditi se konceptu zasnovanom na znanju i poslovnoj inteligenciji. Ekomska kriza na ovim prostorima dodatno usložnjava problem i zahtijeva sagledavanje ovog problema u novom svjetlu (Golob 2016). Velika prednost marketinga društvenih mreža, za razliku od tradicionalnih reklama, oglasa i slanja promotivnog materijala poštom, je u tome što se rezultati online društvenih kampanja mogu direktno mjeriti, što brendovima omogućava jasniji uvid u razliku između uloženog i dobijenog. Marketing društvenih mreža pruža mnoštvo ključnih informacija o kupcima, potrošačima, klijentima te njihovim preferencijama, potrebama, problemima i interesima koje se mogu dugoročnije koristiti prilikom kreiranja novih i efikasnijih promotivnih kampanja te stvaranja i modifikovanja čvršće i sveobuhvatnije poslovne i marketinške strategije (Matošević 2015).

Broj korisnika Interneta širom svijeta u 2018. godini je za 7% veći u odnosu na 2017. godinu, broj korisnika društvenih mreža širom svijeta u 2018. godini je 13% veći u odnosu na 2017.

godinu, dok broj korisnika mobilnih telefona u 2018. godini je 4% veći u odnosu na 2017. godinu (Tešanović 2018). Najpoznatija društvena mreža danas koja ima najviše koristika je Facebook. Kompanija Facebook je vlasnik društvene platforme Instagram koja na globalnom nivou ostvaruje udio od oglašavanja na mobilnom Internetu u visini od 8,4%, a očekivani prihod tj. udio u 2019. godini će dostići 20%. Najpopularnija društvena mreža na globalnom nivou za razmjenu video sadržaja je, svakako, YouTube. Ova mreža bilježi u 2018. godini preko 1,7 milijardi korisnika, što predstavlja 1/3 od ukupnog broja korisnika Interneta. Zbog svoje globalne popularnosti sadržaja koje nudi kreirana je verzija na osamdeset jezika, koji pokrivaju više od devedeset zemalja svijeta, među kojima je i BiH verzija. Milijarde pregleda sadržaja ove društvene mreže i pregledanje miliona sati sadržaja u najvećem dijelu dolazi sa mobilnih uređaja. To nam potvrđuju statistički podaci ove najpoznatije društvene video mreže za oglašavanje. Odnos između pregledanja kompletног promotivnog videa i broja pregleda in-stream oglašavanja iznosi 31,13%. Odnos pregledanja kompletног promotivnog videa i broja pregleda kod discovery oglašavanja iznosi 2,83%, dok porast broja posjeta YouTube stranici, tj. sesijama na web stranici iznosi 57,24%. Muzički streaming servis Spotify u julu 2018. godine imao je oko 83 miliona registrovanih pretplatnika u svijetu, ali samo tri mjeseca kasnije već ih je imao 75 miliona. Ovaj veliki skok koji ne donosi samo finansijsku dobit za ovu švedsku društvenu platformu, već predstavlja njen vrtoglavi uspjeh koja u ovoj godini ima preko 140 miliona korisnika od kojih je 50 miliona pretplatnika. Prvi konkurent joj je društvena mreža Apple music koja broji nešto preko 30 miliona korsnika. Spotify muzički streaming servis svoju strategiju je utemeljio na geografskom širenju kako bi ostvario bolje i brojčano veće plaćeno oglašavanje. Ova društvena mreža ostvaruje prihod od streaming servisa povezujući autore/muzičare direktno sa korisnicima bez posredovanja skupih izdavačkih diskografskih kuća. Prema podacima kompanije ostvaren prihod se dijeli u omjeru 2/3 autorima, a 1/3 zarađuje Spotify. Tako nam se nameće logično pitanje: Zašto uslužne kompanije moraju biti inteligentne?

Inteligentna kompanija je ona koja brže donosi kvalitetne odluke (Duvnjak 2018), nadmudruje svoje konkurente, može da briljira i zadovolji prirođni instinkt pobjeđivanja. Inteligentan sistem je sve češća pretpostavka ne samo za pobjedu i konkurentnost, već ponajprije za učestvovanje u globalnoj utakmici i takmičenju (Tešanovic 2015). Prilikom kreiranja uslužne strategije turistička organizacija analizira i utvrđuje elemente koji bitno učestvuju u stvaranju zadovoljstva obezbjeđujući dugoročno kvalitetno usluživanje. Pored standardnih parametara kao što su usluga, pristup kanalima distribucije, danas najveću ulaznu barijeru, a istovremeno i najveću prednost predstavlja zajedničko znanje i vještine svih zaposlenih (Tešanović 2015, 472).

#### **4. REZULTATI ISTRAŽIVANJA I DISKUSIJA**

Prospektivno istraživanje je provedeno u vremenu od 01.01. do 28. 02. 2019. godine u dvije Turističke organizacije u Republici Srpskoj. Kao reprezentativni uzorak istraživanja izabrane su turističke organizacije iz različitih i veoma značajnih geografskih područja, sjevera i juga Republike Srpske i to: Turistička organizacija grada Trebinje i Turistička organizacija grada Banja Luke. Društvene mreže u turizmu promijenile su način na koji ljudi istražuju, prikupljaju informacije, donose odluke i dijele svoja iskustva i doživljaje. Prilikom odabira destinacije, najčešće se koriste društvene mreže za istraživanje ponude, smještaja, sadržaja i korisnih savjeta drugih turista. Turistima je prilikom odabira turističke destinacije najvažnija atraktivnost destinacije, kvalitet turističke ponude i dostupnost informacija.

Grad Trebinje, koji sa razlogom zovu biser Hercegovine, spada u jednu od najljepših i napoželjnijih turističkih destinacija u BiH. Trebinje se nalazi na krajnjem jugu Bosne i Hercegovine i zauzima površinu od 904 km<sup>2</sup>, sa 36.000 stanovnika. Imo veoma značajan geografski položaj, jer graniči sa Crnom Gorom i Hrvatskom. Geografski položaj Trebinja je veoma važan za njegov turistički razvoj, jer je od svjetski poznate turističke destinacije –

Dubrovnika udaljen 27 km, a od Herceg Novog 40 km. U proteklim godinama ulagani su ogromni napor na brendiranju Trebinja kao nezaobilazne turističke destinacije i na njenom promovisanju, brendiranjem autentičnih ponuda i proizvoda sa ovoga podneblja. Pored toga grad Trebinje je prepoznatljiv i kao grad pjesnika, grad Jovana Dučića.

Turistička ponuda ove organizacije može se podijeliti u nekoliko tematskih cjelina, a to su; vjerski turizam, vinski turizam, kulturno-istorijski, gastronomski turizam, koji su sa svojom ponudom i karakteristikama, specifični za ovo podneblje. Zadnjih nekoliko godina, u saradnji sa Vladom Republike Srpske, radi se na aktivnostima brendiranja autohtonih hercegovačkih proizvoda poput pršuta, sira, vina, smokve i ljekovitog bilja.

U današnje digitalno doba, kada su svi umreženi, turističke se destinacije traže i pregledaju na Internetu. Turistička odredišta se sve više odmiču od tradicionalnih kampanja i okreću se digitalnim marketinškim kampanjama, jer cilj više nije doprijeti do što većeg broja potencijalnih potrošača, nego doprijeti do svakog pojedinog potencijalnog potrošača. To je gotovo moguće ostvariti uz pomoć određenih marketing komunikacijskih alata na društvenim mrežama.

Web stranica Turističke organizacije (TO) Trebinje nudi sve potrebne informacije za savremene uslove poslovanja. Kako bi se još više specijalizovali u svom poslovanju i fokusirali na segmente, turistička organizacija grada Trebinja je svoju ponudu razvila tako da poslovnim korisnicima pruža potpunu uslugu organizacije putovanja.

Internet stranica Turističke organizacije Trebinje veoma je pregledna, izuzeno jednostavna za korišćenje i dostupna je na tri jezika, srpski (latinica i cirilica), engleski i ruski jezik, što je čini upotrebljivom za veliki broj korisnika ili potencijalnih korisnika. Stranica je podijeljena u četiri glavne sekcije: vodič, smještaj, gastro i korisne informacije te dvije standardne opcije: o nama i mapa grada. Sekcija vodič je podijeljena u tri podsekcije: Trebinje, destinacije i aktivnosti. U podsekciji Trebinje mogu se naći sve ključne informacije o samom gradu i zanimljivostima vezanim za poznate lokacije i kulturno-istorijske znamenitosti. Podsekcija destinacije nudi pregled vjerskih objekta, prirodnih atrakcija, izletiša i kupališta. Treća podsekcija aktivnosti, usmjerna je na ponudu aktivnosti u gradu, kao što su: izleti, avanturizam, lov, ribolov i sport. Sekcija smještaj nudi pregled smještajnih kapaciteta od hotela, motela, hostela, prenoćišta, kao i privatnog smještaja. Ovi kapaciteti se iz godine u godinu povećavaju sa sve boljom i sveobuhvatnijom ponudom. Sekcija gastro nudi pregled svih gastro užitaka vezanih za hercegovačku kuhinju, od restorana i konoba, ponude na zelenoj pijaci, vinarije i vinarske degustacione sale, pa sve do ponude meda i ljekovitog bilja. Sekcija korisne informacije sadrži sve potrebne informacije o tome: kako doći u Trebinje, odnosno informacije o transportnoj povezanosti, položaj i aktivnosti Informacionog centra, autoboska stanica i redovi vožnje, manifestacije (potpun pregled manifestacija sa nazivima i vremenom održavanja), mjenjačnice i benzinske pumpe, parking, rent a car, taxi i važni telefonski brojevi.

Društvene mreže postale su nezaobilazne u turističkoj djelatnosti, a rezultati istraživanja nam pokazuju da najviše studenata informacije o izabranoj turističkoj destinaciji nalazi na Facebooku, Instagramu i Booking-u. Danas Facebook ima 1,86 milijardi korisnika. 1,23 milijarde korisnika se svakodnevno uloguje na svoj profil i prosječno na njemu provede 20 minuta. Najviše korisnika ima od 25 do 34 godine. Od 100 žena njih 77 se koristi ovom mrežom, a od 100 muškaraca njih 66.50% pripadnika demografske grupe od 18 do 24 godine posjeti Facebook odmah nakon što se probudi. Zbog svega navedenog lako je primijetiti koliko je to tržište i koliki značaj i mogućnosti u promociji pruža ova društvena mreža.

Facebook stranica Turističke organizacije Trebinje je pokrenuta 17. avgusta, 2010. godine, u sklopu aktivnosti što bolje promocije turističke ponude grada i kvalitetnijeg provođenja marketinških aktivnosti. Ovu stranicu slijedi 9.624 korisnika, dok se njima 9.614 sviđa (like) stranica. Facebook stranica TO Trebinje je sve aktivnija, a naročito u ljetnom periodu, za koji je vezan i najveći broj aktivnosti, kulturnih aktivnosti i manifestacija. Objavama na Facebook

stranici na najfetiniji i najjednostviji način vrši se promocija manifestacija i kulturnih dešavanja.

Instagram je društvena mreža, odnosno besplatna aplikacija koja služi za obradu i dijeljenje fotografija i videozapisa putem mobitela preko same društvene mreže te preko ostalih kao što su Facebook, Twitter i sl. te služi za društveno umrežavanje i fotografске usluge. Prepoznavši značaj marketinga na društvenim mrežama TO Trebinje je u poslednje vrijeme, takođe, aktivna i na Instagramu, objavljivajući fotografije i video sadržaje, posebno za ponude turističkog sadržaja naglašavajući prirodne i kulturne ljepote grada, koje kao takve, same po sebi, postaju mamac za potencijalne posjetioce.

Istraživanjem smo utvrdili i nedostatke u oglašavanju TO grada Trebinja u digitalnom marketing okruženju. Kada u najkorisnijoj pretraživač, Google, unesemo pojam Trebinje, možemo da primijetimo da nema plaćenog oglašavanja (SEM), već samo dobijamo organske rezultate (SEO). Stranica GoTrebinje, odnosno zvanična stranica Turističke organizacije Trebinje, koja je nosilac turističkog razvoja grada, nalazi se tek na drugoj strani pretrage te možemo konstatovati da u tom pogledu nije dovoljno urađeno. Jedan od razloga je i neosposobljenost zaposlenih u segmentu digitlnog komuniciranja. Društvene mreže, iako su prisutne u marketinškoj koncepciji Turističke organizacije Trebinje, nisu dovoljno zastupljene u marketinškoj komunikaciji. To bi trebao biti budući cilj TO Trebinje, tj. da povećaju broj pratileaca na društvenim mrežama. Taj cilj se može postići putem raznih akcija, na primjer, da se zamole korisnici da na Facebook stranici TO Trebinje objavljuju svoje fotografije sa putovanja (posjetioci koji bilo da borave ili samo prolaze kroz Trebinje). Na taj način povećala bi se emocionalna povezanost korisnika i TO Trebinje te bi korisnici više i češće odlazili na ove stranice.

Za razliku od Turističke organizacije grada Trebinje, Turistička organizacija grada Banja Luka (TOBL) je, u 2018. godini, aktivno radila na razvoju komunikacije putem društvenih mreža. Internet stranica TOBL-a ([www.banjaluka-tourism.com](http://www.banjaluka-tourism.com)) je svakodnevno ažurirana, a posebno sekcijski kalendar dešavanja za grad Banjaluku. Pored glavne stranice, TOBL je u 2018. godini ažurirala tematsku Internet stranicu posvećenu seoskom turizmu Potkozarja i ruralnom razvoju na domenu [www.kozaraethno.com](http://www.kozaraethno.com). Internet stranice su unapređene novim sadržajima i relevantnim informacijama.

U cilju efikasnije promocije turističkih proizvoda, ugostiteljskih kapaciteta i ostalih elemenata turističke privrede, konstantno se vrši analiza postojeće Internet stranice Turističke organizacije grada Banja Luka. Na osnovu analize i iskustava korsnika vrši se unapređenje Internet stranice TOBL-a u 2019. godini. Turistička organizacija grada Banja Luka je aktivno radila na razvoju komunikacije putem društvenih mreža i razvoja Community Management-a s ciljem povećanja broja i animacije fanova kao i razvoja interakcije sa korisnicima. Takođe, preko društvenih mreža realizovane su kampanje i promocije turističke ponude Banjaluke kao i aktuelnih dešavanja. TOBL se oglašava na društvenim mrežama Facebook, Instagram, Twitter i YouTube.

Na društvenoj mreži Facebook, kao najdominantnijoj i najpopularnijoj na ovim područjima, TOBL ima četiri fan stranice i to:

- Turistička organizacija Banjaluka, stranica koja je namijenjena građanima Banjaluke i na kojoj se promovišu kako događaji koji su interesantni građanima, tako i rad TOBL-a (7.000 lajkova). S obzirom na to da se plaćena kampanja na ovoj stranici nije radila, stranica je dobila na popularnosti posebno tokom kampanje za manifestaciju Ljeto na Vrbasu 2018, kada su organizovane posebne nagradne igre.
- Visit Banja Luka, stranica koja je namijenjena regionalnim turistima, vodi se na srpskom jeziku i promoviše turističku ponudu Banjaluke (2.359 lajkova).
- Kozara etno, stranica koja promoviše Kozara etno festival te komunicira kako sa publikom, tako i sa učesnicima festivala (780 lajkova).
- Simply AdoraBLE Banjaluka, stranica koja je kreirana u sklopu istoimene kampanje koja je započela u julu mjesecu 2017. godine (1.504 lajka). U maju mjesecu 2018. kampanja, a

samim tim i stranica, je promjenila naziv u Exteremly AdoraBLE Banjaluka. Stranica se vodi na engleskom jeziku za komuniciranje sa potencijalnim turistima. Putem ove stranice rađena je plaćena kampanja za tržišta Slovenije, Hrvatske, Srbije, Crne Gore i BiH. Kampanjom su promovisane manifestacije Proljeće u Banjoj Luci, Ljeto na Vrbanu, Demofest, FreshWave i Banjalučka zima, kao i avaturski ponuda grada Banjaluka. Ukupan kumulativni doseg broja posjeta ovoj Facebook stranici u 2018. godini je iznosio čak 784.505.

Na društvenoj mreži Instagram TOBL komunicira sa Internet zajednicom putem dva Instagram profila. Prvi je Visit Banja Luka, koji je pokrenut početkom 2017. godine i broji 344 pratioca. Drugi profil pokrenut je u okviru kampanje Simply AdoraBLE Banja Luka, kasnije promijenjene u Banja Luka Exteremly AdoraBLE i trenutno broji 435 pratiaca.

Na društvenoj mreži Twitter, nalog TOBL-a „Visit Banjaluka“ broji oko 658 pratiaca. Kako Twitter nije toliko popularna mreža na ovim prostorima, tako su i aktivnosti na ovoj mreži skromne.

YouTube kanal pod nazivom tobantaluka, sa svega 132 prijavljena pratioca, skromnih je aktivnosti zbog nedostatka video materijala iz Turističke organizacije grada Banja Luke. Ove godine je urađen promotivni film grada Banjaluka, koji na ovoj mreži ima 22.940 prikaza.

Turistička organizacija grada Banja Luke je radila plaćene kampanje i to proljetnu, ljetnu i zimsku. Plaćene kampanje su rađene za Facebook i Instagram stranicu BanjalukaExteremly AdoraBLE, a Google kampanja je rađena sa ciljem povećanja posjećenosti web stranice TOBL-a. Kampanja je komunicirala najinteresantnije događaje u Banjoj Luci u pomenutim sezonomama, a najatraktivnije su bile manifestacije Proljeće u Banjaluci, Ljeto na Vrbanu i Banjalučka zima.

Za razliku od TO grada Trebinje, TO grada Banjaluka provodi proces optimizacije stranice za pretraživače (SEO). Rezultati istraživanja pokazuju da obe organizacije u narednom periodu trebaju utvrditi koje su to ključne riječi i pojmovi koji privlače najviše posjetilaca i koliko je vremena potrebno da njihove web stranice bude dovedene na prvu stranicu pretraživača, jer se trenutno nalaze na drugim stranama pretraživača. Optimizacija web stranice za pretraživače predstavlja najmoćnije sredstvo digitalnog marketinga, tj. tehniku digitalnog marketinga koja brzo i pouzdano donosi željeni rezultat u kratkom roku. Rezultati istraživanja nam potvrđuju da Optimizacija sadržaja društvenih mreža treba biti ključni dio web strategije obe turističke organizacije, kao i upravljanje online reputacijom ili upravljanje reputacijom na pretraživačima koje koriste organizacije koje vode brigu svojoj prisutnosti i rangiranju na Internetu putem društvenih medija kao što su blogovi, forumi, online servisi i web stranice.

Plaćene kampanje za određene tržišne segmente su povećale broj posjeta web stranicama društvenih mreža za kratko vrijeme, jer se široki auditorij sve češće okreće društvenim mrežama tragajući za povoljnijom kupovinom, za popustima, novim izazovima te najčešće na taj način dolazi u dodir s brendovima koji se promovišu na društvenim mrežama. Turističke organizacije koje budu predvodnici elektronskog, mobilnog i inteligentnog poslovanja pretvarajući podatke u informacije, znanje i inteligenciju biće najkonkurentnije i vodeće u svojoj oblasti poslovanja.

## ZAKLJUČAK

Razvoj Interneta i informacionih tehnologija utiče na mijenjanje načina upravljanja poslovanjem, mijenjanje načina poslovanja te oglašavanja proizvoda i usluga. Internet je postao dostupan na svakom mjestu pa su veoma raznolike i široke mogućnosti korišćenja i plasiranja preko Interneta. Digitalni marketing, odnosno marketing putem digitalnih komunikacionih kanala, osvojio je svjetsko tržište. Do krajnjih kupaca ili korisnika proizvoda i usluga treba stići brzo, djelovati efikasno i isporučiti im važan i potreban sadržaj. Prema Kotleru, zaposleni u marketingu se bave plasmanima u okviru deset različitih oblasti: roba, usluga, iskustava, događaja, ličnosti, mjesta, imovine, organizacije, informacija i ideja.

U ovom radu smo nešto detaljnije pratili samo neke segmente plasmana kao što su: usluge, informacije, iskustva, događaje, mjesta i ideje. Ne smatramo da ostali plasmani nisu bitni, ali zbog karaktera i dužine rada nismo ih detaljnije posmatrali. Prije kupovine bilo čega većina ljudi traži online, tako da je veoma važna prisutnost i pomoć organskih rezultata pretraživanja i plaćenih rezultata pretraživanja, a to su: optimizacija stranica za pretraživače (SEO), kontekstualno oglašavanje (SEM), optimizacija sadržaja društvenih mreža (SMO). Optimizacija stranica za pretraživače predstavlja organske rezultate pretraživanja, koji se ne plaćaju, besplatne oglase, dok kontekstualno oglašavanje predstavljaju ciljani plaćeni oglasi, ali oni svakako trebaju biti komplementarni. Optimizacija stranica za pretraživače je temelj dobrog kontekstualnog oglašavanja i kada se ispravno postavi velike su šanse za ostvarenje velikog broja posjeta i visokog pozicioniranja na pretraživačima. Kvalitetan SEO organizacije je neophodan kako bi je Google video kao vjerodostovnu web lokaciju i što bolje je rangirao, uz, svakako, veoma važna pozitivna iskustva korisnika. Ovo je trenutni trend. Google nagrađuje najaktivnije web lokacije, jer je mobilno pretraživanje postalo sve dominantnije, mijenja se priroda pretraživanja te se time omogućuje stvaranje ciljanih oglasa za SEM. Ovlašavanje u digitalnom marketing okruženju postaje sve više fokusirano na podatke te je tako lakše formirati ciljane i personalizovane kampanje, dok će korisnici biti sve više zabrinuti zbog svoje privatnosti.

U veoma jakoj konkurenciji turističke organizacije u budućnosti trebaju da obezbijede motivisanost i posvećenost zaposlenih ostvarenju postavljenih ciljeva turističke organizacije (znanje i vještine - da se stvori superiorna vrijednost i pozicija). Da bi se to ostvarilo, turistička organizacija treba kod zaposlenih razvijati specijalne tehničke i komunikacione vještine digitalnog marketinga, mora investirati u kadrove i upućivati ih na odgovarajuće seminare i obuke, u cilju osposobljavanja za postizanje performansi vrhunskog kvaliteta usluga.

U savremenom poslovanju, u globalnom okruženju, neophodno je kod svih razvijati ideju stvaranju imidža svjetskog glasa i renomea. Rezultatima provedenog istraživanja Turističke organizacije grada Trebinje i Turističke organizacije grada Banjaluka potvrđili smo postavljenu tvrdnju da svjetski globalni trendovi u ekspanziji savremenih tehnologija nisu zaobišli ni oglašavanje u marketingu turističkih organizacija, koje svoje usluge/proizvode u savremenom oglašavanju razvijaju korišćenjem digitalnih tehnologija. Turističke organizacije u savremenom digitalnom okruženju trebaju se baviti istraživanjem okruženja, istraživanjem promjena na tržištu, širenjem ponude, korišćenjem novih tehnologija i marketing komunikacionih alata, sofisticiranim ukusima korisnika usluga i potrošača, kako bi se obezbijedile izuzetne usluge u globalnom trendu pooštene konkurenциje.

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## MODERN ASPECTS OF ADVERTISING IN DIGITAL MARKETING ENVIRONMENT

**Summary:** *The subject of the research in this paper is modern advertising in the digital marketing environment, where we explore and explain the importance, types and directions of advertising in the faster development of society and the changes which occur in the continuous development of the digital environment. The aim of the research is to determine how, by using digital technology, in the best possible way marketing reaches the target consumer group as the ultimate goal of promotion and branding, and at the end results in increasing in sales of products and services. The results of the research confirmed the hypothesis that global trends in the expansion of modern technologies did not bypass advertising in the marketing of tourist organizations that develop their services / products in modern advertising by using digital technologies. Thus, the paper analyzes and presents the comparison of modern aspects of advertising in the digital marketing environment of the Tourist Organization of Trebinje and the Tourist Organization of Banja Luka.*

**Key words:** advertising, digital environment, marketing management, information technology, business management

**JEL classification:** M10, M15, M21, M31, M37

### INTRODUCTION

In Bosnia and Herzegovina, as well as in many underdeveloped economies, we can feel the impact of advertising trends that dominate in developed countries of the world. Their influence on domestic business practice arrives with a certain delay. Therefore it is necessary to be familiar with trends and engage in timely fashion. With the development of communication technologies and with a better insight into the awareness and habits of end-users or service users, the role of marketing is becoming increasingly important. Today's development of the Internet and Information Technologies affects on changing the modes of how we manage business, changing the modes of business, and advertising of products and services. The Internet has become available to almost everyone, so the possibilities for placing ideas over the Internet are very diverse and extensive. Digital marketing, or marketing through digital communication channels, has seized the world market. To end customers or users of products and services we need to approach quickly, operate efficiently, and deliver them important and necessary content. Digital marketing channels are enabling this. Thus in this paper we will present the analysis of research results based on a comparison of modern aspects of advertising in the digital marketing environment of the Tourist Organization of Trebinje and the Tourist Organization of Banja Luka. Tourist organizations are searching for

ways how to manage current economic events and how to prepare for a very complex global environment. They constantly wander: How to be and remain competitive? How to be more successful than others? In this paper we suggest that they use information technologies more, and especially knowledge bases and business intelligence in order to improve competitiveness in their line of business. Scientific research in this multidisciplinary area follow the continuous growth of digital marketing for years and predict its further advancement.

## **1. RESEARCH METHODOLOGY:**

In this scientific research the subject of the research presents modern advertising in a digital marketing environment in which we explore and analyze the significance, types and directions of advertising in the faster development of society as a whole and constant changes that take place in a dynamic digital environment. The aim of the paper is to determine how by using digital technology, in the best possible way, marketing reaches to the target group of consumers / users of services as the goal of promotion and branding, and at the end to the sales of products and services. In accordance with the formulated object and the aim of the research, we have set up the research hypothesis that global trends in the expansion of modern technologies have not even bypassed not even advertising in the marketing of tourist organizations that develop their services / products in modern advertising by using digital technologies. Gathering of primary data was carried out by testing method which consisted of a structured interview with a deliberately chosen sample - competent respondents. In addition to the scientific method of testing in the primary research, other methods suitable for this type of research were also used in certain parts of the work: descriptive, causal, methods of observation, methods of comparison and analysis.

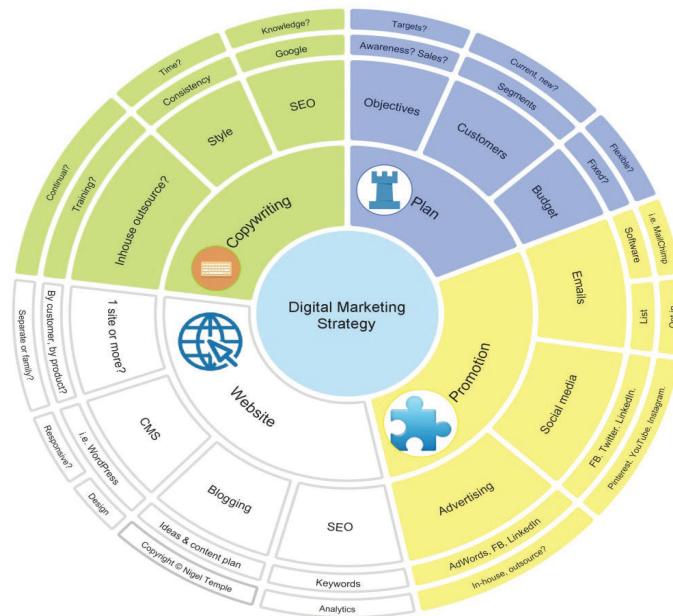
Prospective research was conducted in the period from January the 1<sup>st</sup> until February 28<sup>th</sup> 2019, in two Tourist Organizations of the Republic of Srpska. The city Trebinje was selected from the south and the city of Banja Luka from the north of the Republic of Srpska. The data collected were processed by using the latest version of statistical programme the IBM SPSS Version 23. The results of the research are precisely given below, based on which conclusions about the impact of global trends and the expansion of modern technologies have been drawn on contemporary aspects of advertising of tourist organizations in the digital marketing environment.

## **2. ANALYSIS OF DIGITAL MARKETING FROM THE ASPECT OF ADVERTISING**

The basic advantages of digital marketing are multiple, ranging from its massive adaptability to different market segments to the full personalization of different products, services and communication messages through cheap digital channels of distribution. Hence digital marketing is currently the most effective form of advertising in international business. By analyzing of digital marketing within the digital marketing environment, we have determined very significant advantages which are based on creating interactions with a large number of customers in different locations (Grbavac and Grbavac 2014). In this way, a large number of contacts is accomplished through which we came to the essential knowledge related to better understanding and satisfaction of the needs of customers, attitude towards a particular brand, when they are the most open to consume advertising messages, which communication device they use, and almost all these activities can be measured and monitored (Tešanović et al 2018). Organizations need to modify their business strategy, choose the appropriate digital marketing strategy subtly and choose those channels that meet their needs the best in order to achieve the goals of digital marketing. (Picture 1.)

When designing a digital marketing strategy it is important to include the technological structure of organization, knowledge, skills and support for employees, to determine the

suitability of products or services for online advertising, the boundaries of integration of digital marketing and the existing strategy (Durzmaz and Efendioglu 2016, 34).



Slika 1. Digital marketing strategy, Nigel Temple, The Marketing Compass, UK (Google 2019)

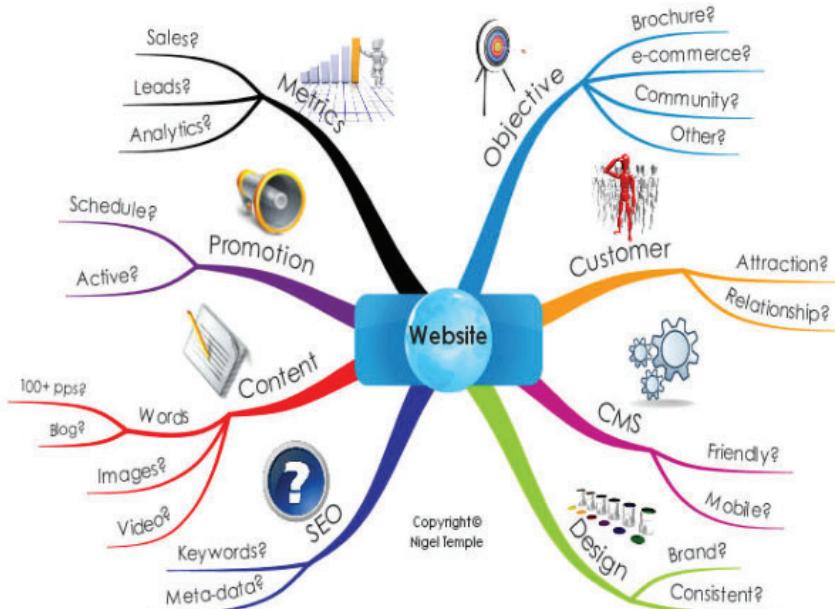
We distinguish four phases of digital marketing. The first phase represents the stage of attracting and gaining customers to visit the organization's website by using Search Engine Optimization techniques (SEO), advertising on search engines, email and mobile marketing, social network marketing, and viral marketing. The second phase is the phase of adjustment to consumers with the aim of achieving sales targets through such designed web page that needs to attract as many customers by offering the ease of ordering and different payment options. Media optimization and measurement of the results represent the third phase of digital marketing in which the web page performance testing is conducted, results are evaluated, and key words use is of great importance. The fourth phase is the customer satisfaction phase in which we strive to transform current customers into permanent customers (Weinlich and Semeradova 2014, 11).

The goals of digital marketing can be the most frequently be: increasing of sales, increasing the number of visits to the web page, timely informing of current and potential customers, communicating and approaching to customers in order to increase their interest and engagement, increase of value and optimization of advertising (Tešanović and Knežević and Radivojević 2015).

Regarding to goals of digital marketing we can distinguish several of its components, out of which the most important are: Search Engine Optimization (SEO), Search Engine Marketing (SEM), Contextual advertising, Mobile marketing, Web pages analysis, Customer Relationship Management (CRM), Content Marketing, YouTube and Video Advertising (Kotler and Kartajaya and Setiawan 2016). The best digital marketing tools that provide the best marketing solutions are: Marketing of content (blogs and infographics), Marketing on

social networks (Facebook, Instagram, Twitter, LinkedIn, Google+), Optimization for web browsers, Marketing on browsers, Marketing novelties, Advertising by banners, Internet marketing, e-books, and sponsored articles (Tešanović and Radivojević 2015). In accordance with the subject and purpose of the research, we will analyze some digital marketing tools appropriate to the tourist organizations in which we conducted our research, such as: Search Engine Optimization (SEO), Search Engine Marketing (SEM), Social Media Optimization (SMO).

We all search the Internet by using search engines, where by entering a certain term we get a series of results ranked by the quality of the web page and its importance (Stanojević 2011). Some Internet users are more inert and do not scroll through all the pages of the search results. Also, each search engine forms and offers its order of results by classifying them in terms of quality, relevance and significance (Kukobat and Tešanović and Kukić 2016). The goal of each organization should be, that in the eyes of each search engine, to be the most relevant and of the best-quality for the products or services it offers, in comparison to the competition that also tries to present its products and services as efficiently as possible and to be ahead in the search results (SERP). For this reason, the web page of the organization should be ranked better / positioned with the most important and the most wanted key words and phrases in the search results (Vilić and Dujaković 2015). Of crucial importance is to just appear on the first page of Google, Yahoo or some other search engine, according to the type of products and services or other important search engine results, depending on the language of the target audience (Radivojević and Tešanović and Stevandić 2015). Every web page and its owner who represents their products and services through it should strive for a better position in the search results, ie, the higher visibility as possible. In the era of digitalization of media for mass communication, the majority of visitors and users have the Internet, so that the position of the web page on the first page of Google will bring more visitors and customers than the expensive advertising in the prime time of the national televisions.



Slika 1. The Eight Website Keys, Nigel Temple, The Marketing Compass, UK (Google 2019)

With a detailed analysis of the web page of some organization or a web page of competition, we start the process of Search Engine Optimization (SEO). With the results of analysis we

get, what are the key words and terms that attract the most visitors and how much time does it take for the web page to be brought to the first page of the search engine. Search Engine Optimization represents the most powerful tool of digital marketing, ie. a digital marketing technique that quickly and reliably delivers the desired result in a short time (Kozić Radenović 2014). In the process of web page analysis we can distinguish five phases: competition research, research and application of key words, site optimization, web page structuring, monitoring of results and optimization of results (Weinlich and Semeradova 2014). Search Engine Marketing or SEM traffic is considered to be the most important source of Internet communication because it is directed to a particular market segment. Customers or clients use daily search engines to find an adequate solution to their problem or an answer to some question. SEM is a wider term than SEO because it contains SEO, paid ads and other services related to search engines and is often used to describe certain procedures connected with exploring, announcing and ranking / positioning of the web pages on search engines. The organization that runs the job on the Internet should also be visible in organic (unpaid) and paid links, which means that it needs both SEO and SEM (Bellman et al. 2011). The results of the analysis confirm that Social Media Optimization (SMO) represents a key part of the web strategy of Online Reputation Management or Search Engine Reputation Management, which use organizations that take care about their presence and ranking on the Internet through social media such as blogs, forums, online services and web pages.

### **3. MARKETING OF SOCIAL NETWORKS AND ADVERTISING**

Social networks enable numerous marketing activities, such as application of mouth-to-mouth marketing, market research, creating and testing ideas, developing new products, improving customer relationships, all forms of communication activities and promotion. The popularity of social networks grows every day, and today those who do not use them are rare (Parlov and Perkov and Sičaja 2015). Social networks represent a platform that enables communication with potential customers or clients. In order for the company to be noticed and stand out from the competition, its profile should be active, which means it should be involved in various forum contents, comments and to participate in different surveys (Jovičić and Kukobat and Tešanović 2018). If a product or service or just a company is promoted, this type of marketing represents a very powerful method to make the company more profitable and to achieve that in a shorter time in comparison when using some other promotional methods (Djukic 2018). In the last few years research shows that a broad auditorium more frequently turns to social networks when searching for more favorable purchases, when they search for discounts, and more often in that way they come in contact with brands promoted on social networks.

According to the Lisbon Agenda for Development and Employment, innovation and development of informational technologies represent the two most important components of the competitive development of the European Union (Didero 2009). In modern business conditions, for a tourist organization is set the challenge of stable economic growth and the preservation of the current position (or advancement) in the global economy characterized by high competitiveness and constant technological changes (Knežević and Šaula and Dujaković 2014). Therefore, they have to improve the level of application of new technologies in tourist organizations and adapt to the concept based on knowledge and business intelligence. The economic crisis in this region further complicates the problem and requires that this problem should be considered in a new light (Golob 2016). The great advantage of marketing social media, unlike traditional advertisements, announcements and mailing of promotional material by post, is in that the results of online social campaigns can be directly measured, which allows brands to have a clearer insight into the difference between the invested and the received. Marketing of social media provides a lot of key information about customers, consumers, clients, about their preferences, needs, problems and interests that can be used in

the longer period when creating new and more efficient promotional campaigns, and creating and modifying firmer and more universal business and marketing strategy (Matošević 2015). The number of Internet users around the world in 2018 is 7% higher than in 2017, the number of social network users around the world in 2018 is 13% higher than in 2017, while the number of mobile phone users in 2018 is 4% higher than in 2017 (Tešanović 2018). Facebook is the most popular social network today. The company Facebook is the owner of the social platform Instagram, which has a global share of advertising on mobile internet in the amount of 8.4%, and the expected revenue ie. share in 2019 will reach 20%. The most popular social network on the global level for sharing of video content is certainly YouTube. This network records over 1.7 billion users in 2018, which represents 1/3 of the total number of Internet users. Because of its global popularity of the content the network offers its version in eighty languages which cover more than ninety countries of the world, including the B&H version. Billions of views of the content of this social network and viewing millions of hours of content and they mostly come from mobile devices. This is confirmed by the statistics data of this most famous social video advertising network. The ratio between viewing of the full promotional video and the number of in-stream advertising is 31,13%; the ratio of viewing the full promotional video and the number of views at the discovery advertising is 2,83%; while the increase in the number of YouTube site visits ie. sessions on the website is 57,24%. Just in June 2018, the music streaming service Spotify had around 83 million of registered subscribers in the world, but only three months later it already had 75 million. This big jump, which does not only bring financial gain for this Swedish social platform, but represents its spinning success, which has over 140 million users this year, of which 50 million subscribers. Its first competitor is the social network Apple Music, which counts little over 30 million users. The Spotify Music Streaming Service has already grounded as its strategy on geographic expansion in order to achieve better and in numbers better paid advertising. This social network generates revenue from streaming services by connecting authors / musicians directly with users without the intervention of expensive publishing record companies. According to the company's data, the revenue is divided in the ratio of 2/3 to the authors, and 1/3 is earned by Spotify. So the logical question arises: Why do service companies need to be intelligent?

An intelligent company is the one that makes quality decisions faster (Duvnjak 2018), outsmarts its competitors, can stand out and satisfy the natural instinct of winning. An intelligent system is more often an assumption not only for winning and competitiveness, but primarily for participation in global game and competition (Tešanović 2015). When designing a service strategy a tourist organization analyzes and defines elements that are important for creating satisfaction by providing long-term quality service. Beside standard parameters such as service, access to distribution channels, today the greatest entry barrier, and at the same time the greatest advantage represents the common knowledge and skills of all employees (Tešanović 2015, 472).

#### 4. THE RESULTS OF RESEARCH AND DISCUSSION

Prospective research was conducted in the period from January the 1<sup>st</sup> until 28<sup>th</sup> of February 2019, in two Tourist Organizations in the Republic of Srpska. As a representative sample of the research Tourist organizations from different and very important geographical areas, the north and the south of the Republic of Srpska were chosen, such as: the Tourist Organization of Trebinje and the Tourist Organization of Banja Luka. Social networks in tourism have changed the way people research, gather information, make decisions and share their experiences and adventures. When choosing a destination, social networks are commonly used to research offers, accommodation, content and useful advice from other tourists. When choosing a tourist destination, for tourists are the most important attractiveness of the destination, the quality of the tourist offer and the availability of information.

The city of Trebinje, which is reasonably called the pearl of Herzegovina, belongs to one of the most beautiful and the most desirable tourist destinations in B&H. Trebinje is located in the far south of Bosnia and Herzegovina, and occupies an area of 904 km<sup>2</sup>, with 36.000 inhabitants. It has a very significant geographical position, because it borders with Montenegro and Croatia. The geographical position of Trebinje is very important for its tourist development since it is 27 km far from the world-famous tourist destination - Dubrovnik, and 40 km from Herceg Novi. In the past years huge efforts have been made to brand Trebinje as an unavoidable tourist destination and to its promotion, branding of authentic offers and products from this region. Beside that the city of Trebinje is also recognizable as a city of poets, the city of Jovan Dučić.

The tourist offer of this organization can be divided into several thematic units, and they include; religious tourism, wine tourism, cultural-historical, gastronomic tourism, which are with their offer and characteristics specific to this region. In the past few years, in cooperation with the Government of the Republic of Srpska, the activities of branding autochthonous Herzegovinian products are conducted, such as prosciutto, cheese, wine, figs and medicinal herbs.

In today's digital age, when everybody is networked, tourist destinations are searched and browsed on the Internet. Tourist destinations are increasingly moving away from traditional campaigns and turning to digital marketing campaigns, because the goal is no longer reaching as many potential consumers as possible, but reaching to each individual potential consumer. This is almost possible to accomplish with the help of certain marketing communication tools on social networks.

The Web page of the Tourist Organization (TO) of Trebinje offers all the necessary information for modern business conditions. In order to further specialize in their business and focus on segments, the Tourist Organization of Trebinje has developed its offer so that it provides full service of organization of the travel for the business users.

The web page of the Tourist Organization of Trebinje is very transparent, exceptionally easy to use and available in three languages, Serbian (Latin and Cyrillic), English and Russian, which makes it useful for a large number of users or potential users. The page is divided into four main sections: guide, accommodation, gastronomy and useful information, and two customary options: about us and the city map. The section Guide is divided into three subsections: Trebinje, destinations and activities. In the sub-section of Trebinje you can find all the key information about the city itself and interesting facts related to famous sites and cultural-historical sights. The subsection Destinations offers an overview of religious buildings, natural attractions, excursions and bathing places. The third subsection of Activities is focused on the offer of activities in the city, such as excursions, adventures, hunting, fishing and sports. The section Accommodation offers an overview of accommodation capacities such as hotels, motels, hostels, lodging, as well as private accommodation. These capacities are increasing from year to year with better and more comprehensive offer. The Gastro section offers an overview of all the gastronomic pleasures related to Herzegovinian cuisine, restaurants and taverns, offers on green market, wineries and winery tasting rooms, and even the offer of honey and medicinal herbs. The section of Useful information contains all the necessary information on how to get to Trebinje, ie. information about the transport connection, position and activities of Information Centre, bus stations and timetable, events (complete overview of events with names and time when it is held), exchange offices and gas stations, parking, rent a car, taxi, and important phone numbers.

Social networks have become inevitable in tourism, and research results show that the majority of students, information about selected tourist destination, find on Facebook, Instagram and Booking. Today, Facebook has 1.86 billion users; 1.23 billion users daily log into their profile and spend in average 20 minutes on it. The majority of users are 25 to 34 years old; 77 women out of 100 use this network, and 66.50% of men out of 100 which

belong to the demographic group of 18 to 24-year-old visit Facebook immediately after they wake up. Because all of this above, it's easy to notice how big is the market and how significant and how many possibilities this social network offers.

The Facebook page of the Tourist Organization of Trebinje was launched on August 17<sup>th</sup>, 2010, as part of the activities for better promotion of the city's tourist offer and better implementation of marketing activities. This page is followed by 9.624 users, while 9.614 like this page. Facebook page of TO Trebinje is becoming more and more active, especially in the summer period, for which the largest number of activities, cultural activities and events are related. Posting on the Facebook page in the cheapest and the simplest way is to perform promotion of manifestations and cultural events.

Instagram is a social network, ie. a free application that processes and distributes photos and videos via mobile phones over the social network itself, and others such as Facebook, Twitter, and similar and serve for social networking and photographic services. Recognizing the significance of marketing on social networks TO Trebinje has recently also been active on Instagram by posting photographs and videos, especially for offering of touristic content by highlighting the natural and cultural beauties of the city, which as such, by itself, become a bait for potential visitors.

The research also determined the shortcomings in the advertising of TO Trebinje in the digital marketing environment. When in the most used Google search engine, we enter the term Trebinje, we can notice that there is no paid advertising (SEM), but we only get organic results (SEO). The page GoTrebinje, or the official site of the Tourist Organization of Trebinje, which is the leader of the tourist development of the city, is placed on the second page of the search, and we can conclude that in this respect it has not been done enough. One of the reasons is also that employees are not educated in the segment of digital communication. Social networks, although present in the marketing concept of Tourist Organization Trebinje, are not sufficiently represented in marketing communication. This should be the future goal of TO of Trebinje, that is, to increase the number of followers on social networks. That goal can be achieved through various actions, for example, that users are asked to post their travel photos on the Facebook page of Trebinje (visitors who either stay or just go through Trebinje). In this way, the emotional connection of users and TO Trebinje would increase, and users would visit these pages more often.

Unlike the Tourist Organization of Trebinje, Tourist Organization of Banja Luka (TOBL), in 2018, actively worked on the development of communication through social networks. The web page of TOBL ([www.banjaluka-tourism.com](http://www.banjaluka-tourism.com)) is updated on a daily basis and especially the section calendar of events for the city of Banja Luka. In addition to the main page, in 2018, TOBL updated a thematic web page dedicated to rural tourism of Potkozarje and rural development at [www.kozaraethno.com](http://www.kozaraethno.com). The Internet pages are upgraded with new content and relevant information.

In order to promote tourist products more efficiently, catering capacities and other elements of the tourist industry, an analysis of the existing web page of the Tourist Organization of Banja Luka is being constantly analyzed. On the basis of the analysis and experience of the users, the TOBL web page will be improved in 2019. The Tourist Organization of Banja Luka actively worked on the development of communication through social networks and the development of Community Management with the aim of increasing the number and on animation of fans as well as the development of interaction with users. Also, through social networks, campaigns and promotions of the tourist offer of Banja Luka, as well as current events, were realized. TOBL is advertised on social networks such as Facebook, Instagram, Twitter and YouTube.

On the social network Facebook, as the most dominant and the most popular in these regions, TOBL has four fan pages:

- Tourist Organization Banja Luka, the page intended for citizens of Banja Luka, and on which events are promoted that are of interest to citizens as well as the work of TOBL (7.000

likes). Since the paid campaign on this site did not work, the page has gained popularity especially during the campaign for the manifestation Summer on Vrbas 2018, when special prize games were organized.

- Visit Banja Luka, a page dedicated to regional tourists, is conducted in Serbian language and promotes the tourist offer of Banja Luka (2.359 likes)
- Kozara etno, a page which promotes the Kozara Etno Festival, and communicates both with the audience and with the participants of the festival (780 likes)
- Simply AdoraBLE Banja Luka, a page created within the campaign of the same name that began in July 2017 (1.504 likes). In the month of May in 2018 campaign, and therefore the page changed its name to Exteremly AdoraBLE Banja Luka. The page is in English for communication with potential tourists. Through this page a paid campaign for the markets of Slovenia, Croatia, Serbia, Montenegro and B&H was made. The campaign promoted the manifestations such as Spring in Banja Luka, Summer on Vrbas, Demofest, FreshWave and Banja Luka Winter, as well as the adventurous offer of the city Banja Luka. The total cumulative reach of the number of visits to this Facebook page in 2018 was as high as 784.505.

On the social network Instagram TOBL communicates with the Internet community through two Instgram profiles. The first is Visit Banja Luka, which started at the beginning of 2017 and has 344 followers. The second profile was launched within the campaign Simply AdoraBLE Banja Luka, later changed to Banja Luka Exteremly AdoraBLE, and currently has 435 followers.

On the social network Twitter, TOBL's account "Visit Banja Luka" has approximately 658 followers. Since Twitter is not such a popular network in this region, the activities on this network are modest as well.

The YouTube channel called tobanjaluka, with only 132 registered followers, is of modest activities due to the lack of video material in the Tourist Organization of Banja Luka. This year, a promotional film of the city of Banja Luka was made, which has 22.940 views on this network.

Tourist Organization Banja Luka conducted paid campaigns, such as spring, summer and winter. Paid campaigns were made for Facebook and the Instagram page BanjalukaExteremly AdoraBLE, and the Google campaign was designed in order to increase the visibility of the TOBL web page. The campaign communicated the most interesting events in Banja Luka in the above mentioned seasons, and the most attractive were the manifestations Spring in Banja Luka, Summer on Vrbas and Banja Luka Winter.

Unlike the TO of Trebinje, TO of Banja Luka carries out the Search Engine Optimization process (SEO). The results of the research show that both organizations in the following period should determine what are the keywords and terms that attract the most visitors and how long does it take for their web pages to be brought to the first page of the search engine, because they are currently on the second page of the search engine. Optimization of the web page for search engines represents the most powerful digital marketing tool, ie. a digital marketing technique that quickly and reliably delivers the desired result in a short period. The results of the research confirmed us that Social Network Content Optimization should be a key part of the web strategy of both tourist organizations as well as managing online reputation or managing reputation on search engines that use organizations that take care about their presence and ranking on the Internet through social media such as blogs, forums, online services and web pages.

Paid campaigns for certain market segments have increased the number of visits to web pages of social networks in a short time, as a broad auditorium more frequently turns to social networks when searching for more favorable purchases, discounts, new challenges, and most often in that way comes in contact with brands that are promoted on social networks. Tourist organizations which will be the leaders of electronic, mobile and intelligent business, by

turning data into information, knowledge and intelligence will be the most competitive and leading in their field of business.

## CONCLUSION

The development of the Internet and Information Technologies influences on the changing of the way of managing the business, changing the way of business, and on advertising of products and services. The Internet has become available in every place, so the possibilities of using and placing over the Internet are very diverse and extensive. Digital marketing, or marketing through digital communication channels, has won the world market. To the end customers or users of products and services we need to arrive quickly, operate efficiently, and deliver important and necessary content to them. According to Kotler, marketing employees are dealing with placements within ten different areas: goods, services, experiences, events, personalities, places, assets, organizations, information and ideas.

In this paper, we have followed in some detail only some segments of placements such as services, information, experiences, events, places and ideas. We do not think that other placements are not important, but due to character and length of this paper we have not examined them in more detail. Before buying anything, most people search online, so it is very important to have the presence and help of organic search results and paid search results, such as: Search Engine Optimization (SEO), Search Engine Marketing (SEM), and Social Media Optimization (SMO). Search Engine Optimization represents organic non-paid search results, free ads, while Search Engine Marketing represent targeted paid announcements, but they certainly need to be complementary. Search Engine Optimization is the base of good Search Engine Marketing, and when it is set up correctly, there are great chances to accomplish a high number of visits and high positioning on search engines. A quality SEO of an organization is necessary so the Google could see it as a credible web location and the best it ranks, with certainly very important positive user experience. This is the current trend. Google rewards top-ranked web locations as mobile search has become more and more dominant, and the nature of search changes, and with that the creation of targeted ads for SEM is enabled. Advertising in digital marketing environment is becoming more and more focused on data, making it easier to form targeted and personalized campaigns, while users will be more and more concerned about their privacy.

In very strong competition, tourist organizations in the future should provide motivation and commitment of employees in accomplishing the set goals of the tourist organization (knowledge and skills - to create superior value and position). In order to achieve that, tourist organization should develop special technical and communication skills of digital marketing to their employees, must invest in personnel and send them to appropriate seminars and trainings, in order to train them to achieve the performance of top quality of services.

In modern business in global environment it is necessary for everyone to develop the idea of creating the image known world wide and excellent reputation. With the results of the research carried out by the Tourist Organization of Trebinje and the Tourist Organization of Banja Luka we confirmed the stated claim that the global trends in the expansion of modern technologies did not bypass advertising in marketing of tourist organizations that develop their services / products in modern advertising by using digital technologies. Tourist organizations in the modern digital environment need to deal with exploration of environment, exploration of market changes, expanding their offer, by using new technologies and marketing communication tools, sophisticated demands of users of services and consumers, in order to provide exceptional services in the global trend of tougher competition.

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## PRIJEDLOZI ZA UVOĐENJE NOVIH BANKARSKIH USLUGA UZ PRIMJENU INFORMACIONIH I MOBILNIH TEHNOLOGIJA

**Rezime:** Rad ima za cilj da ukaže na nužnost promjena u načinu pružanja usluga u bankarstvu, na promjeni sadržaja i prirode tih usluga te na potrebu uvođenja nekih novih bankarskih usluga. U skladu s tim, ukazuje se na potrebu prebacivanja težišta bankarskog poslovanja na neke nove vrste usluga, koje banka do sada nije pružala, ali ima potencijal i potrebu za to. Očekuje se neizbjegno smanjivanje obima ili odustajanje od pružanja klasičnih vrsta bankarskih usluga. Razlog za to je, jer se očekuje značajan pad cijena tih usluga, zbog evidentne nadolazeće konkurenциje i njihove koncepcije. Ta koncepcija dopušta konkurenциji da te usluge realizuju pod znatno nižim cijenama, jer su u startu smanjili svoje troškove. U tom smislu se predlaže u ovom radu da banke uvedu određene nove proizvode u skup usluga koje pružaju korisnicima, a da iskoriste na najbolji način mogućnosti koje nude informacione i mobilne digitalne tehnologije. To bi omogućilo poboljšanje kvaliteta usluga, smanjenje troškova davanja takvih usluga i prelazak na, za banku, sasvim nove vidove usluga, za koje banka ima potencijal koji treba da razvije i iskoristi. U radu se predlažu i opisuju neke takve nove vrste bankarskih usluga bazirane na primjeni modernih informacionih, komunikacionih i mobilnih digitalnih tehnologija.

**Ključne riječi:** klasične bankarske usluge, uvođenje novih bankarskih usluga, primjena informacionih i mobilnih tehnologija u bankarstvu, poboljšanje kvaliteta i smanjenje troškova davanja usluga

**Jel klasifikacija:** G14, G21, M15, O32, O33

### UVOD

Navike ljudi su podložne stalnim promjenama. Pogotovo su izložene promjenama kada se nalaze pod nekim jačim uticajem. Upravo to se dešava u cijelom svijetu pod uticajem mobilnih digitalnih informacionih i komunikacionih tehnologija. Na osnovu iskustvu u rada sa mobilnim telefonima i drugim mobilnim uređajima, može se vidjeti da je prva navika koja se tako stvara korišćenje prilike da se informacije prikupljaju i razmjenjuju daljinski te da se poslovi obavljaju u realnom vremenu, ali sa udaljene lokacije. Iz toga je prirodno nastala i težnja modernog klijenta banke da svoje aktivnosti sa bankom obavlja na daljinu, u što većoj mogućoj mjeri. Trenutno, sem omogućenja obavljanja nekih bankarskih poslova sa distance od strane banke, uvođenjem pogodnih softverskih i hardverskih rješenja, to u najvećoj mjeri zavisi od pravne regulative konkretnе države. Konkretno, to zavisi od toga da li klijent mora lično i fizički, svojim potpisom, u prostorijama banke, dati saglasnost na neki dokument ili je to moguće uraditi daljinski, slanjem verifikovanog digitalnog potpisa kao vida legalne saglasnosti i legalnog poslovanja.

Banke su se u prošlosti primarno bavile, u svom „retail“ poslovanju, prikupljanjem novca u vidu štednje od svojih klijenata uz određenu naknadu tim klijentima te davanjem kredita, takođe svojim klijentima, uz veću svoju naknadu od naknade za štednju. Na osnovu razlike u tim naknadama, banke su, pružanjem tih svojih primarnih usluga, ostvarivale finansijsku dobit i zaradivale.

Tokom vremena, a to se direktno povezuje sa razvojem informacionih tehnologija, banke su proširele djelokrug usluga koje pružaju. Počele su da se bave i investicionim bankarstvom, berzanskim poslom, hipotekarnim poslom, hartijama od vrijednosti, raznim drugim oblicima kreditiranja (npr. kredit na kredit i sl), fondovima tržišta novca, tržištima za ugovore otkupa i sl. Neke od tih vrsta poslovanja banke obavljaju u saradnji sa još nekim institucijama. Svi ti nabrojani i slični poslovi se često nazivaju „Shadow Banking“ ili „Bankarstvo u sjenci“ (McMillan 2014, 65).

Razlog pominjanja ovog termina, koji se kao pojava javlja od 1970. godine, je da se ukaže na pravce razvoja bankarskih usluga, a takođe i na štetna dejstva te pojave. Ta pojava je naročito povezana sa bankarskom krizom 2007. i 2008. godine (Vukić i Knežević i Miličević 2017, 245). Odavno je bankarstvo u sjenci počelo da stvara veliki prihod bankama. Međutim, uglavnom je ono bilo van domaćaja regulatornih instrumenata država. Smatra se da su to glavni razlozi veličine pomenute bankarske krize. Klijenti se tu tretiraju više kao roba, nastojeći da se izvuče što veća dobit od njih, ne mareći za posljedice. Normalno je da je to imalo negativne posljedice na poslovanje banaka i dovelo do krize (McMillan 2014, 81).

Takođe, banka koja već duže postoji, je prikupila i svakodnevno prikuplja informacije o klijentima, s posebnim naglaskom na informacije finansijske prirode. Te informacije suštinski imaju finansijsku vrijednost. Mogu se koristiti i na određen način naplatiti, ako se pravovremeno i svrshodno iskoriste.

Moderno bankarski klijent više ne želi da svoj „retail“ posao, tj. nabavku konkretnog proizvoda ili usluge obavlja parcijalno i da lično ide od institucije do institucije. Moderni klijent više ne želi ili nema vremena da prvo ode u prodavnici, da vidi i odabere robu, da dobije predračun, pa da sa tim predračunom ode u banku. Banka bi ga onda vjerovatno slala da pribavi potrebnu dokumentaciju o njegovim mjesecnim primanjima i sl. Klijent bi onda isao da svoje firme, pa nazad u banku da potpiše kredit, a onda ponovo u prodavnici da kupi željenu robu. Moderni klijent želi da sve to može da obavi sa jednog mjesta i uz pomoć mobilnih uređaja, koje svakodnevno koristi, a koji mu omogućavaju da brzo i lako realizuje sve potrebne aktivnosti (Bobrek Macanović 2017, 245). On bi tako mogao da pogleda robu koju želi da kupi, putem slika koje dobije na mobilnom telefonu ili drugom mobilnom uređaju te da brzo i jednostavno izvrši komparaciju cijena i kvaliteta robe u više prodavnica, sve sa jednog mjesta. Takođe, klijent bi mogao da pomoću mobilnih aplikacija banke, u kojoj je klijent, zatvoriti finansijsku konstrukciju procesa nabavke željenog proizvoda ili usluge te da aktivira kućnu dostavu, da mu sve to bude dostavljeno na željeno mjesto.

Klijent, svjestan mogućnosti moderne mobilne digitalne tehnologije, ne želi više da troši svoje vrijeme i pažnju te da mora da izlazi iz jedne aplikacije, da snima proizvod koji želi, njegovu cijenu i da sve to šalje ka banci na odobrenje kreditne linije pa kada dobije odobrenje, ponovo odlazi do aplikacije koja vrši prodaju željenog proizvoda. Klijent bi želio da ima neku instituciju koja će voditi kompletan „retail“ proces pribavljanja željenog proizvoda, koja će ga brzo i jednostavno voditi kroz taj cjelokupni proces. Koja će institucija, gdje i kako, postati ona koja vodi cijeli taj proces, zavisće od spremnosti i mogućnosti takve institucije. Banka ima sve resurse za to, samo ih treba aktivirati, a prije toga se treba preorganizovati u tom pravcu (Sajić et al. 2018, 78). Kao dobar uzor kako se to može uraditi, mogu poslužiti najveće Internet prodavnice, koje su već spremne da vrše kompletan proces nabavljanja željenog proizvoda, jer one spajaju svoje klijente kupce i svoje klijente prodavce, istovremeno omogućavajući kupovinu preko svojih elektronskih platnih kartica pa i kupovinu na rate.

Ovdje, u ovom radu, se predlaže i preporučuje da banke razmotre svoje mogućnosti i potencijale, da ih stalno unapređuju i da pokušaju da se nametnu kao vodeći u određenim

granama „retail“ poslovanja, da uvedu nove bankarske usluge i da po tome postanu prepoznatljive institucije (Harangus 2011, 86).

Neke od takvih novih usluga koje banke već pružaju su: mobilno i elektronsko bankarstvo, mobilni novčanik i personalni finansijski savjetnik, P2P platni promet, P2P kreditiranje, chatbot, crowdfunding, itd. Svim tim uslugama je zajedničko da su to aplikacije koje koriste prednosti mobilnih uređaja, mogućnosti izgrađenih baza znanja (Knowledge Data Base), DataWarehouse sistema, BigData sistema, upotrebe vještačke inteligencije i poslovne inteligencije, izgradnje dobrih CRM platformi, korišćenja API funkcija, dokument menadžment sistema (DMS), „cloud“ tehnologije, upotrebe „Interneta stvari (Internet of Things/IoT)“, upotrebe blockchain tehnologije i sl.

U ovom radu se predlažu i opisuju neke nove bankarske usluge ili proizvodi, koje bi mogle biti veoma zanimljive kao usluge koje bi banke mogle pružati klijentima u budućnosti. Neke od tih usluga su već praktično implementirane i ponuđene bankama, ali ih banke još nisu počele koristiti. Neke od tih usluga su u fazi razvoja. Predlaže se i opisuje pet novih usluga (proizvoda) sa nazivima:

- Marketinška kampanja za potrebe korisnika;
- FotoKredit;
- Upravljanje transakcionim limitima klijenata;
- Digitalni sigurnosni bankarski sef;
- Dokument menadžment sistem (DMS) za mala i srednja preduzeća.

## 1. MARKETINŠKA KAMPANJA ZA POTREBE KORISNIKA

Pretpostavimo npr. da se otvara prodavnica skupih satova i parfimerija sa brendiranim proizvodima. Da bi se sve dobro izreklimiralo, menadžeri te prodavnice bi trebali da angažuju kvalitetnu marketinšku agenciju. Međutim, neko od menadžera dolazi na ideju i predloži da se angažuje jedna ili više banaka za pronaalaženje klijenata (Atif 2002, 19) te da se iskoriste informacije o bankarskim klijentima koje banke već imaju. Banke koje imaju kvalitetne CRM aplikacije, na osnovu podataka koje već posjeduju, mogu sa velikom dozom preciznosti da identifikuju grupe klijenata koji su platežno sposobni za opisanu vrstu proizvoda. Banke, zatim, te klijente mogu da lociraju, npr. u krugu od 10 km, da im pošalju sva potrebna obavještenja sa prigodnim materijalom, sa kuponima na kojima su donosiocu dati popusti i sl. Lociranje klijenta je moguće uraditi veoma jednostavno. Dovoljno je da se to uradi na osnovu adrese klijenta, da se prikupe informacije o longitudama i latitudama adresa klijenata, a postoji mnogo programa (čak veoma jeftinji ili potpuno oslobođeni plaćanja) koji mogu vizuelno da prikažu adresu svakog klijenta banke u vidu određene tačke ili nekog drugog vidi markera. Ovaj metod se može koristiti i kao dobar vizuelni metod za prikazivanje gustoće prisutnosti klijenata u željenoj oblasti posmatranja.

U ovakovom slučaju usluge, gdje banka realizuje marketinšku kampanju za nekog korisnika, i korisnik (prodavnica i prodavac) i banka imaju koristi. Prodavac se preko banke obraća dobro odabranoj potencijalnoj klijenteli zbog koje je i otvorena prodavnica. On tako povećava broj kupaca svojih proizvoda ili usluga. Banka, pored ekonomskog interesa koji ostvaruje kroz naplaćivanje troškova pružanja usluge, ostvaruje i posrednu korist. Ona klijente, kojima se obraća, opskrbljuje pravovremenim i korisnim informacijama i tako povećava njihovo povjerenje u banku.

Na osnovu ovog prijedloga, može se realizovati i ponuditi korisnicima niz sličnih novih usluga, gdje bi banka koristila saznanja stečena na osnovu raspoloživih informacija, prvenstveno finansijskih, ali i drugih, o svojim klijentima, na osnovu iskustva stečenog u radu s njima te na osnovu stručnosti svojih radnika. Tako bi banka mogla da djeluje uslužno i/ili u vidu konsaltinga kroz te nove usluge.

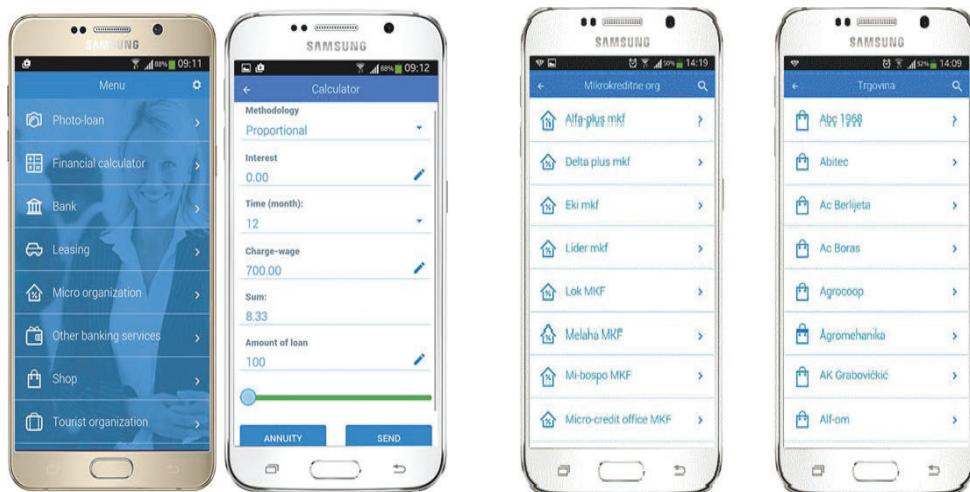
## 2. FOTOKREDIT

Kao primjer korišćenja digitalnih i informacionih tehnologija u svrhu olakšavanja i ubrzavanja korišćenja usluga za korisnika, ovdje se predstavlja prototip već praktično realizovane aplikacije za odgovarajuću uslugu, koja je nazvana FotoKredit/PhotoLoan (Avtori).

FotoKredit/PhotoLoan je aplikacija implementirana na Android platformi (postoji i prilagođena Web verzija koja funkcioniše na svim platformama). Njena prvenstvena namjena je da omogući brzo proslijedivanje i rješavanje zahtjeva za bankarskim finansijskim uslugama, prvenstveno kreditima, putem mobilnih uređaja.

Ovdje neće biti detaljnije opisivana kompletna aplikacija, već će biti istaknute neke prednosti te i sličnih aplikacija, u kontekstu već naglašenih potencijalnih prednosti banke, koje se nedovoljno koriste.

Implementirana aplikacija prezentuje praktičan način povezivanja klijenta privatnog lica (kreditnog potražioca) sa klijentom pravnim licem (prodavcem robe) preko banke kao davaoca kredita. Ta aplikacija predlaže, prezentuje i pokazuje kako efikasno stimulisati i organizovati kupovinu, kreditiranje i prenos robe koju kupac treba od prodavca, korišćenjem mobilne aplikacije i mobilne tehnologije. Ona, praktično, pokazuje kako je moguće efikasno povezati klijenta, fizičko lice sa klijentom pravnim licem, putem banke ili kako efikasno stimulisati i organizovati prodaju i tranziciju robe od prodavca do kupca. Jedan od najboljih načina za to je preko finansijskih institucija i banaka, ubrzanim načinom emitovanja kredita, korišćenjem mobilnih uređaja. Korišćenjem FotoKredit mobilne aplikacije korisnik je u mogućnosti da šalje zahtjeve za kredit, pregleda kursne liste, pronađi osnovne podatke o svim bankinim filijalama, agencijama i ATM-ovima, prodavnici turističkim agencijama, kao i da ih pronađe na Google mapi preko unesenih GPS pozicija. Na slici 1. prikazan je glavni meni i neke opcije aplikacije FotoKredit implementirane na Android platformi (Sajić i drugi 2018, 41).



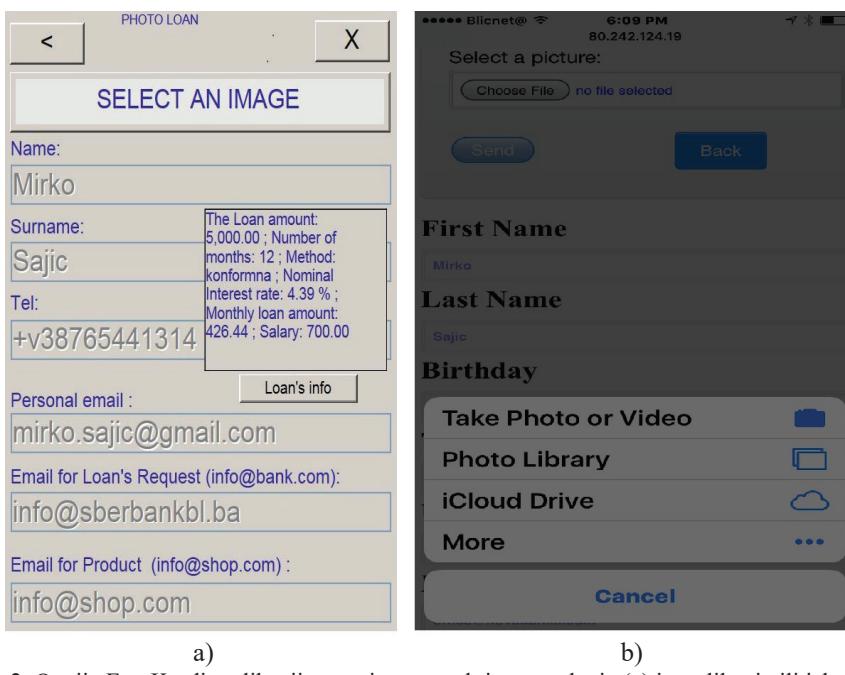
Slika 1. Glavni meni i neke opcije FotoKredit aplikacije (Android verzija) (Avtori 2015)

Pri podnošenju zahtjeva za kredit potrebno je da klijent baci pošalje sliku proizvoda koji želi da kupi. Slanjem slike klijent naglašava šta zapravo želi da kupi i bira lakši i brži način da to uradi putem kredita. Banka sada dobro zna o kakvoj potrebi klijenta se radi pa joj preostaje samo da ispita kreditnu sposobnost klijenta. Banka to može da učini preko dobivenih podataka o klijentu te da pristupi realizaciji kredita, da zatraži dodatne informacije

od klijenta ili da ga odbije zbog loše kreditne sposobnosti. Ne treba zanemariti i zainteresovanost treće strane, tj. potencijalnog prodavca ili prodavnice, da proda svoj proizvod.

Pretpostavka je i tako se predlaže da u budućnosti lični bankar/Account Manager bude više profilisan za određene grupe klijenata, kako fizičkih tako i pravnih subjekata. Tako će biti u mogućnosti da iskoristi ovakav vid zahtjeva za kredit, preciznije da iskoristi saznanje u koju svrhu ide kredit, da bi pokušao pribaviti klijentu još bolju ponudu od one koju je poslao, koristeći vlastitu (svoje banke) mrežu kontakata sa potencijalnim prodavcima. Time se ovaj krug jednostavno, brzo i prirodno zatvara, na zadovoljstvo svih strana, klijenta, banke i prodavca. Klijent dobija još povoljniju ponudu od one koju je sam našao. Time se stvara određena vrsta zahvalnosti i povjerenja prema banci i jača povezanost (tzv. socijalizacija klijenata) sa bankom (Sajić i Bundalo i Bundalo 2019, 69). Slična situacija je i za prodavca, jer mu banka pronalazi kupce i povećava prodaju. Na kraju, zadovoljna je i banka, jer je plasirala kredit koji je postavljen na dobrim osnovama. Pored svega navedenog, aplikacija ima mogućnost formiranja liste prodavnica i turističkih agencija, a u budućnosti i njihovih kataloga proizvoda, čija bi se kupovina realizovala plasiranjem kredita banke.

Na slici 2. su prikazane neke opcije FotoKredit aplikacije realizovane kao web i IOS verzija. Slika 2a. prikazuje način pripreme zahtjeva za slanje, tj. postupak sa izborom odgovarajućeg kreditnog proizvoda odgovarajuće banke. Slika 2b. prikazuje opciju za slikanje ili izbor slike želenog proizvoda iz Galerije slika. Ta slika se onda pošalje banci u sastavu podataka o zahtjevu za kredit.



Slika 2. Opcije FotoKredit aplikacije za pripremu zahtjeva za slanje (a) i za slikanje ili izbor slike želenog proizvoda iz Galerije slika (b) (Autori 2015)

Ovdje, za banke, mogu biti podjednako zanimljive postojeće prodavnice i turističke agencije sa kojima već imaju određenu saradnju, kao i sklapanje novih saradnji putem ove aplikacije, nakon iskazane zainteresovanosti korisnika aplikacije za nekom konkretnom prodavnicom/turističkom agencijom ili nekim proizvodima i uslugama koje one nude.

Aplikacija FotoKredit ima ugrađenu lokalnu bazu podataka koja putem mreže (npr. Wi-Fi) razmjenjuje podatke sa serverom (MySQL baza). Na taj način se vrše izmjene u podacima na samoj aplikaciji korisnika. Trenutno aplikacija koristi informacije dostupne sa web sajtova. Za kvalitetno funkcionisanje aplikacije posebno bi bilo važno da se informacije, posebno informacije o katalogu proizvoda sa svim pripadajućim podacima, vrše dostavom podataka od strane banke, na propisanom formatu dokumenata.

### 3. UPRAVLJANJE TRANSAKCIJONIM LIMITIMA KLIJENATA

Ova usluga i servis omogućava upravljanje, tj. korišćenje i podešavanje dnevnih i mjesecnih finansijskih transakcionalih limita klijenata, visine njihovih dnevnih transakcija i dozvoljenih prekoračenja po računu i po plaćanjima elektronskim karticama, u svrhu stvaranja kvalitetnijeg višenamjenskog bankarskog proizvoda. Ovdje se ukratko opisuju namjene te usluge, s ciljem stvaranja mogućnosti klijentu da sam bira i podešava veličinu i način korišćenja limita, radi zadovoljenja sopstvenih finansijskih potreba. S druge strane, fleksibilnost postavljanja trenutnih limita u realnom vremenu može poslužiti kao jedna od najboljih zaštita klijentu od neovlaštenog i neautorizovanog odliva novaca sa njegovog računa, koji je najčešće uzrokovani krađom informacija sa elektronskih platnih kartica korisnika. Opširnije o ovom prijedlogu novog bankarskog proizvoda se može naći u literaturi (Sajić i drugi 2018, 188).

Dobijanjem elektronske platne kartice od strane banke klijent najčešće dobija mogućnost odlaska u finansijski minus na toj kartici do visine definisanog limita. Taj limit je najčešće u veličini jedne ili više klijentovih mjesecnih plata. Takođe je poznato da veliki broj klijenata ima više elektronskih platnih kartica (revolving – za plaćanje usluga i proizvoda do visine odobrenog limita; installment – za mogućnost plaćanja na rate; kreditne kartice; kartice koje mogu da se koriste za plaćanja preko Interneta i sl). Kad se uzme u obzir i mogućnost prekoračenja limita (odlaska u minus) na tekućem računu klijenta, može se vidjeti da jedan klijent može po više osnova da koristi dodijeljene limite.

Budući da se, zavisno od korišćenog limita, određeni proizvodi koji to pružaju nalaze u različitim odjelima banke, banke najčešće nemaju cijelokupan uvid o kompletno iskorišćenom limitu klijenta u realnom vremenu. Izgradnjom softverskog rješenja, koje će biti u stanju da u svakom trenutku da informaciju o trenutno iskorišćenom ukupnom limitu klijenta, po svim vrstama proizvoda, banka će moći lakše da kontroliše dodijeljene limite. Takođe će moći da omogući klijentu fleksibilniji pristup u smislu načina iskorišćenja dodijeljenog mu ukupnog iznosa limita.

Razmotrimo dva primjera korišćenja transakcionalih limita u praksi.

Primjer 1: Klijentu je na osnovu njegovih finansijskih pokazatelja od banke dodijeljeno 15000 KM mogućnosti ukupnog prekoračenja. Klijent ima tekući račun u banci i revolving i installment elektronske platne kartice. Klijent razmatra kupovinu polovnog automobila na auto pijaci (cijena oko 12000 KM). U pregovorima sa prodavcem dolazi do zaključka da mu je finansijski najbolje da to plati kešom. Klijent se obraća banci da mu obezbijedi dovoljnu količinu novca i dolazi na blagajnu, podiže novac i islačuje prodavcu za željeni automobil. Ostaje mu neiskorišćeno još 3000 KM dodijeljenog limita.

U ovom primjeru se jasno vidi prednost ovakvog načina tretiranja limita. Ukoliko banka ne bi imala ovu mogućnost, već radila po uobičajenim principima, klijent bi imao ukupni limit dovoljan da kupi željeni automobil, ali ti limiti bi bili razdijeljeni po proizvodima (nešto za prekoračenje po tekućem računu, nešto za installment, a nešto za revolving elektronske platne kartice). Tako bi to bilo nedovoljno, gledajući parcijalno po dodijeljenim limitima, po proizvodima, da izvrši tu kupovinu. U tom slučaju bi morao da se obrati banci da mu dodijeli prigodan kredit, što dugo traje. U mnogim slučajevima, kao što je ovaj opisani primjer, veoma je važna brzina reagovanja zbog nekih povoljnosti ostvarenja kupovine u kratkom roku.

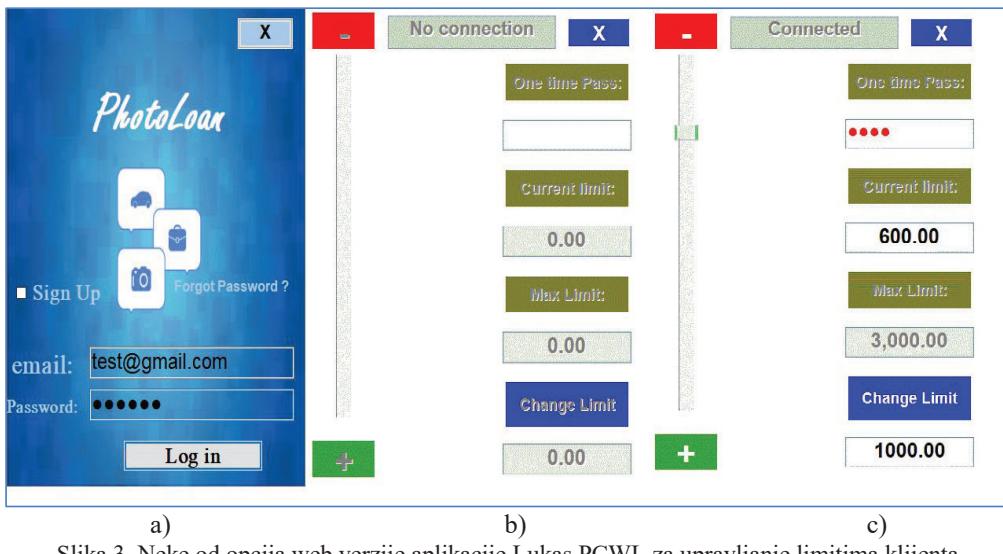
Primjer 2: Pretpostavimo da se klijent nalazi u nekoj stranoj državi i u drugoj vremenskoj zoni. Vodi na večeru poslovne prijatelje i u momentu plaćanja svojom elektronskom platnom karticom konobar kaže da nešto nije u redu s karticom. Značenje poruke koju dobije na POS uređaju nije uvijek najjasnije pa je klijent zbumen i nalazi se u neugodnom položaju. Kad sazna da je problem u visini transakcije, koja prevazilazi njemu dodijeljeni dnevni limit, shvata da zbog razlike u vremenskim zonama banka tada više ne radi i da je suviše kasno da bilo koga zove da pomogne.

Ovaj primjer, takođe, pokazuje potrebu banke za uvođenjem predloženog ili sličnog proizvoda i usluge za upravljanje limitima. Da bi banka to mogla uraditi na fleksibilan način, prijedlog je za banku da se realizuje odgovarajuć mobilna aplikacija, koja ima mogućnost spajanja na adekvatnu bankarsku aplikaciju. Ona bi prikazala trenutni raspoloživi limit, dnevni i mjesecni, kao i ukupni iznos dodijeljenog limita. Takođe, klijent bi mogao sam da podesi svoj dnevni limit ili limit po transakciji na željenu vrijednost, koja ne može preći dodijeljeni trenutni ukupni limit te izvršiti željenu transakciju. Primjenom ovako definisanog rješenja, jasno je da bi se izbjegle situacije opisane u primjeru 2, jer bi klijent mogao lično i vrlo brzo da promijeni i poveća trenutni transakcioni limit i uspješno izvrši potrebno plaćanje. Ukoliko bi banka imala ovakav sistem za upravljanje limitima klijenata to bi dodatno omogućilo klijentu da sam sebe štiti od neovlašćenih transakcija sa vlastitog računa. U tom slučaju bi klijent, pravilnim korišćenjem aplikacije za regulisanje visine limita, imao mogućnost da sam sebe zaštiti. Postavljanjem limita prije svakog plaćanja na vrlo malu vrijednost (preporučljivo čak na 0) onemogućavaju se neovlašćene transakcije većih finansijskih iznosa (ili nikakvih iznosa) sa računa klijenta. Neposredno prije svakog plaćanja korisnik može podesiti potrebni limit, izvršiti plaćanje pa limit zatim vratiti na minimalni (ili na 0). Čak i kad bi mu bile ukradene elektronske platne kartice ili neka od njih, kad bi nekako bio otkriven i PIN kod na njima, transakcija koja bi mogla da se izvrši bi bila samo do visine trenutnog minimalnog limita. To bi u praksi bio veoma mali iznos. Postavljanjem limita na 0 transakcija bi bila potpuno onemogućena.

Ovdje se opisuje prijedlog i način implementacije jedne takve aplikacije za realizovanje navedene bankarske usluge, razvijene pod nazivom Lukas PCWL. Ta aplikacija i usluga su praktično ravnjene i realizovane te ponuđene bankama, ali ih banke nisu još uvrstile u svoje usluge. Lukas PCWL je aplikacija razvijena i implementirana na prilagođenoj web verziji koja funkcioniše na svim kompjuterskim platformama, kao i korišćenjem SMS komunikacione tehnologije. Svrha te aplikacije je da poveća sigurnost i zaštitu finansijskih transakcija koristeći fleksibilnu mogućnost promjene limita i da zaštititi korisnika od neovlašćene upotrebe i neovlašćenih transakcija sa njegovog/njenog bankovnog računa. Takođe, treba da poveća fleksibilnost i komoditet u visini iznosa plaćanja za svaku transakciju. Omogućava brz i jednostavan način definisanja i postavljanja (programiranja) ograničenja visine transfera novca pomoću mobilnih uređaja (pametnih mobilnih telefona i tablet računara), čime se sprječava mogućnost neovlašćenih transakcija većih novčanih sredstava sa korisničkog bankarskog računa.

Korišćenjem ove mobilne aplikacije i rješenja korisnik je u mogućnosti da pošalje zahtjeve za promjenu limita transakcije novca, da programira potrebnu granicu limita transakcije i da dobije potvrdu da je ograničenje odobreno i promijenjeno na traženu vrijednost. Svakako, traženi limit transakcije ne može preći maksimalnu vrijednost koju je banka odobrila u ugovoru.

Slika 3. prikazuje neke od korišćenih opcija i formi web verzije realizovane aplikacije Lukas PCWL (Sajić i drugi 2018, 188). Na slici 3a. prikazana je pristupna opcija i forma. To je opcija koja se pojavljuje nakon pokretanja mobilne aplikacije i koristi se za prijavljivanje korisnika (klijenta). Korisnik se prijavljuje tako što unosi pravilno svoje korisničko ime i lozinku. Ukoliko do tada nije imao nalog u pomenutoj aplikaciji, korisnik popunjava obavezna polja u aplikaciji i dobija obavještenje o uspješnosti prijavljivanja i otvaranja naloga na svoju e-mail adresu prijavljenu u aplikaciji.



Slika 3. Neke od opcija web verzije aplikacije Lukas PCWL za upravljanje limitima klijenta  
(Avtori 2018)

Slika 3b. prikazuje primjer opcije za definisanje i programiranje limita transakcije. To je opcija koja se pojavljuje prije nego što se definiše i pošalje potrebna vrijednost za ograničenje transakcije. U tom procesu klijent mora prvo da unese jednokratnu lozinku dobijenu od bankarskog servera. Kad je unese, nakon uspjele konekcije sa informacionim sistemom banke, kao povratnu informaciju dobija trenutni odobreni limit. Za programiranje granice transakcije postoji i mogućnost korišćenja klizača sa lijeve strane ekrana za povećanje ili smanjenje granične vrijednosti. Takođe, novi limit se može jednostavno unijeti u polje za unos (Change Limit). Kada se aplikacija startuje i izvrši prijava korisnika, prvo se zahtjeva od banke jednokratna lozinka za verifikaciju i komunikaciju sa bankarskim informacionim sistemom. Zahtjev se vrši klikom na dugme "One time Pass". Informacioni sistem banke zatim generiše i šalje jednokratnu lozinku putem SMS poruke na broj korisnikovog mobilnog telefona. Bankarski informacioni sistem istovremeno provjerava i podatke o jedinstvenom fabričkom broju korisničkog mobilnog telefona, o korisničkom imenu i lozinki. Svi ti podaci moraju biti identični sa odgovarajućim memorisanim podacima u informacionom sistemu banke, za tog klijenta. Klijent pročita primljenu lozinku u SMS poruci i upisuje tu lozinku u potrebno polje (polje One time Pass).

Aplikacija komunicira sa informacionim sistemom banke. Nakon uspješne provjere jednokratne lozinke i drugih podataka o klijentu, informacioni sistem banke vraća i upisuje u aplikaciju informacije o programiranom tekućem dnevnom limitu i o preostalom mjesecnom limitu, tj. o ukupnoj ili maksimalnoj granici. Ukupna ili maksimalna granica se može definisati kao što je utvrđeno u ugovoru između banke i klijenta. Takođe se može izračunati na osnovu definisanog maksimalnog mjesecnog limita za klijenta, utrošenog dijela do tada, stanja računa klijenta i dozvoljenog prekoračenja na računu klijenta. Veličina definisane maksimalne granice zavisi i od dogovora između banke i klijenta.

Nakon unosa novog željenog limita, unosom jednokratne lozinke (One Time Pass) i klikom na dugme "Change Limit" proslijediće se zahtjev ka informacionom sistemu banke za promjenom trenutnog limita. Slika 3. prikazuje primjer stanja koje se pojavljuje na ekranu mobilnog telefona u pripremi promjene trenutnog limita (Slika 3a.) i stanja nakon promjene trenutnog limita (Slika 3b). Na ekranima se vidi da je prethodni limit bio 600.00 KM i da je

nova programirana granična vrijednost transakcije sada 1000.00 KM. Takođe je prikazan maksimalni limit transakcije koji je odobrila banka (ovdje 3.000.00 KM) kao podsjetnik klijentu da ne može prelaziti taj limitirani iznos. Program dopušta dva načina za izmjenu iznosa za željeni limit, putem klizača ili direktno unosom željene vrijednosti u odgovarajuće polje i klikom na dugme „Change Limit“. Nakon obavljene transakcije od 1000 KM novi upotrebljivi maksimalni limit se smanjuje za taj iznos i sada iznosi 2000 KM. Normalno, taj limit će ponovo porasti ka 3000 KM, shodno uplatama klijenta u svrhu nadoknade izvršene posudbe novca od banke od 1000 KM.

Preporuka je da klijent, odmah po izvršenoj transakciji, vrati trenutni limit na željenu minimalnu vrijednost (npr. na 1KM ili još bolje na 0.00KM, kao što je prikazano na slici 3b. da je limit prije njegove promjene i povećanja bio 0.00KM). Tako će sigurno spriječiti zloupotrebu i neovlaštene transakcije sredstava sa sopstvenog računa. Takođe je preporuka bankama da izrade određenu vrstu specijalnog ugovora, gdje klijent postaje svjestan i svojim potpisom odgovoran za eventualne propuste u radu sa tom aplikacijom u slučaju ostavljanja velikog iznosa trenutnog limita. Takođe, banka bi trebala da u svom informacionom sistemu ugradi mogućnost upozoravanja klijenta, pomoću SMS poruka, e-mail upozorenja i sl. kada otkrije da je ostavljen veliki iznos njegovog trenutnog limita. Takođe se mogu uvesti mogućnosti da se vremensko trajanje limita ograniči na određeni vremenski period koji se može programirati. Tako bi se definisalo koliko dugo će informacioni sistem držati postavljeni iznos trenutnog limita i da će nakon isteka tog vremena vratiti iznos limita na minimalnu vrijednost. Slično tome, može se klijentu omogućiti opcija da u aplikaciji postavi podrazumijevanu minimalnu vrijednost trenutnog iznosa limita, a da se poslije svake izvršene transakcije vrijednost limita automatski vraća na tu početnu minimalnu vrijednost.

Prijedlog je da ova ili slična aplikacija bude implementirana kao odvojena i samostalna aplikacija, a ne u sklopu mobilne bankarske aplikacije, zbog jasnih sigurnosnih razloga. Ako neko neovlašćeno uđe u mobilnu aplikaciju klijenta ostaje mu problem sa trenutnim limitima koji se nalaze u drugoj aplikaciji i obrnuto.

Dodatna zaštita aplikacije od neovlašćenog korišćenja se postiže na sljedeći način. Kada korisnik preuzme aplikaciju sa web lokacije banke i instalira je na svoj mobilni uređaj, aplikacija šalje jedinstveni identifikacioni broj tog mobilnog uređaja u informacioni sistem banke. Jedan korisnik može koristi samo jedan mobilni telefon i jedan broj mobilnog telefona. Za prijavljivanje u aplikaciju koriste se korisničko ime i lozinka za svakog korisnika. Promjene limita transakcija, takođe, su zaštićene na još jedan način, koristi se dodatna jednokratna lozinka za svaku promjenu i podešavanje limita transakcije.

Korišćenjem ovakvog načina rada sa limitima može se reći da klijent postaje stvarni vlasnik nad dodijeljenim mu iznosom maksimalnog limita.

#### 4. DIGITALNI SIGURNOSNI BANKARSKI SEF

Kao sljedeći prijedlog novog bankarskog proizvoda i usluge ukratko se opisuje digitalni modularni sigurnosni depozitni bankarski sef, realizovan primjenom modernih digitalnih informacionih i komunikacionih tehnologija. Više o tom proizvodu i usluzi se može naći u literaturi (Sajić i drugi 2018, 108).

Činjenica je da svaki čovjek koristi i posjeduje sve veći broj digitalnih dokumenata, koji imaju određenu važnost i vrijednost za njega. Dovoljno je samo pomenuti digitalne slike, koje vremenom dobijaju na važnosti, pogotovo porodične slike. Takođe, tu su razni video zapisi, važni digitalizovani dokumenti, diplome, certifikati, projektna dokumentacija u digitalnom obliku i slično. Tačno je da postoje razne firme i aplikacije na Internetu koje nude svoje usluge za čuvanje takvih dokumenata. Ali se postavlja pitanje da li je to dovoljno? Da li je dovoljno prosječnom klijentu da mu se u takvom slučaju nudi opcija „Uzmi ili ostavi“ ili „Slažem se/Ne slažem se“. Da li je to dovoljna garancija klijentu da će njegovi digitalni vrijedni dokumenti biti sigurni i sačuvani? Takođe, privatne i kućne varijante čuvanja takvih

podataka i dokumenata u velikom broju slučajeva dovode do gubljenja tih podataka. Razlog za to je vrlo jednostavan. Standardan korisnik i klijent nema dovoljno informatičkog znanja i opreme da na pravilan način zaštiti i pohrani svoje podatke na čuvanje. Takođe, kad korisnik ima dovoljno znanja i opreme problem je što takav propisno implementiran sistem za lokalno čuvanje podataka može biti vrlo skup.

Na osnovu iznesenih razloga može se zaključiti da postoji dovoljno potreba za kreiranje jedne takve bankarske usluge. Ta usluga bi, po uzoru na klasične sefove koje banke posjeduju, imala mogućnost smještanja i čuvanja digitalnih informacija na sličan način. U klasičnim sefovima se smiještaju i čuvaju klijentove vrijedne stvari kao što su nakit, skupi satovi, vrijednosni papiri u štampanom obliku i slične stvari, gdje banke imaju dugogodišnje iskustvo i povjerenje korisnika. Digitalni sigurnosni depozitni bankarski sef bi pohranjivao i čuvao digitalne informacije i podatke korisnika. Jasno je da bi osnovna prednost koju banka ima, u odnosu na već postojeće pružaoce Internet usluga ovog tipa, bila sigurnost i garancija čuvanja tih podataka.

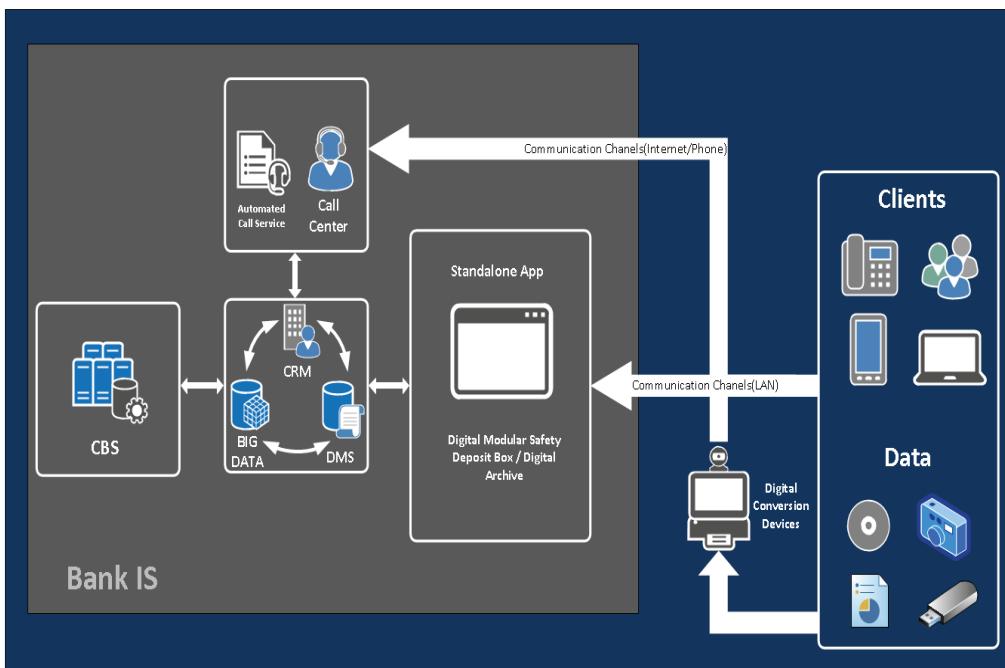
Takva usluga se ne bi trebala zasnovati na prostom ugovoru tipa „Uzmi ili ostavi”. Klijentima bi trebala biti ponuđena određena vrsta ugovora SLA (Service Level Agreement) tipa, gdje bi bila precizno regulisana prava i obaveze i klijenta i banke. Akcenat bi trebao biti na sigurnosnom dijelu ugovora, gdje bi svaki digitalni dokument bio precizno definisan u smislu njegove važnosti i vrijednosti. Pošto je teško odrediti finansijsku vrijednost nekog digitalnog dokumenta, prijedlog je da klijent sam izvrši procjenu važnosti i vrijednosti svojih digitalnih zapisa. Banka može, svojim iskustvom i stručnošću da pomaže pri tome, ali završnu odluku treba ostaviti klijentu. Npr. kako bi teško bilo izvršiti finansijsku procjenu vrijednosti porodičnih slika i ostalih sličnih digitalnih zapisa. Neko može reći da mu te slike imaju vrijednost od svega nekoliko stotina KM, a neko drugi to može procijeniti na višestruko veći iznos. Takođe, izvršiti procjenu vrijednosti samo na osnovu veličine smještajnog kapaciteta, koji ti podaci zauzimaju, ne bi bila dobra procjena. To bi onda bio sličan princip kao kod takvih usluga koje pružaju postojeći Internet provajderi.

Cijena koštanja takve usluge, koju bi vršila i naplaćivala banka, zavisila bi od dogovorene visine procjenjene vrijednosti digitalnih informacija koje se čuvaju, od eventualnih penala koje bi banka plaćala u slučaju kompromitovanja ili gubljenja zapisa, kao i od stepena obligacija koje bi banka bila obavezna da realizuje kroz ugovor. Predlaže se da se u slučajevima sa niskim iznosima procijenjene vrijednosti podataka, klijenti ne odbijaju ili da im se ne prave ugovori sa nepovoljnim iznosima troškova usluga, već da se i takvi klijenti prihvataju, ali bez nekih većih obligacionih uslova za banku. Kod ovakvih slučajeva, cilj bi bio da se dobiju određene korisne informacije i o ovakvim klijentima, a u skladu sa GDPR (General Data Protection Regulation) i ostalim regulatornim normama ponašanja.

Predlaže se da se realizuju dvije verzije digitalnih modularnih bankarskih sigurnosnih sefova: offline i online verzija.

*Predložena verzija offline digitalnog modularnog sigurnosnog sefa* je izvedba koja koristi izolovanu računarsku mrežu, izolovanu od bankarske računarske mreže, smještenu u posebnim za to namijenjenim prostorijama banke, na sličan način kao što je slučaj sa klasičnim bankarskim depozitnim sefovima. Takva izvedba sigurnosnog digitalnog sefa omogućava klijentima da svoje jako vrijedne digitalne podatke, koji ne smiju da se prenose preko Interneta i računarskih mreža, mogu korišćenjem nekog svog medijuma za skladištenje da prenesu u bančin sistem za skladištenje digitalnih podataka u striktno dodijeljeni sef. Klijenti, takođe, mogu da donesu te svoje dokumente u njihovom originalnom obliku (papir, fotografija, video i slično) i biće u mogućnosti da pretvore te dokumente u digitalni oblik, pomoću digitalnih skenera i drugih u tu svrhu namijenjenih uređaja, a zatim da ih uskladište na dodijeljeni sigurnosni digitalni modularni sef. Pored klasičnog načina zaštite korisničkim imenom i lozinkom, svi uskladišteni podaci se kriptografski štite pomoću odabранe kriptografske tehnologije, ukoliko ih korisnik već nije zaštitio, tako da to ostaje kao opcija korisniku. U obrnutom slučaju, kada klijent treba da dobije dokumente u nekom njihovom

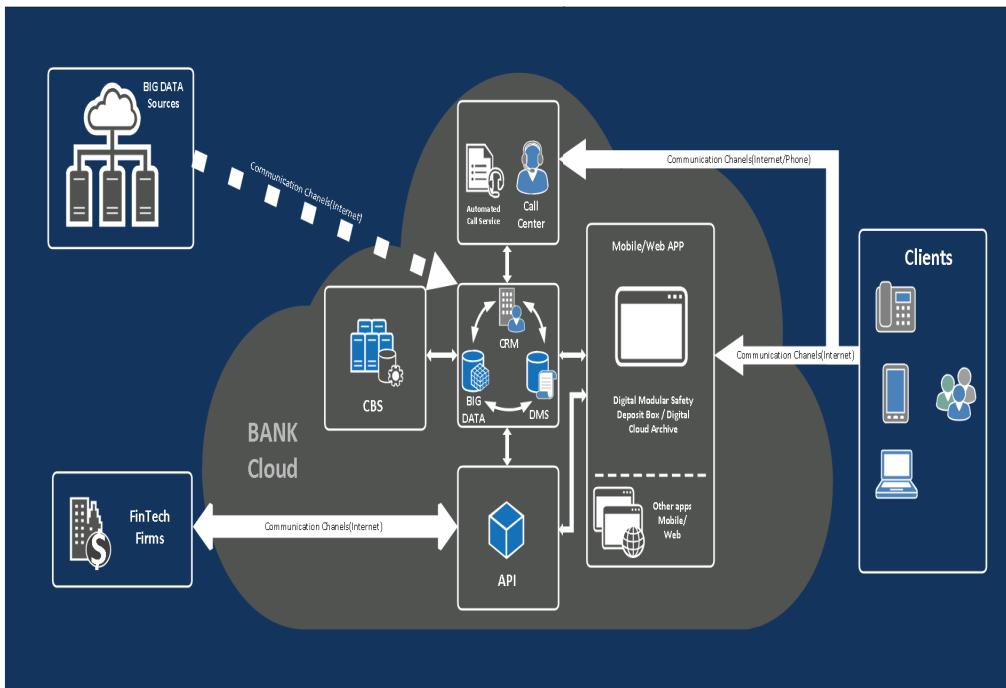
standardnom obliku (papir, fotografija, video zapis), on/ona to može preuzeti preko njemu/njoj dodijeljenog digitalnog sigurnosnog sefa u banci. Za potpunu manipulaciju sa klijentskim podacima i klijentskim dokumentima koristi se odgovarajući DMS kao dio offline digitalnog sistema skladištenja. Offline digitalni sigurnosni sef je kreiran kao modularni sistem. Korišćenjem odgovarajućih hardverskih i softverskih modula moguće je jednostavno i lako povećati kapacitet i mogućnosti tog digitalnog sigurnosnog sefa. Na slici 4. je prikazana predložena blok šema offline digitalnog modularnog sigurnosnog sefa (Sajić i drugi 2018, 110).



Slika 4. Blok šema offline digitalnog modularnog sigurnosnog sefa (Autori 2018)

*Predložena verzija online (cloud) digitalnog modularnog sigurnosnog sefa je izvedba koja koristi prenos podataka preko Interneta i koja je dostupna preko Interneta, korišćenjem određene web aplikacije ili mobilne aplikacije, u tu svrhu napravljene od strane banke i postavljene na web stranicu banke. Ta vrsta digitalnog sigurnosnog sefa namijenjena je klijentima kojima je potreban jednostavniji i lakši način arhiviranja, zaštite i osiguranja za njih manje vrijednih i manje važnih digitalnih podataka, različitih vrsta dokumenata i drugih informacija. Klijenti mogu da pristupaju i koriste ove aplikacije (web i/ili mobilnu aplikaciju) iz svojih domova ili radnih mjestra preko Interneta. To omogućava brži, jednostavniji i lakši način da klijenti arhiviraju i pristupaju svojim podacima u bilo kom trenutku, sa svojih računara ili pametnih mobilnih telefona. Ta verzija se realizuje pomoću informacionih tehnologija, računara, odgovarajućeg hardvera (serveri i storage uređaji), odgovarajućeg softvera i korišćenjem odgovarajućih komunikacionih i mobilnih tehnologija. Predloženi sistem digitalnog online (cloud) sigurnosnog sefa bi bio sličan poznatim postojećim cloud digitalnim sistemima za arhiviranje. Ali akcenat i naglasak je na mnogo veću sigurnost i zaštitu podataka, koju garantuje banka kao poznata i sigurna ustanova. Slično kao i kod offline verzije, pored klasičnog načina zaštite korisničkim imenom i lozinkom, svi uskladišteni podaci bi bili kriptografski zaštićeni nekim kriptografskim tehnologijama. Takođe, treba preporučiti klijentu da digitalne podatke, koje šalje, prethodno kriptuje ukoliko*

sadrže za njega povjerljive informacije. Za ovu uslugu banka bi, takođe, naplaćivala određenu naknadu, ali mnogo manju nego kod offline digitalnog sefa. Za skladištenje manjih količina podataka, do određenog limita, banka bi ovu uslugu mogla da daje besplatno. Tako bi bio povećan ukupan broj korisnika koji bi kasnije mogli da počnu skladišiti veće količine podataka, a mogle bi i da se tako prikupljaju informacije o tim klijentima. Digitalni online (cloud) sigurnosni sef, takođe, je kreiran modularno. Korišćenjem odgovarajućih hardverskih i softverskih modula moguće je jednostavno i lako povećati kapacitet i proširiti njegove mogućnosti. Na slici 5. je prikazana predložena blok šema online (cloud) verzije digitalnog modularnog sigurnosnog sefa (Sajić i drugi 2018, 111).



Slika 5. Blok šema online (cloud) digitalnog modularnog sigurnosnog sefa (Avtori 2018)

Ako bi se sve uradilo na predloženi način moglo bi se reći da tako klijent postaje stvarni vlasnik pohranjenih digitalnih zapisa, čak i u finansijskom dijelu koji određuje njihovu vrijednost.

## 5. DOKUMENT MENADŽMENT SISTEM ZA MALA I SREDNJA PREDUZEĆA

U osnovi, ovaj prijedlog usluge dokument menadžment sistem za mala i srednja preduzeća se zasniva na rješenju sličnom prethodnom prijedlogu online digitalnog modularnog sefa. Razlika je samo u ponuđenoj Internet aplikaciji koja bi bila dostupna na web stranici banke. To bi omogućavalo da u „cloud“ izvedbi banka ponudi malim i srednjim preduzećima da za njih vrši usluge koje pruža jedan dobar dokument menadžment sistem (DMS). Principijelna izvedba, opisana u slučaju online digitalnog modularnog sefa, ostaje gotovo ista i primjenljiva i za ovu vrstu usluge.

Ekonomска osnova za takvu uslugu je jasna. Mala i srednja preduzeća, da bi formirala dobar i kvalitetan DMS, morala bi da ulože mnogo novaca (Duvnjak 2018), da angažuju neku IT firmu da im održava takav sistem ili da zaposle barem jedno adekvatno stručno lice za tu

namjenu. Sve su to dodatni izdaci, koji mogu za male firme biti veliki problem. Takođe, politika prodaje DMS tehnologija zasniva se uglavnom na broju licenci. Kao i u sličnim prodajama informacionih sistema, daleko je veća cijena kada se koristi mali broj kopija za mali broj korisnika, nego kada se radi o velikom broju korisnika i velikom broju kopija. Zato je za mala i srednja preduzeća ta cijena dosta velika i uglavnom neprihvatljiva.

Iz tih razloga se predlaže uvođenje ove bankarske usluge, usluge pružanja DMS usluga malim i srednjim preduzećima. Banka, svakako, mora realizovati za svoje potrebe dobar i kvalitetan DMS. Prilikom realizovanja i uvođenja DMS-a, određeni broj ljudi sa strane IT-a i sa potpuno biznis strane, će se dobro obučiti u radu sa tim sistemom. Oni mogu predstavljati dobro jezgro za formiranje odjela koji bi se bavio pružanjem usluga DMS unutar banke i eksterno, kao dodatnu uslugu klijentima, u ovom slučaju pravnim licima, malim i srednjim preduzećima.

Potencijalni klijenti ove usluge bi mogli biti i advokati, notari i sve one firme koje imaju i koriste dosta dokumentacije u svom radu. Zatim, to bi moglo biti i firme koje se udružuju sa drugim firmama u cilju izvođenja zajedničkih projekata. U takvim slučajevima bi bilo zgodno da imaju mogućnost da zajedno iznajme digitalni sef sa prigodnom DMS aplikacijom sa potrebnim certifikatom, pravno priznat te da tu pohranjuju dokumentaciju vezanu za planiranje, izvođenje i nadzor projekata. Tako bio bi omogućen tačan, pravno podržan uvid u tok projekta. Takođe, znatno bi bio olakšan proces evidentiranja grešaka, kašnjenja i drugih anomalija, koje bi nastajale u lošije vođenim projektima. Sve bi to imalo čvrstu pravnu osnovu i time bi se izbjegli eventualni dugi i iscrpljujući pravni sporovi.

## ZAKLJUČAK

S pojavom mobilnih prenosnih uređaja, smart mobilnih telefona i mobilnih personalnih računara nastale su nove mogućnosti i nove potrebe ljudi i klijenata banaka, a time su stvoreni uslovi za uvođenje novih bankarskih usluga. U ovom radu je predloženo i opisano pet prijedloga za uvođenje novih usluga, koje bi banke mogle u budućnosti pružati klijentima. Evidentno je da neke usluge, koje su do sada banke pružale i od kojih su imale značajne finansijske koristi (kao što je platni promet), zbog pojave konkurencije, prvenstveno u vidu tehnološki naprednijih Internet baziranih tzv. Fitech firmi (npr. PayPal), postaju sve manje finansijski isplatne. Slična situacija je i sa bankomatima pa i sa pružanjem usluga malih kreditnih linija, gdje Internet bazirane firme, koje se bave prodajom robe i usluga preko Interneta, već sad emituju svoje elektronske platne kartice i omogućavaju plaćanje na rate. Sve to smanjuje finansijsku dobit banaka koje su navikle na uobičajeni, ustaljeni, klasični način rada i poslovanja.

Jasno je da će banke, da bi opstale, morati da pronalaze dodatne usluge i proizvode koje bi moglo da pruže klijentima. Pri tome će se bazirati na tome da nude i realizuju one usluge gdje mogu biti u prednosti u odnosu na konkurenčiju, s obzirom na svoju poziciju na tržištu, obučeni kadar i dosadašnje stečeno povjerenje klijenata.

Zbog navedenih razloga je u ovom radu dat i opisan prijedlog pet novih usluga koje bi moglo pomoći da se kvalitet usluga banke poveća na viši nivo, da se poveća zadovoljstvo klijenata, a i da se poboljšaju finansijski efekti za banku. Zajedničko za sve prijedloge je da se baziraju na korišćenju digitalnih informacionih i mobilnih tehnologija, tehnologija u „cloud“-u. Takođe, pristup kod svih predloženih usluga je takav da se teži da se zadovolje potrebe klijenata, a da se ne teži na ostvarivanje zarade putem skupih usluga. Cilj je da se postigne razumna cijena usluga kako bi se dobilo na kvantitetu korisnika i ostvarila sekundarna dobit sticanjem povjerenja klijenata. Klijenti bi na osnovu toga proširivali spisak usluga koje bi tražili od svoje banke što bi poboljšavalo finansijske efekte za banku. Npr. aplikacija FotoKredit pruža mogućnost bankama da spajaju svoje klijente pravna lica sa klijentima fizičkim licima te da obezbeđuju zadovoljstvo sklopljenim i urađenim poslom i za jedne i za druge. To stvara realne osnove za očuvanje klijenata i postavlja perspektive za proširenje broja klijenata na osnovu dobrih preporuka. Takođe, aplikacija za upravljanje korisničkim limitima pruža visok

komfor i zadovoljstvo klijentima pri radu sa njihovim računima i transakcijama. To bi sigurno imalo za posljedicu očuvanje postojećih i mogućnost povećanja ukupnog broja klijenata te povećanje finansijskih efekata u poslovanju banke. Sa uvođenjem digitalnog modularnog sefa i njegovim proširenjem na davanje usluga DMS-a, gotovo je sigurno da bi preduzeća, koja bi prihvatile takvu vrstu usluga, prešla velikim dijelom svog rada na korišćenje usluga konkretne banke. Pružanje konsultantskih i marketinških usluga generalno, a i za nove uvedene bankarske proizvode, takođe će povećati reputaciju banke i može više koristi donijeti retroaktivno, nego što bi to na prvi pogled izgledalo.

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## PROPOSALS FOR INTRODUCTION OF NEW BANKING SERVICES WITH APPLICATION OF INFORMATION AND MOBILE TECHNOLOGIES

**Summary:** *The goal of this paper is to point out on the necessity of changes in the way that the banking services are provided, on the change in the content and nature of those services and on the need to introduce some new banking services. In accordance with that, it is pointed out that there is the need to shift the focus of banking business on some new services that the bank has not provided so far, but it has the potential and need for it. The unavoidable reduction of the volume or giving up of providing classical banking services are expected. The reason for that is because a significant drop in the prices of these services is expected, due to evident upcoming competition and their conception. That conception allows to competition to realize these services at significantly lower prices, because they initially reduced their costs. In this regard, it is proposed in this paper that banks introduce some new products into a set of services that they provide to users and that utilize in the best way possibilities that are offered by information and mobile digital technologies. That would enable improvement of quality of services, reduction of the cost of providing such services and transferring on to the bank entirely new types of services, for which the bank has the potential which should to develop and utilize. Some such new types of banking services based on the application of modern information, communication and mobile digital technologies are proposed and described in the paper.*

**Key words:** *classical banking services, introduction of new banking services, application of information and mobile technologies in banking, quality improvement and reduction of costs of service delivery*

**Jel classification:** *G14, G21, M15, O32, O33*

### INTRODUCTION

Habits of people are subject to permanent changes. They are especially exposed to changes when they are under some stronger influence. Just that is happening all over the world under the influence of mobile digital information and communication technologies. Based on experience in working with mobile phones and other mobile devices, it can be seen that the first habit that is such created is to use the opportunity to collect and exchange information remotely and to perform tasks in real time but from a remote location. From that, naturally it was created tendency of the modern client of the bank to perform its activities with the bank at a distance, as much as it is possible. At this moment, except allowing banks to conduct banking activities from a distance by introducing appropriate software and hardware solutions, that mainly depends on the legal regulations of a concrete country. In particular, that depends on whether the client must personally and physically, by his/her signature, in the premises of the bank, to give agreement to some document or it is possible to perform

remotely by sending the verified digital signature as a form of legal agreement and legal operations.

In the past, banks were primarily concerned, in their "retail" business, on collecting money in the form of savings from their clients, with a certain fee for those clients, and on issuing loans, also to their clients, with higher fee than the fee for savings. Based on the differences in these fees, the banks, by providing these their primary services, were made financial gain and earned.

During the time banks have expanded the scope of services that they provide. That is directly connected with the development of information technologies. Banks started to deal with investment banking, stock exchange business, mortgage business, securities, various other forms of lending (for example credit on credit and similarly), money market funds, markets for repurchase contracts, and so on. Some of that types of operations banks are performing in cooperation with some other institutions. All that listed and similar jobs are often called „Shadow Banking“ or „Banking in the shadow“ (McMillan 2014, 65).

The reason for mentioning this term, that as a phenomenon appears since 1970. year, is to indicate on the directions of the development of banking services and also on the harmful effects of that phenomenon. That phenomenon is particularly connected with the banking crisis in 2007. and 2008. years (Vukić and Knežević and Miličević 2017, 245). The shadow banking started to generate high income to banks long time ago,. However, it was mainly out of reach of regulatory instruments of the stats. It is considered that these are the main reasons for the size of the mentioned banking crisis. Clients are treated there more like goods, trying to get as much profit as possible from them, without worrying about the consequences. It is normal that this had negative consequences on operations of banks and led to the crisis (McMillan 2014, 81).

Also, a bank that has existed for a long time has collected and collects daily information on clients, with a special focus on financial information. That information essentially has a financial value. It can be used and charged in a certain way, if it is used timely and purposefully.

The modern banking client no longer wants that its "retail" business, i.e. procurement of a particular product or service, performs partially and that personally goes from institution to institution. A modern client no longer wants or does not have time to go to the store first, to see and select the goods, to get invoice, and to go with that invoice to the bank. The bank would then probably send him to obtain the necessary documentation about his/her monthly income and similar. The client would then go to his/her company, and back to the bank to sign a loan, and then again to the store to buy the desired goods. The modern client wants that all that can be performed from one place and with the help of mobile devices, that he/she uses every day, and that enable him to quickly and easily realize all needed activities (Bobrek Macanović 2017, 245). Client could such see the goods he/she wants to buy, via images that receive on the mobile phone or other mobile device, and that quickly and easily perform a comparison of prices and quality of the goods in more stores, all from one place. Also, the client could by using mobile applications of the bank where he/she is client to close the financial construction of the process of purchasing of the desired product or service, and to activate the home delivery, to all that be delivered to him/her on the desired place.

The client, aware of the possibilities of modern mobile digital technology, does not want any more to spend its time and attention, and that has to come out of one application, to record the product he wants, its price and to send it all to the bank for approval of the credit line, and when gets the approval, to go back to the application that performs selling of the desired product. The client would want to have some institution that will lead the complete retail process of obtaining the desired product, which will quickly and easily guide him/her through that complete process. What institution, where and how, will become a leader in that complete process it will depend on the skills and capabilities of such institution. The bank has all resources for that. it should only activate them, and before that it should be reorganized

in that direction (Sajić et al. 2018, 78). As a good example how that can be performed, it can be used the largest Internet stores, which are already prepared to perform the complete process of procurement the desired product. They connect their clients-customers with their clients-sellers, at the same time enabling the purchase via their electronic payment cards, and also purchase on instalments.

It is proposed and recommended in this paper that banks consider their possibilities and potentials, that constantly improve them and to try to impose themselves as leaders in certain parts of retail business, to introduce new banking services and accordingly to that become recognizable institutions (Harangus 2011, 86).

Some of such new services that banks already provide are: mobile and electronic banking, mobile wallet and personal financial canceller (PFC), P2P payment transactions, P2P crediting, chatbot, crowdfunding, etc.. To all these services it is common that they are applications that use advantages of mobile devices, possibilities of built Knowledge Data Bases, DataWarehouse systems, BigData systems, application of artificial intelligence and business intelligence, creation of good CRM platforms, application of API functions, document management systems (DMS ), "cloud" technology, application of "Internet of Things/IoT", application of blockchain technology, and so on.

Some new banking services or products that could be very interesting as the services that the banks could provide to the clients in the future are proposed and described in this paper. A few of these services have already been practically implemented and offered to banks, but banks have not yet begun to use them. Some of the services are in the development phase. Five new services (products) are proposed and described in the paper, with the names:

- Marketing campaign for needs of users,
- PhotoLoan,
- Management of transaction limits of clients,
- Digital bank safety deposit box,
- Document Management System (DMS) for small and medium enterprises.

## **1. MARKETING CAMPAIGN FOR NEEDS OF USERS**

Let us suppose, for example, that it is opened a shop of expensive watches and perfumery with branded products. In order to be all well advertised managers of that store should hire a quality marketing agency. However, some of the managers come up with an idea and proposes to involve one or more banks for finding clients (Atif 2002, 19), and to use information about bank clients that banks already have. Banks that have high-quality CRM applications, based on data they already have, can with a high degree of precision to identify groups of clients that are capable of paying for the described type of products. Banks then can locate those clients, for example in the diameter of 10 km, to send them all needed information with suitable material, with coupons on which are given discounts to the bearer, etc.

Locating of clients can be performed very easily. It is enough to perform it on the basis of client address, to collect information about the longitudes and latitudes of the addresses of clients, and there are many programs (even very cheap or completely free of charge) that can visually display the address of each client of the bank in the form of some point or some other type of marker. This method can also be used as a good visual method for showing the density of presence of clients in desired area of observation.

In such case of service, where a bank realizes a marketing campaign for a user, both a user (store and seller) and a bank have benefits. The seller, through the bank, addresses a well-chosen potential clientele because of which was opened the store. He/she thus increases the number of customers of his/her products or services. The bank, in addition to the economic interest that it realizes through charging of the costs of providing the services, realizes also indirect benefit. It is providing the clients to whom addresses with timely and useful information and thus increases their trust in the bank.

Based on this proposal, it can be realized and offered to users a number of similar new services, where the bank would use the knowledge acquired on the basis of the available information, primarily financial but also other, about its clients, based on the experience acquired in work with them, and on the basis of the expertise of its employees. Such, the bank could act as a service and/or in the form of consulting through these new services.

## 2. PHOTOLOAN

The prototype of already practically realized application for appropriate service, called FotoKredit/PhotoLoan, as an example of the use of digital and information technologies for the purpose of facilitation and acceleration of usage of services for the user, is presented here (Authors).

PhotoLoan is an application developed on the Android platform (there is also a customized Web version that functions on all platforms). Its primary purpose is to enable fast forwarding and resolving of requests for banking financial services, primarily loans, via mobile devices. It will not be here described in detail the complete application, but it will be outlined some of advantages of this and similar applications, in context of already emphasized potential advantages of the bank, which are insufficiently used.

Implemented application presents and describes practical way of connecting client private person (loan claimant) with client legal entity (seller of goods) through the bank as loan provider. That application proposes, presents and shows how to effectively stimulate and organize purchase, crediting and transfer of goods that customer needs from the seller using mobile applications and mobile technologies. It practically shows how it is possible to effectively connect client physical person with client legal entity through the bank or how to effectively stimulate and organize sale and transfer of goods from seller to buyer. One of the best ways for that is through financial institutions and banks, with an accelerated way of issuing loans, by using mobile devices. Using the FotoKredit mobile application the user is able to send credit requests, check exchange rates, find basic information about all bank's branches, agencies and ATMs, shops/travel agencies and also to find them on the Google map via entered GPS positions. Figure 1 shows the main menu and some options of the PhotoLoan application that are implemented on the Android platform (Sajić et al. 2017, 41).

In the application for the loan it is needed and sufficient that the client sends to the bank picture of product he/she wants to buy. By sending picture client emphasizes what actually wants to buy and chooses an easier and quicker way to perform it through a loan. The bank now knows very well what client need is about and it only remains to examine the client's creditworthiness. The bank can do that based on obtained information about the client, and to approach to realization of the loan, to request additional information from the client or to refuse client due to poor credit ability. Also, it should not be forget interest of the third party, interest of stores to sell their product.

The assumption is and it is suggested that in the future Personal Banker/Account Manager will be more profiled for certain groups of clients, both private persons and legal entities. Such he/she will be able to use this type of loan application, precisely to use the knowledge for what purpose is particular loan, to try to get for a client even better offer than the one he/she sent, using his/her own (of his/her bank) network of contacts with potential sellers. Thus, this circle is simple, quickly and naturally closed with the satisfaction of all parties, client, bank and seller. Client gets even more favourable offer than he/she has personally found. Such it is created certain kind of gratitude to the bank and a stronger connection (the so-called socialization of clients) with the bank (Sajić and Bundalo and Bundalo 2019, 69). Similar situation is also for the seller because the bank finds buyers and increases selling for seller. At the end, the bank is also satisfied since issued a loan that was set on good grounds. In addition to all of mentioned, the application has the ability to create a list of stores and

touristic agencies, and in the future also their product catalogues the purchase of which would be realized through the issuance of bank loan.

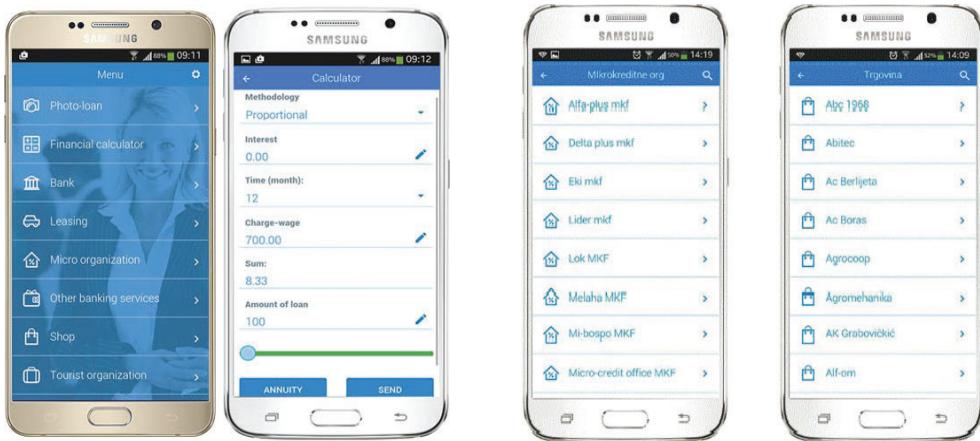


Figure 1 – PhotoLoan application – Main menu and some options (Android ver.) (Authors 2015)

Figure 2 shows some options for the PhotoLoan application implemented as Web and IOS versions. Figure 2a shows way for preparing request for sending, i.e. the procedure with selecting appropriate credit product of the appropriate bank. Figure 2b shows the option for taking picture or to select image of desired product from the Image Gallery. That picture is then sent to the bank within the credit information details.

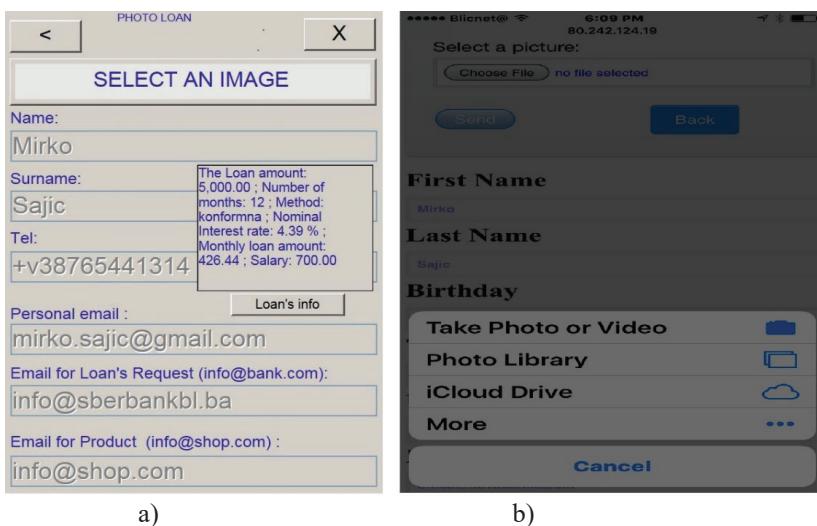


Figure 2. PhotoLoan application options for preparing request for sending (a) and for taking picture or selecting image of desired product from Image Gallery (b) (Authors 2015)

Here, for the banks can be equally interesting existing stores and travel agencies with which they already have some cooperation, as well as making new cooperation through this

application after expressed interest of users of the application for some specific store/tourist agency or some products and services that their offer. The Photo Credit application has built-in local database which exchanges data with the server (MySQL database) over the network (e.g. Wi-Fi). In this way are made changes to the data on the user's application itself. At the moment, the application uses information available from Web sites. For quality operation of the application it would be especially important that information, especially information on product catalogue with all relevant data, be supplied from the bank, on prescribed documents format.

### **3. MANAGEMENT OF TRANSACTION LIMITS OF CLIENTS**

This service enables management, i.e. use and adjustment of daily and monthly financial transaction limits of clients, amount of their daily transactions and allowed overdrafts per account and per payment by electronic payment cards, in order to create a better quality multifunctional banking product. The purpose of this service is briefly described here, in order to create ability for client to select and adjust amount and way of using limit, to meet its financial needs. On the other hand, the flexibility of the limit setting in real time can serve as one of the best protections for the client against unauthorized outflow of money from his account, most often caused by theft of information from electronic payment cards. More information about this proposal of new banking product can be found in the references (Sajić et al. 2018, 188).

By obtaining electronic payment card from a bank the client usually gets opportunity to go into financial minus on that card up to the amount of defined limit. That limit is usually in the amount of one or more of client monthly salaries. It is also known that large number of clients has more electronic payment cards (revolving - for payment of services and products up to approved limit; instalment - for possibility of payment in instalments; credit cards; cards for payments that can be made on the Internet, etc.). When it is taken into consideration also possibility of overrun of the limit (going into the minus) on the current account of the client, it can be seen that one client can use the approved limits on more bases.

Since, depending on used limit, certain products that provide it are located in different departments of the bank, banks usually do not have a complete insight into totally utilized limit of the client in real time. The bank will be able to more easily control the assigned limits by implementing such software solution that will be able to give inform at any time about currently used total limit of the client, by all types of products,. It will also be able for bank to provide a more flexible approach to the client in terms of way of utilization of total amount of limit approved to him/her.

Let us consider two examples of using transaction limits in practice.

Example 1: The bank to the client has been approved 15000 KM of possibility for total overrun on the basis of his/her financial indicators. The client has a current account at the bank and revolving and instalment electronic payment cards. The client is considering purchasing a used (not new) car on a car market (price about 12000 KM). In negotiations with the seller he/she comes to the conclusion that it is financially the best for hem/her to pay it by cash. The client addresses the bank to provide to him/her sufficient amount of money and comes to the bank cashier, takes money and pays to the seller of the desired car. There is still left 3000 KM more allocated unused limits approved to him/her.

The advantage of this method of manipulation with limit transactions is clearly seen in this example. If the bank did not have this option, but works according to the usual principles, the client would have total limit sufficient to buy the desired car. But, the limits would have been split by products (some part for a client bank account override, some part for the instalment card, some part for a revolving electronic payment card). Such it would be insufficient looking partially at the assigned limits by products, to make it purchase. In that case, he/she would have to ask the bank to give him/her a proper kind of loan, what sometimes takes time.

In many cases, like is this described example, speed of reaction is very important because of some advantages of making purchase in short period.

Example 2: Let us suppose that the client is in some foreign country and in another time zone. He/she invites business friends at dinner and at the time of paying by his/her electronic payment card the waiter told him/her that something is wrong with the card. Meaning of message received on the POS device is not always understandable and the client is confused and in an unpleasant position. When he/she finds out that the problem is in the level of a transaction, that exceeds to him/her assigned daily limit, then he/she understands that because of the difference in time zones the bank does not work in that moment and that it is too late to call anyone for help.

This example also shows the need of the bank to introduce the proposed or similar product and service for managing with the limits. That the bank could perform it in a flexible way, the proposal for bank is to create appropriate mobile application that has ability to connect to a core banking application. That application will show current available limit, daily and monthly, and total amount of dedicated limit. Also, the client could himself to adjust his/her daily limit or limit per transaction to the desired value, which can't exceed current assigned total limit, and could execute the desired transaction. By using such defined solution, it is clear that the situations described in Example 2 would be avoided, since the client could personally and very quickly change and increase current transaction limit and successfully perform needed payment.

If the bank would have such system for management with limits of the client that would further enable to the client to protect himself/herself from unauthorized transactions from his/her own bank account. In that case, by proper using of the application for regulation of limit value, the client would have the possibility to protect himself/herself. By setting a limit before each payment at a very small value (preferably at value 0) unauthorized transactions of larger financial amounts (or no amounts) from the client account are disabled. Immediately before each payment the user can adjust needed limit, perform the payment, and then return the limit to the minimum (or to 0 value). Even if his/her electronic payment cards or some of them would be stolen, if in some kind would be detected PIN code on them, transaction that could be performed would be only up to the current minimum limit amount. In practice that would be a very small amount. By setting limit to 0 value the transaction would be completely disabled.

It is described here proposal and way of implementation of one such application for realization of mentioned banking service, developed under the name Lukas PCWL. That application and service were practically developed and implemented and were offered to banks, but banks did not yet involve it into their services. Lukas PCWL is application developed and implemented on a customised Web version that works on all computer platforms, as well as using SMS communication technology. The purpose of the application is to increase security and protection of financial transactions using a flexible ability to change the limits and to protect users from unauthorized use and unauthorized transactions from his/her bank account. Also, it should increase flexibility and commodity in the amount of payment for each transaction. It enables quick and easy way to define and set (program) limit of amount of money transfer using mobile devices (smartphones and tablets), thus preventing possibility of unauthorized transactions of larger money amounts from user bank account.

By using this mobile application and solution, the user is able to send requests for changing a limit of money transaction, to program needed money transaction limit and to obtain confirmation that the limit has been approved and changed to the required value. Of course, requested transaction limit can not exceed maximum value that the bank has approved in the contract.

Figure 3 shows some of used options and forms of the Web version of implemented Lukas PCWL application (Sajić et al. 2018, 188). Figure 3a shows the access option and form. This is option that appears after launching of mobile application and is used for log in of user

(client). The user logs in by entering his/her username and password correctly. If he/she had no account in mentioned application yet, the user completes the mandatory fields in the application and gets notification about success of application and opening account on his/her e-mail address registered in the application.

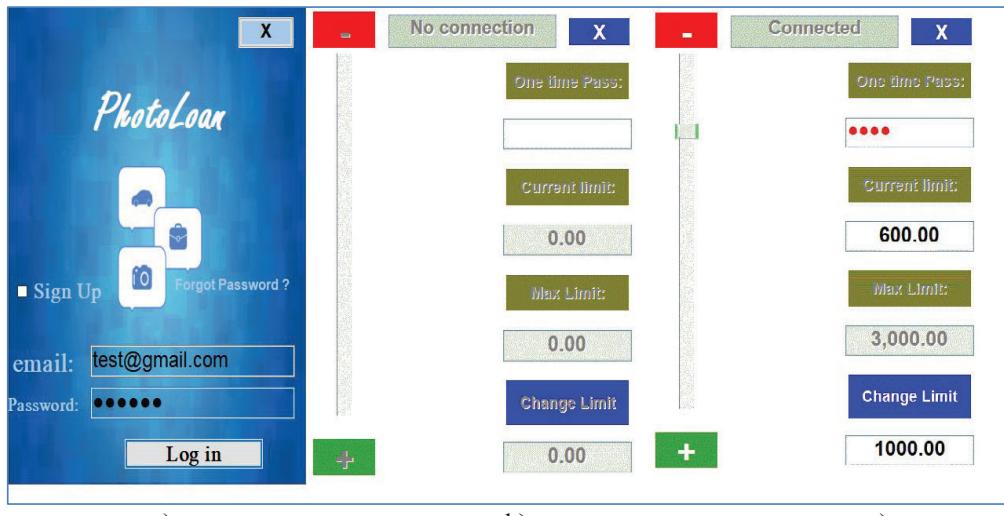


Figure 3. Some of options for Web version of Lukas PCWL application for managing client limits (Authors 2018)

Figure 3 shows example of option for defining and programming of transaction limit. That is option that appears before it is defined and sent needed value for transaction limit. In that process the client must first enter one-time password received from the banking server. When it is entered, after successful connection with information system of the bank, as feedback information he/she receives current approved limit. For programming of transaction limit there is also possibility to use the slider on the left side of the screen to increase or decrease the limit value. Also, new limit can be simply entered in the field for entering (Change Limit). When the application is started and is performed user log in, it is first required from bank the one-time password for verification and communication with the banking information system. The request is performed by clicking the "One Time Pass" button. Information system of the bank then generates and sends one-time password via SMS message to number of user mobile phone. At the same time, the bank information system checks also data about unique factory number of user mobile phone, about user name and passwords. All these data must be identical with corresponding data stored in the bank information system for that client. The client reads received password in the SMS message and writes that password in required field (One time Pass field).

The application communicates with the bank information system. After successful check of one-time passwords and other client data, the bank information system returns and records in the application information about programmed current daily limit and about remaining monthly limit, i.e. about total or maximum limit. The total or maximum limit can be defined as specified in the contract between the bank and the client. It can also be calculated based on defined maximal monthly limit for the client, the portion spent up to that time, the account balance of the client and allowed overdraft on the client account. The amount of defined maximal limit depends also on agreement between the bank and the client.

After entering new desired limit, by entering one time password (One Time Pass) and clicking "Change Limit" button, it is forwarded to the bank information system the request to change current limit. Figure 3 shows example of state that appears on mobile phone screen in

preparing of change in current limit (Figure 3b) and state after changing the current limit (Figure 3c). On the screens can be seen that previous limit was 600 KM and that programmed new limit value of transaction is now 1000 KM. It was also shown maximal transaction limit approved by the bank (here 3000 KM) as a reminder to the client that can not exceed this limited amount. The program allows two ways to change amount for desired limit, by the slider or directly by entering desired value into appropriate field and clicking on the "Change Limit" button. After performed transaction of 1000 KM new usable maximal limit is reduced by this amount and now is 2000 KM. Normally, that limit will be again increased to 3000 KM, according to client payments for purpose of repaying the loan of bank of 1000 KM.

It is recommendation that, immediately after performed transaction, client returns current limit on desired minimal value (e.g. on 1 KM or better on 0 KM, as was shown in Figure 3b that the limit before its change and increase was 0 KM). Such will surely prevent misuse and unauthorised transactions from his/her account. It is also recommendation to banks to develop some type of special contract, where client becomes aware and with his signature responsible for eventual failure in work with that application in case of leaving large amount of current limit. Also, the bank should that in its information system incorporate possibility of warning client, by SMS messages, email alerts, etc., when it realizes that large amount of his/her current limit has been left. It is also possible to introduce possibilities to limit time duration of the limit on defined time period that can be programmed. Such will be defined how long the information system will keep value of set current limit and that after expiration of that time will return limit amount on minimal value. Similarly, it is possible to enable option for the client that in the application set default minimal value of current amount of the limit, and that after each performed transaction value of limit automatically returns on that default minimum value.

It is recommendation that this or similar application be implemented as separated and independent application, and not within the mobile banking application, because of clear security reasons. If someone unauthorized enters into mobile application of the client it remains to him/her problem with current limits that are located in other application and vice versa.

Additional protection of the application against unauthorized use is achieved in the following way. When a user takes the application from bank Web site and installs it on his mobile device, the application sends unique identification number of that mobile device to the bank information system. One user can uses only one mobile phone and one mobile phone number. For log in the application the username and password are used for each user. Changes of transaction limits are also protected in one more way, an additional one time password is used for each change and the adjustment of the transaction limit.

By using such way of working with limits it can be said that the client becomes actual owner over to him/her assigned amount of the maximum limit.

#### **4. DIGITAL BANK SAFETY DEPOSIT BOX**

Digital modular bank safety deposit box that was developed using modern digital information and communication technology is briefly described as next proposal of new banking product and service. More details about the product can be found in the references (Sajić et al. 2018, 108).

The fact is that each person uses and has an increasing number of digital documents that have certain importance and value for him/her. It is enough to just mention digital pictures which in time become more and more important, especially family pictures. Also, there are various videos, important digitized documents, diplomas, certificates, project documentation in digital form and similar. It is true that there are various companies and applications on the Internet that offer their services for store such documents. But the question is whether is that sufficient? Is it sufficient for an average client that to him/her in such situation be offered the

option "Take it or leave it" or " Agree/Not agree"? Is it sufficient guaranty to the client that his/her digital valuable documents will be safe and preserved? Also, private and home variants of storing such data and documents in many cases lead to loss of that data. The reason for that is very simple. Standard costumer and client does not have sufficient IT knowledge in information technologies and equipment that in a proper way protect and store his/her data for safe keeping. Also, when client has enough knowledge and equipment problem is that such properly implemented system for local data storage can be very expensive.

On the basis of mentioned reasons it can be concluded that there is enough needs to create one such banking service. That service, based on model of classic safes that banks possess, would have possibility of storing and saving digital information in a similar way. In classic bank deposit box (safe) are stored and saved valuable things of client such as are jewellery, expensive watches, valuable paper in printed form, and similar, where banks have many years of experience and customer trust. The digital security deposit banking box would store and save digital information and data of user. It is clear that the main advantage that the bank has over already existing Internet service providers of this type would be security and guarantee of preserving that data.

Such service should not be based on a simple "Take it or leave it" type contract. To clients should be offered certain type of SLA (Service Level Agreement) type contract where would be precisely regulated rights and obligations of both the client and the bank. The accent should be on the security part of the contract, where each digital document would be precisely defined in terms of its importance and value. Since it is difficult to determine the financial value of some digital document, the proposal is that the client himself/herself assesses the importance and value of his/her digital records. The bank can, with its experience and expertise to help in that, but the final decision should be left to the client. For example, it would be very difficult to perform some kind of financial evaluation of the value of family pictures and other similar digital records. Someone can say that those pictures to him/her have value of just a few hundred of KM and someone else can estimate that on a multiple higher amount. Also, performing value estimation only based on the size of storage capacity that the data occupy would not be a good estimation. That would be then a similar principle as in such services that are offer by existing Internet providers.

The cost of such service that the bank would perform and charge would depend on agreed amount of estimated value of digital information that is stored, on eventual penalties that bank would pay in case of compromising or losing records, as well as on level of obligations that the bank should be required to realize through the contract. It is proposed that in the case of low amounts of estimated values of data, clients would not be rejected or not to make contracts for them with unfavourable amounts of costs of services, and to accept also those clients but without some higher obligation conditions for bank. In such cases, the goal would be to obtain certain useful information also about such clients, but in accordance with GDPR (General Data Protection Regulation) and other regulatory norms of behaviour.

Proposal is to realize two versions of the proposed digital modular bank safety deposit box: offline and online version.

*Proposed version of offline digital modular bank safety deposit box* is realization that uses isolated computer network, isolated from the banking computer network, located in special for that dedicated premises of the bank, in a similar way as is the case with classic bank deposit boxes. Such implementation of a security digital safety box allows clients that their very valuable digital data, that must not be transmitted over the Internet and over computer networks, can by using some their storage medium to transfer into digital data storage system of the bank in strictly assigned safety box. Clients can also bring that their documents in their original form (paper, photo, video, etc.) and will be able to convert that documents into digital form, using digital scanners and other equipment dedicated for that purpose, and then to store them on the assigned security digital modular safe. In addition to the classic way of protection

by the user name and password, all stored data is cryptographically protected using selected cryptographic technology, if the user has not already protected them, so this remains as an option for the user. In the opposite case, when a client needs to obtain documents in some their standard form (paper, photo, video record), he/she can download it through him/her allocated digital security bank deposit box. For complete manipulation of client data and client documents it is used appropriate DMS as part of the offline digital storage system. The offline digital bank safety deposit box was created as modular system. By using the appropriate hardware and software modules it is possible to easily increase the capacity and capabilities of that digital safety box. Figure 4 shows proposed block scheme of offline digital modular safety deposit box (Sajić et al. 2018, 110).

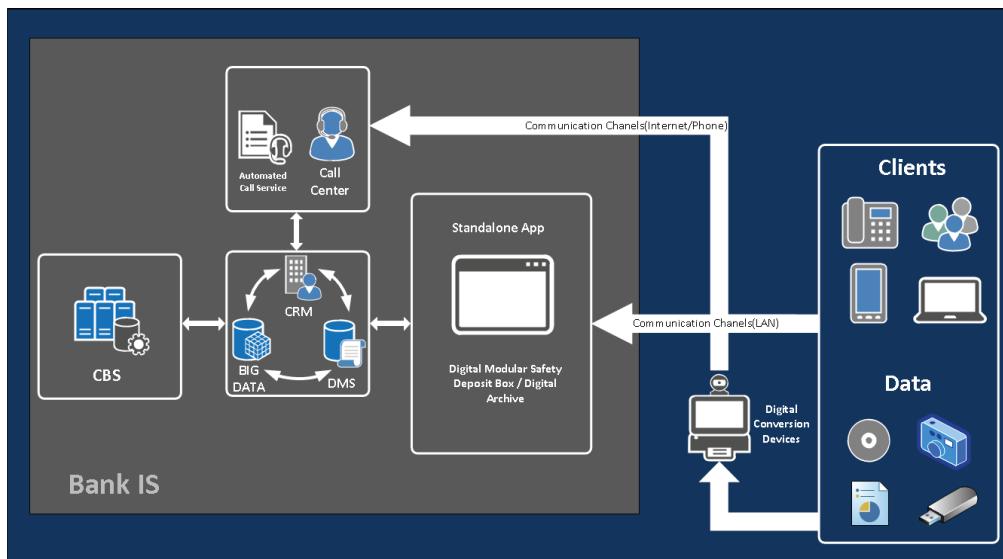


Figure 4 - Block scheme of offline digital modular bank safety deposit box (Authors 2018)

*Proposed version of online (cloud) digital modular bank safety deposit box* is realization that uses data transmission over the Internet and that is accessible via the Internet, using specific Web application or mobile application, for this purpose made by the bank and placed on Web site of the bank. That type of digital safety deposit box is intended for clients who need simpler and easier way of archiving, protecting and securing for them less valuable and less important digital data, different types of documents and other information. Clients can access and use these applications (Web and/or mobile applications) from their homes or work places over the Internet. That allows a faster, simpler and easier way for clients to archive and access their data at any time from their computers or smartphones. That version is realized using digital information technologies, computers, appropriate hardware (servers and storage devices), appropriate software and using appropriate communication and mobile technologies. The proposed system of online digital (cloud) security deposit box would be similar to the well-known existing cloud digital systems for archiving. But, accent and emphasis is on much greater security and data protection guaranteed by the bank as known and secure institution. Similarly as in offline version, in addition to the classic way of protection by the user name and password, all stored data would be cryptographically protected by some cryptographic technologies. Also, it should be suggested to the client that digital data that sends previously encrypts if they contain for him/her confidential information. For this service, the bank would also charge certain fee, but much less than for the offline digital safety deposit box. For store

smaller amounts of data, up to a certain limit, the bank could provide this service for free. Such would be increased total number of users who could later begin to store larger amounts of data, and also could be thus collected information about that clients. The digital online (cloud) safety deposit box was also created modularly. By using appropriate hardware and software modules it is simple and easy to increase the capacity and expand its capabilities. Figure 5 shows proposed scheme of the online (cloud) version of the digital modular bank safety deposit box (Sajić et al. 2018, 111).

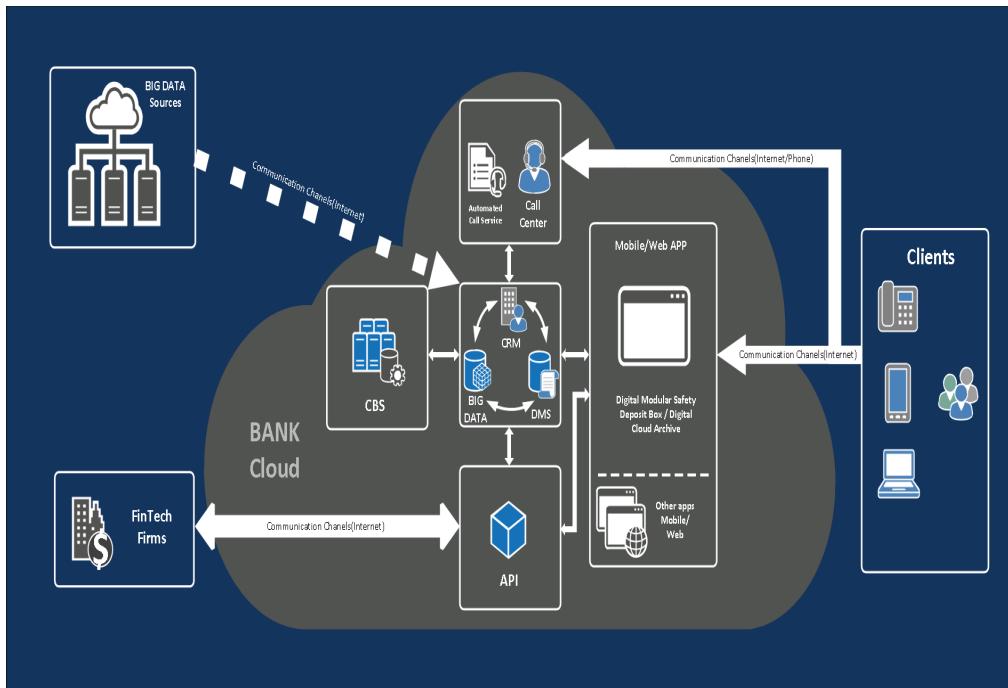


Figure 5 - Block scheme of online (cloud) digital modular bank safety deposit box (Authors 2018)

If everything was done in proposed way it could be said that the client becomes the actual owner of stored digital records, even in the financial part that determines their value.

## 5. DOCUMENT MANAGEMENT SYSTEM FOR SMALL AND MEDIUM ENTERPRISES

Basically, this proposal of service of document management system for small and medium enterprises (SME) is based on a solution similar to previous proposal of the online digital modular deposit box. Difference is only in the offered Internet application that would be available on the bank Web site. That would allow that in the "cloud" version the bank offers to small and medium enterprises that for them performs services that provides a good document management system (DMS). The principle solution, described in the case of a online digital modular safety box, remains almost the same and applicable also for this type of service.

The economic basis for such service is clear. Small and medium enterprises, in order to create good and quality DMS, should to invest quite a lot of money (Duvnjak 2018), to engage some IT firm to maintain such a system or to employ at least one adequate professional for that purpose. All that are additional expenditures which could be a big problem for small firms. Also, sales policy of DMS technology is based mainly on the number of licenses. As well as

in similar sales of information systems, much greater price is when a small number of copies is used for a small number of users, than when is case of a large number of users and a large number of copies. Therefore, for small and medium enterprises this price is quite high and mainly unacceptable.

For these reasons it is proposed introduction of this banking service, service of providing DMS services to small and medium enterprises. The bank must certainly to realize good and quality DMS for their own purposes. During introduction and realization of DMS a certain number of people from the IT side and also from completely business side will be well trained in working with that system. They can represent a good core for forming of a department that would deal with the providing of DMS services within the bank and externally, as an additional service to clients, in this case legal entities, small and medium enterprises.

Potential clients of this service could be also lawyers, public notaries, and those companies that have and use a lot of documentation in their work. Then, it could be also be companies that join with other companies in order to perform common projects. In such cases, it would be convenient for them to rent together a digital safe with an appropriate DMS application with necessary certificate, legally recognized, used for purpose to store documentation related to planning, execution and monitoring of projects. Such, an accurate, legally supported insight into the flow of the project would be enabled. Also, the process of evidention of errors, delays and other anomalies, which would result in poorly guided projects would be substantially easier. All that would have a solid legal basis and thereby would be avoided eventually lengthy and exhausting legal disputes.

## CONCLUSION

With appearance of mobile portable devices, smartphones and mobile personal computers, there were created new opportunities and new needs of people and clients of banks, and thus were created conditions for introducing new banking services. Five proposals for introduction of new services that banks could provide in the future to the clients were proposed and described in this article. It is evident that some services that banks were provided in the past and from what banks had significant financial benefits (such as payment operations) due to appearance of competition, primarily in the form of smaller but technologically advanced so-called Fitech firms (e.g. PayPal), increasingly become less financially effective. Similar situation is also with ATMs, and also with providing of small credit line services, where the Internet based companies are selling goods via the Internet already issue their electronic payment cards and allow payment on instalments. All that reduces the profit of the banks that are accustomed to the usual, regular, classic way of working and operation.

It is clear that, in order to survive, banks will have to find additional services and products that they could provide to their clients. In that they will be based on that to offer and realize those services where they can be in advantage in relation to competition considering their position on the market, trained personnel and already acquired customer confidence.

Because of mentioned reasons, in this paper was given and described proposal of five new services that could help to increase quality of bank services to a higher level, to increase satisfaction of clients and also to improve financial effects for bank. The common for all proposals is that they are based on using digital information and mobile technologies and cloud technologies. Also, access in all proposed services is such that is intended to satisfy needs of clients, and is not intended to achieve profit through expensive services. The goal is to achieve a reasonable price of services in order to obtain in quantity of users and achieved secondary profit by gaining client confidence. Based on that, the clients would expand list of services that would ask from their bank what would increase financial effects for the bank. For example, the PhotoLoan application provides possibility for banks to connect their clients legal entities with clients physical persons, and to provide satisfaction with concluded and performed business for both of them. That creates real bases for preserving their clients and

sets out perspectives for expanding the number of clients based on good recommendations. Also, application for management with limits of clients provides high comfort and satisfaction to the clients in work with their accounts and transactions. That would certainly result in preserving existing and possibility to increase total number of clients, and in increasing of financial effects in operation of bank. With the introduction of a digital modular safely box and with its extension on the provision of DMS services, it is almost certain that companies, that would accept this kind of services, would transit with great part of their work on using services of the concrete bank. Providing of consulting and marketing services generally, and also for new introduced banking products, will also increase reputation of bank and can bring more benefits retroactively than it would seem at first glance.

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## ZNAČAJ EFIKASNE KOMUNIKACIJE REVIZORSKE INSTITUCIJE I PARLAMENTA U SISTEMU ODGOVORNOSTI IZVRŠNE VLASTI

**Rezime:** Temelj odnosa između vrhovnih revizorskih institucija i parlamenta su revizorski izveštaji koji se, na osnovu provedenog procesa revizije, dostavljaju parlamentima, odnosno parlamentarnim odborima. Iako sve vrhovne revizorske institucije izveštavaju parlamente, postoje brojne razlike u tome: kako, kada i koliko često se to radi. Takođe, razlike u modalitetima izveštavanja postoje i zbog različitih parlamentarnih sistema i strukture samih parlamenta, različite strukture i nadležnosti vrhovne revizorske institucije (VRI), njene ustavne i istorijske pozicije te mnogih drugih faktora koji oblikuju odnose između VRI i parlamenta. U radu su identifikovani brojni faktori koji mogu uticati na odnose vrhovne revizorske institucije i parlamenta, odnosno parlamentarnih odbora, kako bi se mogla napraviti poboljšanja i promovisati dobre prakse. Sve sa ciljem da rad revizije javnog sektora doprinese poboljšanju standarda upravljanja, kvalitetnjem donošenju odluka te posledično, efikasnijem korišćenju javnog novca. Rad je nastao na osnovu javno dostupne literature, prvenstveno zakonskih i drugih propisa koji uređuju rad VRI i sistem javnih finansija, uz korišćenje podataka i informacija dobijenih direktno od VRI te uzimajući u obzir zahtjeve ISSAI i drugih relevantnih standarda.

**Ključne riječi:** revizija, javni sektor, odgovornost, parlamentarni sistem

**JEL klasifikacija:** H83

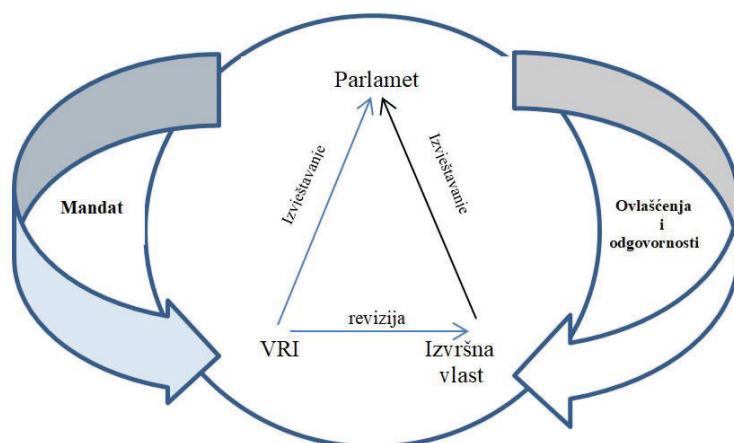
### UVOD

U kompleksnom sistemu javne finansijske odgovornosti, uloga parlamenta je da odobri budžet vladi, odnosno da povjeri obavljanje javnih poslova i korišćenje javnih resursa za zadovoljavanje širokog spektra direktnih i indirektnih potreba građana, institucijama izvršne vlasti, kao i da vodi računa o izvršenju budžeta, osiguravajući u ime građana i korisnika javnih usluga da se resursi koriste namjenski, zakonito i odgovorno, uz poštovanje principa efikasnosti i ekonomičnosti. Naime, nema nijednog demokratskog tijela osim nacionalnog parlamenta koje bi dalo legitimitet i koje bi obnašalo demokratsku kontrolu rada nacionalne vlade (Bačić 2006, 10). Da bi se to postiglo, članovi parlamenta, odnosno politički izabrani predstavnici, treba da imaju objektivnu i na činjenicama zasnovanu bazu informacija o tome kako i koliko dobro izvršna vlast prikuplja i troši javna sredstva. S obzirom na to da parlamenti obično nemaju kapacitet za stručne i precizne analize pri kontroli korišćenja javnih sredstava od strane izvršne vlasti, oni se oslanjaju na objektivno i stručno mišljenje revizora i tako revizorske izveštaje koriste kao izvor pouzdanih informacija o tačnosti finansijskih izveštaj i o korišćenju javnih resursa na zakonit, ekonomičan i efikasan način. Praksa pokazuje da će parlamenti koristiti izveštaje revizora samo ako su oni razumljivi te pravovremeni i zanimljivi u političkom kontekstu.

Jasno je da VRI igraju važnu ulogu u ovom sistemu odgovornosti između parlamenta kao zakonodavne vlasti i vlada kao izvršne vlasti, ali i eksterno – prema građanima i korisnicima javnih usluga. Kao revizori javnog sektora, oni putem izveštaja parlamentu (ali i drugim zainteresovanim korisnicima) pružaju nezavisne i objektivne informacije o: pouzdanosti finansijskih izveštaja, pojedinačnih, kompiliranih ili konsolidovanih (Santis, Grossi and Bisogno 2018, 231), namjenskom korišćenju sredstava, čuvanju imovine i resursa koji su povjereni na upravljanje, poštovanju zakona i drugih propisa, primjeni standarda i principa dobre prakse u smislu efektivnog, efikasnog i ekonomičnog trošenja javnog novca.

## 1. OČEKIVANJA OD REVIZORA JAVNOG SEKTORA

Pojednostavljeni se može reći da je osnovni razlog zašto postoje VRI da se pruže pouzdane i kredibilne informacije zainteresovanim stranama u interesu javnosti. Zbog toga su VRI i pozicionirane kao jedan od instrumenata parlamentarnog nadzora, nezavisno od izvršne vlasti, ali i u najvećoj mjeri izdvojeni iz sudbene vlasti, odnosno institucija za sprovođenje zakona. Odnos VRI sa parlamentom i vladom najčešće i najjednostavnije je predstavljen tzv. trougom odgovornosti (Slika 1).



Slika 1. Trougao odgovornosti u odnosima VRI sa parlamentom (Avtori)

U odnosima parlamenta i izvršne vlasti leže bitni problemi takozvane „političke volje“ u osiguravanju jednakosti građana i svih ostalih pred zakonom. U središtu formiranja takve političke volje nelazi se problem demokratskog nadzora nad nosiocima (izvršne, to jest zbiljske) vlasti, odnosno njezine političke odgovornosti (Smerdel 2012, 25). Prema tome, VRI u okviru „trougla odgovornosti“ treba da razvija modalitete i pronalazi načine kako najbolje da ispuni svoju funkciju u odnosu na druge aktere u sistemu upravljanja javnim finansijama, a sve to uzimajući u obzir zahtjeve ISSAI i drugih standarda, koji za VRI postavljaju okvire profesionalnog rada. Revizori javnog sektora moraju imati kontinuiranu saradnju sa svojim parlamentima (preko nadležnog parlamentarnog odbora) kako bi bili svjesni njihovih očekivanja i kako bi bili sigurni da izabrani predstavnici razumiju i prihvataju ulogu VRI i na koji način mogu imati koristi od njenog rada.

Osnovni principi za rad vrhovnih revizorskih institucija, koji postavljaju preduslov za nezavisnost revizorskih institucija javnog sektora, su sadržani u ISSAI 1 - Limska deklaracija o smjernicama za pravila revizije i u ISSAI 10 - Meksička deklaracija o nezavisnosti VRI (INTOSAI 2014).

Limska deklaracija, koja je aklamacijom delegata usvojena 1977. godine, imala je odlučujući uticaj na razvijanje revizije javnih institucija u kontekstu svake zemlje pojedinačno i postavila

je osnovna očekivanja za dugogodišnji odnos VRI sa parlamentima. Prema Limskoj deklaraciji, uspostavljanje revizije javnog sektora i sam koncept revizije neodvojivi su od upravljanja javnim finansijama, jer upravljanje javnim sredstvima predstavlja povjerenu obavezu. Pri tome bi trebalo imati u vidu da su sredstva u javnom sektoru ona sredstva koja su kontrolisana od strane države i koja služe za proizvodnju dobara ili pružanje usluga za javno korišćenje, dakle ne samo novčana budžetska sredstva. Principi koji se primjenjuju za vrednovanje sredstava u javnom sektoru su u suštini isti koji se primjenjuju i za sredstva u privatnom sektoru (Ćurić and Babić 2017, 86).

Revizija tako nije sama sebi svrha, već predstavlja dio šireg regulatornog sistema, u funkciji parlamentarnog nadzora, čiji je cilj da se otkriju odstupanja od uspostavljenih standarda i kršenja principa zakonitosti, efektivnosti, ekonomičnosti i efikasnosti pri upravljanju javnim sredstvima, a sve to da bi se omogućilo preduzimanje korektivnih mera u pojedinačnim slučajevima. U Limskoj deklaraciji poglavje VI, dio 16 (INTOSAI 2014) se jasno navodi: „Vrhovna revizorska institucija je ovlašćena i od nje će se ustavom zahtijevati da o svojim nalazima godišnje podnosi izveštaj parlamentu ili drugoj nadležnoj javnoj instituciji i da se ovaj izveštaj objavljuje.“ Osim toga, VRI će biti ovlašćena da podnosi izveštaj o naročito važnim i značajnim nalazima tokom godine.

Nakon nekoliko decenija od uspostavljanja osnovnih principa za rad vrhovnih revizorskih institucija, 2007. godine donesena je Meksika deklaracija o nezavisnosti u kojoj, između ostalog, стоји да VRI podnose svoje izvještaje zakonodavnoj vlasti, nekom od njениh komisija/odbora ili, pak, upravnom odboru subjekta revizije (zavisno od konkretnog slučaja) na razmatranje i praćenje realizacije preporuka datih radi provođenja korektivnih mera. Ova obaveza dostavljanja izvještaje o praćenju realizacije preporuka na razmatranje parlamentu, to jest, nekom od njegovih odbora/komisija, prisutna je čak i u slučajevima kada VRI imaju spostvena zakonska ovlašćenja za praćenje realizacije i sankcionisanje: ISSAI 10, princip 7 (INTOSAI 2014).

Sve ovo ukazuje na neophodnost dobro koordinisane i tjesno „skopčane“ saradnje i komunikacije vrhovne revizorske institucije i parlamenta, a ustav i zakonodavni okvir svake pojedine zemlje, te ISSAI 1 i ISSAI 10 predstavljaju kontekst za taj ključni odnos. Međunarodni standardi vrhovnih revizorskih institucija (engl. *The International Standards of Supreme Audit Institutions ISSAI*) su detaljnije razrađeni, pružajući dodatne smjernice i smjernice o različitim aspektima ovog odnosa i očekivanjima koja se postavljaju pred VRI u razvoju i održavanju odnosa sa parlamentom (i drugim zainteresovanim stranama). Standardi, takođe, postavljaju očekivanja u vezi sa kvalitetom informacija kojima se izvještava parlament, ukazujući da informacije koje se pružaju moraju biti relevantne, objektivne i pravovremene. Revizorski izvještaji bi trebalo da istaknu teme, zajedničke nalaze, trendove, uzroke i preporuke, a kad god je to moguće, ohrabruje se i pružanje smjernica dobre prakse: ISSAI 12, Princip 3 (INTOSAI 2014).

## **1.1. Izvještavanje parlamenta – osnov svih odnosa**

Osnova svih odnosa između VRI i parlamenta su revizorski izvještaji. Iako sve evropske VRI izvještavaju parlament, postoje značajne razlike u tome kada, kako i koliko često to rade. Principom 6 Meksika deklaracije naglašena je sloboda VRI o odlučivanja o sadržaju i vremenu objavljivanja i slanja izvještaja o reviziji, osim tamo gdje su posebni zahtjevi u pogledu izvještavanja propisani zakonom. Zakonodavna vlast propisuje minimalne zahtjeve u pogledu izvještavanja, a VRI imaju slobodu da iznose zapažanja i daju preporuke u izvještajima o reviziji, uzimajući u obzir, gde je to prikladno i gledišta subjekta revizije. VRI mogu da uzmu u obzir posebne zahtjeve za provođenje revizije na prijedlog parlamenta ili parlamentarnih odbora/komisija ili vlade. Pored toga, kako pokazuju komparativna istraživanja u ekonomijama kao što su Velika Britanija i Njemačka (Elbakrya i Nwachukwu i Abdou i Elshandidy 2017, 24): može se pretpostaviti da je prelazak na novi međunarodni

sistem izvještavanja uveo određene nejasnoće u odmjeravanju računovodstvenih podataka i zakona koji su osmišljeni kako bi se lokalna pravila uskladila s međunarodnim standardima. Shodno tome, uticaj novih direktiva EU o izvještavanju na menadžerske podsticaje i pravne i institucionalne aranžmane u državama članicama je pitanje koje je vrijedno pažnje u daljim istraživanjima.

Dakle, različita zakonska rješenja i prostor koji ISSAI omogućavaju slobodu VRI pri odlučivanju o sadržaju i vremenu slanja i objavljivanja izvještaja o reviziji, doveli su do različitih rješenja u praksi, tako da se primjena ovih principa razlikuje od zemlje do zemlje.

Neke od dobrih praksi koje se primjenjuju prilikom podnošenja izvještaja parlamentu su:

- Dostavljanje izvještaja parlamentu i njihovo javno objavljivanje u isto vrijeme;
- Distribuiranje izvještaja svim relevantnim tijelima (odborima i komisijama) unutar parlamenta;
- Prezentacije ili kratki izvodi iz izvještaja za potrebe parlamentarnih odbora;
- Korišćenje saopštenja za medije da bi se istakla važni dijelovi/nalazi u izvještaju;
- Povremeno razmatranje tematskih izvještaja (ili više njih) na sektorskim parlamentarnim odborima, a ne samo na odboru za reviziju ili budžet.

Kako da u sproveđenju svoje misije VRI osiguraju da njihov rad dodaje vrijednost i ima društveni uticaj, između ostalih, ISSAI 12 (INTOSAI 2014): „Vrijednosti i koristi VRI – pokretanje promjena u životima građana“ daje prilično autoritativne smjernice o ovom pitanju. VRI mogu pokazati svoju relevantnost adekvatnim odgovorom na aktuelna društvena pitanja, izazove građana, očekivanja različitih zainteresovanih strana, kao i nastajućih rizika i promjena okruženja u kojima se revizije provode. Nadalje, važno je da VRI imaju u kontinuitetu, razumijevanje dešavanja u širem javnom sektoru i da održavaju smislen i efikasan dijalog sa zainteresovanim stranama o tome kako revizorski rad i izvještaji mogu da doprinesu razvoju javnog sektora, donošenju kvalitetnijih strateških i operativnih parlamentarnih odluka, poboljšanju finansijske discipline i praćenju rezultata i efekata pojedinih programske mjera. Kada se takva komunikacija uspostavi, to omogućava VRI da budu vjerodostojan izvor informacija za parlament, odnosno da omogući nezavisan i objektivan uvid, podržavajući korisne promjene u javnom sektoru.

U tom smislu, ISSAI 12 kroz Princip 5: Odgovor na promjene u okruženju i rizike koji nastaju, Princip 6: Efektivna komunikacija sa učesnicima i Princip 7: Vjerodostojan izvor nezavisnog i objektivnog uvoda i smjernica za postizanje pozitivnih promjena u javnom sektoru; opisuju jasna očekivanja od VRI koja, kao aktivni partner u „trouglu odgovornosti“, mora da osigura da njen rad bude prepoznat kao relevantan, što uključuje nastojanje VRI da:

- Bude svjesna očekivanja zainteresovanih strana i adekvatno reaguje na ta očekivanja;
- Ponudi odgovore na ključna pitanja koja su u fokusu društveno-ekonomskih dešavanja i da ih uzima u obzir prilikom razvoja svog programa rada;
- Procijeni promjenjljive i narastajuće rizike u revisionom okruženju i da blagovremeno odgovori na njih;
- Osigura da se očekivanja zainteresovanih strana i rizici, pema potrebi, uključe u strateške i operativne planove revizije;
- Razmotri i uvaži stavove zainteresovanih strana u procesu planiranja revizorskih aktivnosti, ali bez ugrožavanja nezavisnosti;
- Nakon svakog revisionog ciklusa procjeni da li ključni akteri (zainteresovane strane) imaju povjerenje da je VRI djelotvorna i da doprinosi ukupnom poboljšanju u javnom sektoru.

Iako je važno da VRI slobodno i samostalno razvija program i određuje plan rada, dvosmjerna komunikacija i angažman sa parlamentom i drugim akterima je od suštinskog značaja.

Istraživanja (Vivian i Maroun 2019, 44) potvrđuju stav da računovodstvena profesija, kao sastavni dio sistema tržišta kapitala, vrši pritisak na pokretanje standardizacije finansijskih računovodstvenih praksi za javni i za privatni sektor. Nasuprot tome, vladine agencije podržavaju računovodstvene sisteme uskladene sa konvencionalnim principima odgovornosti,

koji su usklađeni sa kontekstima specifičnim za nadležnost. Interakcija ovih suprotnih perspektiva je primarna odrednica promjene računovodstvene prakse u prostoru javnog sektora, što se određuje pojmom novo javno upravljanje. Međutim, oprečni su zaključci o efektima tog „novog javnog upravljanja“ za koji se kaže: (Steccolini 2019, 255) da može predstavljati novo doba (new age), ali isto tako i „zlatni kavez“ (“*a golden cage*”).

## 1.2. Komunikacija i razumijevanje uloge i rada VRI

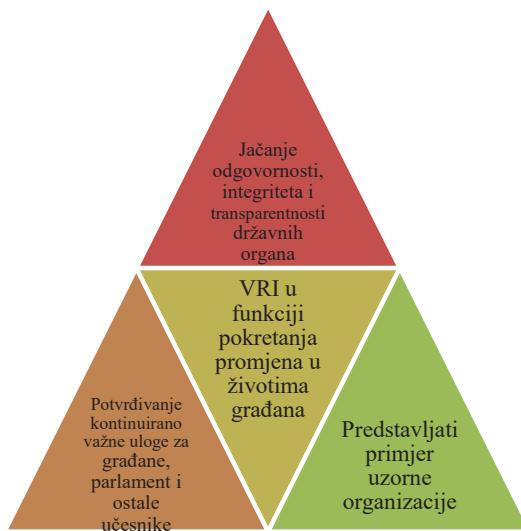
Kako bi se podržali i unaprijedili mehanizmi odgovornosti, sve VRI u savremenim demokratijama u okviru svojih mandata, prevazilaze samo dostavljanje izvještaja o reviziji parlamentima, time što preduzimaju inicijative za uspostavljanje boljih i efektivnijih odnosa sa parlamentarnim odborima, kroz podizanje svijesti o ulozi VRI i pružanje pomoći u razumijevanju revizorskih izvještaja. Ovim aktivnostima na poboljšanju komunikacije, takođe, se nastoji povećati pažnja parlamenti i staviti fokus na izvještaje VRI, ali i uticati na osnaživanje javnosti u zahtijevanju odgovornosti od vlade i subjekata javnog sektora. Mada, treba imati u vidu i tzv. „paradokse odgovornog upravljanja u javnom sektoru“ (Humphrey i Miller i Scapens 1993, 14), odnosno činjenicu da što su više u primjeni efikasne kontrole (Duvnjak 2018), različiti indikatori vrijednosti za novac, inspekcije i revizije, to se sve jače postavljaju uslovi i stvara javni pritisak za odgovornije upravljanje javnim novcem.

Postoji niz aktivnosti koje čine dobre prakse koje su VRI usvojile i koje primjenjuju u komunikaciji sa parlamentom, među kojima su:

- Održavanje redovnih sastanaka, dopunjениh neformalnim kontaktima na operativnom nivou;
- Usaglašavanje dnevnog reda i rasporeda izvještavanja;
- Intervjui i javna saslušanja odgovornih lica po pitanjima iz revizorskog izvještaja;
- Organizovanje konferencija, okruglih stolova i radionice za članove palamenta, ali i za druge zainteresovane učesnike;
- Dogovaranje memoranduma o razumijevanju i uspostavljanje procedura za saradnju;
- Donošenje strategije komunikacije i uspostavljanje međusobno kompatibilnih komunikacionih politika;
- Poboljšanje razumijevanja putem privremenog upućivanja osoblja na praktičan rad iz jedne u drugu instituciju.

Sve ovo može da doprinese raspravama u smijeru unapređenja u javnom sektoru, a bez ugrožavanja nezavisnosti VRI. Stepen u kojem su VRI u stanju da pokrenu promjene u životima građana zavisi od VRI, a to se može ilustrovati na sljedeći način (Slika 2).

Kvalitet revizije poboljšava kvalitet finansijskog izvještavanja povećavajući vjerodostojnost finansijskih izvještaja. Dakle, kvalitet revizije je komponenta kvaliteta finansijskog izvještavanja (DeFond i Zhang 2014, 276), što je primjenljivo i na privatne kompanije i na subjekte iz javnog sektora.



Slika 2. Tri cilja VRI za promjene u životima građana  
(ISSAI 12 - Vrijednost i korist VRI – pokretanje promjena u životima građana)

## 2. OČEKIVANJA OD PARLAMENTA

### 2.1. Modaliteti parlamentarnog nadzora

Parlament ima jedinstvenu ustavnu funkciju nadzora. Parlamentarni nadzor je sredstvo pomoću koga izabrani predstavnici, u ime naroda, pozivaju vladu na odgovornost između izbora. Takođe, parlamenti su ti, koji usvajanjem zakona definišu računovodstveni okvir i standarde izvještavanja. Kako pokazuju ranije studije (Bartorneu i Magee 2015, 285) konačni standardi proizlaze iz procesa političkog kompromisa, koji ne može imati koristi od neorganizovanih interesnih grupa ili grupa čiji interes leži u manjini. Primjena pravila objavljivanja je obavezna za sve firme kojima se trguje na javnom tržištu, a javna firma ne može se isključiti i napisati svoja vlastita pravila, čak i ako je to u najboljem interesu njegovih dioničara.

S obzirom na to da postoje specifičnosti u organizaciji samih parlamenta, razlikuju se i vidovi parlamentarnog nadzora javnih finansija, koji se provodi uz pomoć revizorskih izvještaja i informacija prezentovanih od strane VRI. Pojedini parlamenti se direktno bave radom i izvještajima VRI, dok se drugi oslanjaju na odgovarajući parlamentarni odbor. U Republici Srpskoj to je Odbor za reviziju, u Republici Srbiji je Odbor za finansije, republički budžet i kontrolu trošenja javnih sredstava sa pododborima (Podobor za razmatranje izvještaja o obavljenim revizijama Državne revizorske institucije). Uspostavljanje posebnog parlamentarnog odbora zaduženog za reviziju omogućava konkretniju i efikasniju saradnju sa VRI, angažovanje specijalističkih asistencija i pravovremeno reagovanje na nalaze revizije, dok s druge strane, odnos sa VRI preko odbora sa širim ovlašćenjima kao što je odbor za budžet i javne finansije daje mogućnost da se parlament bavi revizorskim izvještajima ne samo po njihovom nastajanju, nego i prilikom donošenja budžeta, jer takav parlamentarni odbor, koji je zadužen za rad VRI, direktno je uključen u proces odobravanja budžeta te su time pažnja i interes unekoliko različiti od odbora koji je nadležan samo za rad VRI.

U parlamentima gdje je dvodomni sistem, česti su primjeri zajedničkih sjednica odbora oba doma parlamenta, prilikom razmatranja revizorskih izvještaja i izvještaja o radu VRI. U većini evropskih VRI sve više se teži da se revizorski izvještaji dostavljaju odgovarajućem odboru za reviziju, ali i relevantnom sektorskom odboru na razmatranje (npr. odbor za

socijalna pitanja, zdravstvo, obrazovanje, odbranu i sl.) prije održavanja sjednice plenuma. Ovo je naročito naglašeno i smatra se dobrom praksom za izvještaje revizije učinka koji se odnose na određeno područje/sektor ili društveni problem. U Švedskoj je specifično da se izvještajima VRI isključivo bave sektorski ili predmetni odbori, a ne postoji jedan specijalizovani parlamentarni odbor (za reviziju). U Velikoj Britaniji su sve glasniji zahtjevi za jačanjem parlamentarne kontrole. Odbori bi mogli biti efikasniji ako budu selektivniji, ali i sistematičniji u svom pristupu kontroli prije imenovanja (Hazzel 2019, 225) najviših javnih zvaničnika.

Jasno je da ne postoji model parlamentarnog rada koji je najbolji, odnosno koji odgovara svima, već to prije svega zavisi od veličine parlamenta, strukture i efikasnosti parlamentarnih odbora, mogućnosti uspostavljanja pododbora, mogućnosti zajedničkog rada više parlamentarnih odbora, ali i od zainteresovanosti članova parlamenta da učestvuju u radu odbora ili na plenarnoj sjednici za pitanja koja se odnose na revizorske izvještaje i radu VRI.

## 2.2. Parlamentarni odbori/komisije koji se bave izvještajima revizije

Nadovezujući se na temeljne principe koji su definisani deklaracijama iz Lime i Meksika, kroz ISSAI okvir se naglašava i izražava očekivanje da će VRI razviti efikasne odnose i linije komunikacije sa parlamentom, odnosno njegovim odborima/komisijama. U ISSAI 12 – „Vrijednost i koristi VRI – pokretanje promjena u životu građana“ - Princip 3, tačka 2, naglašava (INTOSAI 2014) da VRI treba da, u skladu sa svojim mandatom, parlamentu, njegovim odborima/komisijama, rukovodstvu revidiranih institucija i upravnim odborima dostavlja relevantne, objektivne i blagovremene informacije.

Uz to, VRI o objektivnim informacijama treba da izvještava na jednostavan i jasan način, koristeći se jezikom koji razumiju svi učesnici. U praksi to znači da će izabrani predstavnici koji u parlamentu i parlamentarnim odborima predstavljaju volju birača koristiti izvještaje revizora samo ako su oni pravovremeni, ali prije svega razumljivi te zanimljivi u političkom kontekstu.

Jasna očekivanja od VRI, odnosno o tome šta se smatra relevantnim informacijama, nisu precizno navedena, ali obično obuhvataju aktivnosti koje omogućavaju da u VRI budu svjesni očekivanja zainteresovanih strana i da mogu reagovati na ta očekivanja, a prilikom razvoja vlastitih programa rada, treba da da budu u mogućnosti da ponude odgovor na ključna pitanja od uticaja na društvo.

Parlamenti u svim zemljama imaju neku vrstu diskrecionog prava o tome kako se angažuju u odnosima sa VRI, o čemu je već prethodno navedeno. Jedan od modaliteta je i formiranje parlamentarnog odbora ili komisije koji je zadužen za eksternu reviziju i za bavljenje izvještajima koje dostavlja VRI. Forma, struktura i djelokrug rada pojedinih odbora se uređuje propisima na nacionalnom nivou (što uključuje ustavne i zakonske odredbe, skupštinske poslovni, uredbe i procedure), budući da nema obavezujuće međunarodne ili evropske konvencije koja uređuje ovo pitanje. Iz navedenog proizilazi da je, u sistemima gdje se takvi posebni parlamentarni odbori formiraju, od suštinskog značaja za efektivan i efikasan rad VRI, osim njene vlastite nezavisnosti, bitno i to: koja ovlašćenja ima parlamentarni odbor zadužen za eksternu reviziju i na koji način se taj odbor bavi informacijama koje prima od VRI.

U tom kontekstu, uvijek vodeći računa o tome da princip nezavisnosti VRI ne bude doveden u pitanje, jasnom komunikacijom sa parlamentarnim odborom koji je zadužen za reviziju, VRI obezbjeđuje da su parlamentarna očekivanja i mišljenja o bitnim društvenim temama prisutni, razmotreni i (shodno mogućnostima) uvaženi, dok se sa druge strane omogućava da parlamentarni predstavnici razumiju izazove sa kojima se suočava VRI, uzimajući u obzir raspoložive resurse i zakonske obaveze.

Formalna zakonska pa i poslovnička obaveza parlamentarnih odbora je da razmatraju revizorske izvještaje, imajući pri tome odgovornost da se na taj način kroz formalne

mehanizme kontrolisu i usmjeravaju rad vlade u pogledu raspolaganja javnim resursima. Drugi bitan element ovog mehanizma je da parlamentarni odbori/komisije koji su zaduženi za eksternu reviziju razmatraju sve dostavljene izvještaje sa dužnom pažnjom, čime doprinose dobrom funkcionisanju sistema javne odgovornosti. Za upražnjavanje ovih zakonskih prava i privilegija koje imaju parlamentarni odbori zaduženi za eksternu reviziju od ključne važnosti su njihovi kadrovski resursi, kako bi se na svrshodan način iskoristile informacije koje VRI pružaju kroz svoje izvještaje i kako bi se doprinijelo efektivnoj funkciji nadzora i odgovornosti parlamenta u cjelini.

Veoma je važno imati u vidu da se parlamenti, pa samim tim, i parlamentarni odbori formiraju nakon provedenih parlamentarnih izbora, po izbornim ciklusima, što u praksi znači da se struktura odbora mijenja u roku od najduže četiri do pet godina. Pored toga što iskustva razvijenih parlamentarnih demokratija i različite smjernice koje se periodično upućuju u vidu preporuka zemljama koje teže da se pridruže Evropskoj uniji naglašavaju da se od parlamentarnog odbora za reviziju očekuje da radi na nepristrasan način i da čini sve da parlament u cjelini bude informisan o nalazima revizije, postoje i određene formalne sugestije/preporuke koje parlamentarni odbori za reviziju treba da ispunjavaju, a to su:

- Da imaju najmanje pet članova (do maksimalno 11);
- Da predsjedavajući odbora bude iz reda opozicionih stranaka;
- Da imaju jasan mandat i ovlašćenja pomoću kojih mogu osigurati provođenje preporuka koje daje reviziju;
- Da koriste revizora (tj. VRI) kao stručnog savjetnika u svim svojim razmatranjima, a naročito pri saslušavanju odgovornih lica u institucijama izvršne vlasti;
- Da imaju adekvatne resurse, uključujući kompetentno osoblje sa odgovarajućom obukom i vještinama za razumijevanje revizorskih izvještaja;
- Da mogu osigurati da izvještaji VRI, uključujući sve ključne nalaze i preporuke, budu pripremljeni na vrijeme i kao takvi prezentovani parlamentu zajedno sa zaključcima odbora.

Drugo suštinsko važno pitanje za VRI, tamo gdje je uspostavljen parlamentarni odbor nadležan za eksternu reviziju je na koji način se taj odbor bavi informacijama koje dobija od VRI.

### **3. FAKTORI BITNI ZA ODNOSE VRI I PARLAMENTA**

Iako su uloge i djelokrug rada vrhovnih revizorskih institucija i parlamentarnih odbora zaduženih za reviziju i/ili javne finansije obično dobro zakonski i ustavno definisane, postoje brojni faktori koji mogu da utiču na to da međusobni odnosi VRI i parlamentarnih odbora budu više ili manje efektivni i efikasni. Neki od tih faktora koji oblikuju odnose između VRI i nadležnih skupštinskih odbora su: istorijska i ustavna pozadina VRI, parlamentarni sistem i izborni ciklusi, budžetski i računovodstveni sistem, pa čak, i razvijenost nevladinog sektora.

Od VRI se, s jedne strane, očekuju revizorski izvještaji visokog kvaliteta, to jest, izvještaji koji su stručni, standardizovani, ali i kredibilni, relevantni, da dodaju vrijednost i imaju uticaj, kako putem izvještavanja o onome što se dogodilo, ali i kroz identifikovanje područja gdje se mogu napraviti poboljšanja uz promovisanje dobre prakse. Na ovaj način revizija javnog sektora bi trebalo da doprinosi boljem upravljanju i donošenju odluka iz oblasti javnih finansija i efikasnijem korišćenju javnog novca. Sa druge strane, parlamenti i parlamentarni odbori će izvještaje, koje „proizvodи“ VRI, koristiti u političkom kontekstu, oslanjajući se tako na ekspertska znanja revizora u kontroli trošenja javnog novca od strane izvršne vlasti, ali samo kada su ti izvještaji razumljivi, zanimljivi i dovoljno aktuelni.

Vrhovna revizorska institucija (VRI) je tu da pruži sigurnost i dodatne informacije o pouzdanosti finansijskih izvještaja, namjenskom i svrshodnom korišćenju javnih resursa i drugim pitanjima zavisno od zakonskog mandata, a parlament, odnosno nadležni parlamentarni odbor, da putem usmjeravajućih i obavezujućih odluka kanališe rad vlade i

drugih izvršnih organa uz kontrolu korišćenja javnih sredstava. Prema tome, proizilazi da je neophodno da saradnja i veza između VRI i nadležnih skupštinskih odbora bude dobra, efikasna i pravovremena. Bitno je, međutim, imati u vidu kako međunarodne standarde, tako i kontekstualne faktore, ali i dobre prakse i primjere efikasnih odnosa nadležnih parlamentarnih odbora i VRI u pojedinim zemljama.

### 3.1. Organizacioni modeli i mandat VRI

Iako većina VRI slijedi jedinstven okvir kojeg postavljaju ISSAI, ipak postoje brojne razlike u modelu organizovanja, ali i u definisanom mandatu VRI u pojedinim zemljama. Svaka VRI se razvila u okvirima pravne, političke i kulturne tradicije pojedine zemlje, oslanjajući se na iskustva i prakse proistekla iz takve tradicije i kontekstualnog okvira. Međutim, većina VRI prati jedan od tri modela, a to su:

- Monokratski ili anglosaksonski model (model kancelarije);
- Sudski ili napoleonski model;
- Model odbora ili kolegijuma.

U monokratskom modelu, instituciju, uglavnom, vodi jedan rukovodilac, generalni ili glavni revizor, a da bi ovaj model bio uspješan i efikasan, VRI treba da ima dobru saradnju sa parlamentom. U nekim sistemima (kao što je slučaj u Velikoj Britaniji) generalni revizor je službenik parlamenta, što implicira i samo po sebi uključuje blisku vezu sa parlamentom. VRI u ovom modelu su uglavnom fokusirane na finansijsku reviziju, uključujući reviziju zakonitosti poslovanja u mjeri u kojoj to utiče na finansijske izvještaje, a sve više se razvija revizija učinka/svrsishodnosti. Prema pojedinim zakonskim rješenjima, VRI ovog modela ima obavezu da dostavi određene predmete/izvještaje tužilačkim organima, ali generalno, ove VRI nemaju nikakvu moć da iniciraju sankcije protiv javnih zvaničnika. Prema nekim zakonskim rješenjima, kao što je slučaj i u Bosni i Hercegovini, parlamentarni odbor ima mehanizam da predloži umanjenje budžeta institucije kod koje su utvrđena značajne nepravilnosti, a na parlamentu je da li će takav prijedlog da prihvati. Struktura profesionalnog osoblja (revizora) je primarno finansijsko-računovodstvene orientacije. Rad VRI organizovane po modelu kancelarije ima veći uticaj samo kada se parlament aktivno interesuje za rad revizora javnog sekora i kada to koristi za razmatranje korišćenja javnih resursa od strane izvršne vlasti, što podrazumijeva jaku parlamentarnu kontrolu. Vrhovne revizorske institucije u Bosni i Hercegovini su organizovane po modelu kancelarije, a to su: Glavna služba za reviziju javnog sektora Republike Srpske i Kancelarija za reviziju institucija Federacije BiH koje po teritorijalnom i funkcionalnom principu imaju nadležnosti na entitetskim nivoima i izvještaje podnose Narodnoj skupštini Republike Srpske, odnosno Parlamentu Federacije BiH, kao i odgovarajućim opštinskim, gradskim i kantonalnim parlamentima; zatim Kancelarija za reviziju institucija na nivou BiH i Kancelarija za reviziju Brčko Distrikta, koje u svom mandatu imaju obavezu revizije subjekata određenog institucionalnog nivoa i izvještaje podnose nadležnom parlamentu. Po modelu kancelarije su organizovane i VRI u Hrvatskoj i Sjevernoj Makedoniji, a značajne karakteristike ovog modela ima i Računsko sodišće Republike Slovenije (VRI Slovenije).

U sudskom modelu, VRI funkcioniše po principima suda, članovi uprave imaju status sličan sudijama u pravosuđu, a stručno osoblje ima primarno pravnu pozadinu. Revizija ovako organizovanih VRI je istorijski i kontekstualno bila usmjerena na provjeru i ocjenu zakonitosti provedenih transakcija koje rezultiraju finansijskim (završnim) računima. Svojim presudama VRI ocjenjuju zakonitost rada javnih računovođa, mogu izricati sankcije do određenog nivoa, ali većina VRI i ovog modela imaju mandat koji uključuje finansijsku reviziju i reviziju učinka te izvještavanje o sistemskim pitanjima. Ovakav model imaju VRI: Francuske, Belgije, Španije, Portugalije, Italije, Grčke i Turske.

U modelu odbora (kolegijuma) revizorskom institucijom upravlja kolegiju, odbor odnosno grupa generalnih revizora istog ranga. U nekim zemljama članovi odbora imaju sličan status

kao sudije u sudovima (primjer: SR Njemačka, Moldavija), mada to nije pravilo, jer su se neke VRI razvile po modelu odbora, ali u kontekstu finansijske revizije, što je primjereno modelu kancelarije, a neke uz pravnu pozadinu sličnu sudskom modelu (npr. u Luksemburgu ili Nizozemskoj). Jedna od takvih revizorskih institucija je Evropski revizorski sud, koji djeluje kao kolegijalni organ sastavljen od 28 članova, po jedan iz svake države članice EU. Takođe, ovakav model VRI je zastupljen u Srbiji, Crnoj Gori, Rumuniji, Češkoj, Slovačkoj i u još nekim evropskim zemljama, gdje sam model nije moguće jednoznačno kategorizovati (npr. u Švedskoj). Naime, ove tri grupe (modela) nisu potpuno homogene te pojedine VRI nije jednostavno pozicionirati samo u jednu grupu, budući da imaju više od jedne karakteristike nekog modela, dok su pojedine VRI tokom svog razvoja prešle, odnosno evoluirale, iz jednog modela u drugi.

Mandat VRI često je usko povezan sa oblikom (modelom) organizovanja VRI, ali i tradicija i kulturno-istorijski kontekst zemlje igraju značajnu ulogu u tome da li je revizorski pristup primarno finansijski ili pravni te kakve su veze i odnosi sa parlamentom. Ipak, kako računovodstveni i revizorski standardi postaju sve više formalizovani i međunarodno ujednačeni, to je u gotovo svim oblicima VRI moguće identifikovati: finansijske revizije, revizije usklađenosti i revizij učinka/svrishodnosti. Pa tako, VRI sa sudskom ulogom i dalje imaju ovlašćenja da procjenjuju i sankcionišu zakonitost transakcija. Međutim, njihov mandat se zakonski definiše ili proširuje i na finansijske revizije i na revizije učinka. S druge strane, VRI koje su organizovane po modelu kancelarije ili modelu odbora, nemaju sudsku ulogu u pogledu utvrđivanja zakonitosti transakcija, ali u skladu sa relevantnim standardima i zakonskim rješenjima, provode određeni nivo revizije usklađenosti kako bi osigurali informacije o tome da li su revidirani subjekti prilikom izvršavanja finansijskih transakcija pridržavali odgovarajućih zakonskih propisa. U nekim zemljama, kao što su Srbija i Crna Gora, postoje specifične odgovornosti za koje VRI u slučaju nepoštovanja na nivou prekršaja podnosi prijave i/ili izriče mjere.

Osim mandata koji prvenstveno proizilazi iz modela organizovanja VRI i kroz taj model datih ovlašćenja, bitan elemenat pri razmatranju revizorskog mandata nalazi se u vrsama javnih subjekata koji su u nadležnosti VRI. Sve VRI provode reviziju finansijskih izvještaja, javnih računa i upotrebe resursa tzv „centralne vlade“ i o tome podnose izvještaj državnom parlamentu. Međutim, VRI imaju različito definisan mandat, odnosno stepen uključenosti u revizije regionalnih i lokalnih (samo)uprava, opština, javnih preduzeća, nezavisnih agencija, finansijskih institucija i drugih javnih tijela. Pri tome treba imati u vidu da (Heald and Steal 2018,151): oni koji su odgovorni za upravljanje određenim javnim tijelima moraju ne samo da se nose s konfliktним očekivanjima, već i sa mogućom neusklađenošću svojih statutarnih obaveza sa političkim preferencijama njihovih trenutnih ministara.

Na primjer, VRI u Republici Srpskoj i Federaciji BiH imaju nadležnost za sve nivoe vlasti (entitet, opštine, gradove, kantone), javna preduzeća i sva druga javna tijela, pa tako VRI kada vrši reviziju tih subjekata mora da ostvari komunikaciju i sa lokalnim parlamentima što dodaje nivo složenosti u sam revizorski rad. S druge strane, VRI za institucije na nivou BiH nema taj nivo složenosti rada, s obzirom na strukturu subjekata (samo državni nivo) i komunikaciju sa samo jednim parlamentom.

### **3.2. Zakonski okvir za izvještavanje parlamenta**

S obzirom na svoju ustavnu ili zakonsku ulogu, sve VRI izvještavaju parlamente. Najčešće se revizorski izvještaji dostavljaju parlamentu (parlamentarnom odboru) istovremeno kada i revidiranom subjektu, tako da, ispunjavajući svoju funkciju parlamentarnog nadzora, VRI omogućava da se revizorski nalazi razmatraju blagovremeno i u okviru nadležnog sektora. U nekim slučajevima (primjer Velike Britanije) revizorski izvještaj je adresiran na revidiranog subjekta koji je dužan da zajedno sa finansijskim izvještajem parlamentu dostavi i izvještaj VRI.

Broj, vrsta i priroda izvještaja koje VRI dostavljaju parlamentima, takođe, varira od države do države. Pojedine VRI parlamentu dostavljaju jedan godišnji izvještaj u kome se sažimaju nalazi iz čitavog niza revizija (po subjektima i po vrstama revizija), dok drugi dostavljaju parlamentu sve izvještaje o pojedinačnim revizijama (po subjektima, vrstama revizije ili temama). Prema tome, i priroda i intenzitet odnosa između VRI i parlamenta će u određenoj mjeri odražavati način izvještavanja parlamenta. U nekim zemljama, kao što je slučaj u Velikoj Britaniji, revizorima se sve više nameću i nove statutarne obaveze da izvještavaju o „sumnjivim aktivnostima“ koje se, ako su identifikovane moraju prijaviti, a takva nova kvazi policijska uloga je u suprotnosti sa tradicionalnom prirodnom odnosa revizor – subjekt revizije (Norton 2018, 61). Poenta je da revizor može postati usredsređen na stvaranje pokazatelja najbolje prakse i birokratske usklađenosti radije nego da se fokusira na suštinsko prosuđivanje (Norton 2018, 62).

Glavna služba za reviziju javnog sektora Republike Srpske svaki pojedinačni izvještaj o reviziji dostavlja subjektu revizije i skupštinskom odboru (kao i određenim drugim korisnicima, što je definisano zakonom), a uz izvještaj o reviziji vladinog konsolidovanog godišnjeg izvještaja o izvršenju budžeta Republike, dostavlja se i godišnji revizorski izvještaj u kojem se navode najvažniji nalazi i preporuke iz finansijske revizije, revizije učinka i posebnih revizija. Takođe, Glavna služba za reviziju javnog sektora Republike Srpske ima obavezu da prilikom sačinjavanja svojih finansijskih izvještaja za fiskalnu godinu, skupštinskom odboru dostavi i godišnji izvještaj o aktivnostima, koji obuhvata i informacije o poslovanju Glavne službe kao institucije javnog sektora. Na ovaj način je obezbijeđeno da parlament pravovremeno, jasno i u kontinuitetu bude informisan o svim pojedinačnim revizijama, sažeto i sa najvažnijim informacijama o svim revizijama u toku godine dana (sa najznačajnijim nalazima, preporukama, vrstama mišljenja, brojem i strukturu provedenih preporuka, itd), kao i godišnje o radu same revizorske institucije, resursima, rezultatima i budžetu.

### **3.3. Uloga parlamentarnog odbora u određivanju programa rada VRI**

Značajan faktor za usmjeravanje odnosa VRI i parlamenta je i opseg prava, odnosno sposobnost parlamenta da utiče ili da određuje godišnji program rada VRI. U većini zemalja taj mandat je definisan zakonom, u smislu odredbi i mogućnosti za parlament da traži od VRI da određena pitanja, teme ili subjekte uvrsti u godišnji program revizije. U nekim zemljama VRI je obavezna da prihvati zahtjev parlamentarnog odbora, iako je broj revizija koje može izvršiti na zahtjev ograničen kako bi se zaštitila nezavisnost i izbjeglo prekomjerno opterećenje (npr. u Austriji VRI može da prihvati do tri zahtjeva, a VRI Portugalije najviše dva zahtjeva godišnje, dok je u Bugarskoj definisano do pet zahtjev godišnje). Parlament Slovenije ima mogućnost da podnese zahtjeve za reviziju od kojih VRI mora da razmotri najmanje pet (najmanje dva na prijedlog opozicije), iako je konačna odluka o prihvatanju takvih zahtjeva prepustena VRI. Čak i tamo gdje ne postoje zakonske odredbe, VRI bi trebalo da prime sugestije ili zahtjeve parlamenta i drugih zainteresovanih strana, da ih razmotre i da, potom, nezavisno odluče o uvrštavanju takvih revizija u godišnji plan. Bitan dio dobre komunikacione strategije je da VRI pruži obrazloženje nadležnom parlamentarnom odboru o mogućnosti da se određeni zahtjevi uvrste ili ne u revizorski plan.

U principu, VRI imaju potpuno diskreciono pravo pri određivanju subjekata ili tema kojima će se baviti, uz određene izuzetke kao što su:

- Zakonsko definisanje obaveznih revizija (u Republici Srpskoj je to definisano Zakonom o reviziju javnog sektora);
- Mogućnost da VRI provede određeni broj revizija po zahtjevu parlamenta, a koje će biti posebno finansirane mimo redovnog godišnjeg budžeta.

Pojedine VRI, iako nemaju zakonsku obavezu, aktivno traže i prikupljaju prijedloge za revizije i revizijske teme.

Uvažavajući princip nezavisnosti, kao temeljni postulat postojanja i rada svake revizije, VRI moraju biti slobodne od smjernica ili uplitanja od strane parlamenta, a naročito od izvršne vlasti u procesu programiranja, planiranja revizija i izbora revizijskih tema te u planiranju i provođenju pojedinačnih revizijskih angažmana, izvještavanju i naknadnom praćenju provođenja preporuka. Istovremeno, VRI mogu, a često je to dio dobre prakse, prilagoditi svoje planove posebnim zahtjevima za reviziju određenih oblasti ili tema, uzimajući u obzir opštedruštvenu korist, očekivanja zainteresovanih strana.

U Republici Srpskoj rad odbora za reviziju, koji ima devet članova izabralih iz reda narodnih poslanika, određen je članovima 67 i 68 Poslovnika Narodne skupštine Republike Srpske. Tu je definisano da Odbor za reviziju, između ostalog: razmatra izvještaje po obavljenim revizijama Glavne službe za reviziju budžetskih i drugih pravnih lica; razmatra godišnje planove za reviziju; daje inicijativu za profesionalne ocjene rada Glavne službe za reviziju i razmatra izvještaje o izvršenoj profesionalnoj ocjeni. Odbor, takođe, ima ovlašćenje da zahtijeva od Glavne službe da izvrši posebne revizije (po potrebi), ali i da daje prijedloge Narodnoj skupštini o smanjenju budžeta budžetskih korisnika, na osnovu nalaza i preporuka iz izvještaja o reviziji. Odbor za reviziju upućuje Narodnoj skupštini na razmatranje sve negativne izvještaje Glavne službe za reviziju.

### **3.4. Budžetski i računovodstveni sistem i organizacija izvršne vlasti**

Još jedan od faktora koji može značajno da utiče na odnos, to jest, na razumijevanje između VRI i parlamentarnog odbora je uspostavljeni budžetski i računovodstveni sistem. Tamo gdje se računovodstveni sistem javnog sektora zasniva na gotovinskom principu, fokus revizije i pažnja zainteresovanih strana će, uslijed prirode i strukture finansijskih izvještaja, biti usmjeren na izvršenje budžete. To može dovesti do potpuno različitih zaključaka i uopšte pristupa reviziji i rezultatima revizije u odnosu na to kada je računovodstveni (i budžetski) sistem uspostavljen po obračunskom principu. Takođe, mogu se razlikovati sistemi u kojima je budžetiranje i finansiranje bazirano na više budžetskih/programske linija ili kada se određeni projekti planiraju, prate i izvršavaju izvan redovnog godišnjeg budžeta. Ipak, ne bi trebalo svu pažnju usmjeriti na posmatranje finansijskih izvještaja iz ugla njihovih korisnika, već i iz ugla subjekata koji moraju da pripreme ponekad veoma kompleksne izvještaje. Kako pokazuju neka istraživanja (Chychla i Leone i Minutti-Meza 2019, 230) složena računovodstvena pravila za pripremu finansijskih izveštaja i finansijski izvještaji sa složenijim računovodstvenim statkama imaju relativno veću kompleksnost, što povećava potrebu za većom računovodstvenom ekspertizom u odborima za reviziju.

Sve ovo, iako ne utiče direktno na uspostavljen i na zakonu zasnovani odnos VRI i parlamenta, imaće indirekstan uticaj na komunikaciju VRI i parlamenta, odnosno parlamentarnog odbora, tako što će se neminovnom promjenom vrste i forme revizorskog izvještaja, mijenjati i zahtjevi koji se postavljaju pred članove parlamentarnog odbora zaduženog za eksternu reviziju. U dugom roku, može izostati mogućnost poređenja niza revizorskih izvještaja (za pojedine subjekte, sektore ili programe), što politički izabranim predstavnicima, posebno kada je u međuvremenu došlo do promjene u strukturi zakonodavne vlasti, treba da bude dodatno argumentovano. VRI bi trebalo da sve ovo ima u vidu prilikom izrade strategije razvoja i/ili strategije komunikacije, kako bi na najbolji mogući način odgovorila izazovima koje može predstavljati evolucijska dinamika u budžetskom ili računovodstvenom sistemu.

Organizacija izvršne vlasti, tamo gdje VRI ne izvještava parlament samo kroz jedan godišnji izvještaj, nego dostavlja svaki pojedinačni izvještaj o reviziji, može predstavljati komunikacijski izazov zbog toga što su pojedini akteri izvršne vlasti (npr. agencije) autonomni u izvještavanju i direktno odgovorni parlamentu. U tim okolnostima, u trouglu odgovornosti (Slika 1) nije moguće prepoznati samo jednog učesnika na poziciji izvršne vlasti, već će najvjerojatnije postojati oblici izvještaja i rokovi koji se razlikuju u pogledu

izvještavanja i adresiranja preporuka koje VRI upućuje odgovornim licima. Tako, u Republici Srpskoj postoje razlike u formi i sadržaju revizorskih izvještaja koji se odnose na budžetske korisnike (koji nemaju vlastite račune i imaju ograničen pravni subjektivitet) u odnosu na izvještaje pravnih lica iz javnog sektora koji raspolažu vlastitim izvorima prihoda i time nose veći nivo odgovornosti za donesene odluke.

Takođe, uticaj i osnaživanje revizije učinka može značajno da doprinese promjeni stavova u vezi odgovornosti nosilaca javne vlasti i preporuka revizije. Kako pokazuju novija istraživanja (Parker, Jacobs and Schmitz 2019, 280) rast revizije učinka se nastavlja, ali ne uvijek dosljedno tokom vremena i kroz revizijske jurisdikcije. Uprkos diskursu revizora u vezi sa nastojanjima revizije učinka koje su snažno usmjerene na procjenu ishoda programa, objavljenji izvještaji u prvoj fazi zadržavaju snažan fokus na kontroli. Iako se čini da to odražava neodlučnosti revizora da kritikuje vladinu politiku, ipak postoji naznake direktnih i indirektnih rekurzivnih odnosa koji se pojavljuju između: revizora, parlamentaraca, medija i javnosti.

U svakom slučaju, VRI treba da nastoji da sve članove parlamenta, a naročito predstavnike u parlamentarnom odboru koji je zadužen za eksternu reviziju, uputi u pojedinosti i razlike koje su rezultat razlika u primijenjenom računovodstvenom okviru, tamo gdje se može pretpostaviti da je postojeći deficit odgovornosti u suštini povezan sa računovodstvenim greškama (Chow i Pontoppidan 2019, 22) budžetskom sistemu i sistemu organizacije izvršne vlasti, ali i mogućih vrsta i oblika revizorskih izvještaja.

## ZAKLJUČAK

Da bi se u potpunosti ili u najvećoj mogućoj mjeri ispunila uloga koju vrhovna revizorska institucija (VRI) kao najviši državni organ kontrole upotrebe javnih resursa ima u nekoj zemlji, potrebno je da svi akteri prihvate proaktivnu ulogu u razvoju i primjeni svih raspoloživih komunikacionih alata, kako bi iz njihove profesionalne saradnje proizašla korist za društvo i kako bi se ispunila očekivanja građana.

Ključnu ulogu u ovoj vrsti interakcije imaju predstavnici VRI i parlamentarni odbori odgovorni za eksternu reviziju.

Međunarodnim standardom revizije javnog sektora ISSAI 12 - Princip 5, tačka 1 (INTOSAI 2014), je načelno definisano da VRI treba da budu svjesne očekivanja zainteresovanih strana i da odgovore na njih, po potrebi, blagovremeno i bez ugrožavanja svoje nezavisnosti. Dvosmjerna komunikacija u tom smislu znači da VRI treba da olakša pristup svojim izvještajima svim zainteresovanim stranama i po tom pitanju su već ustanovljene i široko se primjenjuju dobre prakse, kao što su: izrada izvještaja i drugih informacija dostupnih na web-stranici VRI, držanje konferencija za medije, sačinjavanje izvoda iz izvještaja sa najznačajnijim nalazima, publikovanje i podjela godišnjih izvještaja o reviziji, pa do sve prisutnije upotrebe društvenih mreža kao što su Fejsbuk, Triter i sl. U odnosima sa relevantnim zakonodavnim tijelom, odnosno parlamentom ili nadležnim parlamentarnim odborom, VRI treba da razvije dobre, profesionalne i uzajamne odnose kako bi doprinijela boljem razumijevanju revizorskih izvještaja, zaključaka i preporuka i kako bi se osiguralo preduzimanje odgovarajućih mjera. Ovo, u stvari, znači da samo formalno podnošenje izvještaja nadležnom skupštinskom odboru možda neće biti dovoljno za stimulisanje adekvatnog praćenja i pobudivanje efektivne i djelotvorne reakcije. VRI, dakle, treba da učini više, da preduzme inicijativu, kako bi se kroz proaktivan pristup objasnili pozadina i kontekst revizije, naglasili ključni i sistemski nedostaci i stvorile pretpostavke da buduće revizije i revizorski izvještaji rezultiraju preduzetim mjerama u vezi sa njihovim preporukama.

Nadležni skupštinski odbor (ili više njih), sa druge strane, treba da ima u vidu da je odnos između VRI i parlamenta determinisan čitavim nizom faktora, od zakonskih ovlašćenja pa do ličnog odnosa predstavnika VRI i predsjednika parlamentarnog odbora. Da bi se održali efektivni i za opšti interes konstruktivni odnosi, neophodno je da komunikacija sa VRI bude

prilagodljiva i fleksibilna, sa mogućnošću da odgovori na eventualnu promjenu okolnosti. To podrazumijeva kontinuitet u komunikaciji, kako bi se obezbijedilo da parlamentarni odbor stalno prati rad VRI, a da VRI uzima u obzir potrebe ključnih učesnika. Osim toga, samo jake i djelotvorne veze između VRI i parlamenta, bez narušavanja principa nezavisnosti, omogućiće onima koji su zaduženi za upravljanje u javnom sektoru da ispunjavaju svoje odgovornosti, u skladu sa nalazima i preporukama revizije, da se preduzimaju odgovarajuće korektivne mjere, čime se zatvara ciklus odgovornosti i jača integritet državnih i javnih organa.

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## THE IMPORTANCE OF EFFICIENT COMMUNICATIONS OF THE AUDIT INSTITUTION AND PARLIAMENT IN THE ACCOUNTABILITY OF THE EXECUTIVE AUTHORITIES SYSTEM

**Summary:** *The base of the relationship between SAIs and parliaments is the audit reports submitted to parliaments, or parliamentary committees, based on the audit process. Although all Supreme Audit Institutions report to parliaments, there are numerous differences in how, when and how often it is done. Also, there are differences in reporting modalities due to the different parliamentary systems and the structure of the parliaments themselves, the different structures and responsibilities of the Supreme Audit Institution (SAI), its constitutional and historical positions, and many other factors that form the relationship between the SAI and the Parliament. A number of factors have been identified in this paper that can influence the relations of the Supreme Audit Institutions and parliaments, or parliamentary committees, in order to make improvements and promote good practices. Everything in order to contribute to the improvement of management standards, better decision-making, and, consequently, more efficient use of public money. The work was based on publicly available literature, primarily legal and other regulations governing the work of the SAI and the public finance system, using data and information obtained directly from the SAI, and taking into account the requirements of the ISSAI and other relevant standards.*

**Key words:** *audit, public sector, accountability, parliamentary system*

**JEL classification:** *H83*

### INTRODUCTION

In a complex system of public financial accountability, the role of the parliament is to approve the budget to the government, or to entrust the performance of public affairs and the use of public resources to meet a wide range of direct and indirect needs of citizens, to institutions of executive power, and to take care of budget execution, in the name of citizens and users of public services that resources are used intentionally, legally and responsibly, while respecting the principles of efficiency and economy. Namely, there is no one democratic body other than a national parliament that would give legitimacy and that would exercise democratic control over the work of the national government (Bačić 2006, 10). In order to achieve this, members of the parliament, that is, politically elected representatives, should have an objective and fact-based information base on how and how well executive authorities collect and spend public funds. Since parliaments usually do not have the capacity for expert and precise analyzes in controlling the use of public funds by the executive, they rely on the objective and expert opinion of the auditors and thus use the audit reports as a source of reliable information on the accuracy of the financial statements and the use of public resources in a lawful, cost-effective and efficient way. Practice shows that parliaments will use audit reports only if they are understandable, timely and interesting in the political context.

It is clear that the SAI plays an important role in this system of responsibility between the parliament as legislature and government as the executive, but also externally - towards citizens and users of public services. As public sector auditors, they provide independent, objective information on the reliability of financial reports, individual, compiled or consolidated (Santis, Grossi and Bisogno 2018, 231), purposeful use of assets, the protection of assets and resources entrusted to management, compliance with the law and other regulations, the application of standards and principles of good practice in terms of effective, efficient and economical spending of public money, through the reports to the parliament (and other interested parties).

## 1. EXPECTATIONS FROM PUBLIC SECTOR AUDITORS

Simplifying, it can be said that the main reason why the SAI exists is to provide reliable and credible information to stakeholders in the public interest. Because of this, the SAI is positioned as one of the instruments of parliamentary supervision, independent of the executive, but also to a large extent separated from the judicial authorities and law enforcement institutions. The relationship between the SAI and the parliament and the government is most often presented in the simplest way by accountability triangle (Illustration 1).

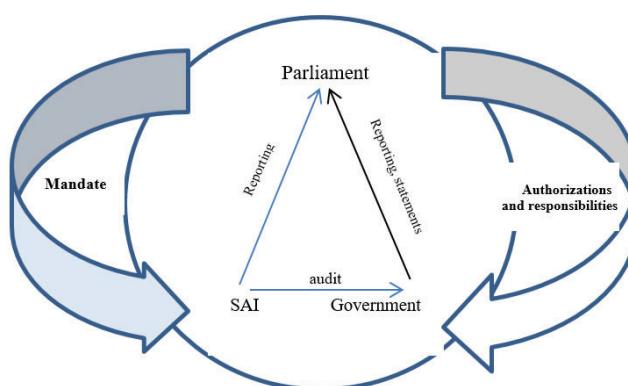


Illustration 1. „The Accountability Triangle“ relation between SAI and parliament  
( Author's)

In the relations between the parliament and the executive, important problems lie in the so-called "political will" in ensuring the equality of citizens and everyone else by the law. At the center of the formation of such political will, there is a problem of democratic control over the bearers (executive, that is, the actual) of the authorities, or its political responsibility. (Smerdel 2012, 25) Accordingly, the SAI within the "accountability triangle" should develop modalities and find ways to best fulfill its function in relation to other actors in public finance management systems, all taking into account the requirements of the ISSAI and other standards that set SAIs for professional work. Public sector auditors must have continuous cooperation with their parliaments (through a parliament committee) to witness their expectations and to make sure that elected representatives understand and accept the role of the SAI and how they can benefit from its work.

The basic principles for the work of supreme audit institutions that set the prerequisite for the independence of public sector auditing institutions are contained in ISSAI 1 - The Lima Declaration of Guidelines on Auditing Precepts and the ISSAI 10 - the Mexican Declaration on SAI Independence (INTOSAI 2014).

The Lima Declaration which was adopted by delegates in 1977, had a decisive impact on the development of the audit of public institutions in the context of each country individually and set the basic expectations for the long-standing SAI relationship with parliaments. According to the Lima Declaration, the establishment of a public sector audit and the concept of auditing itself are inseparable from the management of public finances, since the management of public funds represents a committed obligation. It should be borne in mind that public sector funds are those controlled by the state and which are used for the production of goods or the provision of services for public use, therefore is not only the budgetary funds. The principles that apply to the valuation of public sector funds are essentially the same that apply to private sector funds valuation (Ćurić and Babić 2017, 86).

Audit is not an end in itself, it is part of a wider regulatory system, in the function of parliamentary supervision, whose objective is to disclose deviations from established standards and violations of the principles of legality, effectiveness, economy and efficiency in the management of public funds, in order to enable the corrective measures taken in individual cases. In the Lima Declaration, Part VI, Section 16, it is clearly stated (INTOSAI 2014): „The Supreme Audit Institution shall be empowered and required by the Constitution to report its findings annually and independently to Parliament or any other responsible public body; this report shall be published. In addition, the SAI will be empowered to report on particularly important and significant findings during the year.

After several decades of establishing the basic principles for the work of supreme audit institutions, the 2007 Mexican Declaration of Independence was adopted, in which, *inter alia*, SAIs submit their reports to the Legislature, one of its commissions, or the auditee's governing board (depending on the particular case) for review and follow-up on specific recommendations given for the implementation of corrective action. This obligation to submit a report on monitoring the implementation of the recommendation for consideration by the parliament, to be done by one of its committees, is present in cases where the SAI has their own statutory power for follow-up and sanctions - ISSAI 10, Principle 7 (INTOSAI 2014).

All this points to the need for well-coordinated and tightly "linked" cooperation and communication between the supreme audit institution and parliament, and the constitution and legislative framework of each country, and ISSAI 1 and ISSAI 10, represent the context for this key relationship. The International Standards of Supreme Audit Institutions (ISSAI) have been elaborated in more detail, providing additional guidance on the various aspects of this relationship and the expectations set by the SAI in developing and maintaining relations with the parliament (and others interested parties). Standards also set expectations about the quality of information reported to Parliament, indicating that the information provided must be relevant, objective and timely. Audit reports should highlight topics, common findings, trends, causes and recommendations, and whenever possible, the guidance of good practice is encouraged - ISSAI 12, Principle 3 (INTOSAI 2014).

### **1.1. Reporting Parliament - the basis of all relations**

The basics of all relations between the SAI and parliaments are audit reports. Although all European SAIs report to parliaments, there are significant differences in when, how and how often to work. Principle 6 of the Mexican Declaration emphasized the independence of the SAI to decide on the content and timing of the publication and transmission of the audit report, except where specific requirements for the implementation of the law were prescribed. The legislative authority prescribes minimum reporting requirements, and the SAI is free to make observations and make recommendations regarding the audit, taking into account, where appropriate, viewing the subject of the audit. The SAIs may take into account the specific requirements for conducting the audit on the proposal of the parliament or parliamentary committees/commissions or the government. In addition, comparative research in economies such as in the UK and Germany shows (Elbakrya and Nwachukwub and

Abdouc and Elshandidy 2017, 24): it might be postulate that the transition to the new international reporting system introduced some ambiguity in the measurement of accounting data and legislation designed to bring local rules into line with international standards. Consequently, the impact of the new EU reporting directives on managerial incentives and legal and institutional arrangements in member states is an issue worthy of attention in further research.

Thus, the various legal solutions and space that ISSAI allow for the freedom of the SAI in deciding on the content and timing of sending and publishing the audit reports have led to different solutions in practice, so that the application of these principles varies from country to country. Some of the best practices that apply when submitting a report to a parliament are:

- submitting reports to Parliament and publishing them at the same time;
- distribution of reports to all relevant bodies (committees and commissions) within the parliament;
- presentations or short extracts from the reports for the needs of parliamentary committees;
- use of press releases to highlight important parts / findings in the report;
- periodically reviewing thematic reports (or more) on sectoral parliamentary committees, not just on the audit or budget committee.

How in carrying out their mission, the SAI ensures that their work adds value and has a social impact, amongst others, ISSAI 12 (INTOSAI 2014): "The Value and Benefits of Supreme Audit Institutions –making a difference to the lives of citizens" gives fairly authoritative guidance on this issue. The SAI can demonstrate its relevance with an adequate response to current social issues, citizen challenges, the expectations of various stakeholders, and the emerging risks and changes in the environment in which audits are carried out. Furthermore, it is important that SAIs have continuity, understanding of developments in the wider public sector and to maintain meaningful and effective dialogue with stakeholders on how the audit work and reports can contribute to the development of the public sector, making better strategic and operational parliamentary decisions, improving financial discipline and monitoring the results and effects of individual program measures. When such communication is established, this allows the SAI to be a credible source of information for parliament, or to provide an independent and objective insight, supporting useful public sector changes.

In that sense, ISSAI 12 out: Principle 5 - Being responsive to changing environments and emerging risks, Principle 6 - Communicating effectively with stakeholders and Principle 7 - Being a credible source of independent and objective insight and guidance to support beneficial change in the public sector; describes it the clear expectations of the SAI that, as an active partner in the "responsibility triangle", must ensure that its work is recognized as relevant, which includes the efforts of the SAI to:

- Be aware of the expectations of stakeholders and respond adequately to these expectations;
- Provide answers to key issues that are in the focus of socio-economic events and take them into account when developing their work program;
- Assess the changing and emerging risks in the audit environment and respond promptly to them;
- Ensure that the expectations of stakeholders and the risks inherent in need are included in the strategic and operational audit plans;
- Consider and appreciate the views of stakeholders in the process of planning auditing activities, but without jeopardizing independence;
- After each audit cycle, assess whether key actors (stakeholders) have confidence that the SAI is effective and contributes to overall improvements in the public sector.

While it is important that the SAI freely and independently develops the program and determines the work plan, simultaneously communication and engagement with the parliament and other actors is essential.

Some research (Vivian and Maroun 2019, 44) supports the view that the accounting profession, as an integral part of the capital market system, exerts pressure to drive standardisation of financialised accounting practices both public and private sector. In contrast, the government's agencies support accounting systems aligned with conventional accountability principles aligned with jurisdiction-specific contexts. The interaction of these opposing perspectives is a primary determinant of change in accounting practice in the public sector space, which is determined by the term: new public management. However, contradictory conclusions about the effects of this "new public management" are (Stecoloni 2019, 255): „NPM may have represented a golden age, but also a “golden cage”.

## **1.2. Communication and understanding of the role and work of the SAI**

In order to support and enhance accountability mechanisms, all SAIs in contemporary democracies within their mandates go far beyond delivering audit reports to parliaments by taking initiatives to establish better and more effective relations with parliamentary committees through raising awareness of the role of the SAI and providing assistance in understanding audit reports. These activities to improve communication also seek to increase the attention of parliaments and to focus on SAI reports, but also to influence public awareness in demanding accountability from government and public sector entities. Although it should be kept in mind also the so-called „the Paradoxes of accountable management in the Public Sector“ (Humphrey and Miller and Scapens 1993, 14), it is a fact that when often be used efficiency controles (Duvnjak 2018), different performance indicators for value for money, inspections or audits, conditions are increasing and creating public pressure for more responsible management of public money.

There are a number of activities that constitute good practices that the SAI adopted and applied in communicating with the parliament, among which are:

- Holding regular meetings, supplemented by informal contacts at the operational level;
- Adjustment of the agenda and schedule of reporting;
- Interviews and public hearings of responsible persons on issues from the audit report;
- Organizing conferences, round tables and workshops for members of the palace, but also for other interested participants;
- Negotiating a memorandum of understanding and establishing procedures for cooperation;
- Adopting a communication strategy and establishing mutually compatible communication policies;
- Improving understanding through the temporary transfer of staff to practical work from one institution to another.

All of this can contribute to discussions in the direction of improvement in the public sector, without jeopardizing the independence of the SAI. The extent to which the SAI is able to trigger changes in the lives of citizens depends on the SAI, and this can be illustrated in the following way (Illustration 2).

Audit quality improves financial reporting quality by increasing the credibility of the financial reports. Thus, audit quality is a component of financial reporting quality (DeFond and Zhang 2014, 276), which is applicable to both private companies and public sector entities.

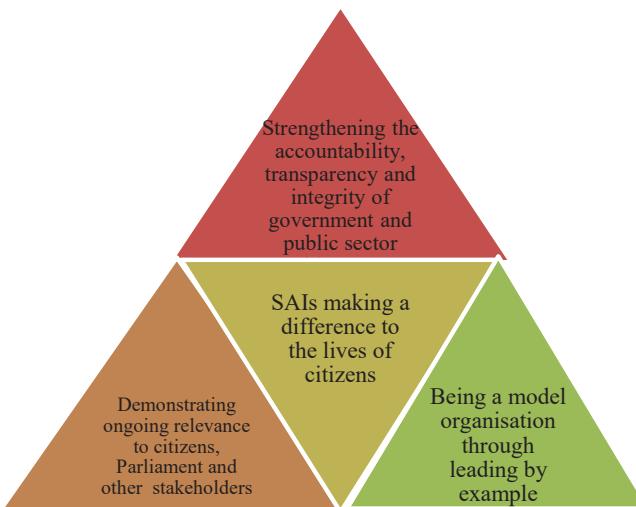


Illustration 2. The three goals the SAI for change in the lives of citizens  
(ISSAI 12 - The Value and Benefits of SAI –making a difference to the lives of citizens)

## 2. EXPECTATIONS FROM THE PARLIAMENT

### 2.1. Modalities of parliamentary supervision

The Parliament has a unified constitutional function of supervision. Parliamentary oversight is a means by which the elected representatives, on behalf of the people, call on the government to be held accountable. Also, parliaments are those who, by adopting laws, define the accounting framework and reporting standards. As shown earlier studies (Bartorneu and Magee 2015, 285) final standards emerge from a process of political compromise, which may not benefit unorganized interest groups or groups whose interest lies in the minority. Implementing disclosure rules is mandatory for all publicly traded firms, and a public firm cannot opt out and write its own rules even if doing so is in the best interest of its shareholders.

Given that there are specificities in the organization of the parliaments itself, the types of parliamentary supervisions of public finances are also distinguished, which is carried out with the help of audit reports and information presented by the SAI. Some parliaments directly deal with the work and reports of the SAI, while others relate to the relevant parliamentary committee. In the Republika Srpska it is the Audit Committee, in Republica Serbia is the Committee for finance, the Republic budget and the control of public expenditure of public funds consisting by subcommittees (Sub-Committee for Consideration of SAI's Reports). The formation of a special parliamentary committee in charge of auditing allows for more concrete and efficient cooperation with SAIs, engagement of specialist assistance and timely response to audit findings, while on the other hand, the relationship with the SAI through a wider committee such as the Budget and Public Finance Committee the parliament deals with auditors' reports not only when they are emerging, but also when budget is being made, because such a parliamentary committee responsible for the work of the SAI is directly involved in the process of budget approval, and so the attention and interest is as different from the board that is in charge only for the SAI's operation.

In parliaments consisting of two chambers, they increasingly apply to joint sessions of committees of both chambers, when discussing audit reports and reports on the work of the SAI. In most of the European SAIs, it is becoming increasingly important for the audit reports to be submitted to the relevant audit committee, but also to the relevant sectoral committee for

consideration (for example, the Committee on Social Affairs, Health, Education, Defense, etc.) before the plenary session. This is especially emphasized and is considered to be a good practice for performance audit reports on a specific area/sector or social problem. In Sweden, sectoral or subject committees exclusively dealing with its specifically reports of SAIs, and there is no one specialized parliamentary committee (for audit). In the UK, there are increasingly loud demands for strengthening parliamentary control. Committees could be more effective if they were more selective, but also more systematic in their approach to pre-appointment scrutiny (Hazzel 2019, 225) of the the most senior public officials.

It is clear that there is no model of parliamentary work that is the best, or to suit everyone, but all depends on the size of the parliament, the structure and efficiency of parliamentary committees, the possibility of establishing subcommittees, the possibility of joint work of several parliamentary committees, as well as the interest of parliament members participate in the work of the committee or in a plenary session on matters relating to audit reports and work of the SAI.

## **2.2. Parliamentary committees/commissions dealing with audit reports**

Building on the basic principles defined by the Lima and Mexico Declarations, the ISSAI framework emphasizes and expresses the expectation that the SAI will develop effective relations and lines of communication with Parliament and its committees/commissions. In ISSAI 12 - "The Value and Benefits of SAI –making a difference to the lives of citizens " - Principle 3, Item 2 (INTOSAI 2014), the SAI should, in accordance with its mandate, submit to Parliament and its committees/commissions, the management/boards of audited institutions relevant, objective and timely information.

In addition, the SAI on objective information should report in a simple and clear way, using a language understood by all participants. In practice, this means that elected representatives who in parliament and parliamentary committees represent the will of the voters will use audit reports only if they are timely, but above all understandable, and interesting in the political context.

Clear expectations from the SAI, or what is considered relevant information, are not precise, but usually include activities that enable the SAI to be aware of the expectations of stakeholders and to respond to these expectations, and in developing their own work programs, they should be able to offer an answer to key issues of impact on society.

The Parliaments in all countries have some kind of discretion about how they engage in relations with the SAI, as previously mentioned. One of the modalities is the formation of a parliamentary committee or commission that is in charge of external audit and for dealing with reports submitted by the SAI. The form, structure and scope of work of individual committees is governed by regulations at the national level (including constitutional and legal provisions, parliamentary rules, regulations and procedures), as there is no binding international or European convention governing this issue. From the above, it follows that, in systems where such special parliamentary committees are formed, it is essential for the effective work of the SAI, besides to its own independence: what powers have the parliamentary committee in charge of external audit and how the committee deals with information received from the SAI.

In this context, always taking into account that the principle of independence of the SAI is not questioned, by clear communication with the parliamentary committee in charge of the audit, the SAI provides that parliamentary expectations and opinions on important social issues are present, considered and (in accordance with the possibilities) while on the other hand it is possible for parliamentary representatives to understand the challenges that the SAI faces, taking into account available resources and legal obligations.

The formal legal, and also the obligation of parliamentary committees, is to consider audit reports, while ensuring that, through formal mechanisms, the government's work on the

management of public resources is controlled and directed. Another important element of this mechanism is that the parliamentary committees that are in charge of external audit consider all submitted reports with due care, thus contributing to the sound functioning of the public accountability system. For the exercise of these statutory rights and privileges by the parliamentary committees in charge of external audit, their human resources are essential in order to make good use of the information provided by the SAI through its reports and in order to contribute to the effective function of supervision and accountability of the Parliament as a whole.

It is important to keep in mind that parliaments, and therefore parliamentary committees, are formed after parliamentary elections are conducted, according to electoral cycles, which in practice means that the structure of the committees changes within a maximum of four to five years. In addition to the experience of developed parliamentary democracies and the various guidelines that are periodically referred to as recommendations to countries that are striving to join the European Union, they emphasize that the Parliamentary Audit Committee is expected to work in an impartial manner and besides to inform the Parliament about audit findings as a whole, there are also some formal suggestions/recommendations that parliamentary committees should meet, which are:

- have at least five members (up to a maximum of 11);
- that the chair of the committee be from the opposition parties,
- have a clear mandate and authority to ensure the implementation of the audit recommendations,
- to use auditors (ie SAIs) as an expert advisor in all of their discussions, and in particular when interrogating responsible persons in institutions of executive power,
- have adequate resources, including competent staff with appropriate training and skills to understand audit reports,
- to ensure that SAI reports, including all key findings and recommendations, are prepared on time and as such presented to the Parliament together with the conclusions of the committee.

The second essential issue for the SAI, where a parliamentary committee responsible for external audit is established, is how the committee deals with the information it receives from the SAI.

### **3. IMPORTANT FACTORS FOR THE SAI AND PARLIAMENT RELATIONS**

Although the roles and scope of the work of supreme audit institutions and parliamentary committees responsible for auditing and/or public finance are usually well-defined by law and the constitution, there are many factors that can influence the interaction of SAIs and parliamentary committees more or less effective and efficient. Some of these factors that form the relationship between the SAI and relevant parliamentary committees are: the historical and constitutional background of the SAI, the parliamentary system and electoral cycles, the budgetary and accounting system, and even the development of the non-governmental sector. SAIs are expected to provide high quality audit reports, that is, reports that are professional, standardized, but also credible, relevant, to add value and have an impact, both through reporting on what happened, but also through identifying the area where improvements can be made by promoting good practice. In this way, the public sector audit should contribute to better governance and decision-making in the area of public finances and more efficient use of public money. On the other hand, parliaments and parliamentary committees will use reports „produced by“ the SAI in a political context, relying on the expert's expertise in supervising the spending of public money by the executive, but only when those reports are understandable, interesting and on time.

The Supreme Audit Institution is here to provide security and additional information on the reliability of financial reports, the purpose and efficiency of using public resources and other

issues depending on the legal mandate, and the parliament or the relevant parliamentary committee to route the work of the government and other executive bodies through directional and binding decisions about the control of the use of public funds. Consequently, it follows that it is necessary that the cooperation and the link between the SAI and the relevant parliamentary committees be good, efficient and timely. It is important, however, to take into account both international standards and contextual factors, as well as good practices and examples of effective relations between relevant parliamentary committees and SAIs in individual countries.

### **3.1. Organizational models and SAI mandate**

Although most of the SAIs follow a unique framework set by the ISSAI, there are still many differences in the model of organization, but also in the defined SAI mandate in some countries. Each SAI developed within the legal, political and cultural traditions of a particular country, relying on experiences and practices derived from such a tradition and contextual framework. However, most of the SAI belongs to one of three models, which are:

- Monocratic or Anglo-Saxonic model (office model),
- Judicial or Napoleonic model and
- Committee or collegium model.

In a monocratic model, the institution is generally run by one manager, the general or the chief auditor. In order to make this model successful and efficient, the SAI should have good cooperation with the parliament. In some systems (as is the case in the UK), the auditor general is a parliamentary official, which implies and in itself involves a close connection with the parliament. The SAIs in this model are mainly focused on financial audits, including the audit of the legality of operations to the extent that it affects the financial statements, and an performance audit is increasingly being developed. According to certain legal solutions, the SAI of this model is obliged to deliver certain findings/reports to the prosecuting authorities, but in general, these SAIs have no power to initiate sanctions against public officials. According to some legal solutions, as in the case of Bosnia and Herzegovina, the parliamentary committee has a mechanism to propose the reduction of the budget of the institution where significant irregularities have been identified, and whether it will accept such a proposal depends on the parliament. The structure of professional staff (auditors) is primarily financial and accounting. The work of SAI organized according to the office model has a greater impact only when Parliament is actively interested in the work of public sector auditors and when it uses it to consider the usage of public resources by the executive, which implies strong parliamentary control. The Supreme Audit Institutions in Bosnia and Herzegovina are organized according to the office model, which are: The Supreme Office for the Public Sector Audit of the Republic Srpska and the Audit Office of the Institutions of the Federation of Bosnia and Herzegovina, which, by territorial and functional principle, have competencies at entity's levels and submit reports to the National Assembly of Republika Srpska, ie the Parliament of the Federation of BiH, as well as the relevant municipal, city and cantonal parliaments; then the Audit Office at the BiH level and the Audit Office of the Brčko District, which in their mandate have an obligation to audit entities of a certain institutional level and submit reports to the competent parliament. According to the office model, SAIs are organized in Croatia and North Macedonia, and the significant features of this model are also the SAI of the Republic of Slovenia.

In the judicial model, the SAI functions according to the principles of the court, members have a status similar to judges in the judiciary, and professional staff has a primary legal background. The audits by these organized SAIs was historically and contextually focused on verifying and evaluating the legality of the transactions carried out that result in financial accounts. With their SAI judgments, they assess the legality of public accountants' work, they can impose sanctions to a certain level, but most of the SAIs and this model have a mandate

that includes financial auditing and performance audit, and reporting on system issues. This model has SAIs: France, Belgium, Spain, Portugal, Italy, Greece and Turkey.

The model of the board (collegium) means the auditing institution manages by the collegium, committee or group of general auditors of the same rank. In some countries, committee members have similar status as judges in the courts (for example: Germany, Moldova), although this is not the rule, since some SAIs have been developed according to the board model but in the context of financial audit, which is appropriate for the office model, legal background similar to the judicial model (eg in Luxembourg or the Netherlands). One of such auditing institutions is the European Court of Auditors, which acts as a collegial body composed of 28 members, one from each EU Member State. Also, this type of SAI is represented in Serbia, Montenegro, Romania, the Czech Republic, Slovakia, and in some other European countries where the model can not be uniquely categorized (eg in Sweden). Namely, these three groups (models) are not completely homogenous, and some SAIs are not easy to position only in one group, since they have more than one characteristic of a model, while some SAIs have evolved from one model to another.

The mandate of the SAI is often closely linked to the organization (model) of the SAI, but also the tradition and the cultural and historical context of the country play an important role in whether the audit approach is primarily financial or legal, and what are the connections and relations with the parliament. However, as accounting and auditing standards become more and more formalized and internationally uniform, it is possible to identify in almost all forms of the SAI: financial audits, compliance audits and performance audits. Thus, the SAI with a judicial role still has the power to assess and sanction the legality of transactions, however their mandate is legally defined or extended to financial audits and performance audits. On the other hand, SAIs that are organised on the office model or the committee model do not have a judicial role in determining the legality of transactions, but in accordance with relevant standards and legal solutions, they implement a certain level of compliance audit in order to provide information on whether the audited entities were complied with the relevant legal regulations during the execution of financial transactions. In some countries, such as Serbia and Montenegro, there are specific responsibilities for which the SAI submits charges and/or pronounces measures, in case of non-compliance at the certain level.

In addition to the mandate originally derived from the SAI's model of organization and through this model of authority, an important element in considering the audit mandate lies in the roles of public entities that are within the SAI's competence. All SAIs carry out audits of financial reports, public accounts and the usage resources of the so-called "central government" and submit a report to the State Parliament. However, the SAI has a different mandate or degree of involvement in audits of regional and local administrations, municipalities, public companies, independent agencies, financial institutions and other public bodies. It should be borne in mind that (Heald and Steal 2018, 151): Those with responsibility for the governance of particular public bodies have not only to deal with conflicting expectations but also with possible misalignment of their statutory obligations with the policy preferences of their current Ministers. For example, SAIs in the Republika Srpska and the Federation of BiH have competence for all levels of government (entity, municipalities, cities, cantons) and for public companies and all other public bodies, so the SAI, when auditing these entities, must communicate with local parliaments which adds the level of complexity to the audit work itself. On the other hand, the SAI for institutions at the BiH level does not have such kind of complexity of work, given by structure of subjects (only state level) and so communicate with only one parliament.

### **3.2. Legal framework for reporting to parliaments**

Given their constitutional or legal role, all SAIs report to the parliaments. The audit reports are usually submitted to the parliament (parliamentary committee) at the same time as the

auditee, so that, in fulfilling its parliamentary supervision function, the SAI allows the audit findings to be considered timely and within the competent sector. In some cases (UK example), the audit report was addressed to a auditee that is required to submit a SAI report together with the financial report to the parliament. The number, type and nature of reports submitted by the SAI to parliaments varies from state to state. Some SAIs submit to the Parliament an annual report summarizing the findings from a series of audits (by subject and by type of audit), while others submit to the Parliament all reports on individual audits (by entities, types of audits or topics). Accordingly, both the nature and intensity of the relationship between the SAI and the parliament will reflect, to a certain extent, the manner in which the parliament is informed.

In some countries, as is the case in the UK, auditors are now statutorily required to continuously review their relationships with clients for any evidence of ‘suspicious activity’ which, if identified, must be reported, and this newly established quasi-policing role is at odds with the traditional nature of the auditor-client relationship (Norton 2018, 61). The point is that auditors may become fixated on generating indicators of best practice and bureaucratic compliance rather than focusing on exercising substantive judgement (Norton 2018, 62).

The Supreme Office of the Republic Srpska Public Sector Audit (SAI RS) shall submit each individual audit report to the auditee and to the parliamentary committee (as well as to certain other beneficiaries, as defined by law) and, with the report on the audit of the government consolidated annual report on the execution of the budget of the Republic, an audit report listing the most important findings and recommendations from the financial audit, performance audit and special audits. Also, the SAI RS is obliged to submit to the parliamentary committee an annual activity report, which includes information on the the SAIs operations as public sector institutions when compiling its financial statements for the fiscal year. In this way, it has been ensured that the parliament is timely, clearly and continuously informed about all individual audits, summarized with the most important information on all audits within a year (with the most important findings, recommendations, types of opinions, number and structure of implemented recommendations, etc.), as well as annually about the work of the audit institution, resources, results and budget.

### **3.3. The role of the parliamentary committee in determining the work program of the SAI**

A significant factor for routing the relationship between the SAI and the parliament is the scope of the right, ie the ability of parliament to influence or determine the annual work program of SAIs. In most countries, this mandate is defined by law, in terms of the ability of parliament to ask the SAI to include certain issues, topics or subjects in the annual audit program. In some countries the SAI is obliged to accept the request of the parliamentary committee, although the number of audit engagements that can be made at the request is limited in order to protect the independence and avoid overload (for example: in Austria, the SAI can accept up to three requests, and the SAI Portugal with up to two requests per year, while in Bulgaria that is five applications per year). The Parliament of Slovenia has the opportunity to submit audit requests from which the SAI has to consider at least five (at least two on the proposal of the opposition), although the final decision on accepting such requests is left to the SAI. Even where there are no statutory liability, the SAI should make suggestions or requests from the Parliament and other interested parties to consider them and then independently decide to incorporate such audits into the annual plan. An important part of a good communication strategy is that the SAI provides an explanation to the relevant parliamentary committee on the possibility that certain requirements may be included or not in the audit plan.

In principle, SAIs have a completely discretion in determining the subjects or topics they will deal with, with certain exceptions such as:

- Statutory definition of mandatory audits (in the Republika Srpska it is defined by the Public Sector Audit Act),
- The possibility for the SAI to carry out a number of audits on a parliamentary request, which will be specifically funded outside the regular annual budget.

Some SAIs, although they have no legal obligation, are actively seeking and collecting proposals for audit and audit topics. Bearing in mind the principle of independence as a fundamental postulate to the existence and operation of each audit, the SAIs need to be free from directives or interferences by the parliament, and in particular by executive authorities in the programming process, audit planning and audit topics selection and in planning and implementation of individual audit engagements, reporting and follow-up of recommendations. At the same time, SAIs can, and often it is part of, good practice, adapt their plans to specific requirements for the audit of certain areas or topics, taking into account the overall benefit, the expectations of the interested parties.

In the Republika Srpska, the work of the parliamentary audit committee, which has nine members elected from the ranks of the deputies, is defined in Articles 67 and 68 of the Rules of Procedure of the National Assembly of Republika Srpska. It is defined that the Audit committee, *inter alia*, considers the Supreme Audit Office's audit reports of the budget and other legal entities; consider annual audit plans; gives an initiative for the professional appraisal of the work of the Auditor General and reviews reports on the performed professional judgment. The Committee also has the authority to require to carry out special audits (as appropriate), but also to make proposals to the National Assembly to reduce the budget of auditee based on findings and recommendations from the audit report. The Audit Committee shall refer the National Assembly to consideration of any negative reports of the Supreme Audit Office.

### **3.4. Budget and accounting system and organization of government**

Another factor that may have a significant impact on the relationship, that is, an understanding between the SAI and the parliamentary committee has a form of the established budgetary and accounting system. Where the public sector accounting system is cash based, the focus of the audit and attention of the interested parties will, by virtue of the nature and structure of the financial statements, be directed towards execution of the budget. This can lead to completely different conclusions and general approaches to auditing and audit results when compared to the accrual based accounting system (and the budget system). Also, systems in which budgeting and funding are based on multiple budget/program lines may differ, or when certain projects are planned, monitored and executed outside the regular annual budget. However, one should not focus all the attention on viewing financial reports from the perspective of their users, but also from the perspective of subjects who have to prepare sometimes very complex reports. As some research shows (Chychyla, Leone and Minutti-Meza 2019, 230) complex accounting rules for the preparation of financial statements and financial reports with more complex accounting items have relatively greater complexity, that is, increases the need for greater accounting expertise in audit committees.

All this, although not directly affecting the established and the law-based relationship between the SAI and the parliament, will have an indirect impact on the communication of the SAI and the parliament, ie the parliamentary committee, by inevitably altering the type and form of the audit report, changing the requirements that are put forward members of the parliamentary committee in charge of external auditing. In the long run, there may be no possibility of comparing a series of audit reports (for particular subjects, sectors or programs), which should be further argued for the politically elected representatives, especially when there has been a change in the legislative structure. The SAI should keep this in mind when developing a strategy of development and/or communication strategy to respond to the

challenges that may be evolutionary dynamics in the budget or accounting system in the best possible way.

The organization of governments and the executive authority, where the SAI does not report to parliament only through an annual report, but submits each individual audit report, can be a communication challenge because individual actors in the executive branch (eg agencies) are autonomous in reporting and directly accountable to the parliament. Under these circumstances, in a triangle of responsibilities (Illustration 1) it is not possible to identify only one participant in the position of the executive, but most likely there will be forms of reports and deadlines that differ in terms of reporting and addressing recommendations made by the SAI to the responsible persons. Thus, in the Republika Srpska, there are differences in the form and content of audit reports pertaining to budget users (who do not have their own accounts and have limited legal personality) in relation to reports from public sector entities that have their own sources of income and therefore carry a higher level of responsibility for the decisions made.

Also, the impact and strength of the performance audit can significantly contribute to changing attitudes regarding public accountability and audit recommendations. As recent research shows (Parker, Jacobs and Schmitz 2019, 280), the growth of the performance audits is continued but not always consistently over time and through audit jurisdictions. Despite auditor discourse on performance auditing efforts that are strongly geared to evaluating program outcomes, the first stage reports keep a strong focus on control. Although it seems to reflect the discretion of auditors to criticize government policy, there are indications of direct and indirect recursive relationships that arise between auditors, parliamentarians, the media and the public.

In any case, the SAI should endeavor to ensure that all members of parliament, and in particular the representatives of the parliamentary committee responsible for external audit, refer that the details and differences that result from differences in the applied accounting framework, when logic assumed that existing accountability deficits were intrinsically linked to accounting failures (Chow and Pontoppidan 2019, 22), the budgetary system and the system of government management, affects to possible types and forms of audit reports.

## CONCLUSION

In order to fully complete or to the fullest extent fullfil the role of the Supreme Audit Institution (SAI) as the highest public authority for controlling the use of public resources in an state, it is necessary for all actors to take a proactive role in the development and application of all available communication tools, they would benefit from their professional co-operation for the society and to meet citizens' expectations. The key role in this type of interaction is with representatives of SAIs and parliamentary committees responsible for external auditing.

By ISSAI 12 - Principle 5, Paragraph 1 (INTOSAI 2014) is generally defined as requiring the SAI to be aware of the expectations of stakeholders and to respond to them, if necessary, in a timely manner and without jeopardizing their independence. Two-way communication in this sense means that the SAI should facilitate access to its reports to all stakeholders, and good practices are already being established and widely applied in this respect, such as: making reports and other information available on the SAI website, holding conferences for the media, making summaries from the most important findings, publishing and dividing the annual audit reports, and to the increasingly present use of social networks such as Facebook, Twiter and others. In relations with the relevant legislative body, ie the parliament or the competent parliamentary committee, the SAI should develop good, professional and mutual relations to contribute to a better understanding of audit reports, conclusions and recommendations and to ensure that appropriate measures are taken. This in fact means that only formal report submission to the competent parliamentary committee may not be enough

to stimulate adequate monitoring and stimulate effective and effective response. The SAI therefore needs to do more to take the initiative to explain the background and audit context through a proactive approach, highlight key and systemic shortcomings and create the assumption that future audits and audit reports will result in measures taken in relation to their recommendations.

On the other hand, the relevant parliamentary committee (or more) should bear in mind that the relationship between the SAI and the parliament is determined by a whole series of factors, from legal powers, to the personal relationship between the SAI representative and the chairman of the parliamentary committee. In order to maintain an effective and constructive relationship with the general interest, it is essential that communication with the SAI is flexible, with the possibility to respond to a possible change of circumstances. This implies continuity in communication in order to ensure that the parliamentary committee constantly monitors the work of the SAI, and that the SAI takes into account the needs of key participants. In addition, only strong and effective links between SAI and the parliament, without disturbing the principle of independence, will enable those in charge of public sector management to fulfill their responsibilities, in line with findings and recommendations of the audit, to take appropriate corrective measures, thereby closes the cycle of responsibility and strengthens the integrity of state and public bodies.

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## ZNAČAJ I EFEKTI INVESTIRANJA U POZITIVNE POSLOVNE ODNOSE SA KUPCIMA

**Rezime:** Ovim radom pokušali smo da dokažemo da je jedan od osnovnih uzroka pada efikasnosti i efektivnosti poslovanja naših preduzeća upravo u nedovoljnem respektovanju kategorije kupaca, odnosno u nedovoljnim ulaganjima u pozitivne poslovne odnose, što se odražava na loše poslovne rezultate. Naime, na jednoj strani imamo situaciju u kojoj se buduće potrebe i zahtjevi kupaca tako brzo mijenjaju da se kreiraju prije nego što su kupci i svjesni mogućnosti postojanja novih ponuda. Dosadašnje „kozmetičke“ promjene ne prate promjene poslovnog okruženja. One jesu napravile pomake u radu, ali se ništa nije bitno promijenilo u odnosu prema kupcima. Naš osnovni cilj je istražiti i provjeriti subjektivni osjećaj kupaca, u smislu tretmana od strane proizvođača te ukazati na mogućnosti unapređenja odnosa u svrhu donošenja najefikasnijih poslovnih odluka, koje će u konačnici osigurati dugoročnu stabilnu konkurentsku poziciju preduzeća. Kao što smo rekli, cilj ovog istraživačkog rada je da ukaže na važnost kupca u funkciji poslovnog rezultata preduzeća, što presudno može uticati na sudbinu preduzeća, njegovu konkurentsku poziciju i učešće na tržištu, smjer daljeg tehnološkog razvoja, pa čak i na njegov opstanak.

**Ključne reči:** kupci, konkurentnost

**JEL klasifikacija:** D11, D41

### UVOD

Savremeni tržišni uslovi, diktirani drastičnim promjenama poslovnog okruženja, iziskuju od vlasnika i menadžmenta preduzeća značajne napore u cilju uspostavljanja dugoročne stabilnosti i poboljšanja konkurentске pozicije svojih proizvoda. Najkonkurentnije oružje modernog tržišta, svakako, jeste kvalitet proizvoda ili usluga. Međutim, ova karakteristika ne mora da bude i presudna u opredjeljenju kupca. Današnji kupac traži potpunu brigu ne samo do momenta kupovine proizvoda i usluge. U savremenim uslovima poslovanja, podrazumijeva se podrška proizvođača u smislu održavanja, servisiranja, „upgrade“ aktivnosti. Savremeno poslovanje karakteriše izraženo, kontinuirano, dinamično, poslovno okruženje, gdje se nužno javlja potreba za razvijanjem modela, tehnika i alata koji će omogućiti uspješnije i učinkovitije upravljanje preduzećima. Najvažniji opšti ciljevi preduzeća su prije svega profit, rast i razvoj preduzeća. Prema Porteru, osnovni cilj preduzeća nije isključivo maksimiziranje ukupnog prihoda i profita, već i mogućnost da se utičući na uslove poslovanja i ograničenja, kreira i postiže konkurenatska prednost. Ako preduzeće, kako smo već konstatovali, ima za cilj da prihodi i profit održivo rastu, onda to povlači kontinuirano ulaganje u porast konkurentnosti. Činjenica je da se nerijetko dešava da preduzeća, bez obzira na tehnološku prednost, finansijsku moć i slično, gube trku sa konkurentima čije je tržišno učešće manje. U dinamičnom i promjenljivom poslovnom okruženju važno je kupcu pružiti uslugu/proizvod koji nadmašuju njegova očekivanja,

odnosno kreirati njegove potrebe, važno je biti fleksibilan, brzo odgovarati zahtjevima tržišta. Tako nešto zahtijeva kontinuirano ulaganje u vlastito poslovanje, fleksibilnu organizaciju, promociju, inovativnost, alate upravljanja čija upotrebljivost nije upitna.

Izučavajući dostupnu literaturu, možemo zaključiti da ovaj problem sve više zaokuplja pažnju teoretičara, ali i samih praktičara pa stoji zaključak da sistemi upravljanja menadžmentom treba da se sinhronizovano mijenjaju sa proizvodnim procesima te da su promjene neizbjegljive, budući da se kompanije okreću prema klijentima (Wickramasinghe i Chandana 2007, 4-23), što i jeste osnovni ključ za održavanje dugoročne konkurentnosti. Možemo sa visokim stepenom sigurnosti utvrditi da postoji saglasnost među teoretičarima vezano za značaj fokusiranja preduzeća na kupca (Wickramasinghe i Chandana 2007, 205-237).

Iz navedenog možemo zaključiti da osnov problema leži u činjenici da efikasnost poslovanja, odnosno dobra konkurenčna pozicioniranost zavisi od sposobnosti samog preduzeća da u skladu sa brzim promjenama u zahtjevima kupaca i ostalim uslovima tržišta, koriguje i promjeni način razmišljanja vlasnika i uprave u cilju pridobijanja potpune pažnje svojih kupaca. Naravno ovakve promjene iziskuju dodatne napore menadžmenta i svih zaposlenih. Predmet istraživanja ovog rada je pozitivan poslovni odnos sa kupcima, kao osnovni postulat poslovanja od kog se u savremenom poslovnom ambijentu očekuju brzi odgovori na vrlo delikatna pitanja, koja su od krucijalne važnosti za opstanak i razvoj preduzeća. Govorimo o upravljačkom konceptu koji treba odgovoriti na izraženu promjenljivost poslovног okruženja kojim se kontinuirano povećava rizik poslovanja.

## **1. KUPAC KAO OSNOVNI POKRETAČ RASTA I RAZVOJA PREDUZEĆA**

Najveća vrijednost svakog preduzeća su kupci. Stoga je njihovo zadovoljstvo osnovni parametar uspješnog poslovanju preduzeća u budućnosti. Povjerenje i zadovoljstvo su ključni koncepti u razumijevanju dinamike razvoja odnosa između kupca i prodavca (Selnes 1998, 305). Svrha mjerena zadovoljstva kupaca je prilagođavanje preduzeća sve bržim i zahtjevnijim promjenama na tržištu, ali i proaktivno djelovanje na tržištu. Gotovo svaka definicija misije savremenih preduzeća ističe vrhunsku predanost kupcu i njegovom zadovoljstvu, s tim u vezi i osnovni zadatak menadžmenta bi trebao biti da svojom poslovnom kulturom i ličnim primjerom ukaže na važnost zadovoljstva kupca.

Kako definisati pojam zadovoljstvo kupca? Budući da, koristeći proizvod ili uslugu, kupci imaju određena očekivanja, oni konzumacijom percipiraju benefite koje porede sa svojim očekivanjima, i na osnovu toga formiraju osjećaj zadovoljstva. Da bi se došlo do spoznaja o zadovoljstvu kupca, njegovim potrebama i budućim namjerama nameće se potreba mjerjenja tog zadovoljstva. Na taj način preduzeće dolazi do saznanja o iskustvima kupaca sa njihovom ponudom. Mjerjenje zadovoljstva podrazumijeva kontinuirano prikupljanje i analiziranje podataka o ličnom osjećaju kupca, a mjeri se danas savremenim metodama (online upitnici, direktni kontakt - lično, mejlom, putem telefona, društvenih mreža, publikacija, časopisa, baza podataka, itd.) putem anketnih upitnika. Cilj prikupljanja podataka o zadovoljstvu kupaca je što veći odziv kako bi se postigao reprezentativan rezultat, a sa kupcem uspostavio i gradio odnos povjerenja i obostrane zainteresovanosti.

Zadovoljstvo kupaca možemo definisati kao subjektivnu percepciju benefita, odnosno vrijednosti koji mu pruža određeni proizvod ili usluga, odnosno subjektivni osjećaj kupca o koristi koja mu se vraća za cijenu koju je platio. Zadovoljstvo proizvodom nadgrađuje se zadovoljstvom međusobnog odnosa kupca i preduzeća, čime se gradi obostrano povjerenje i lojalnost. Iskustva kupca stečena korišćenjem nekog proizvoda ili usluge ponekad mogu nadmašiti kupčeva očekivanja pa govorimo o zadovoljstvu kupca. Takva iskustva vode do lojalnosti prema proizvodu, odnosno preduzeću ponuđaču. Šta kupca čini lojalnim? Prije svega to je kvalitet i cijena koja ga prati (neprecijenjena, nepotcijenjena), a potom i odnos preduzeća prema kupcu u smislu da isprati potrebe kupca u smislu održavanja, adekvatne distribucije i svih ostalih elemenata koji se preduzeću mogu činiti manje ili više važnim, a za

kupca mogu biti od presudnog značaja. Međutim, nisu rijetki slučajevi kada su ta iskustva znatno niža od očekivanog, što govori o kupčevom nezadovoljstvu. Svako preduzeće pred sobom ima iskušenje u smislu zadržavanja postojećih i privlačenja novih kupaca. Potrebeni su izuzetni napori kako bi se zadovoljni ili relativno zadovoljni kupci „preoteli“ od njihovih sadašnjih dobavljača pa se procjenjuje da je trošak privlačenja novih kupaca pet puta veći od troškova održavanja zadovoljstva sadašnjih kupaca. Obzirom na štetu koju nezadovoljstvo kupca može da prouzrokuje posebno koncentričnim širenjem loše reputacije, preduzeća kao osnovni fokus svog poslovanja u savremenim uslovima poslovanja stavlaju na kupca.

Zadovoljstvo kupaca se mjeri prije svega da bismo spoznali da li naš proizvod ispunjava određene zahtjeve, da li je potrebna dorada, kakva je dostupnost, koliko su česte reklamacije, koliko je odgovor na reakcije, poštuju li se mišljenja, ideje i stavovi kupaca. U suprotnom, proizvod neće imati budućnost na tržištu. Budući da mjerjenje zadovoljstva kupaca povlači i značajne troškove, vrlo je bitan proces do vrijedne informacije. Indeks zadovoljstva klijenata je mjera zadovoljstva klijenata, koja se jako često koristi. Vrlo često je transparentan u finansijskim izvještajima preduzeća kao pokazatelj zadovoljstva klijenata u poslovanju sa preduzećem. Bitno je da postoji kontinuitet u praćenju ovog pokazatelja kako bismo tokom godina pratili trend. Da bi zadržali zadovoljstvo kupaca na poželjnom nivou, preduzeće treba kontinuirano održavati kontakt sa kupcima te periodično provoditi istraživanje o zadovoljstvu kupaca. Kupac je put koji vodi prema poželjnom poslovnom rezultatu, njegovo zadovoljstvo obezbjeđuje nam manji rizik vezan za realizaciju prihoda, obezbjeđuje nam povoljnu konkurenčku poziciju. Stoga možemo konstatovati da izgrađena veza povjerenje između preduzeća i kupca, njegovih proizvoda i usluga predstavlja glavni pokretač daljeg razvoja društva.

## 2. POZITIVNI POSLOVNI ODNOSI PREMA KUPCIMA U FUNKCIJI KONKURENTNOSTI PREDUZEĆA

Savremeni poslovni ambijent zahtjeva pažnju prema suštini poslovanja, a ne formi, potencira balans između detalja i preciznosti, zahtjeva vrhunsku senzibilnost prema kupcima. Zašto je to tako? Kvalitet svake mape, vodiča, navigacije, pa time i plana, manifestuje se ne samo stopom njihove realizacije, već, prije svega, njihovom pripremom, od čijeg kvalitet zavisi koliki će doprinos taj plan donijeti preduzeću u smislu njegove pozicije na tržištu. Konkurenčka prednost je definisana na brojne načine, ali jednostavna definicija je da konkurenčka prednost postoji kada je firma ostvarila iznad normalne prinose (ili ekonomsku vrijednost) u odnosu na svoje konkurente (Peteraf i Barney 2003, 313). U savremenim uslovima poslovanja preduzeće dugoročnu postojanu konkurenčku prednost može postići uspješnim sprovođenjem strategije diferencijacije, koja se zasniva na konkurentnom pozicioniranju, koje omogućava uspostavu jedinstvenog položaja preduzeća u industriji. Strategija diferencijacije podrazumijeva organizovanje poslovnih aktivnosti na način kojim će se preduzeće na bolji način razlikovati od svoje konkurenčije. Kupcima se nudi jedinstven proizvod ili usluga koja za njih ima posebnu vrijednost koju im drugi ponuđači u industriji ne mogu ponuditi. Suština je kreirati takvu ponudu koja cijenu neće temeljiti isključivo na troškovima, već i na posebnostima. Cilj diferencijacije je stvoriti preferencije i lojalnost kupaca prema specifičnoj ponudi i na taj način smanjiti njihovu osjetljivost na ponuđene cjenovne razlike. Diferencijacija se može temeljiti na:

- Specifičnosti proizvoda/usluge;
- Sistemu distribucije proizvoda;
- Marketinškom pristupu;
- Drugim faktorima nekog lanca vrijednosti.

Neminovnost, koju savremeno poslovanje kao temelj konkurenčnosti nameće, jeste potpuno razumijevanje zahtjeva kupaca. Da bismo potpuno razumjeli zahtjeve kupaca, moramo biti

sposobni ponuditi različitost, odnosno ponuditi bolji proizvod, uslugu, u odnosu na naše konkurente. Budući da su kupci ti koji formiraju stav i daju ocjenu o kvalitetu i posebnosti proizvoda te iznose svoje zahtjeve, interesovanja i ideje o potrebnim promjenama i inovacija vrlo bitan faktor koji insistira na nižim cijenama. Stoga možemo zaključiti da su upravo kupci insistirali na postizanju kvaliteta, inovativnosti, efikasnosti i nižim cijenama, čime se u stvari fokus poslovanja usmjerava na superiornu odgovornost prema kupcima. Dugoročan uspješan i kvalitetan odnos preduzeća i kupca zahtjeva fokus proizvođača na kupca i njegove potrebe, odnosno zahtjeva od proizvođača da identificuje načine za bolje zadovoljavanje tih potreba. U današnjem poslovnom ambijentu posebno je bitno obratiti pažnju na zahtjeve pojedinačnog kupca i što brži odgovori na iskazane potrebe i zahtjeve kupca. Takav koncept, svakako, proizvodi i veće troškove poslovanja. Međutim, suština i jeste u iznalaženju fleksibilnih tehnologija koje će omogućiti proizvodnju velikog broja varijanti, a da pri tom ne dođe do velikog povećanja troškova.

Konkurentska prednost je u suštini komparativna metrika između firmi zasnovana na odnosu prema drugim firmama. Ne samo profit, prihod, ili rast, konkurentska prednost je u stvaranju nadnormalnih prinosa (Ployhart i Hale 2014, 148). Konkurentnost pretpostavlja odgovor preduzeća na zahtjeve kupca u što kraćem roku. Današnji životni ritam ne ostavlja prostora čekanju pa je sasvim logična činjenica da kupci ne vole i ne žele čekati bez obzira o kojoj se kupovini radi. Tradicionalni koncept poslovanja ne može da odgovori na ovakve zahtjeve. Posebno danas, u dinamičnim životnim uslovima, vrijeme je ključni faktor pa, stoga, preduzeća moraju voditi računa o brzini zadovoljavanja potreba kupaca i to u svim segmentima od razvoja, proizvodnje, marketinga, dostave, servisiranja, održavanja, itd. Preduzeća uspjevaju ili propadaju na osnovu konkurentske prednosti (Johnson i Busbin 2000, 153). Ranije smo rekli da su kvalitet proizvoda i cijena dva osnovna parametara na koje se usmjeravaju i proizvođači i kupci. Međutim, krucijalan je osjećaj zadovoljstva koji kupci formiraju konzumacijom nekog proizvoda i koji ih vraća tom proizvodu. Logičan slijed je pitanje, koja je to „treća dimenzija“ u poslovanju koja obezbjeđuje lojalnost kupca? Ključnu ulogu ovdje ima komunikacija, odnosno razgovor s kupcima kojim se bezrezervno želi ostvariti međusobni odnos uvažavanja i povjerenja. Prioritete svakog preduzeća jeste zadržati postojeće i pridobiti nove kupce (Duvnjak 2018) i to ne politikom navike i prisiljenosti na kupovinu (nepostojanje adekvatne alternative), već gradnjom lojalnosti zasnovane na zadovoljstvu i faktoru sreće kod kupaca, odnosno emocionalni afinitet prema proizvodu. Ovdje je potrebno uložiti dodatni napor u smislu proaktivnog djelovanja u cilju da se premaše očekivanja kupaca i izazove osjećaj oduševljenja, koji kupca zasigurno vraća. Kad se jednom izgradi takav odnos, takvo ponašanje postaje standard koji vodi uspjehu. Svjetsko tržište karakteriše ostra i nikad kvalitetnija konkurenčija. Nećemo biti strogi ako konstatujemo da konkurenčija na tržištima našeg podneblja još uvjek polako ulazi na vrata i da će se njeni stvarni efekti osjetiti vrlo brzo. Koliko će se i kako domaća preduzeća snaći u takvom ambijentu veliko je pitanje. Sasvim je jasno da će u toj „borbi“ vjerovatno izostati podrška države i institucija. Zbog toga preduzeća moraju biti svjesna činjenice da za njihov opstanak, rast, razvoj i konačno konkurentsku poziciju odgovaraju sami izborom svojih poslovnih filozofija. Tradicionalni koncept ne može odgovoriti novom ambijentu. Stoga je vrlo bitno prepoznati značaj kupca i njegovu presudnu ulogu za preduzeće. Potrebno je fokusirati se na odanost, zadovoljstvo i lojalnost kupca, ali ne zanemariti ulogu drugih perspektiva poslovanja.

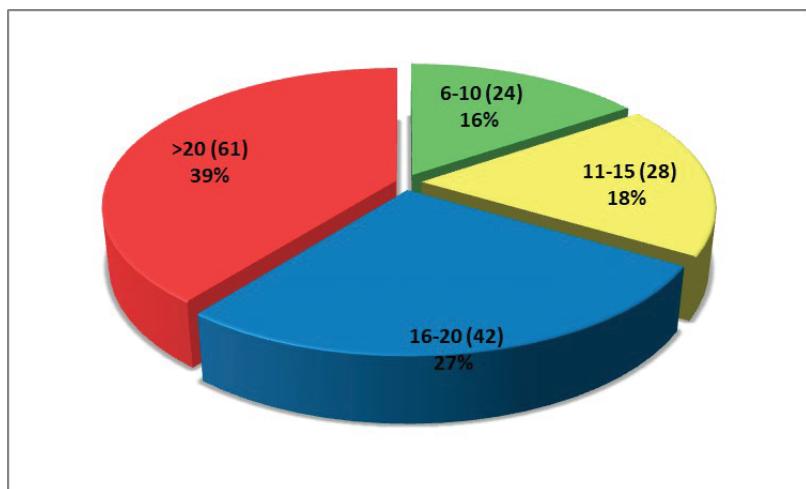
### 3. REZULTATI EMPIRIJSKOG ISTRAŽIVANJA

Analizirajući rezultate provedenog empirijskog istraživanja, koje se baziralo na subjektivnom osjećaju kupaca vezanom za njihovu percepciju koliko su i kako kao kupci respektovani i uvažavani od strane proizvođača, dobili smo set vrlo korisnih informacija. Radi sagledavanja ukupne slike anketni upitnik počinje sa pitanjima kojima uopšteno identifikujemo profil

anketiranih u smislu polne strukture, starosne dobi, zaposlenosti i stepena obrazovanja. Od ukupno 155 anketiranih 57% ispitanih su bile žene, a 43% muški ispitanici.

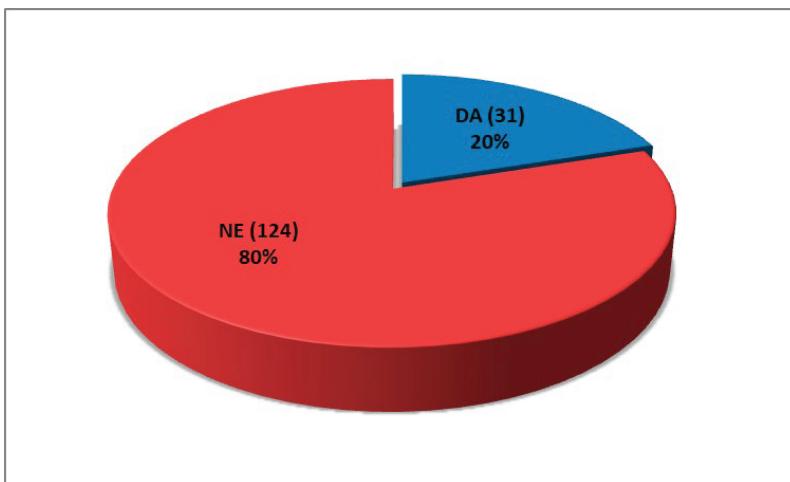
Najznačajnije participiraju anketirani u starosnoj strukturi od 31-40 godina starosti sa 23%, a potom 21-30 godina starosti sa 21%, što je i razumljivo obzirom na platežnu sposobnost, a potom i na interesovanje za telekomunikacione usluge. Fokusirajući radni vijek ispitanika, najznačajnije participiraju nezaposleni od 24%, a potom zaposleni sa radnim vijekom od 11-20 godina i manje od 5 godina i to u procentu od po 19%. U postupku anketiranja, najznačajnije su participirali obrazovani sa srednjom stručnom spremom od 57% i sa visokom stručnom spremom od 32%.

Budući da su tri percepcije kupaca od primarnog interesa: kvalitet usluge, zadovoljstvo i lojalnost (Liao i Chuang 2004, 52), koncentrisali smo se upravo na ova pitanja. Prvo u nizu pitanja bitnih za zadovoljstvo kupaca bilo je pitanje koje se odnosilo na vrijeme, odnosno ročnost korišćenja usluge, čime smo htjeli stići utisak o dosadašnjoj lojalnosti kupaca. Čak 39% anketiranih se izjasnilo da usluge koristi preko 20 godina. Takođe, 27% anketiranih koristi uslugu 16-20 godina. Imajući u vidu protekli period znamo da je to poslijeratni period kog karakteriše niska platežna moć i gotovo nepostojanje alternativnih operatera. Takođe, treba imati u vidu da je istraživanje rađeno u Republici Srpskoj, Bosna i Hercegovina, gdje je nepostojanje konkurenčije toliko dugo bilo realnost, a i nadošla liberalizacija više je imala promotivni, nego stvarni karakter. Takođe, to je geografski prostor u kome, možemo slobodno reći, svijest kupaca kao konzumenata proizvoda i usluga još uvek nije razvijena u smislu da traže alternativne mogućnosti.



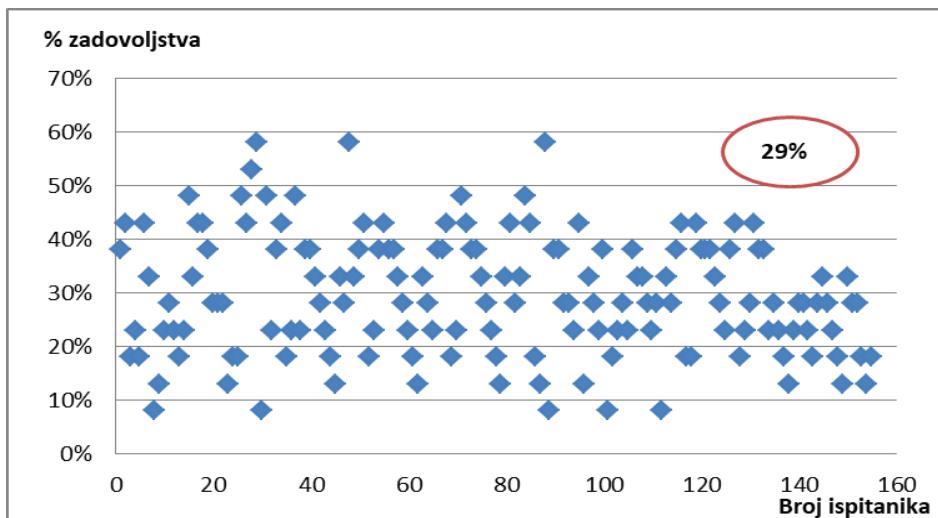
Grafikon 1. Vrijeme korišćenja usluge (Autor na osnovu rezultata provedenog istraživanja)

Na pitanje o osjećaju zadovoljstva kupca dobili smo, možda neočekivano, visok negativan odgovor, kojim se 80% anketiranih izjasnilo kao nezadovoljan kupac.



Grafikon 2. Zadovoljstvo kupaca (Autor na osnovu rezultata provedenog istraživanja)

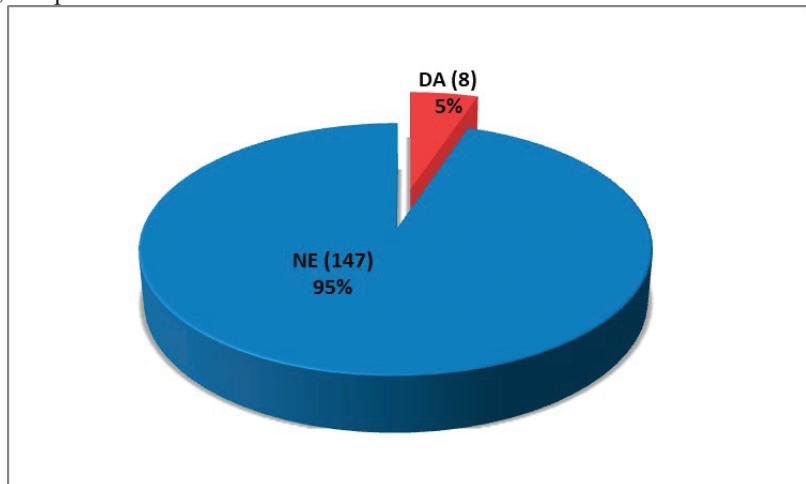
U želji da izmjerimo i procentom iskažemo zadovoljstvo anketiranih kupaca, jedno od postavljenih pitanja u anketnom upitniku bilo je da se kupci odrede u kom su procentu zadovoljni tretmanom. Koristeći Scatter dijagram, aproksimacijom dobijenih podataka o iskazanom zadovoljstvu kupaca, dobili smo podatak da je u prosjeku naših 155 ispitanih sa 29% ocijenilo zadovoljstvo uslugom, podrškom i ukupnim tretmanom od strane davaoca usluge. Smatramo da je to izrazito nizak procenat, kojim se više iskazuje nezadovoljstvo ili revolt na odnos proizvođača, odnosno davaoca usluga, ali na neki način to je i šansa za sve one koji žele popraviti svoju konkurenčku poziciju.



Grafikon 3. Zadovoljstvo kupaca izraženo % (Autor na osnovu rezultata provedenog istraživanja)

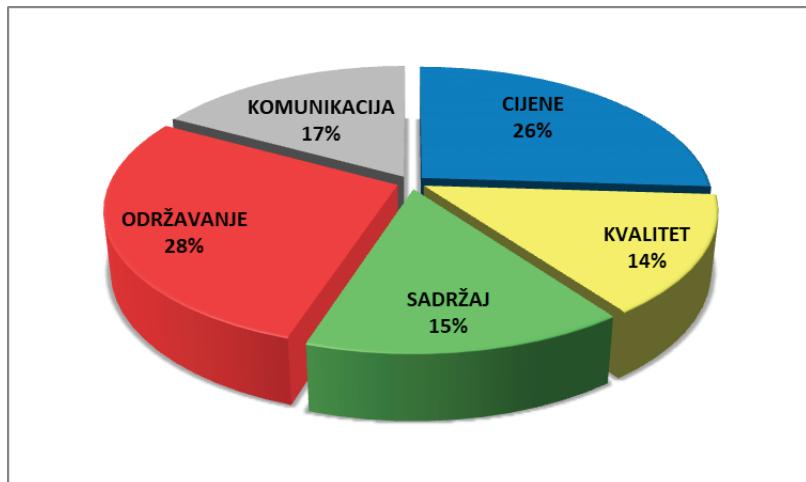
Sljedeće pitanje u anketnom upitniku odnosilo se na naviku kupaca u smislu da li su iskoristili mogućnost da sebi obezbijede bolji tretman i pokušali promijeniti davaoca usluga, odnosno provajdera. 95% anketiranih se izjasnilo da u prošlosti nije mijenjalo provajdera usluga, što, takođe, govori o izraženoj lojalnosti, a u nastavku anketnog upitnika pokušaćemo saznati na čemu se ta lojalnost i bazira. Da li je lojalnost građena na zadovoljstvu kupca i njegovoj

„vijernosti“ proizvođaču ili na nemogućnosti da nešto promijeni, što više ne potпадa pod lojalnost, već prinudu.



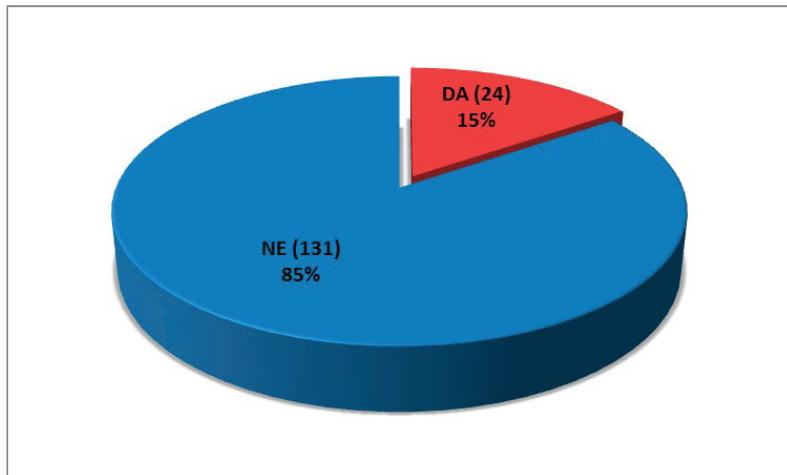
Grafikon 4. Promjena provajdera usluga u prošlosti (Autor na osnovu rezultata provedenog istraživanja)

Na pitanje kojim je bilo potrebno izjasniti se na čemu se bazira, ukoliko postoji nezadovoljstvo, primat je dat održavanju usluga (u smislu brige o korisnicima - servis i podrška) sa 28%, potom cijenama (tarifna politika) od 26%, komunikaciji sa davaocem usluga od 17% i, konačno, nezadovoljstvo kvalitetom od 14% i sadržajem od 15%. Iz dobijenih rezultata možemo da vidimo da sam sadržaj, kvalitet i cijena ne moraju biti presudan faktor u kupčevoj percepciji zadovoljstva. Kupac traži konstantnu brigu i komunikaciju kojom će iskazati svoj potrebe. Traži uvažavanje. Sve ovo ide u prilog potvrde naše druge pomoćne hipoteze.



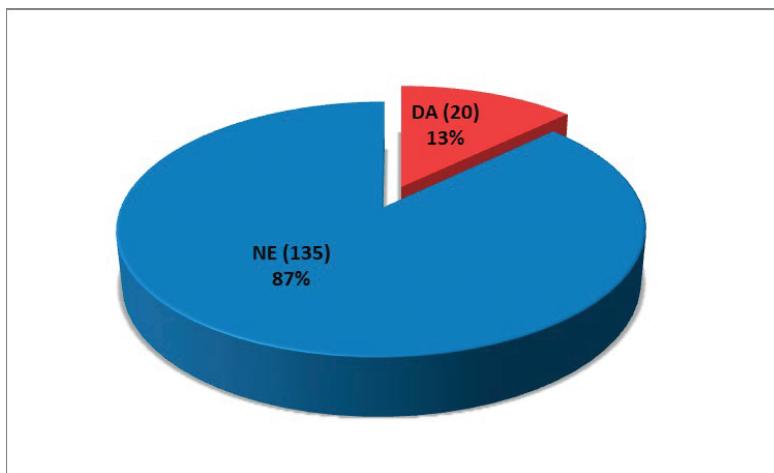
Grafikon 5. Značajnost predmeta nezadovoljstva kupaca (Autor na osnovu rezultata provedenog istraživanja)

Sljedeće pitanje se odnosilo na subjektivni osjećaj uvažavanja i poštovanja, odnosno respekta od strane proizvođača - davaoca usluga, koja je ocijenjena negativno sa 85%.



Grafikon 6. Kupčev osjećaj poštovanja od strane provajdera (Autor na osnovu rezultata provedenog istraživanja)

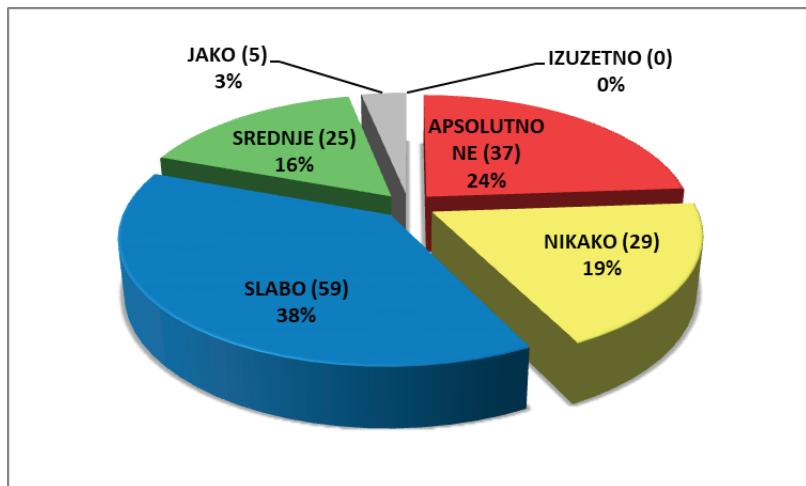
Na pitanje da li je kupac od strane davaoca usluga kontaktiran po pitanju njegovih postojećih i očekivanih potreba i mišljenja, dobili smo negativan odgovor kod 87% anketiranih.



Grafikon 7. Kupci kontaktirani za potrebe i mišljenje (Autor na osnovu rezultata provedenog istraživanja)

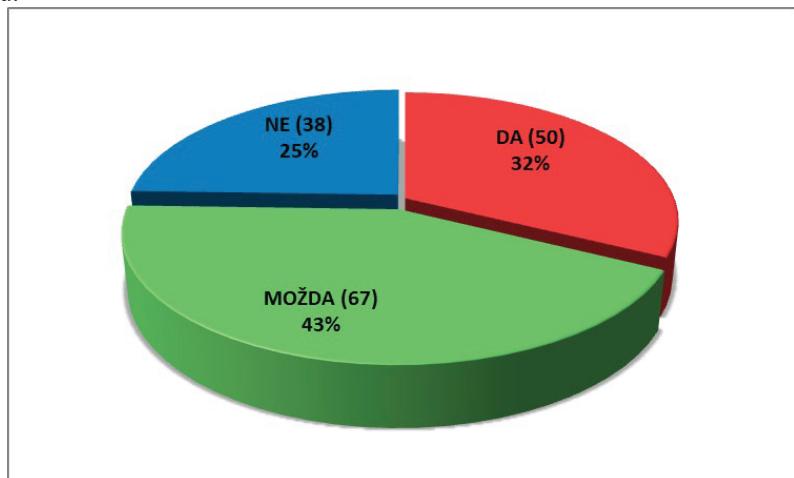
U današnje vrijeme, neminovnost je i potreba da se dugoročno zadrži svaki kupac, svaki korisnik. Kratkoročna politika prodaje osuđena je a priori na propast. Kupci takav odnos ne prštaju i kažnjavaju ga promjenom. Ovakva šteta se teško ili nikako rehabilituje. Zbog toga je, u današnjem savremenom poslovnom svijetu, nedopustivo ignorisati stavove potrošača od čijeg opredjeljenja u kupovini, konačno, zavisi i sudbina preduzeća. Ne manje bitan je i

odgovor na anketno pitanje da li kupac osjeća da je važan provajderu, gdje smo kod 43% anketiranih dobili odgovor da smatraju da su potpuno ili nikako važni davaocu usluga, odnosno kod 54% anketiranih da su slabo ili srednje važni. Dakle, tek 3% anketiranih imaju jak osjećaj važnosti za davaoca usluga.



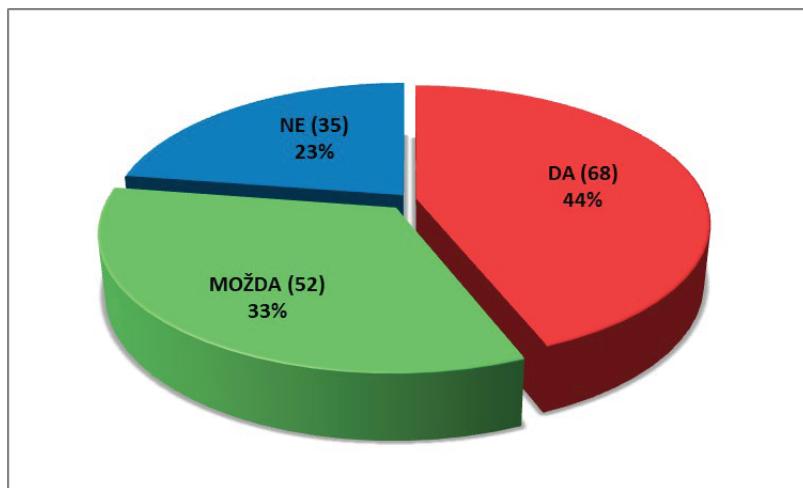
Grafikon 8. Kupčev osjećaj njegove važnosti provajderu (Autor na osnovu rezultata provedenog istraživanja)

Logičan slijed anketnog upitnika je pitanje da li postoji alternativa, gdje smo dobili odgovor 32% anketiranih da postoji alternativa, 43% da možda postoji, a 25% je ubijeđeno da nema alternativu.



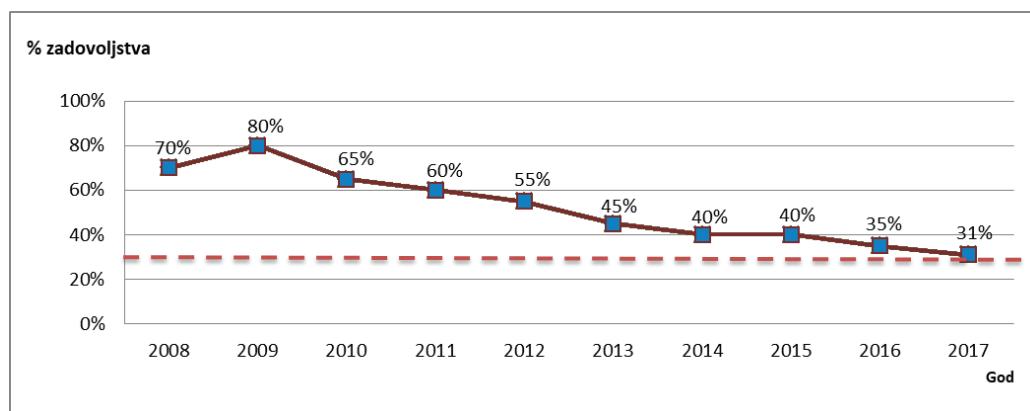
Grafikon 9. Mišljenje kupaca da li postoji alternativa (Autor na osnovu rezultata provedenog istraživanja)

Na pitanje da li je kupac ima namjeru da u budućnosti mijenja provajdera, 44% anketiranih se izjasnilo da ima namjeru da mijenja davaoca usluga, a 33% nije sigurno. 23% anketiranih se izjasnilo da nema namjeru da mijenja davaoca usluga.



Grafikon 10. Namjera kupca o promjeni provajdera u budućnosti (Autor na osnovu rezultata provedenog istraživanja)

Jedno od vrlo indikativnih pitanja jeste bilo da linijom na grafikonu, čija apscisa predstavlja hronološki deset posljednjih godina, iscrtaju svoje zadovoljstvo u posljednjih deset godina korišćenja usluge, pri čemu smo sumirajući sve prikupljene informacije došli do zaključka da u posmatranom vremenu zadovoljstvo kupca značajno opada. Visoka stopa zadovoljstva uslugama na početku perioda vjerovatno je zasnovana na činjenici da prije deset godina usluge i paketi koji se danas nude u savremenom telekomunikacionom okruženju nisu bili tako razvijeni i dostupni kao danas ni kod nas ni u okruženju. Telekomunikacione usluge su specifične u smislu da korisnik mora imati konstantnu pažnju davaoca usluga u bilo kom momentu korišćenja usluge. Sasvim je logično da niko ne želi da čeka na televizijski signal, wi-fi uslugu, telefonski signal. Ukoliko u tom segmentu ne postoji zadovoljstvo korisnika, a obzirom na brzinu današnjeg života, sasvim je za očekivati da će kupci potražiti bolje rješenje.



Grafikon 11. Zadovoljstvo kupaca usluga mobilne telefonije u posljednjih deset godina (Autor na osnovu rezultata provedenog istraživanja)

Prikupljene informacije, putem ovog anketnog upitnika, ukazuju na postojanje izraženog nezadovoljstva, kog vjerovatno ni sami davaoci usluga, ukoliko ne rade istinsko kontinuirano istraživanje tržišta, nisu svjesni. U proteklom periodu svi su se više oslanjali na činjenicu da ne postoji alternativa za kupce. Međutim, liberalizacija tržišta već je učinila svoje i oni davaoci usluga, koji se već sada nisu pravilno pozicionirali na tržištu, osjetiće oštricu konkurentske borbe i značaj svakog pojedinačnog kupca.

Na kraju analize rezultata ovog empirijskog istraživanja, a u svrhu lakšeg izvođenja zaključka, pobrojaćemo ključne rezultate ovog istraživanja:

- 80% anketiranih se izjasnilo kao nezadovoljan kupac;
- 85% anketiranih ne osjeća poštovanje od strane davaoca usluga;
- 87% anketiranih nije nikada kontaktirano po pitanju dodatnih potreba, zahtijeva, interesa;
- 43% anketiranih smatra da u potpunosti ili nikako nisu važni davaoci usluga, dok 54% anketiranih smatra da su slabo ili srednje važni davaocima usluga;
- 32% anketiranih smatra da postoji alternativa, 43% da vjerovatno postoji alternativa, a 25% je ubijedeno da nemaju alternativu;
- Zadovoljstvo uslugom, podrškom i ukupnim tretmanom od strane davaoca usluge, u skali od 0% do 100%, ocijenjeno je sa prosječnom ocjenom od 29%;
- Nezadovoljstvo kupaca odnosi se na:
 

* servis i podršku	28%,
* cijene	26%,
* komunikaciju sa provajderom	17%,
* kvalitet	14% i
* sadržaj	15%.
- 95% anketiranih se izjasnilo da u prošlosti nije mijenjalo provajdera usluga;
- preko 66% anketiranih se izjasnilo da usluge koristi preko 15 godina;
- 44% anketiranih se izjasnilo da ima namjeru da mijenja davaoca usluga, a 33% nije sigurno, dok 23% anketiranih ne namjerava da mijenja davaoca usluga;
- Anketirani kupci su, posmatrajući posljednju dekadu, iskazali pad zadovoljstva uslugama sa 80% na 31%, dakle za 49%.

#### **4. DISKUSIJA I KRITIČKI OSVRT**

Kako smo već konstatovali, prilikom identifikovanja predmeta i problema ovog istraživanja savremeno poslovanje karakteriše izraženo dinamično poslovno okruženje, gdje je neminovno razvijati modele, tehnike i alate koji će omogućiti adekvatno upravljanje preduzećima koje se interpretira dugoročno stabilnom i ambicioznom konkurenckom pozicijom. Menadžment domaćih preduzeća mora imati svijest da u tranzicijskim uslovima poslovanja prepozna prilike koje vode boljem pozicioniranju na tržištu, i ujedno, postizanju konkurenntske prednosti (Đervida and Radosavac i Rodić 2016. 365-372). Obzirom na promjene poslovног ambijenta i sve veću sofisticiranost potreba kupaca, upravljačka uloga postaje sve složenija, odgovornija i dinamičnija, zbog čega preduzeća moraju iznalaziti različite metode i načine pomoću kojih će svoju poslovnu aktivnost učiniti što efektivnijom i efikasnijom. Cilj provedenog istraživanja bio je da potvrdi ili demantuje tvrdnje o značaju i efektima ulaganju u bolje poslovne odnose sa kupcima, što je sve češće predmet diskusija u savremenoj literaturi. U tu svrhu, kako smo već detaljno obrazložili, provedeno je istraživanje na uzorku kupaca telekomunikacionih usluga o subjektivnom osjećaju kupaca vezanom za njihovu percepciju koliko su i kako kao kupci respektovani i uvažavani od strane proizvođača.

Zadovoljstvo kupaca ima pozitivne efekte na ekonomski povrat (Anderson i Fornell i Lehmann 1994, 56). Naše empirijsko istraživanje potvrdilo je presudan značaj kupaca za poslovni uspjeh preduzeća, kao i nemogućnost kvalitetnog konkurenckog pozicioniranja, koje bi trebalo da odgovori na potrebe savremenog poslovanja u smislu tretiranja kupca kao vrhunski značajnog činioca poslovnog procesa. Sa izrazito visokim procentom iskazano je

nezadovoljstvo kupaca tretmanom kompanija, koje još uvijek nisu razvili efikasnu poslovnu strategiju prema kupcima, sa iskazanom namjerom da promijene davaoca usluga, što već negativno utiče na njihovu konkurentsku poziciju, a što će se u bliskoj budućnosti još dramatičnije interpretirati (vidjeti tabelu 1. koja prikazuje tržišno učešće operatera mobilne telefonije na tržištu Bosne i Hercegovine i tabelu 2. koja pokazuje osnovni pokazatelje poslovanja Telekoma Srpske u periodu 2007-2016).

Analizirajući osnovna mjerila poslovnih performansi fokusiraćemo podatak o učešću na tržištu (Market Share) u posljednjih deset godina. Na bazi dostupnih podataka iz godišnjih poslovnih izvještaja telekom operatera, Regulatorne agencije za komunikacije BiH i ITU (International Telecommunication Union), posmatrali smo podatke o učešću operatera mobilne telefonije na tržištu BiH. Na osnovu činjeničnog stanja prikazanog tržišnim učešćem mobilnih operatera na tržištu Bosne i Hercegovine, u korelaciji sa rezultatima empirijskog istraživanja, možemo utvrditi uticaj odnosa prema kupcima na performansu poslovanja, koji pokazuje tržišno učešće i sagledati vezu između ove dvije varijable. Vidimo koliko se ukazana pažnja prema korisniku kao osnovnom pokretaču rasta i razvoja reflektuje na konkurentsku poziciju.

Tabela 1. Tržišno učešće operatera mobilne telefonije za BiH 2008-2016. (Sarić 2017, 10)

Market Share mobilne telefonije	2008	2009	2010	2011	2012	2013	2014	2015	2016
BH Telekom	44.88	39.21	43.34	42.93	44.54	44.36	46.95	44.88	46.36
Telekom Srpske	34.91	38.58	44.6	43.45	42.10	42.05	39.6	40.72	38.03
Eronet	20.21	22.21	12.06	13.62	13.36	13.32	13.18	13.94	14.55
Ostali	0.00	0.00	0.00	0.00	0.00	0.27	0.27	0.46	1.06
<b>UKUPNO</b>	<b>100</b>								

Da bismo potvrdili navedeno, ukazaćemo da je u posmatranom periodu, od posljednjih deset godina, ovo preduzeće smanjilo broj korisnika usluga fiksne telefonije za 30%, a u posljednjih pet godina pad korisnika mobilne telefonije za 114.000, što nije adekvatno kompenzirano novim uslugama, u posljednjih osam godina prihodi bilježe godišnji pad od 50 miliona KM, EBITDA margin bilježi pad od 3,5%. Sve navedeno govori da postoje ozbiljni problemi koje je potrebno s pažnjom i detaljno analizirati.

Tabela 2. Osnovni pokazatelji poslovanja Telekoma Srpske 2007-2016. (Izvještaji o poslovanju Telekoma Srpske, autor)

	31.12.2007.	31.12.2008.	31.12.2009.	31.12.2010.	31.12.2011.	31.12.2012.	31.12.2013.	31.12.2014.	31.12.2015.	31.12.2016.
Ukupan broj korisnika fiksne telefonije	356,748	359,784	354,800	344,132	320,131	305,230	291,371	280,725	263,574	251,000
Ukupan broj ADSL korisnika	4,981	23,682	52,790	80,712	98,894	110,204	118,759	124,048	127,085	129,150
Ukupan broj IPTV/DTH korisnika	0	0	0	5,284	13,849	24,168	35,519	43,736	51,548	57,840
Ukupan broj korisnika mobilne telefonije	880,337	1,113,002	1,231,489	1,343,643	1,377,322	1,414,774	1,434,630	1,382,338	1,402,702	1,300,000
Ukupni prihodi (milioni KM)	391.49	475.44	493.63	483.49	485.14	490.53	478.15	488.10	464.10	447.77
Ukupni rashodi (milioni KM)	311.05	342.45	379.38	363.22	365.69	368.29	366.85	369.77	373.38	369.90
EBITDA	165.94	218.88	215.21	225.64	230.22	230.66	213.68	213.35	180.03	174.64
EBITDA (u %)	42.65%	46.39%	44.15%	47.17%	47.88%	47.46%	45.22%	44.16%	39.19%	39.27%
EBIT	86.83	136.20	116.22	120.69	120.10	120.49	107.19	114.80	87.34	75.54
EBIT (u %)	22.32%	28.86%	23.84%	25.23%	24.98%	24.79%	22.68%	23.76%	19.02%	16.99%
Bruto dobit (milioni KM)	80.44	132.99	114.26	120.28	119.45	122.24	111.30	118.33	90.72	77.86
Neto dobit (milioni KM)	71.72	119.21	102.63	108.36	107.42	109.96	100.30	106.50	80.74	70.17
Broj zaposlenih	2,515	2,504	2,464	2,327	2,277	2,201	2,161	2,155	2,149	2,143
Neto dobit po zaposlenom	28,517	47,608	41,653	46,566	47,174	49,961	46,412	49,418	37,570	32,744

Na osnovu precizno postavljenih pitanja u anketnom upitniku uspjeli smo da identifikujemo značajnu korelaciju između loših poslovnih rezultata preduzeća i zanemarivanja kupca kao krucijalnog faktora poslovanja.

Naše istraživanje imalo je za cilj da istraži zadovoljstvo korisnika (kupaca) tretmanom ponuđača telekomunikacionih usluga, tačnije usluga mobilne telefonije, u smislu da li se korisnici zaista pitaju o bitnim faktorima vezanim za proizvod ili uslugu koju koriste, kvalitet, distribuciju, način prezentovanja, mogućnošću učešća u njihovom kreiranju, uslovima plaćanja, servisiranja, podrške i slično. Imajući u vidu „vrhunski“ značaj i poziciju kupca u današnjim uslovima poslovanja, s obzirom na profitabilnost kao osnovni cilj poslovanja svakog preduzeća, svrha ovog istraživanja bila je istražiti da li kupcu zaista pripada njegovo proklamovano mjesto, odnosno da li se kupac zaista osjeća respektovanim, uvaženim ili je prinuđen na korišćenje određenog proizvoda ili usluge zbog nedostatka ponude ili nekog drugog razloga, sve do činjenice da postoje situacije u kojima se kupci deklarišu prevarenim ili iskorišćenim.

## ZAKLJUČAK

Dinamične i turbulentne promjene krajem prošlog i početkom ovog vijeka zahtijevaju od budućih menadžera posebne napore da u cilju zadržavanja i poboljšanja konkurentnosti svojih proizvoda u što većem stepenu zadovolje sofisticirane potrebe potrošača. Samo inovativni, proaktivni, fleksibilni, menadžeri spremni na rizik i u svim poslovnim aspektima fokusirani na kvalitet mogu računati na dobru budućnost svojih preduzeća. Savremeni poslovni ambijent, pred menadžment postavlja nove izazove, kako organizovati proces poslovanja, kako integrisati sve aktivnosti na različitim nivoima i razvijati dugoročnu strategiju poslovanja i to sa vizijom koja u fokus stavlja zadovoljavanje potreba i želja potrošača uz istovremeno povećanje konkurentnosti. U tom smislu preispituju se svi upravljački alati, odnosno njihova svrsishodnost i doprinos dodatoj vrijednosti preduzeća. U razvijenim ekonomijama, ove promjene već daju pozitivne rezultate kroz primjenu savremenih poslovnih

filozofija. Kao što smo vidjeli u našim uslovima, još uvijek ne postoji adekvatna interakcija i odgovor na problem koji smo istraživali.

Koliko je bitno ulaganje u pozitivne „poslovne odnose“ sa kupcima govori nam sama činjenica da su kupci ti koji direktno utiču na poslovni rezultat preduzeća. U vremenu kada su potrošači izloženi agresivnoj ponudi mnoštva vrlo sličnih proizvoda i usluga, postavlja se pitanje šta je to što presudno utiče na kupčevu opredjeljenje za kupovinu, odnosno po kojim kriterijima se kupac odlučuje za neki proizvod ili uslugu. Direktni kontakt sa kupcima vjerovatno neće otkriti prave razloge, jer ih ponekad ni oni sami ne razumiju ili ne žele da podijele razloge svog izbora. Spoznaju o ponašanju kupaca preduzeće sagledava kroz njihovo zadovoljstvo i lojalnost. Jasno je da postoji snažna veza između zadovoljstva kupca i prodajnih rezultata preduzeća, odnosno da prodajni rezultat zavisi od nivoa zadovoljstva njenih kupaca. Zadovoljstvo kupca u dužem vremenskom periodu prelazi u lojalnost kupca, što preduzeću obezbeđuje sigurne prodajne rezultate i izvjesnije planiranje, što povlači da poslovnu sigurnost ne donosi samo zadovoljavanje potreba kupca, već njegov komforan osjećaj prilikom konzumacije proizvoda, odnosno kupčev subjektivni osjećaj oduševljenosti vrijednošću koju je kupio. Postoje oprečna mišljenja o dostizanju oduševljenja proizvodom ili uslugom, ali, takođe, i mišljenja koja stoje na poziciji da dodatnim zalaganjem preduzeća kupci postaju oduševljeni, što dalje povlači da preporučuju proizvod ili uslugu drugima i na taj način dodatno osiguravaju bolji prodajni rezultat. Zato je veoma bitno zadržati pažnju potrošača i dovesti je na nivo da svoju pozitivnu poruku širi većem krugu potrošača.

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## SIGNIFICANCE AND EFFECTIVENESS OF INVESTMENT IN POSITIVE BUSINESS RELATIONS WITH CUSTOMERS

**Summary:** *With this paper we tried to prove that one of the main causes of the decline in the efficiency and effectiveness of our companies is the insufficient respect for the category of customers, i.e. in insufficient investments in positive business relations, which reflects in poor business results. Namely, on one hand, we have a situation in which future customer needs and demands are so rapidly changed that they are created before the buyers are aware of the possibilities of new offers. So far, "cosmetic" changes do not follow the changes in the business environment. They did make changes in their work, but nothing changed significantly in relation to customers. Our primary goal is to explore and examine the subjective feelings of customers in terms of treatment by the manufacturer and point out the possibilities of improving relationships for the purpose of making the most effective business decisions, which will ultimately ensure a long-term stable competitive position of the company. As we have said, the aim of this research work is to point out the importance of the customer in relation to the business results of the company, which can decisively influence the fate of the company, its competitive position and market participation, the direction of further technological development and even its survival.*

**Key words:** *customers, competitiveness*

**JEL classification:** *D11, D41*

### INTRODUCTION

Contemporary market conditions dictated by drastic changes in the business environment require significant efforts, from owners and company management, to establish long-term stability and improve the competitive position of their products. Certainly the most competitive weapons in the modern market are, of course, the quality of products or services, but this feature does not have to be determining factor of customer's preferences. Today's customer seeks complete care not only for the moment of purchasing products and services. In modern business conditions, the manufacturer support is implied, in terms of maintenance, servicing, "upgrade" activities. Modern business is characterized by a pronounced, continuous, dynamic, business environment where there is a necessity for developing models, techniques and tools that will enable more successful and efficient corporate governance. The most important general goals of the company are primarily the profit, growth and development of the company. According to Porter, the primary goal of the company is not only maximizing total revenue and profits, but also the ability to influence business conditions and constraints, which creates and achieves a competitive advantage. If a company, as we have already noted, aims at sustainable growth of revenue and profit, then it entails continuous investment in increasing competitiveness. The fact is that it often happens that companies, regardless of their technological advantage, financial power, and the like, lose

competition with their competitors whose market share is smaller. In a dynamic and ever-changing business environment, it is important for the customer to provide the customer with a service / product that exceeds his expectations, that is, create his needs; it is important to be flexible, meet the demands of the market quickly. Such a thing requires continuous investment in one's own business, flexible organization, promotion, innovation, management tools whose usability is not an issue.

By studying the available literature, we can conclude that this problem is increasingly getting the attention of the theoreticians as well as the practitioners themselves, and the conclusion is that management systems should be changed in synchronized manner with production processes; the changes are inevitable, considering the fact that companies turn to customers (Wickramasinghe and Chandana 2007, 4-23), which is the key to maintaining long-term competitiveness. With a high degree of certainty we can assert that there is agreement among theorists about the importance of focusing the company towards the buyer (Wickramasinghe and Chandana 2007, 205-237). From the aforementioned we can conclude that the basis of the problem lies in the fact that the efficiency of the business, that is, the good competitive positioning depends on the ability of the company itself to correct and change the way of thinking of the owners and the administration in order to gain the full attention of their customers, in accordance with the rapid changes in the requirements of customers and other market conditions. Of course, such changes require additional efforts from the management and all employees. The topic of this research paper is a positive business relationship with customers as a basic business postulate, which is expected to provide quick answers to very delicate questions, are of crucial importance for the survival and development of the company, within the modern business environment. We are talking about a management concept that needs to respond to the pronounced changeability of a business environment that continuously increases the risk in doing business.

## **1. CUSTOMERS AS A BASIC INITIATOR OF GROWTH AND DEVELOPMENT OF ENTERPRISES**

The greatest asset of each company are the customers, therefore their satisfaction is the basic parameter of successful business in the future. Trust and satisfaction are key concepts in understanding between customers and sellers (Selnes 1998, 305). The purpose of measuring customer satisfaction is to adapt the company to ever faster and more demanding changes in the market, as well as proactive market activity. Almost every definition of the mission of modern companies highlights the top commitment to the customer and his satisfaction, in this regard, the basic task of management should be to point out the importance of customer satisfaction with its business culture and by personal example.

How to define the notion of customer satisfaction? Because using a product or service, customers have certain expectations; in using the products they perceive benefits and compare them with their expectations and upon that they create a sense of satisfaction. In order to understand customer satisfaction, its needs and future intentions, the need to measure this satisfaction is imposed. In this way, the company learns about the experiences of customers related to their offer. Measurement of satisfaction implies continuous collection and analysis of data on customer's emotional experience, and is measured by modern methods (on-line questionnaires, direct contact, by e-mail, by telephone, social networks, publications, magazines, databases ...) through survey questionnaires. The aim of collecting data on customer satisfaction is the high response ratio in order to achieve a representative sample result, and to establish and build a relationship of trust and mutual interest with the buyer.

Customer satisfaction can be defined as a subjective perception of benefits, that is, a value given to it by a certain product or service, or a subjective feeling of benefits by the customer that is returned to him for the price he has paid. Satisfaction with the product is upgraded by the satisfaction of the mutual relationship between the buyer and the company, which builds

mutual trust and loyalty. The experiences of a buyer acquired through the use of a product or service can sometimes exceed customer's expectations and therefore we are talking about customer satisfaction. Such experiences lead to product loyalty, or to the company loyalty. Does this make loyal customer? First and foremost, it is the quality and price that accompanies it (overrated, underrated) and then the relationship of the company towards the customer in terms of meeting the customer's needs in terms of maintenance, adequate distribution and all other elements that may seem more or less important to the company, and it can be of a crucial importance for the customer. However, there are not rare cases where these expectations are significantly lower than expected which reveals customer dissatisfaction. Every company has a temptation ahead of itself in terms of retaining existing ones and attracting new customers. Extreme effort is needed for the satisfied or relatively satisfied customers to be taken from their current suppliers, so it is estimated that the cost of attracting new customers is five times the cost of maintaining the satisfaction of current customers. Given the damage that customer dissatisfaction can cause to the particularly through expansion of a bad reputation, the companies place the basic focus of their business, in modern business conditions, on the customer.

Customer satisfaction is measured first of all to find out whether our product meets certain requirements, whether it is necessary to put the finishing touch, what is the availability of the product, how many complaints are there, the level of responsiveness, whether the opinions, ideas and attitudes of customers are considered. Otherwise, the product will not have a future on the market. Since measuring customer satisfaction draws significant costs, it is very important for the process to give valuable information. Customer satisfaction index is a measure of customer satisfaction, which is often used. It is very often transparent in the company's financial statements as an indicator of customer satisfaction in business with the company. In order to keep track of trends, it is important to have continuity in monitoring this indicator. In order to maintain customer satisfaction at a desired level, the company should continuously maintain contact with customers, and periodically conduct customer satisfaction surveys. The customer is the path leading to a desirable business result, his satisfaction provides us with a lower risk associated with creating of income, provides us with a favorable competitive position. Therefore, we can conclude that the built-in relationship of trust between the company and the buyer of its products and services is the main driver of further development of the society.

## **2. POSITIVE BUSINESS RELATIONS TOWARDS THE CUSTOMERS IN THE FUNCTION OF COMPETITIVENESS OF THE ENTERPRISE**

A modern business environment requires attention towards the essence of business rather than form, emphasizes the balance between detail and precision, requiring top-level sensitivity to customers. Why is it like that? The quality of each man, guide, navigation, and thus the plan, is manifested not only by the rate of their realization, but primarily by their preparation, which dictates the contribution that the plan brings to the company in terms of its position on the market. Competitive advantage has been defined in numerous ways, but a simple definition is that a competitive advantage exists when a firm has generated above-normal returns (or economic value) compared to its competitors (Peteraf and Barney 2003, 313). Under modern business conditions, the company can achieve a long-term stable competitive advantage by successfully implementing the differentiation strategy, which is based on competitive positioning that enables the establishment of a unique position of the enterprise in the industry. The differentiation strategy implies the organization of business activities in a way that the company will differ in a better way from its competition. Customers are offered a unique product or service that has a special value for them that other suppliers in the industry can't offer. The essence is to create such an offer whose price will not be based exclusively on costs, but on special features. The goal of differentiation is to create preferences and loyalty of

customers towards a specific offer and thus reduce their sensitivity to the offered price differences. Differentiation can be based on:

- Features of the product / service
- The product distribution system
- Marketing approach and
- Other factors of a value chain.

The inevitability that modern business puts as a basis for competitiveness is a complete understanding of the demands of customers. In order to fully understand customer demands, we must be able to offer diversity, that is, to offer a better product, service, compared to our competitors. Since customers are the ones who shape the attitude and give a rating on the quality and special features of the products, they put their demands, interests and ideas about the necessary changes and innovations a very important factor that insists on lower prices. Therefore, we can conclude that just buyers are insisting on achieving quality, innovation, efficiency and lower prices, which in fact directs business focus on superior responsibility towards customers. The long-term successful and quality relationship between the company and the buyer requires the focus of the manufacturer on the customer and his needs, that is, the requirements of the manufacturer to identify ways to better meet those needs. In today's business environment, it is especially important to pay attention to the demands of individual buyers and to respond quickly to the stated needs and requirements of the customer. Such a concept certainly produces higher operating costs, however, the essence is finding the flexible technologies that will enable the production of a large number of variants, without a significant increase in costs.

Competitive advantage is basically a comparative, metric between companies based on relations towards other companies. Not simply profit, revenue, or growth, competitive advantage is about generating above normal returns (Ployhart and Hale 2014, 148). Competition presupposes the response of the company to the requirements of the buyer as soon as possible. Today's life rhythm does not tolerate time wasting, so it's quite logical that customers do not like and do not want to wait regardless the type of shopping. The traditional concept of doing business can't respond to such requests. Especially today, in dynamic living conditions, time is a key factor, and therefore companies must take into account the fast meeting customer needs, in all segments of development, production, marketing, delivery, servicing, maintenance... Businesses succeed or fail based on competitive advantage (Johnson and Busbin 2000, 153). Previously, we said that product quality and price are the two basic parameters that are targeted both by manufacturers and customers, however, the crucial feeling of satisfaction that customers create in the consumption of a product and returns them to that product. A logical sequence is the question, which is the "third dimension" in business that provides customer loyalty. A key role here is communication that is, talking to customers, in order to achieve mutual respect and trust. The priorities of each company are to keep the existing ones and to acquire new customers (Duvnjak 2018), not as a policy of habit and compulsion to purchase (nonexistence of an adequate alternative), but by building loyalty based on customer satisfaction and luck, or an emotional affinity to the product. Additional effort is required here in terms of proactive action in order to exceed customer expectations and cause a sense of enthusiasm, which certainly brings back the customer. When such a relationship is built, such behavior becomes a standard that leads to success. The global market is characterized by harsh and never-ending competition. We will not be strict if we conclude that competition in the markets of our region is still slowly entering the door, and that its real effects will be felt very quickly. How much and to which extent domestic companies manage in such an environment is a big question. It is quite clear that the support of the state and institutions in this "struggle" will not be given. Therefore, companies must be aware of the fact that their survival, growth, development and ultimate competitive position correspond to the choice of their business philosophies. The traditional concept can't respond

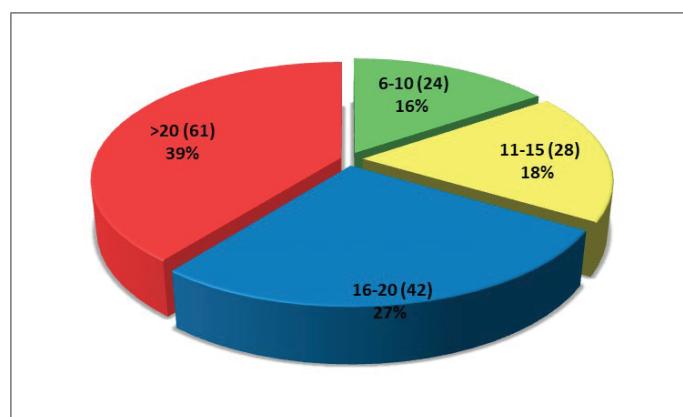
to the new ambiance. It is therefore very important to recognize the importance of the customer and his crucial role for the company. It is necessary to focus on loyalty, customer satisfaction and loyalty, but not to neglect the role of other business perspectives.

### 3. RESULTS OF EMPIRICAL RESEARCH

Analyzing the results of the conducted empirical research, based on the subjective sense of the customers related to their perception how much and in which manner they were respected and respected by the manufacturer, a source of very useful information. In order to examine the overall picture, the questionnaire starts with questions that generally identify the profile of respondents in terms of gender structure, age, employment and level of education. Out of a total of 155 respondents, 57% were women, and 43% were male respondents.

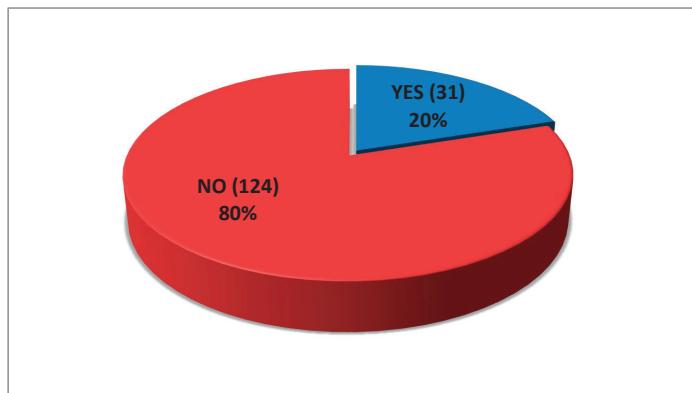
The most significant respondents participate in the age structure of 31-40 years old with 23%, and then 21-30 years of age with 21%, which is understandable due to the payment capacity and then the interest for telecommunication services. Focusing on the work life of the respondents, the most significant are the unemployed of 24%, and then employed with a working life of 11-20 years and less than 5 years, in a percentage of 19%. In the survey process, the most important were those with a secondary education degree of 57%, and with a high professional education of 32%.

Given that the three customer perceptions are of primary interest: service quality, satisfaction, and loyalty (Liao and Chuang 2004, 52) we concentrated on these issues. First, in a series of issues relevant to customer satisfaction, there was a question concerning the time, that is, the maturity of using the service, where we wanted to gain the impression of customer loyalty so far. Even 39% of respondents said they had used services over 20 years. Also, 27% of respondents use the service for 16-20 years. Bearing in mind the past period, we know that this is a postwar period characterized by low payment ability and almost nonexistence of alternative operators. Also, one should bear in mind that the research was conducted in the Republic of Srpska, Bosnia and Herzegovina, where the lack of competition has been a reality for so long, and the liberalization that was taking place was more of a promotional nature than a real deal. Also, it is a geographical area, in which we can freely say, the awareness of customers as consumers of products and services is still not developed in the sense that they seek alternative opportunities.



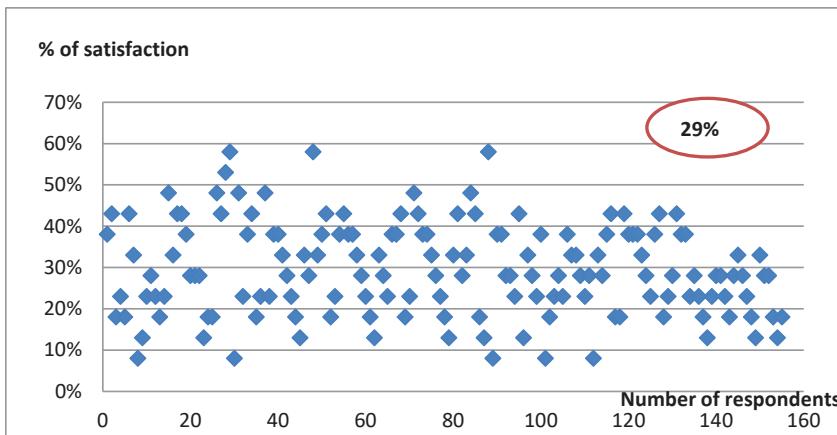
Graph 1. Time of use of the service (Author based on the results of the conducted research)

When asked about the sense of customer satisfaction, we received, perhaps unexpectedly, a highly negative response, by which 80% of respondents declared themselves as an unsatisfied customer.



Graph 2. Customer satisfaction (Author based on the results of the conducted research)

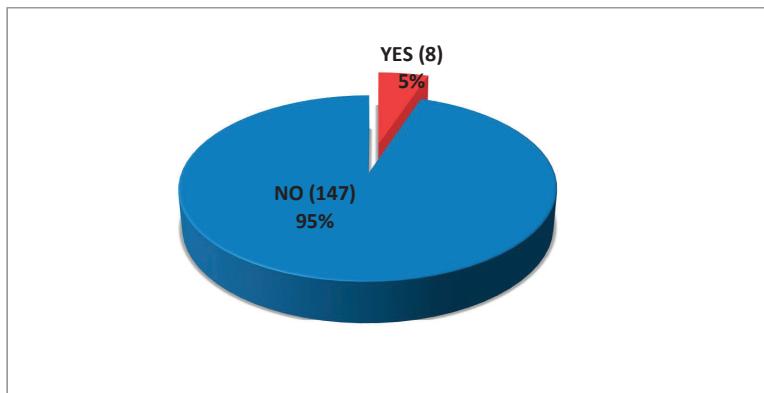
Wishing to measure the percentage of satisfied customers, one of the questions asked in the survey questionnaire was that the customers determine the percent of satisfaction with the treatment. Using the Scatter diagram, the approximation of the obtained customer satisfaction data showed that on average 155 of our respondents rated 29% satisfaction with service, support and overall treatment by the service provider. We believe that this is an extremely low percentage, with which more expresses dissatisfaction or revolt on the relationship between the manufacturer and the service provider, but in a way it is also a chance for those who want to improve their competitive position.



Graph 3. Customer satisfaction expressed in% (Author based on the results of the conducted research)

The next question in the questionnaire was about the habit of customers in terms of whether they took advantage of the opportunity, to provide themselves with better treatment and try to change the provider of services or providers. 95% of respondents said that they did not change service providers in the past, which also speaks of loyalty, and further on in the questionnaire we will try to find out what this loyalty is based on. Whether loyalty was built on the

customer's satisfaction and his "loyalty" to the manufacturer or on the inability to change something, no longer falls under loyalty but compulsion.



Graph 4. Change of service providers in the past (Author based on the results of the conducted research)

When asked what was needed to clarify what is being based, if any, the dissatisfaction was defined in the maintenance of services (in terms of customer care - service and support) with 28%, then pricing (tariff policy) of 26%, communication with the service provider of 17%, and ultimately dissatisfaction with the quality of 14%, and content of 15%. From the obtained results we can see that the content, quality and price itself must not be determining factor in the customer's perception of satisfaction. The customer seeks constant care and communication to express his needs. Search respect. All this supports the confirmation of our other auxiliary hypothesis.

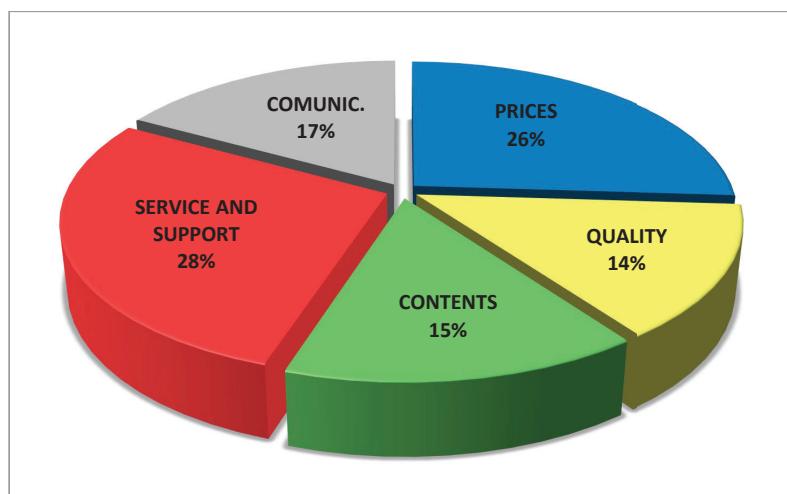
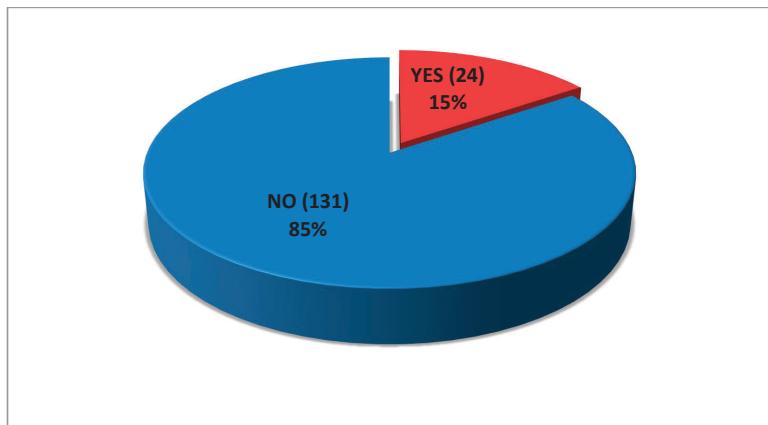


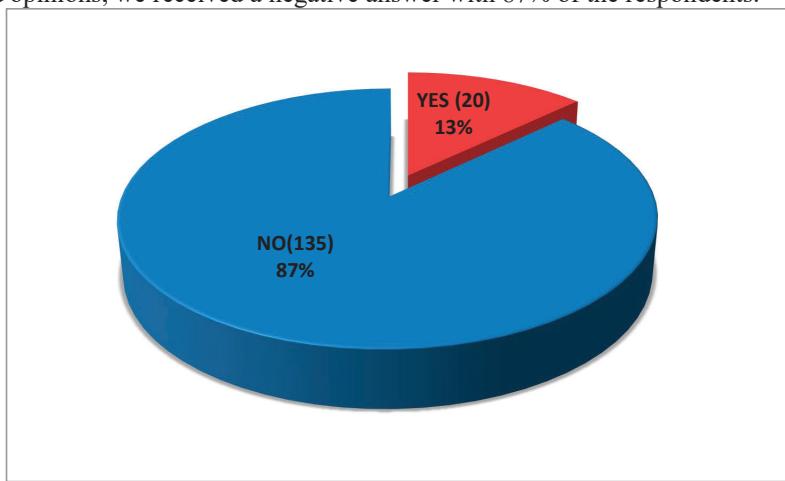
Chart 5. Significance of the subject of customer dissatisfaction (Author based on the results of the conducted research)

The next question concerned the subjective sense of appreciation and respect, which is respect by the manufacturer-service provider, which was rated negatively at 85%.



Graph 6. Customers sense of respect by the provider (Author based on the results of the conducted research)

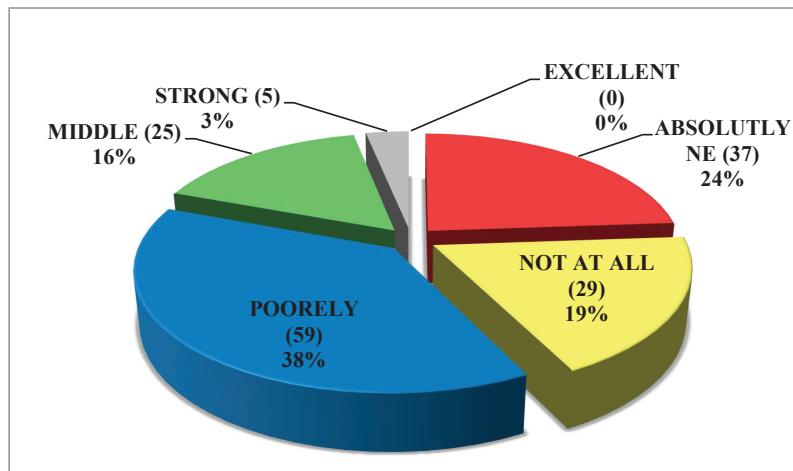
Asked if the customer was contacted by the service provider regarding his existing and future needs and opinions, we received a negative answer with 87% of the respondents.



Graph 7. Customers contacted for needs and opinions (Author based on the results of the conducted research)

Nowadays, the inevitability is the need to keep every buyer, every user, in the long run. Short-term sales policies have been condemned and to failure. Customers do not forgive such a relationship, and punish it by changing it. Such damage is difficult or impossible to rehabilitate. Therefore, in today's modern business world, it is impermissible to ignore the views of consumers from whose determination to purchase, finally, the fate of the company depends. No less important is the answer to the survey question whether the customer feels that it is important to the provider, where with 43% of the respondents the answer is that they feel that they are completely or totally not important to the service provider, that is, 54% of

the respondents are of low or medium importance. So, only 3% of respondents have a strong sense of importance for the service provider.



Graph 8. Customers sense of its importance to the provider (Author based on the results of the conducted research)

The logical sequence of the questionnaire is the question whether there is an alternative, where we received the answer 32% of respondents that there is an alternative, 43% may exist, and 25% are convinced that there is no alternative.

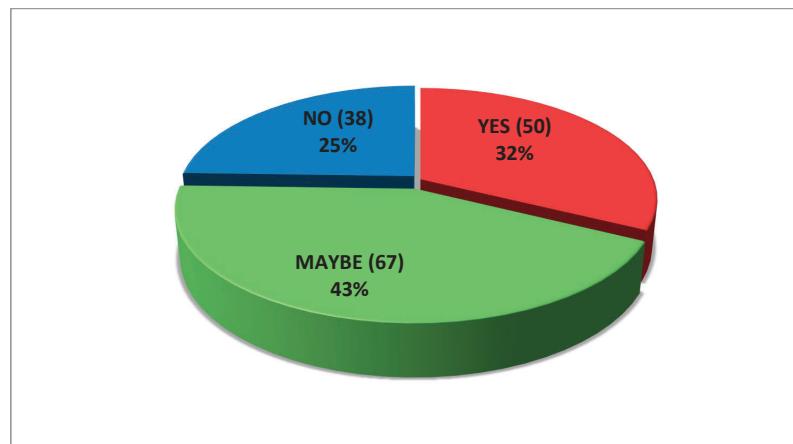


Chart 9. Customer's opinion on whether there is an alternative (Author based on the results of the conducted research)

When asked if the customer intends to change providers in the future, 44% of respondents said they intend to change the service provider and 33% are not sure. 23% of respondents said they did not intend to change the service provider.

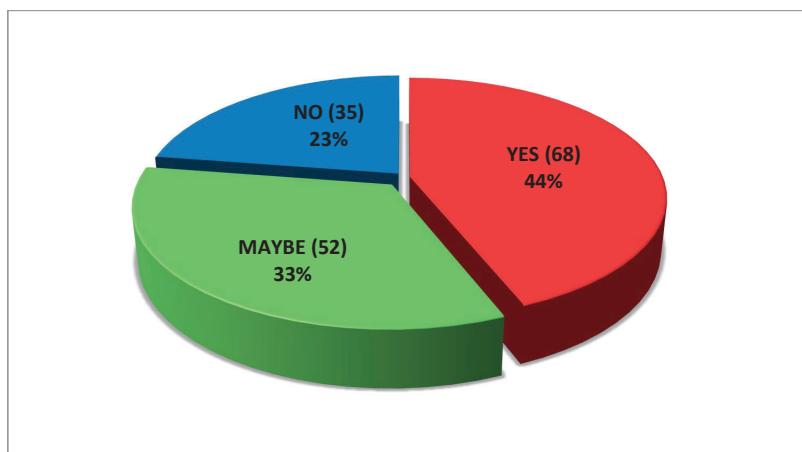
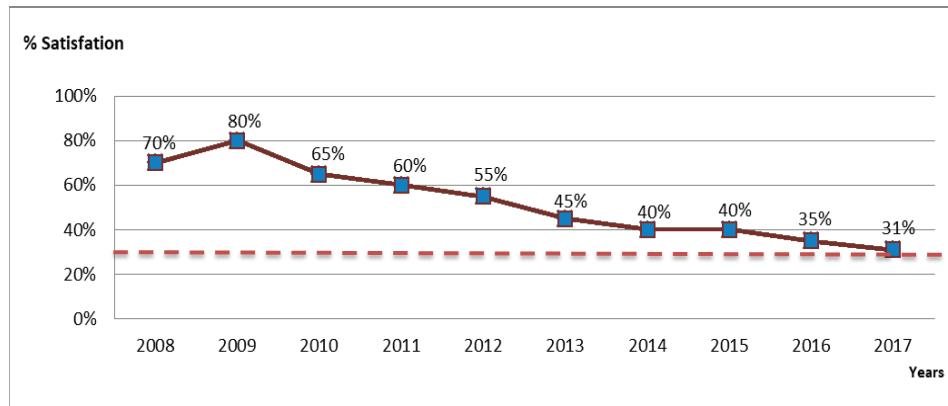


Chart 10. The intention of the buyer to change the provider in the future (Author based on the results of the conducted research)

One of the very indicative issues is whether the line on the chart, whose abscissa represents chronologically the last ten years that should be used to outline its satisfaction over the last ten years of using the service, summing up all the information gathered has led to the conclusion that in the observed time the customer's satisfaction is falling significantly. A high level of customer satisfaction at the beginning of the period is probably based on the fact that ten years ago the services and packages offered in today's telecommunication environment were not so developed and available today, neither in our country nor abroad. Telecommunication services are specific in the sense that the user must have a constant attention from service provider at any time of using the service. It's quite logical that nobody wants to wait for a TV signal, a Wi-Fi service, a telephone signal. If there is no user satisfaction in this segment, and considering the speed of today's life, it is quite possible to expect customers to look for a better solution.



Graph 11. Customer satisfaction of mobile telephony services in the last ten years (Author based on the results of the conducted research)

The information gathered through this survey questionnaire suggests that there is a prominent dissatisfaction, probably unaware of the service providers themselves, if they do not really do

a truly continuous market research. In the past period, everyone rely more on the fact that there is no alternative for customers, however, market liberalization has already done its thing, and those service providers who are not already properly positioned in the market will now will have to fight to maintain competitive edge, and the importance of each individual customer.

At the end of the analysis of the results of this empirical research, and for the purpose of easier interpretation of the conclusion, we will provide the key results of this research:

- 80% of respondents said they were an unsatisfied buyer
- 85% of respondents do not feel respected by the service provider
- 87% of respondents were never contacted for additional needs, requests and interests
- 43% of the respondents consider that they are completely or totally not important to the service provider, while 54% of the respondents consider them to be of low or medium importance to service providers
- 32% of respondents believe that there is an alternative, 43% that there is probably an alternative, and 25% are convinced that they have no alternative
- Satisfaction with the service, support and overall treatment by the service provider in the scale of 0% -100% was rated with an average grade of 29%
- Customer dissatisfaction refers to:
  - \* Service and support 28%,
  - \* Prices 26%,
  - \* Communication with the provider 17%,
  - \* Quality 14% and
  - \* Content 15%.
- 95% of respondents said that in the past they did not change service providers
- Over 66% of respondents said they had used services over 15 years
- 44% of the respondents stated that they intend to change the service provider and 33% are not sure, while 23% of the respondents do not intend to change the service provider
- Customers who participated in the survey, observed a decline in service satisfaction from 80% to 31%, which is 49%.

#### **4. DISCUSSION AND CRITICAL CONVERSATION**

As we have already noted in identifying the subjects and problems of this research, modern business is characterized by a pronounced dynamic business environment where it is inevitable to develop models, techniques and tools that will enable the adequate management of enterprises that are interpreted in a long-term stable and ambitious competitive position. The management of local enterprises must be aware that, in the transition conditions of business, to recognize the opportunities that lead to better positioning in the market and at the same time achieving a competitive advantage (Djervida and Radosavac and Rodic, 2016, 375-385). Given the changes in the business environment and the increasing sophistication of the needs of customers, the management role is becoming more complex, more responsible and dynamic, which requires companies to identify different methods and ways and therefore make their business activity more effective and efficient. The aim of the research was to confirm or deny claims about the importance and effects of investing in better business relations with customers, which is increasingly discussed in contemporary literature. For this purpose, as we have already explained in detail, a survey was carried out on a sample of customers, telecommunication services about the subjective sense of customers regarding their perception how much and how they are respected by the manufacturers.

Customer satisfaction has a positive effect on economic returns (Anderson and Fornell and Lehmann 1994, 56). Our empirical research has confirmed the crucial importance of customers for the business success of the company, as well as the inability of quality

competitive positioning that should respond to the needs of modern business in terms of treating the customer as a top-notch significant factor of the business process. With a very high percentage, customers' dissatisfaction with the treatment of companies that have not yet developed an effective business strategy towards customers, with the stated intention to change service providers, has already adversely affected their competitive position, which will be even more dramatically interpreted in the near future (see Table 1. which shows the market participation of mobile telephony operators in the market of Bosnia and Herzegovina and Table 2. which shows the basic indicators of Telekom Srpske's operations in the period 2007-2016). By analyzing the basic performance benchmarks, we will focus on market share data for the past ten years. On the basis of the available data from the annual business reports of the telecom operator, the Communications Regulatory Agency of BH and the ITU (International Telecommunication Union), we observed data on the participation of mobile operators in the BH market. Based on the factual situation presented by the market share of mobile operators in the market of Bosnia and Herzegovina in correlation with the results of empirical research, we can assert the influence of customer relations on the performance of operations that shows market participation and we can see the link between these two variables. We see how much attention given to the user as the main driver of growth and development reflects on a competitive position.

Table 1. The Market Share of mobile phone operators in Bosnia and Herzegovina 2008 to 2016 ( Saric 2017, 10)

Market Share of mobile phone	2008	2009	2010	2011	2012	2013	2014	2015	2016
BH Telekom	44.88	39.21	43.34	42.93	44.54	44.36	46.95	44.88	46.36
TelekomSrpske	34.91	38.58	44.60	43.45	42.10	42.05	39.6	40.72	38.03
Eronet	20.21	22.21	12.06	13.62	13.36	13.32	13.18	13.94	14.55
Other	0	0	0	0	0	0.27	0.27	0.46	1.06
<b>Total</b>	<b>100.00</b>								

In order to confirm this, we will point out that in the observed period from the last ten years this company has reduced the number of users of fixed telephony by 30%, and in the last five years the decrease of mobile phone users for 114,000, which is not adequately compensated by new services, in the last eight years revenues recorded annual drop of 50 million BAM, EBITDA margin dropped by 3.5%. All of these say that there are serious problems that need to be carefully and thoroughly analyzed.

Table 2. Basic business indicators of Telekom Srpske 2007-2016 (Author)

	31.12.2007.	31.12.2008.	31.12.2009.	31.12.2010.	31.12.2011.	31.12.2012.	31.12.2013.	31.12.2014.	31.12.2015.	31.12.2016.
Total number of fixed telephone	356,748	359,784	354,800	344,132	320,131	305,230	291,371	280,725	263,574	251,000
Total number of ADSL users	4,981	23,682	52,790	80,712	98,894	110,204	118,759	124,048	127,085	129,150
Total number of IPTV/DTH use	0	0	0	5,284	13,849	24,168	35,519	43,736	51,548	57,840
Total number of mobile telephc	880,337	1,113,002	1,231,489	1,343,643	1,377,322	1,414,774	1,434,630	1,382,338	1,402,702	1,300,000
<b>Total revenue</b>	<b>391,485,903</b>	<b>475,440,709</b>	<b>493,634,453</b>	<b>483,494,529</b>	<b>485,144,258</b>	<b>490,529,715</b>	<b>478,148,316</b>	<b>488,099,553</b>	<b>464,098,707</b>	<b>447,766,497</b>
<b>Total expenditures</b>	<b>311,046,366</b>	<b>342,454,481</b>	<b>379,376,551</b>	<b>363,217,370</b>	<b>365,691,313</b>	<b>368,293,533</b>	<b>366,845,830</b>	<b>369,773,812</b>	<b>373,382,065</b>	<b>369,901,537</b>
<b>EBITDA</b>	<b>165,943,528</b>	<b>218,880,875</b>	<b>215,210,138</b>	<b>225,637,606</b>	<b>230,224,837</b>	<b>230,663,879</b>	<b>213,675,879</b>	<b>213,353,430</b>	<b>180,027,015</b>	<b>174,637,608</b>
<b>EBITDA (in %)</b>	<b>42.65%</b>	<b>46.39%</b>	<b>44.15%</b>	<b>47.17%</b>	<b>47.88%</b>	<b>47.46%</b>	<b>45.22%</b>	<b>44.16%</b>	<b>39.19%</b>	<b>39.27%</b>
<b>EBIT</b>	<b>86,827,010</b>	<b>136,204,468</b>	<b>116,224,486</b>	<b>120,688,830</b>	<b>120,101,472</b>	<b>120,491,096</b>	<b>107,187,526</b>	<b>114,800,703</b>	<b>87,341,514</b>	<b>75,539,611</b>
<b>EBIT (in %)</b>	<b>22.32%</b>	<b>28.86%</b>	<b>23.84%</b>	<b>25.23%</b>	<b>24.98%</b>	<b>24.79%</b>	<b>22.68%</b>	<b>23.76%</b>	<b>19.02%</b>	<b>16.99%</b>
<b>Gross profit</b>	<b>80,439,536</b>	<b>132,986,227</b>	<b>114,257,902</b>	<b>120,277,159</b>	<b>119,452,945</b>	<b>122,236,182</b>	<b>111,302,486</b>	<b>118,325,741</b>	<b>90,716,642</b>	<b>77,864,960</b>
<b>Net profit</b>	<b>71,720,343</b>	<b>119,209,503</b>	<b>102,633,216</b>	<b>108,358,780</b>	<b>107,415,885</b>	<b>109,963,497</b>	<b>100,296,487</b>	<b>106,496,171</b>	<b>80,737,811</b>	<b>70,170,354</b>
<b>Number of employee</b>	<b>2,515</b>	<b>2,504</b>	<b>2,464</b>	<b>2,327</b>	<b>2,277</b>	<b>2,201</b>	<b>2,161</b>	<b>2,155</b>	<b>2,149</b>	<b>2,143</b>
<b>Total assets per employee</b>	<b>311,983</b>	<b>410,096</b>	<b>391,188</b>	<b>390,495</b>	<b>392,460</b>	<b>379,196</b>	<b>394,508</b>	<b>398,846</b>	<b>400,266</b>	<b>399,453</b>
<b>Net profit per employee</b>	<b>28,517</b>	<b>47,608</b>	<b>41,653</b>	<b>46,566</b>	<b>47,174</b>	<b>49,961</b>	<b>46,412</b>	<b>49,418</b>	<b>37,570</b>	<b>32,744</b>

Based on the precise questions in the survey questionnaire, we managed to identify the significant correlation between the poor business results of the company and the neglecting of the customer as a crucial business factor.

Our research aimed at investigating the satisfaction of users (customers) with the treatment of telecommunications service providers, or more precisely mobile telephony services, in terms of whether users are really wondering about the relevant factors related to the product or service they use, quality, distribution, way of presentation, the possibility participation in their creation, terms of payment, service, support, and the like. Bearing in mind the "top-notch" significance and position of the customer in today's business conditions, given the profitability as the main goal of every company's business, the purpose of this research was to investigate whether the buyer's proclaimed place really belongs to him, or whether the customer really feels respected, respected, or forced to use a particular product or service due to a lack of supply or some other reason, to the fact that there are situations in which customers declare fraudulent or exploited.

## CONCLUSION

Dynamic and turbulent changes at the end of the last and the beginning of this century require future managers to put special efforts into satisfy the sophisticated needs of consumers in order to maintain and improve the competitiveness of their products. Only innovative, proactive, flexible, risk-ready managers and in all business-focused aspects focused on quality can count on the good future of their businesses. The modern business environment, brings new challenges to the management, how to organize the business process, how to integrate all the activities at different levels and develop a long-term business strategy with a vision that focuses on meeting the needs and wants of consumers while simultaneously increasing competitiveness. In this sense, all management tools are reviewed i.e. their usefulness and contribution to the added value of the company. In developed economies, these changes have already yielded positive results through the application of modern business philosophies. As we have seen in our conditions, there is still no adequate interaction and response to the problem that we have explored.

How important is investing in positive "business relations" with customers is fact that tells us that customers are the ones who are directly affecting the business results of the company. At a time when consumers are exposed to the aggressive offer of a lot of very similar products and services, the question arises what is what decisively affects the buyer's commitment to purchase, that is, according to which criteria the customer decides on a product or service. Direct contact with customers is unlikely to reveal the right reasons, as sometimes they do not understand their reasons themselves or do not want to share the reasons of their choice. The company understands the behavior of its customers through their satisfaction and loyalty. It is clear that there is a strong link between customer satisfaction and sales results of the company, that is, the sales result depends on the level of satisfaction of its customers. Customer satisfaction over a long period of time goes to the loyalty of the buyer, which provides the company with secure sales results and more specific planning, which leads to business security not only satisfying the needs of the customer, but also its comfortable feeling when consuming the product, i.e. the customer's subjective sense of enthusiasm by the value it has bought. There are contradictory opinions about achieving the enthusiasm of a product or service, but also opinions that stand in the position of additional engagement of the company makes buyers become more enthusiastic, which further leads to recommendation of a product or service to others, and thus additionally provide a better sales result. It is therefore important to keep the attention of consumers and bring it to the level that your positive message spreads to a larger circle of consumers.

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## ECONOMIC COMPETITIVENESS IN THE LIGHT OF INVESTMENTS IN RESEARCH AND DEVELOPMENT - EUROPEAN EXPERIENCE AND CHALLENGES FOR DEVELOPING COUNTRIES

**Summary:** *Financing of research and development by the state and the economy in developed and transition countries is a key factor in the structural change policy and a matter of prestige in international competition. Thus the role of the state and its entities in creation of an industrial policy in cooperation with private capital is growing, since the shortening of the century of monopolistic technological rentals accelerates investment in research. Therefore, on the horizon we can see a radical change in the structure of workforce, as well as the education system and its financing on the principle of entrepreneurial incubators. In the nineties of the last century, science and technology gained significance from the point of view of financial investments. The era of diversification of incentives for scientific research and technological development began. In OECD countries, research and development has become an almost dominant field of financial investment of the state and enterprises, as well as entrepreneurs. In this paper we explore European experiences in the form of best practices for developing countries, more precisely Serbia in its Euro-integration processes.*

**Key words:** *research, development, regionalism, incentives, benefits, Euro-integration*

**JEL classification:** *O31, O32, O4*

### INTRODUCTION

In today's world, the competitive ability of the economy is the result of systemic measures and mechanisms, as well as macroeconomic policy instruments, environments, as well as managerial and commercial skills, geographical, organizational, and demographic and resource indicators. In order to maintain stable and sustainable economic growth, it is unimaginable without competitiveness and modernization of the economy in terms of innovative activities and the economy of knowledge (Nestorović and Stankovic 2014, 148). Today, knowledge is recognized as the carrier of productivity growth and an important factor of economic growth, emphasizing technology, information and learning processes in strengthening economic potentials. By investing in knowledge, the production capacity of production factors increases, but it also enables their transformation into new products and processes (Jovičić and Petković 2016, 100).

Science and innovation are key factors of competitiveness and sustainable development. The basic prerequisites for creating an innovative knowledge society are the excellence and relevance of scientific research results. Excellence is a measure of quality and international visibility of scientific research results, and relevance is the influence of scientific and research results on the economy and society. Following the practice of the developed countries of the

world, Serbia adopted the document called Strategy of Scientific and Technological Development of the Republic of Serbia for the period from 2016 to 2020 - Research for Innovation. It is a document that sets out measures and programs for improving excellence in science and research targeted at the development of the economy and society as a whole over the following five-year period.

## 1. FINANCING OF RESEARCH - EUROPEAN EXPERIENCE AND MODELS

There are various purposes of research funding. Namely, in the structure of US funding, the programs of a military-strategic nature have dominant significance. In Japan and Germany, expenditures for financing peacetime (civil) production prevail. According to the National Science Foundation, the research potential of the OECD countries amounts to nearly 230 billion dollars a year. Out of the total OECD, investments in the United States account for 48.9% (from the point of view of workforce, 43% of the research staff comes from the USA). Germany participates with 8.7% of total investment in research. This is less than 1/5 of the US, and less than Japan by 50%. Nevertheless, research and development expenditure in Germany increased from 22.7 to 56.8 billion euros from 1977 to 2010. In the structure of expenditures for R & D in 2014, the economy participates with 59% on self-financing basis with entrepreneurial motives.

World R & D trends have prompted the EU Commission to indicate in its report on science and technology status in Europe that there is a growing gap in financing of research and development between the North and the South, or between Germany, Great Britain and France, and the remaining members of the EU, the brain drain towards the United States and the need to strengthen "research and development intensity". There are another two major problems: (1) the exclusion from the process of production of unqualified and less qualified workforce, and increased job creation for highly qualified and specialized workforce under the influence of the "cardinal consequences of the application of new technologies in the production process" and (2) increasing investments in and reforming of the education system in accordance with the new requirements of production techniques, which now imply "the application of science in all its elements" (from organization to management) and in which "these are no longer machines or robotics, but humans" (Sahlberg and Oldroyd 2010, 285).

In Sweden there are research grants, financial support for cooperative research programs, loans for the purchase of expensive scientific equipment, support from the Fund for Northern Lands, loans for technological development, state investment bank, etc. Research grants aim to encourage fundamental research in industry and can cover almost all types of expenses up to the full cost of the project. Aid for cooperative research programs aims to facilitate the implementation of joint research programs of interest to the entire industry or to a group of companies. The aid is given in the form of a grant, whereas the participation of STR (Eng. Technical Development Council, as a state agency within the line Ministry) cannot exceed 50% of the total project cost. Loans for the purchase of expensive scientific equipment are low-interest and uncollateralized loans, which serve to encourage research in the industry through subsidized procurement of scientific instruments and equipment. The aid of the Northern Lands Fund serves also to encourage research and development, and scientific projects that precede production. Aid is provided in the form of grants. Technological development loans are intended to encourage technological innovation through subsidizing of projects for the development of new technologies. Thus all the development costs are covered, from planning to construction of a pilot plant, including a prototype. In general, the loan covers half of the project cost. The Swedish Industrial Fund, as an independent foundation, serves to finance development projects. Funds are provided by the state. Loans are repaid in the form of "royalties" in the event of success, and are granted with interest rate

equalling discount rate increased by 4 percentage points. Only if the project fails, the fund receives an aid in the form of a grant. The State investment bank of Sweden finances only high-risk projects by granting loans at a fixed interest rate. Loans are given only to large companies that engage in long-term and risky projects. In conclusion, for this purpose, industries can be granted state-guaranteed loans, and loans from the regional development fund and loans for entrepreneurs.

Japan also financially supports research and development through a number of methods: support for significant research projects, technological advancement, creative science and technology promotion programs, contract-based development, licensing assistance, development bank, loan guarantees for research-oriented enterprises, aid for larger and revolutionary technologies, etc. Support for significant research and development projects (R&D) is provided by the state, especially when it comes to fostering a concentration of knowledge in an industrial structure. The system is managed by the Agency for Industrial Science and Technology. The state also provides support for R&D for larger technologies in the form of an interest-free loan. The state also supports revolutionary innovative technologies, with the so-called conditional interest-free loan. The loan covers 50% of the total project cost, since only the target-oriented work is funded. State aid is also provided for technological improvements of small and medium-sized enterprises, while the loan has to be partially repaid with a certain portion of profit upon completion of the research program. The R & D Corporation of Japan aims to help the industrial application of research and experiment results achieved by universities and public and private institutions. There are three programs:

- (1) program for the promotion of creative science and technology,
- (2) development through contracts, and
- (3) supporting licence marketing.

For these programmes, the corporation covers equipment purchase and current expenses, which must be repaid in five years without interest. Along with the corporation, Japan Development Bank is also involved, providing guarantees for the cross-border loans to help develop technology and research. In addition, a small business finance corporation is introduced to improve the application of research results and new technology. The Credit Guarantee Association provides guarantees against loans that companies apply for with commercial banks for innovations. The Centre for R&D and Development-Oriented Enterprises, as a non-profit state foundation, also provides guarantees against loans for development-oriented projects, especially to small and medium-sized enterprises for the development of new technology.

Over the last 20 years, Germany has paid special attention to programs and support to R&D in small and medium-sized enterprises. The federal state is implementing a program of grants for personnel expenses derived from research and development in order to strengthen the R&D capacities of small and medium enterprises. The funds are provided from the budget of the Federal Ministry of Economy. Grants for external contractual research expenditures are paid up to 30% of total expenditures to companies that do not have R&D capacities. The grants are conditioned upon the project being directed at development of these technologies and carried out at the institute funded by the social funds. The system for technological advice, which receives 1/3 of its funds from the Federal Ministry of Economy, through sectoral R&D associations encourages the application of technological knowledge in innovative activities. In addition, premiums for investments in fixed assets for R&D (20%) and in regional development (10%) are also used. Under this pattern, premiums are financed indirectly, i.e. by reducing taxes to companies. Initial innovation programs provide innovation support up to the stage of development of prototypes at the federal unit level.

This way, a loan for up to 50% of the R&D costs can be granted, provided the interest for the entire economy is identified exceeding the financial concept of the company risk-wise. There is a wide range of state support for the improvement of technological performance of the economy and strengthening links between research activities, as follows: vertically, from basic research to its application, and horizontally, between various activities, all aimed at industrial research improvement within the framework of the Federal Ministry of Research and Technology programme. These programs represent cross-categories between contractual research and direct grants, while the federal state can participate in the income from the use of the project results that it had financed depending on the level of participation. On top of these, there are special programmes for microelectronics and information technology, covering 40% of the development costs and 20% is allocated for investments. Finally, there is the so-called venture capital for technological development, formed by credit institutions through foundation of a joint financial institution, whereas the federal state assumes over 75% of losses to cover from its budgetary sources.

The Netherlands, like many OECD countries, provides significant support to research and development, the TNO provides significant support for the applied research, and, as a non-profit organization, has a network of its own laboratories and institutes shared with the industry. The program of "incentive measures" provides grants for R&D projects, up to 50% of the total project cost. The so-called Contract research offers the possibility of covering costs of contractual R&D projects carried out by the institutes for specific companies on a six-year term, while the State Industrial Advisory Service is responsible for managing the program. "Innovation incentive arrangement" represents a new central program that supports small and medium enterprises by covering personnel expenses allocated for R&D purposes. Programs for priority areas (such as transit technologies, information technologies and medical technologies) subsidize the "funds" for know-how and for science and development institutes working on these programs. At the initiative of the Ministry of Economy, a study is performed for priority areas whose costs are covered in their entirety. Priority is given to collective researches (from institutes and groups of companies) in order to strengthen the technological base of the Dutch industry.

Loans for technical development have been launched to contribute to financing ideas and covering the costs of overall research. The support is given in the form of a loan. Interest and reimbursement of funds to small and medium-sized enterprises, the financial support for the project should go beyond the possibilities of a normal budget. There are also demonstration energy saving projects the supporting tool of which consists of two parts: a grant covering 25% of the investment and a special purpose loan covering 25% of the investment price. In case of project failure, loans are written off. Finally, the Ministry of Economy provided additional venture capital through the National Investment Bank to small and medium-sized enterprises. Funding is made in the form of loans with state participation of 35% and with the granting of state premiums for regional investments in accordance with the rules of the EEC for investment and development.

France is, finally, a well-known EU member state, which also financially supports the policy of the R&D by numerous measures and instruments, mechanisms and institutions. The Fund for Scientific and Technical Research, administered by the Ministry of Research and Industry, distributes funds in three different ways (procedures). Namely, managed actions are performed in special areas of fundamental and applied research. These actions are in the form of grants, without repayment obligation. State research organizations receive grants that cover the total cost of research. For private laboratories, grants cover 50% of the total research costs. Contract programs are valued in the form of non-refundable grants in the amount of 50% of the average research price for private research institutes and 100% of the total cost of research for social institutions.

Finally, specific actions (in addition to managed and contracted actions) are focused on the financing of limited-scale research operations. Specific actions have a form of grant and vary depending on the researcher. They serve to compensate research costs, however without covering research personnel expenses. In addition, innovation grants (premiums) are in place to encourage investments in R&D of small and medium-sized enterprises. Costs that are the premise for the grant volume assessment are the R&D price for new products or processes, and R&D prices for expertise. Innovation grants amount to a maximum of 25% of the research costs. Premiums for the dislocation of research activities are allocated to companies that create and develop capital equipment for research outside the Paris region. These schemes are also followed by innovation-targeted support, which is provided to individuals or research agencies. The support is given in the form of an advance payment, which is repaid in case of project success, and, rarely, in the form of a non-repayable grant if the project fails. The support does not exceed 50% of the expenditure (including taxes). In general, the support covers almost all stages of the innovation process, research personnel expenses and capital equipment expenditure. Innovative companies are provided with guarantees against bank loans by an innovation development company. The coverage is obtained from a fund provided by the Ministry of Research and Industry. The bank is protected from risk, as it only provides medium-term loans and investment loans for innovation. These loans are granted for a period of 2-10 years, or 12-15 years.

Loans enable to finance expenditures for industrial and commercial introduction of innovations, R&D expenditures for innovation improvement and investment costs. In addition, Strategic Industrial Development Schemes are used, based on which companies receive financial support from countries for projects in strategic areas. There are also schemes for equipment modernization and special purpose loan for the introduction of robotics. Newly-founded innovation finance companies (so-called venture capital companies) also have their schemes to finance the industrial application of technological research and the development and acceptance of inventions. They enter into an agreement with the state on providing initial capital and investing at least 80% of capital to distribute profits for investing in innovation. The Special Guarantee Fund of the Ministry of Research and Industry covers the losses of innovation finance companies under the loans to small and medium-sized firms. These also include loans from agencies with special legal status and loans from the "natural-social development fund". Finally, they also serve to support through equity interest in shareholders' capital through the Institute for Industrial Development (which, being an agency, only buys newly issued shares) and regional development companies, which receive grants designed for companies that create, expand and maintain research activities, engineering, marketing and consulting.

In Serbia, investments in science accounted for 1.2% of the social product. Relative allocations for science correspond approximately to the degree of its economic development, its economic ranking on the scale of international comparisons. These allocations are 3-5 times lower than in the developed countries of Western Europe. However, if we consider investments in science per capita, then they are 4-5 times lower in Serbia than in the developed countries of Western Europe. And if we look at the financing of scientific research at higher education organizations in Serbia, then we come to the conclusion that the share of the economy in the financing of scientific research is increasing and that the relative share of social funds in this financing is decreasing. From the perspective of open innovation, as a new model in operating of companies in Europe and the world, the Republic of Serbia still has a lot to do to improve the internal structures of knowledge, technology and other tangible and intangible assets, i.e. to improve its own innovative capacity (Ristić and Vukajlović and Brazaković 2016, 22).

Innovation potential of Serbia, in comparison with the developed European countries, is in a much worse position, and this position stems from the lack of adequate access to funding sources, investments in research and development of new products and services, and market

development. Only when an adequate basis for establishing an appropriate knowledge base is created can we improve the national innovation culture (Dajić 2017, 56).

## 2. SUSTAINABLE REGIONAL DEVELOPMENT INCENTIVES

Modern state interventionism in the so-called monitoring economy form implies a complementary response from the public sector to the undertaken economic actions of the private sector in support of the development of propulsive sectors, the promotion of technological progress, infrastructure financing, fiscal benefits, subsidies, etc. In order to accelerate the development of underdeveloped areas in developed industrial countries, a number of mechanisms are used: subsidies, grants, approval of loans with lower interest rates, fiscal benefits and incentives, sale of land and buildings in underdeveloped areas at favourable prices for industry needs, granting privileges to industry in purchasing deficient resources, defining favourable tariffs for public services, the obligation of the state companies to invest in underdeveloped areas, administrative prohibitions for new investments in highly developed and overly urbanized regions, granting state subsidies in various forms (premiums for procurement of investment equipment, premiums for recruiting new workers, participation in research expenditure) (Jakopin 2011, 77).

In Italy, there are subsidies in the amount of building construction costs, grants in the amount of 10% for purchased equipment and devices in developed areas of 20% for purchased equipment in underdeveloped areas. In Germany, from the Fund for Regional Development Programs in Industry and Tourism, grants are given in the amount of 15% of investments, or up to 25% for reduction of investment costs in the border areas. In France, funds for financing the development of underdeveloped areas originate from the Territory Fund, the Fund for Economic and Social Development and the Local Fund for Regional Development in the form of grants, subsidies and favourable loans. In the United Kingdom, a special grant is granted for the construction of individual facilities to increase employment, grant for expenses related to relocation of enterprises and workers in underdeveloped areas is offered as well, and for staff training and new education of workers, grants for construction of facilities, special purpose grants and covering up to 85% the cost of cleaning up the neglected and polluted areas, a special grant of up to 30% of the costs for improving infrastructure and a grant of up to 30% of wage costs in newly-founded enterprises.

In Italy, tax deductions for the profits reinvested in the south are approved. Tax incentives also apply to building materials, taxes on the purchase and transfer of land and buildings, electricity tax and registration fees for new companies. In Belgium, there is the exemption from local labour tax and installed motor power, company registration and real estate taxes, as well as reduction of the tax on the profit reinvested. In France there are tax reliefs on land tax and on reinvested profits and exemption from patent tax and inheritance taxes. Accelerated amortization exists in all EU Member States. In Italy, there is even double amortization during the three budget years, while in France there is an "exception" amortization of up to 25% of the construction costs. In the UK, initial write-offs are allowed up to 40% of the value of investments, while investments in the least developed regions benefit from accelerated write-offs in full amount. The state provides special privileges in the form of free rental of factories or a newly built factory with favourable privileged rental fees in order to strengthen the entrepreneurial spirit.

In Germany, grants and subsidies are allocated from public funds ranging from 10% up to 25% depending on the identified developmental poles. In Denmark, investment premiums can go up to 25%. In Germany, public aid is given in the form of loans to small and medium-sized enterprises, beneficial loans to the processing industry, investment in infrastructure and special social security funds. In the United Kingdom, local government funding is a source of public aid to the industry in underdeveloped regions, while the state places priority on

procurements from the budget to the underdeveloped areas (Hadjimanolis and Dickson 2001, 811)

Thus, a diversity is the level of development aid - from subsidies to bus companies that operate routes in underdeveloped areas (Norway) to major state interventions in the branches and regions to be helped (Sweden). In Sweden, companies are authorized to set aside up to 40% of profits before taxation and hold them in an investment fund for use in the "special assistance" zone. In Spain, aid is allocated to the zones having potential development opportunities. In Germany, there are areas with special status and economic development subsidies (provinces). In Finland there is even a fund, organized as a joint-stock company, where the state is the major bond-holder. There is also a special fund for the development of Ireland and South Italy in the EU. But capital is invested where there is the biggest difference between its yield and its burden, because different taxation systems are a real disruption to integration. Out of the budget, 5% goes to regional expenditures (75% on the CAP, 6% on the administration, and 5% on social expenditures). Regional disparities in the EU, however, still amount to 6: 1 between the most developed Hamburg and the least developed Calabria.

On the other hand, the states provide benefits for the relocation and foundation of new factories in the province (France, England and Greece), and a reduction in the concentration of economy and population around major cities (Belgium, Denmark and Switzerland). By facilitating and subsidizing individual countries, the industry is directed to less developed regions (the Netherlands and Poland). In Russia, the development of the underdeveloped republics, districts and districts is boosted by non-repayable state budget investments, budgetary grants and beneficial bank loans.

By stimulating capital to move towards less developed regions and providing guarantees for loans and favourable interest rates (USA, Canada and Austria), additional funds are provided for the development of underdeveloped areas. Lastly, the Southern Development Fund was established in Italy. In the first phase, the fund stimulated the development of infrastructure. The second phase involved major agricultural interventions, because on the basis of the initial results, the conclusion was that the industry cannot thrive on the economically uncultivated soil without working habits and production of funded consumption. In phase III there was a more intensive foundation and relocation of factories with a major help from a fund that encourages the development of small and medium-sized enterprises, stimulating the relocation of company directors, development centres and project organizations from the North. Enterprises are exempt from social contributions for employees and taxes, and receive loans under more favourable conditions. Among the incentives to increase the free level of demand, production and employment, cash grants for purchasing primary capital are particularly important, expansion and re-activation of existing assets, employing young people and training of staff, reduction of local taxes, subsidizing loans, etc.

In Ireland, grants for investments to small industrial enterprises, grants for modernization and re-adaptation of equipment, subsidies for real estate leasing for agricultural and industrial enterprises, low interest loans and rendering of free services are particularly practiced. Brazil is characterized by income exemptions, taxes on factories and machines purchased for the incorporation of enterprises in underdeveloped regions and customs on imports, the definition of tax exemptions for investment projects through national regional development agencies. In Malaysia, there are long-term income tax exemptions for companies that locate their operations in certain developing regions, for investment in primary capital and for recruitment of additional workforce (Corsetti and Meier and Müller 2012, 880).

While implementing the policy of reducing disparities in the regional development of modern countries, numerous measures and instruments are used: control of the location of economic activity and production capacities, provision of socio-economic infrastructure, complex regional planning, foreign exchange and import licenses, budget grants, development funds and fiscal incentives. In this context, regional fiscal incentives, such as tax incentives for

production, tax incentives on profits, tax incentives in the sphere of consumption and other incentives, are of particular socio-economic importance.

Overall, the emphasis on stimulating additional investment in fixed assets, delivery of goods and rendering of services needed by the state and other fiscal and non-fiscal incentives in the policy of reducing regional disparities reflects focusing more on supply than on demand. However, the question of the cost of incentives for the national fiscal fund and the matter of alternative methods, which, along with the cost of incentives, reject maximum benefits for the regional economy and the national fiscal fund by giving equivalent incentives is still open for scientific discussion. By standard comparison analysis of the prices of incentives set aside from fiscal and budgetary funds and the benefits of allocated incentive through production, employment, income and taxes, a rational decision on the size of the incentive can be reached from the point of view of the efficiency of narrowing regional disparities and the efficiency of allocated resources. In this context, development policy makers should ensure that for each given budgetary expenditure for a fiscal incentive, additional income for national fiscal fund, personal income, consumption, income and assets is created (Ristić 2013).

During 1980-2010. in the EU, discussions were held on the reform of the regional development policy and the Regional Development Fund, which was created as an instrument which by additional financing results in reducing the differences within the national economies of the member states, the prioritized development of the least developed regions and the coordination of national regional policies. The Policy of Incentives for Regional Development through the Fund was fed from four sources: (1) Loans with favourable interest rates approved by the European Investment Bank, (2) Aid from the Agrarian Fund, (3) additional funding from the Social Fund, and (4) Funds of the Regional development Fund. In the period 1985-2008, through the Fund, a huge amount of money was invested in the EU, to activate investments in which the fund participated with 13-17% of equity contribution. In the past period of the Fund's operating, there were disputes over who contributes and to what extent, as well as who receives the funds and the volume thereof, primarily because the Fund financed the costs of the budgets of the countries allocated for the regional development and because the fund's grants represented a kind of subsidy to the budgets of EU member states. Therefore, in the reformed Fund strategy, the funds are divided into two categories: (1) funds allocated to member states within the limits of fiscal quota, which are allocated according to the key for financing national programs of regional development, and (2) funds used to finance common projects. In this way, the Fund is not only a tool for collecting and allocating funds, but is also deciding on the use of funds and coordinating national policies for regional development with EU policy in order to achieve a unified, common regional development policy.

Representing activities of special social interest and leading activities within the entire sphere of social activities, educational and scientific needs are supported by fiscal resources. However, additional investments in science and education do not have fiscal treatment. Namely, investments in scientific and educational activity that are considered material costs, funds of the reserve funds are not encompassed by the fiscal policy. The same applies to the additional investments of the company by additional income allocations, purpose-related investments, pooling of funds, etc. Citizens' contributions for science and education are a deductible item in determining the fiscal burden of taxes from the total income of citizens. The employment service funds serve to increase the mobility of highly educated staff, while the special personnel benefits serve to attract professionals for underdeveloped areas (Smits and Kuhann 2004, 30).

Researching cosmos and new energy sources, new technology and the transfer of science and technology and armaments are, of course, the first-rate domains of spectacular modern state investments and the spending of the budgetary financial resources and public funds of capitalist countries. Technological innovation, as a catalyst for economic growth, has become, in modern economies, the battle field of a new economic struggle. Fiscal benefits (reliefs and

deductibles), development premiums, investment primers, accelerated amortization, tax credit, tax refunds, fiscal deductible, differential or discriminatory taxation, beneficial and anticipated interest, public investment and selective lending are empirically verified in national economies as constituent measures and instruments of the overall economic, i.e. financial policy in the development context with calculated effects in the field of technical and technological progress (Milićević and Milićević and Arsić 2014,130).

The financial potential of budgetary and public-funds as financial institutions is distributed and allocated in the function of covering the costs of building socio-economic, social-health, scientific-educational and cultural-educational infrastructure, through which it indirectly impacts the dynamics of national income. The fund-oriented sector of economic organizations and the retail sector allocate purpose-related funds for the construction of objects of social standard. In addition, funds are allocated for the financing of needs in the material sphere of reproduction having the character of infrastructure objects, through purpose-related allocation of proceeds from income (through loans, special purpose taxes and contributions, and mandatory pooling of funds). By means of commercial and non-commercial investments from the budget, and non-commercial investments of social enterprises and funds relatively significant pool of assets is directed into the construction of infrastructure facilities of production and non-productive types. Special fiscal exemptions and deductions stimulate additional allocations for infrastructure purposes. Economic transfers support investment placements in the domain of infrastructure Duvnjak 2018). By issuing internal public debts and importing external accumulation by external borrowing, creditworthy resources are deployed to finance the infrastructure. Beneficial lending conditions serve to rechannel the funds into investment projects in the domain of infrastructural integrated regional strategy of sustainable development. Finally, a private-public partnership is a new financial challenge for the financial management of regional development, which is already being implemented in the form of regional financial management as a new segment of global financial management and corporate financing of the regional economy.

## CONCLUSION

Importing technology and selling cheap labour force cannot save us from a dangerous trap of slow growth. The right solution is based on an innovative growth strategy that supports innovation and knowledge in the form of a regional innovation support strategy. Even the EU sought solutions in supporting innovation (ERA project) and "smart" specialization, whereas innovations are the key to getting out of the trap of insufficient growth. Innovation, on the path of knowledge-based growth, imply achieving the necessary level of state partnership building, research organizations (public) and economic entities (private) with the end goal to reach the target level of 3% of the social product set by the Lisbon Treaty and now imperative in the Europe 2020 strategy. Innovation must therefore be the epicentre of key discussions on the economic policy and institutional reforms that incorporate the creation of scientific incubators and research parks, creation of university enterprises (spinoffs) and intermediary organizations to support innovation capabilities, the formation of economic clusters for the spillover of knowledge, the formation of the Innovation Fund (financed by innovative companies at an early stage) and the increase in available capital through the investment of business angels and venture capital, and the creation of a co-financing program for innovative activities for structural, regional and demographic development and the creation of competitive business climate. The country is deemed successful only so long as it is able to continuously create and enhance its most important factors of production, such as well-trained people and its science base. (Klincov and Ristic 2009, 23).

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## POLITIKA ZAŠTITE KONKURENCIJE U EVROPSKOJ UNIJI

**Rezime:** *U Evropi se pridaje velika pažnja zaštite slobodne konkurenčije i neophodnosti za normativnim regulisanjem, tako da se u okviru Rimskog ugovora o formiranju Evropske unije usvaja tzv. Amsterdamski sporazum kao prvi osnovni dokument u domenu zaštite konkurenčije. Ovaj dokument se kasnije razrađuje usvajanjem Uredbe o kontroli koncentracija između kompanija, a osniva se i posebna komisija za zaštitu konkurenčije (Evropska komisija) koja se, u saradnji sa regulatornim telima određenih država članica Evropske unije, bavi pitanjima zaštite konkurenčije na području Evropske unije.*

**Ključne reči:** zaštita konkurenčije, Evropska unija, antimonopolsko pravo

**JEL klasifikacija:** K21

### UVOD

Zaštita konkurenčije ima suštinski značaj za efikasno funkcionisanje tržišne privrede. Zaštita konkurenčije se institucionalno implementira putem politike zaštite konkurenčije (drugačije se naziva i antimonopolска politika), koja se bavi zaštitom i jačanjem konkurenčije između učesnika na tržištu kako bi se obezbedili jednakci uslovi za sve učesnike. Osim regulisanja monopola, politika zaštite konkurenčije se bavi i ograničavanjem bilo kog vida ponašanja privrednih subjekata koje može da ugrozi elemente efektivne konkurenčije (Ristić 2009, 68). Radi se o politici koja vodi ostvarivanju efektivne konkurenčije kao preduslova ekonomskog i šireg društvenog napretka (Stojanović i Kostić 2013, 326).

Politika zaštite konkurenčije ima cilj da promoviše proces efektivne konkurenčije tako što će kroz delovanje slobodnog tržišta obezbediti efikasnu alokaciju resursa, pri čemu mere i sredstva zaštite konkurenčije treba da dovedu do povećanja konkurentnosti dobara i usluga sa relevantnih tržišta. Neograničena konkurenčija koja podrazumeva slobodno kretanje dobara, usluga, kapitala i ljudi otvara prostor za sinergijsko delovanje različitih faktora, a otvorenost pojedinačnih tržišta je uslov za podsticanje preduzeća na ekonomičnost, inovativnost i inventivnost, čime se osigurava povećanje blagostanja preduzeća i ukupnog blagostanja (Stojanović i Radivojević i Stanišić 2012, 122). Politika zaštite konkurenčije neprekidno traga za povećanjem efikasnosti, promocijom inovativnosti i unapređenjem mogućnosti većeg izbora od strane proizvođača i potrošača (Dutz i Vagliasindi 2000, 764).

Institucionalno, uređenje pitanja zaštite konkurenčije prvi put je rešeno u SAD-u 1890. godine, kada je usvojen zakon o zaštiti konkurenčije, tzv. Shermanov propis, koji je zabranjivao dogovor između subjekata, čime se limitirala trgovina, a naročito dogovor konkurenata oko visine cena. Ovim propisom se prvi put reguliše monopolsko ponašanje i sankcioniše zloupotrebu tržišne moći. Shermanov propis je 1914. godine doživeo dopunu Klajtonovim aktom koji je regulisao povezivanja (koncentracije) subjekata koja narušavaju zdravu konkurenčiju na tržištu. Oblast zaštite konkurenčije u SAD-u je 1936. godine dodatno poboljšana donošenjem Robinson-Patmanovog propisa kojim je regulisana diskriminacija

putem cena. Dopuna i razrada propisa iz oblasti zaštite konkurenčije nastavljena je u narednom periodu.

Značaj sprovođenja antimonopolske politike proizilazi iz uticaja koji ova politika ima na blagostanje potrošača, produktivnost preduzeća i privredni rast zemlje. Tako se ostvaruju koristi za potrošače koje proizilaze iz niskih cena i visokog kvaliteta proizvoda, kao i širokog izbora raznovrsnih i kvalitetnih proizvoda.

Politika zaštite konkurenčije treba da ujednači uslove konkurenčije na svim delovima tržišta i za sve učesnike na tržištu, pri čemu postoji veći broj prioriteta koje politika zaštite konkurenčije treba da realizuje, među kojima su najznačajniji (Begović i Pavić 2012, 9):

- Borba protiv kartela i sprečavanje njihovog nastajanja;
- Poboljšavanje i pospešivanje privatizacije i ekonomskog restrukturiranja;
- Povećane ekonomske slobode preduzeća i privatnih preduzetnika;
- Smanjivanje neizvesnosti svih učesnika, naročito preduzeća i privatnih preduzetnika;
- Izbegavanje kontrole cena kao mehanizma antimonopolske politike;
- Upliv na druge politike koje imaju uticaj na konkurentnost tržišnih struktura, odnosno ponašanja, naročito na one koje stvaraju barijere ulaska.

Limitiranjem prevelike tržišne moći, kompanija politika zaštite konkurenčije unapređuje alokativnu efikasnost, odnosno proizvodnu efikasnost i blagostanje potrošača i proizvođača na tržištu. Sprovođenje politike zaštite konkurenčije se temelji na analizi stanja na tržištu (proizvodnom i geografskom). Politika zaštite konkurenčije alokativnu efikasnost uspostavlja tako što sprečava i sankcioniše sve aktere na tržištu koji svojim ponašanjem narušavaju slobodnu konkurenčiju na tržištu.

## 1. POLITIKA ZAŠTITE KONKURENCIJE

### 1.1. Pravno-ekonomski okviri politike zaštite konkurenčije

Politika zaštite konkurenčije predstavlja oblast u kojoj se neizbežno susreću i dopunjaju pravo i ekonomija. Pozitivna ekonomska analiza (Duvnjak 2018) predstavlja temelj za donošenje propisa koji sačinjavaju pravni okvir regulacije, što implicira da se sprovođenje politike zaštite konkurenčije mora posmatrati kako sa pravnog, tako i sa ekonomskog aspekta.

Ekonomska analiza stanja na datom tržištu istražuje i tumači dešavanja na tržištu, odnosno uzroke i posledice različitih tržišnih procesa da bi se, na osnovu dobijenih rezultata, moglo da usvoje različite mere iz domena politike zaštite konkurenčije. Prilikom analiziranja stanja na tržištu i usvajanja mera politike zaštite konkurenčije moraju da se imaju u vidu, na jednoj strani, stepen slobode delovanja aktera na tržištu, a na drugoj strani, mogućnost efikasnog funkcionisanja privrede utemeljene na konkurenčiji (Clarke 2011, 42). Samo ako su oba uslova istovremeno ispunjena postoje uslovi za efikasnu tržišnu utakmicu i maksimiranje blagostanja potrošača i društva u celini.

Politika zaštite konkurenčije se pojmovno i suštinski razlikuje od prava konkurenčije. Pravo konkurenčije se definije kao skup pravnih normi koje treba da obezbede da se konkurenčija ne narušava na način kojim se umanjuje društveno blagostanje, dok politika konkurenčije predstavlja širi pojam, koji pored prava konkurenčije, uključuje i sve aktivnosti državnih organa i tela koje su posredno ili neposredno usmerene ka zaštiti konkurenčije, odnosno ka onemogućavanju njenog narušavanja (Ma 2011, 307). Pravo potrošača je usko povezano sa konkurenčijom, kao i određivanje različitih proizvodnih standarda, zatim, državne subvencije, određivanje minimalnih i maksimalnih cena proizvoda ili usluga, itd. (Begović i Pavić 2012, 23).

Pravo konkurenčije, kao posebna grana prava, uređuje najvažnija pitanja funkcionisanja konkurenčije na jedinstvenom tržištu. Ono obuhvata nekoliko specifičnih celina (restriktivni sporazumi, zloupotreba dominantnog položaja, koncentracije privrednih subjekata, državna pomoć i državni monopolii) u zavisnosti od načina na koji se ugrožava funkcionisanje zdrave i

fer konkurenčije na jedinstvenom tržištu (Spasić 2008, 72). Cilj prava konkurenčije je da unapredi ekonomsku efikasnost učesnika na tržištu i optimizuje alokaciju resursa kroz obezbeđivanje slobodne konkurenčije. Osim toga, pravo konkurenčije nastoji da zaštitи male tržišne učesnike i potrošače od neprijateljskih postupaka velikih i moćnih tržišnih učesnika koji dominiraju na tržištu i/ili se međusobno sporazumevaju i na taj način ograničavaju slobodnu konkurenčiju na tržištu. I na kraju, jedan o ciljeva prava konkurenčije jeste i njegov uticaj na izgradnju jedinstvenog tržišta (što se posebno odnosi na zajednička tržišta više zemalja poput Evropske unije) i sprečavanja pojava kojima se to tržište narušava od pojedinih njegovih učesnika (Feldmann 2009, 58).

## **1.2. Osnovni zadatak politike zaštite konkurenčije**

Najvažniji zadatak politike zaštite konkurenčije je da vrši monitoring i reguliše rad monopola (odатле i naziv antimonopolska politika), odnosno velikih kompanija koja poseduju veliku tržišnu (monopolsku) moć. Cilj te politike predstavlja zaštitu opštег društvenog interesa u okolnostima kada monopolska preduzeća zloupotrebljavaju moć koju imaju i ugrožavaju druge aktere na tržištu, pre svega potrošače. Zbog toga politika zaštite konkurenčije mora neprestano da balansira između eventualnih koristi i verovatnih neželjenih posledica od postojanja monopola na nekom tržištu.

Druga bitna oblast koja se nalazi u nadležnosti politike zaštite konkurenčije je monitoring i regulacija koncentracije, odnosno povezivanja aktera na tržištu. Uvećanje veličine kompanije kroz interni razvoj, a naročito pomoću spajanja i preuzimanja drugih kompanija može da naruši slobodu konkurenčije na tržištu, tako da nastaje potreba za praćenjem i eventualnom regulacijom što podrazumeva i zabranu spajanja. Regulatorni organi imaju veoma težak zadatak da uravnoteže koristi koje nastaju povezivanjem zbog efikasnijeg poslovanja novog subjekta u odnosu na pređašnje poslovanje subjekata koji su poslovali nezavisno i troškova koji se stvaraju zbog potencijalne zloupotrebe dominantnog položaja novog subjekta na tržištu.

Politika zaštite konkurenčije, takođe, vrši monitoring i reguliše pojavu restriktivnih aktivnosti (prakse) koju sprovode pojedini učesnici na tržištu. Radi se o aktivnostima koje preduzima jedna ili više velikih kompanija, a kojima se ugrožava ili znatno ograničava konkurenčija na tržištu. U ove restriktivne aktivnosti spadaju dogovori oko fiksiranja cene, definisanje netržišnih cena, razne forme diskriminatorske prakse fokusirane bilo ka dobavljačima ili kupcima. Restriktivni sporazumi se u praksi sprovode kroz različite vrste formalnih i/ili neformalnih dogovora između preduzeća na tržištu. Nezavisno od toga da li se radi o formalnim ili neformalnim dogovorima, oni mogu biti horizontalni i vertikalni u zavisnosti od toga da li radi o preduzećima koja pripadaju istoj grani ili o preduzećima iz različitih delova lanca vrednosti, odnosno faza proizvodnje i prometa. Horizontalni dogovori postoje između subjekata koji pripadaju istoj grani. Oni mogu da sarađuju putem dogovora o usaglašenoj cenovnoj politici, o proizvodnim kvotama, podeli tržišta, razmeni bitnih informacija o cenama i obimu i vrsti ponude i sl. Vertikalni dogovori uključuju subjekte koji pripadaju različitim delatnostima u lancu proizvodnje i odnose se na tzv. ekskluzivne ugovore koje dominantna preduzeća potpisuju sa dobavljačima i kupcima. Ovim ugovorima se određuje cena, kvalitet i drugi bitni elementi, kao što je pravo prvenstva, a što sve pojedine subjekte stavlja u nepovoljniji položaj u odnosu na druge učesnike sa kojima takvi ugovori ne postoje (Hüschelrath i Peyer 2013, 122).

Na implementaciju politike zaštite konkurenčije, uz čisto ekonomске, uticu i drugi elementi, poput socijalnih, političkih, razvojnih i ekoloških. Regulatorna tela koja implementiraju politiku zaštite konkurenčije uvažavaju i socijalne faktore, naročito u periodima ekonomске krize, kada se zbog smanjenja socijalnih tenzija i održanja nivoa zaposlenosti tolerišu pojedina nekonkurentska ponašanja aktera na tržištu (tzv. krizni karteli). Polazi se od hipoteze da je šteta koja se stvara od netržišnog ponašanja nekih kompanija manja od nezaposlenosti

koja bi nastala u slučaju njihove propasti. Naravno, reč je o dugoročno ekonomski neopravdanom ponašanju, tako da se primenjuje samo u izuzetnim prilikama i sa ograničenim rokom.

Bez obzira na različite uticaje, svaki zakon o zaštiti konkurenčije izvorno se tiče pitanja nastanka, jačanja i zloupotrebe tržišne moći aktera na tržištu. Zakon o zaštiti konkurenčije sa odgovarajućim podzakonskim aktima (pravilnici, uredbe, smernice i sl.) određuje prava i obaveze aktera na tržištu i način postupanja regulatornog tela (zavoda, komisije, agencije, službe i sl.). Ovakav pristup insistira na kontroli svih aktivnosti koje dovode do promena tržišne strukture i prema potrebi na izricanju upozorenja, zabrana i kazni. Na taj način se sprečavaju i obeshrabruju akteri na tržištu da svojim ponašanjem narušavaju slobodnu konkurenčiju na tržištu i krše odredbe zakona o zaštiti konkurenčije.

## 2. ANTIMONOPOLSKA POLITIKA EVROPSKE UNIJE

Politika konkurenčije Evropske unije implementira se na području unije kao jedinstvene celine i na nivou država članica, koje, takođe, usvajaju zakone i podzakonska akta koja se u izvesnoj meri razlikuju od zemlje do zemlje. Ipak, ti propisi i regulatorna praksa moraju da budu u skladu sa temeljnim pravilima koje definiše Evropska unija.

Srž politike konkurenčije Evropske unije sadrži se u komunitarnom pravu, čiji najrazvijeniji deo čini upravo pravo konkurenčije. Izvori komunitarnog prava, u zavisnosti od toga ko ih donosi, mogu se razvrstati na primarne i sekundarne (Lopez 2013, 31). Primarne izvore komunitarnog prava usvajaju, odnosno donose, zemlje članice tokom uređivanja međusobnih odnosa i Evropska unija (zajednica) na osnovu svog ugovornog kapaciteta, kao subjekt međunarodnog prava, potpisivanjem sporazuma sa međunarodnim organizacijama i trećim zemljama. Sekundarni izvori prava EU moraju biti harmonizovani sa primarnim i to su: uredbe, uputstva i odluke, smernice, preporuke i mišljenja.

### 2.1. Pravo konkurenčije Evropske unije

Na sam nastanak i razvoj prava konkurenčije i antimonopolske politike EU je ogroman uticaj imala antitrustovska politika Sjedinjenih Američkih Država. U Rimskom ugovoru o osnivanju Evropske zajednice problem zaštite i prava konkurenčije je predstavljao jedno od ključnih pitanja i članovi se od 81. do 90. bave ovom problematikom. Najznačajniji cilj EU je stvaranje jedinstvenog tržišta.

Pravo konkurenčije i kontrola državne pomoći predstavljaju najznačajniji deo pravila za formiranje jedinstvenog tržišta. Ugovorom o funkcionisanju Evropske unije član 3. stav 1, kojim se definišu ekskluzivne nadležnosti Unije, definiše se u tački (b) uspostavljanje pravila konkurenčije neophodnih za funkcionisanje unutrašnjeg tržišta; U Naslovu VIII, Ekonomска i monetarna politika, član 119. u stavu 1. definiše: Za ciljeve postavljene u članu 3. Ugovora o Evropskoj uniji, aktivnosti zemalja članica i Unije uključiće, kako je predviđeno u Ugovorima, usvajanje ekonomске politike koja se zasniva na bliskoj koordinaciji ekonomskih politika država članica, na unutrašnjem tržištu i na definisanju zajedničkih ciljeva i sprovođenje u skladu sa principima otvorene tržišne ekonomije sa slobodnom konkurenčijom. U Ugovoru o funkcionisanju EU pravila konkurenčije definisana su, pre svega, članovima 101. i 102.

Zaštita konkurenčije regulisana je u Evropskoj uniji i sekundarnim aktima koje donose organi EU. Trenutno svaka članica Evropske unije ima nacionalnu instituciju koja se bavi borbotom protiv monopola i zaštitom konkurenčije. Prva država EU koja je formirala takvo telo bila je Nemačka davne 1954. godine. Luksemburg je Zakon o zaštiti konkurenčije doneo tek 2004. godine, dok je Komisija za zaštitu konkurenčije u ovoj zemlji formirana čak i posle Srbije. Luksemburg je dobio ovu instituciju tek 2007. godine (Hylton i Deng 2007, 289).

Prema predmetu regulisanja, sistem komunitarnog prava čine dve grupe propisa. U prvoj su propisi koji regulišu organizaciona i ustavno-pravna pitanja, kao što su sastav, način rada i nadležnosti zajedničkih organa Evropske zajednice, odnosno danas Evropske unije, njihov međusobni odnos i odnos prema državama članicama.

Po svojoj prirodi i poreklu ove norme se mogu uporediti sa propisima ustavnog i upravnog prava u unutrašnjim pravima država članica i čine institucionalno pravo Evropske unije. Drugom grupom normi reguliše se uspostavljanje i funkcionisanje unutrašnjeg tržišta, odnosno ostvarivanje četiri slobode na kojima počiva Evropska unija: sloboda prometa robe, sloboda kretanja lica i radne snage, sloboda pružanja usluga i osnivanja preduzeća i sloboda kretanja kapitala, kao i propisi o konkurenciji. Sve ove norme čine pravo unutrašnjeg tržišta, odnosno privredno pravo Evropske unije (Nicholson 2008, 1017). Još kada su evropske integracije bile u povoju uočena je potreba za zajedničkom politikom konkurenčije. Odredbe koje se tiču konkurenčije bile su sadržane u Rimskom ugovoru i u njegovim kasnijim promenama.

## 2.2. Izvori prava konkurenčije

Brojni su izvori privrednog prava Evropske unije, raznovrsni, a neki i specifični. Osnovni izvor za ovo pravo, kao i za celokupno pravo EU je Ugovor o funkcionisanju Evropske unije, poznat i kao Lisabonski ugovor, kome su prethodili Ugovor o Evropskoj uniji koji je potписан 7.2.1992. godine (Maastrichtski ugovor) i Ugovor o osnivanju Evropske ekonomske zajednice iz 1957. godine, modifikovan i Jedinstvenim evropskim aktom iz 1986. godine.

Odredbe o pravu konkurenčije su sadržane u Naslovu VI, glava I, članovi od 81. do 89. Ugovora o osnivanju Evropske zajednice. S obzirom na neposredni predmet regulisanja, odredbe su podeljene na propise koji se primenjuju na preduzeća: članove od 81. do 86. i državne subvencije: članovi 87. do 89. Ugovora o osnivanju. Do amsterdamskih izmena Ugovora o Evropskoj zajednici (EZ), odredbe člana 91. su bile posvećene regulisanju dampinga, ali su nakon toga ukinute kao suvišne. Opšti ciljevi navedenih odredbi su određeni članom 2. Ugovora o osnivanju, dok je odredbama člana 3(1)(g), predviđena obaveza Zajednice da obezbedi sistem u kome se neće kršiti pravila konkurenčije na unutrašnjem tržištu (Mestmäcker i Schweitzer 2014, 28).

Član 81. Ugovora o osnivanju Evropske zajednice implementira se u slučajevima ograničavanja konkurenčije međukompanijskim sporazumima, odlukama udruženja kompanija i dogovornom praksom. Prema članu 81. stav 1 Ugovora o osnivanju Evropske zajednice, nisu poželjni na zajedničkom tržištu i zabranjeni su svi međukompanijski sporazumi, odluke udruženja kompanija i dogovorna praksa pomoću koje se može ostvariti uticaj na trgovinu između država članica, a koji za cilj, odnosno posledicu, imaju sprečavanje, ograničavanje ili ugrožavanje konkurenčije na zajedničkom tržištu. U pravu konkurenčije Evropske unije donet je princip zabrane za protivpravna kartelna ponašanja, sa mogućnošću pojedinačnih i grupnih izuzetaka.

Član 82. Ugovora o osnivanju Evropske zajednice tiče se povrede konkurenčije kompanija ili grupe kompanija uz pomoć zloupotrebe dominantnog položaja. Po članu 82. stav 1. Ugovora o osnivanju Evropske zajednice, nisu harmonizovani sa zajedničkim tržištem i nisu dozvoljene nikakve zloupotrebe prilikom korišćenja dominantnog položaja na zajedničkom tržištu ili na njegovom značajnom delu od strane jedne ili više kompanija kojima se može ostvariti uticaj na trgovinu između država članica. Nema mogućnosti da Komisija usvoji odluku o izuzeću od zabrane zloupotrebe dominantnog položaja. Treba imati u vidu da se samo sticanje monopolskog ili dominantnog položaja ne može okarakterisati kao zabranjeno i suprotno načelu slobodne trgovine, osim u izuzetnim situacijama, Ugovorom je ograničena samo zloupotreba dominantnog položaja.

Članovima od 83. do 85. Ugovora o osnivanju definisana su ovlašćenja organa Evropske unije da donose implementirajuća pravila i uputstva za primenu članova 81. i 82. Članom 86.

reguliše se položaj javnih preduzeća i preduzeća kojima su zemlje dale posebna ili isključiva prava ili im je povereno vršenje usluga od opštег ekonomskog značenja. Članovi 87. i 88. Ugovora o osnivanju Evropske zajednice odnose se na slučajeve ograničenja konkurenčije korišćenjem državne pomoći. Članom 87. zabranjena je svaka pomoć države ili iz državnih izvora u bilo kom obliku kojom se ograničava ili se može ograničiti konkurenčija putem favorizovanja određenih preduzeća ili proizvodnje određenih proizvoda. Državna pomoć je zabranjena u meri u kojoj omogućuje određenim preduzećima da utiču na trgovinu između zemalja članica ili ograničavaju konkurentnost drugih preduzeća.

Komunitarno pravo u domenu konkurenčije podrazumeva politike ispitivanja povrede konkurenčije, kontrole koncentracija i kontrole državnih subvencija. Pravne tekovine Evropske unije u domenu prava konkurenčije podrazumevaju pravila i procedure za borbu protiv monopolskog ponašanja kompanija (restriktivni sporazumi između kompanija i zloupotreba dominantnog položaja) i kojima se izvršnoj vlasti onemogućava davanje državne pomoći kojom ugrožava slobodnu i fer konkurenčiju na domaćem tržištu. Kada je reč o sprečavanju nedozvoljenih koncentracija, Komisija ima nadležnost da preispita koncentracije koje prevazilaze definisane pragove prometa, dok zemlje članice mogu da vrše kontrolu koncentracija do tog nivoa prometa.

Kada se govori o Ugovoru u funkcionalisanju Evropske unije odredbe posvećene pravu konkurenčije nalaze se u članu 37. (Državni monopolji komercijalne prirode), zatim u Naslovu VII - Zajednička pravila o konkurenčiji, oporezivanju i usklađivanju zakona, Glava 1 - pravila o konkurenčiji, Odeljak 1 - članovi 101. do 105. (Pravila koja se primenjuju na privredna društva), članu 106. (Javna preduzeća i privredna društva sa posebnim ili isključivim pravima) i Odeljak 2 - pomoć odobrena od države, regulisana je članovima od 107. do 109. (Pravila koja se odnose na državnu pomoć) Ugovora o funkcionalisanju Evropske unije. U oblasti ispitivanja povrede konkurenčije i koncentracija, organi na nacionalnom nivou koji su nadležni za zaštitu konkurenčije moraju blisko da sarađuju sa Komisijom u postupcima za zaštitu konkurenčije u EU. Od 1. maja 2014. godine, svim organima na nacionalnom nivou koji su nadležni za zaštitu konkurenčije data je i nadležnost da u potpunosti primenjuju članove 101. i 102. Ugovora o funkcionalisanju Evropske unije kako bi se sprečilo narušavanje ili ograničavanje konkurenčije. U tu svrhu, ti organi treba da imaju ovlašćenja koja su slična ovlašćenjima Evropske komisije. Nacionalni sudovi takođe mogu direktno primenjivati pravila EU za ispitivanje povrede konkurenčije.

Član 101. Ugovora o funkcionalisanju Evropske unije, kao i Uredba 139/2004 o kontroli koncentracija, predstavljuju ključne pravne norme kojima se u Evropskoj uniji uređuju pitanja restriktivnih sporazuma i koncentracija, odnosno odnosa koji podrazumevaju učešće dva ili više učesnika na tržištu. Uredbom 139/2004, reguliše se odnosi koji dovode do trajnih promena u kontroli nad nekim privrednim društvom, a time i do promena tržišnih udela na relevantnom tržištu. Član 101. Ugovora o funkcionalisanju Evropske unije se odnosi na restriktivne sporazume horizontalnog ili vertikalnog tipa čiji uticaj na konkurenčiju nije beznačajan. Član 102. Ugovora o funkcionalisanju Evropske unije, reguliše zabranjene načine ponašanja na tržištu, pri čemu se odnosi samo na zloupotrebe onih učesnika na tržištu za koje se može utvrditi da se nalaze u dominantnom položaju na relevantnom tržištu. Član 102. o zloupotrebi dominantnog položaja deo je prava konkurenčije svake države članice, a sprovode ga Evropska Komisija i nacionalna tela za zaštitu konkurenčije. Primena prava konkurenčije EU u ovom segmentu predviđa utvrđivanje postojanja dominantnog položaja, a potom i radnji ili ponašanja dominantnog učesnika na tržištu koje se mogu smatrati zloupotrebotom tog položaja (Dobrašinović i Matić i Prokopijević i Plahutnik i Radojčić 2014, 49-50).

Evropska komisija i nacionalna regulatorna tela za zaštitu konkurenčije za prioritete u svom radu uzimaju povrede konkurenčije koja produkuju najteže i najštetnije posledice po potrošače. Pored Ugovora o funkcionalisanju Evropske unije i komunitarnog prava, u ostale izvore prava konkurenčije spadaju: sekundarni izvori (implementirajuća legislativa koju donose Evropska Komisija i Savet ministara) i sudska praksa.

Sekundarni izvori podrazumevaju uredbe, uputstva i odluke, preporuke i mišljenja, koje su Savet i Komisija doneli u cilju sprovođenja odredbi Ugovora o funkcionisanju Evropske unije i Ugovora o osnivanju Evropske zajednice, koji se odnose na pravo konkurenčije. Naime, Savetu su data ovlašćenja da na predlog Komisije i pošto prethodno konsultuje Evropski parlament, kvalifikovanom većinom donosi odgovarajuće uredbe ili uputstva radi ostvarivanja načela iz članova 101. i 102. (nekada 81. i 82).

Uredbe imaju opštu važnost (Savić Božić 2016), u potpunosti i neposredno se primenjuju u svakoj državi članici. Uputstva obavezuju države članice u pogledu ciljeva koje treba obezbediti, poštujući potpunu slobodu izbora nadležnih nacionalnih organa u pogledu načina, forme i sredstava pomoću kojih se ostvaruju postavljeni ciljevi.

Prvi i najznačajniji propis čini Uredba Saveta broj 1/2003 kojom je zamenjena Uredba broj 17. iz 1962. godine u kojoj je definisan postupak implementacije članova 101. i 102. Ugovora o funkcionisanju EU, čime je obezbeđena njihova jednoobrazna implementacija u svim državama članicama bez obzira na razlike koje se nalaze u njihovim pravnim sistemima. Savet je usvojio i druge važne odluke za implementaciju prava konkurenčije EU.

Od posebnog je značaja Uredba Saveta broj 139/2004 kojom je zamenjena Uredba Saveta broj 4064/89 o kontroli koncentracija između preduzeća. Prema članu 2. Uredbe Saveta broj 139/2004 zabranjene su koncentracije kojima se stvara ili pojačava dominantna pozicija i koje za posledicu mogu imati značajno smanjenje efektivne konkurenčije na zajedničkom tržištu ili njegovom bitnom delu. Uredba Saveta broj 139/2004 primenjuje se na koncentracije sa komunitarnom dimenzijom, dok se na ostale oblike povreda konkurenčije primenjuju odredbe 101. i 102. Ugovora o funkcionisanju Evropske unije (Lisabonskog ugovora), odnosno članova 81. i 82. Ugovora o osnivanju Evropske zajednice. Važnu ulogu u pravu konkurenčije ima i Uredba br. 2790/1999 o vertikalnim restriktivnim sporazumima. Ogranak praktični značaj u implementaciji politike konkurenčije imaju saopštenja i odluke Komisije putem kojih se izdaju uputstva za ponašanje kompanija u oblastima koje nisu u potpunosti regulisane komunitarnim pravom konkurenčije.

U ostale izvore prava spada i praksa Suda pravde i Prvostepenog suda u takozvanim vodećim (karakterističnim) slučajevima u čijim odlukama je Sud tumačio neke odredbe primarnog ili sekundarnog zakonodavstva.

Evropski sud pravde ima ovlašćenja da tumači komunitarno pravo u postupcima i kontrolise zakonitost akata organa Unije. Nadležnost po tužbama fizičkih i pravnih lica protiv odluka organa EU u izvršenju pravila konkurenčije preneta je na Sud prve instance zbog čega i njegove odluke imaju uticaja na pravo konkurenčije.

Oblast implementacije prava konkurenčije Evropske unije limitirana je takozvanom klauzulom međudržavne trgovine. Preduslov da bi se neki sporazum ili ponašanje na tržištu našli u fokusu komunitarnog prava konkurenčije je egzistiranje mogućnosti da se time može ugroziti trgovina između država članica Unije. Pod lupom prava konkurenčije EU mogu se naći i kompanije u državama koje nisu članice Unije, ako sporazumima ili ponašanjem mogu da utiču na trgovinu između država članica. Kako bi se definisalo da li se dogodila povreda prava konkurenčije EU nije obavezno da se to i realno u praksi dogodilo, već je dovoljno samo postojanje restriktivnog sporazuma ili ponašanja.

Pravo konkurenčije Evropske unije ne tretira pitanje nelojalne konkurenčije, jer su za borbu protiv nje nadležne države članice i njihova nacionalna zakonodavstva. Dakle, propisima za ograničavanje konkurenčije mogu se ugroziti nacionalne i komunitarne norme prava konkurenčije. Do implementacije zajedničkog tržišta u slučajevima razlike između nacionalnih i komunitarnih normi, koristile su se odredbe koje su predviđale strože sankcije.

Uspostavljanjem zajedničkog tržišta u praksi Suda i Komisije prioritet u primeni imaju komunitarne norme. U definisanju i sprovođenju politike i prava konkurenčije EU najvažniju ulogu imaju Evropska komisija i Evropski sudovi. Politika konkurenčije Evropske unije je de facto politika Evropske komisije. Komisija ima značajna ovlašćenja u sprovođenju istrage uključujući i nenajavljenje inspekcije (Clarke 2011, 44).

Kazne za kršenje normi prava konkurenčije su visoke i mogu da iznose i preko 10% od ukupnog prihoda preduzeća. Evropski sudovi, takođe, imaju nezamenljivu ulogu u sprovodenju i zaštiti prava konkurenčije. Stavljujući u prvi plan tržišnu integraciju, Evropski sud pravde je promovisao politiku konkurenčije kao ključnu kariku u evropskom integracionom procesu, često zapostavljajući druge principe kao što su efikasnost i zaštita potrošača. Evropski parlament nema značajniju ulogu u regulisanju prava konkurenčije. Evropski parlament usvaja godišnji izveštaj o politici konkurenčije, koji sastavlja Komisija. Uloga Saveta ministara je ograničena na donošenje legislativnih akata kojima se bliže reguliše primena odredbi iz Ugovora o EU. Od 2004. godine ovlašćenja za punu primenu prava konkurenčije EU pored Komisije doble su i antimonopolske vlasti zemalja članica. Time je uspostavljen sistem paralelnih ovlašćenja prema kojima i Komisija i antimonopolske vlasti država članica mogu primenjivati norme prava konkurenčije EU, uz uspostavljanje mehanizama i pravila njihove koordinacije.

## ZAKLJUČAK

Slobodna trgovina i zaštita konkurenčije na tržištu obezbeđuje malu korist većini, dok monopolizovano tržište donosi ogromnu dobit pojedincima. Ova rečenica sažeto opisuje značaj zaštite konkurenčije. U širem smislu, nedostatak slobodne konkurenčije onemogućava efikasno delovanje tržišnog mehanizma. Nedostatak efektivne konkurenčije uzrokuje smanjenje ili lišavanje izbora, neopravdano visokih nivo cena proizvoda ili usluga uz niži kvalitet. Slobodna konkurenčija ima veliku važnost za ekonomiju, poput značaja demokratije za politički sistem.

Pitanje zaštite konkurenčije predstavlja multidisciplinarnu oblast koja se može posmatrati sa više aspekata. Regulacijom zaštite konkurenčije bave se, pre svega, pravnici i ekonomisti, ali se model regulacije ove oblasti, svakako, odražava na položaj običnih građana i privrede. Dok sa pozicije opštih društvenih interesa i ugla potrošača, konkurenčija uglavnom predstavlja poželjnju tržišnu pojavu, sa pozicije pojedinačnog privrednog subjekta ona nije poželjna, zbog toga što ga primorava na veći rad, inovativnost, a paralelno mu snižava visinu profita. Zbog toga je za regulaciju ove oblasti itekako zainteresovana i tehnička inteligencija. Naime, zadatak svih inženjera je da svojim patentima, inovacijama ili racionalizacijama u proizvodnji dođu do dominantnog položaja na tržištu, što je legitiman cilj i predstavlja jedan od preduslova društvenog napretka.

Na drugoj strani, pravnici i ekonomisti imaju za cilj da definišu dozvoljenu granicu do koje ne dolazi do poremećaja fer tržišnih odnosa i kaznene mere za situacije u kojima se događaju koncentracija, restriktivni sporazumi, zloupotreba dominantnog položaja i ostali postupci koji mogu da uzrokuju poremećaj slobodne konkurenčije i funkcionisanje tržišnog mehanizma na određenom tržištu. Norme prava konkurenčije (antimonopolsko pravo, pravo protiv ograničavanja konkurenčije ili kartelno pravo) imaju zadatku da otklene ovaj neprestani konflikt između opštih društvenih interesa i pojedinačnih interesa privrednih subjekata koji svojim međusobnim sporazumima ili nivoom tržišne moći mogu da otklene delovanje zakona konkurenčije.

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## COMPETITION POLICY IN THE EUROPEAN UNION

**Summary:** Europe dedicates great importance to the protection of free competition and the necessity for normative regulation, so that within the framework of the Treaty of Rome on the formation of the European Union the so-called Treaty of Amsterdam, as the first basic document in the field of competition protection, had been adopted. This document is later elaborated by the adoption of the Regulation on control of concentrations between companies, and a special competition commission (European Commission) was set up, which in cooperation with the regulatory bodies of certain EU member states deals with competition protection issues in the European Union.

**Key words:** protection of competition, European Union, anti monopoly law

**JEL classification:** K21

### INTRODUCTION

The protection of competition is essential for the efficient functioning of the market economy. The protection of competition is institutionally implemented through the competition policy (also called anti monopoly policy), which deals with the protection and strengthening of competition among market participants in order to ensure equal conditions for all participants. In addition to regulating the monopoly, the competition policy also addresses the limitation of any behaviours of companies that may endanger the elements of effective competition (Ristić 2009, 68). It is a policy that leads to the realization of effective competition as a prerequisite for economic and wider social progress (Stojanović and Kostić 2013, 326).

The competition policy aims to promote the effective competition process by providing efficient allocation of resources through the free market, whereby measures and means of competition protection should lead to increased competitiveness of goods and services from relevant markets. Unlimited competition, which implies free movement of goods, services, capital and people, opens up space for synergistic action of various factors, and the openness of individual markets is a prerequisite for stimulating companies to be economical, innovative and inventive, thus ensuring an increase of company's welfare and overall prosperity (Stojanović and Radivojević and Stanišić 2012, 122). The competition policy is continually seeking to increase efficiency, promote innovation and improve the ability of producers and consumers to have choices (Dutz and Vagliansindi 2000, 764).

Institutionally, the regulation of competition issues was first solved in the USA in 1890 when a law on protection of competition was adopted, the so called Sherman Antitrust Act which banned the agreement between the subjects, thus limiting trade, and in particular the agreement of the competitors about the prices. This act regulates monopoly behaviour for the first time and sanctions the abuse of market power. In 1914, the Sherman Act was amended by the Clayton Act regulating the connections (concentrations) of companies that distort the healthy competition in the market. In 1936, the US competition protection was further enhanced by adopting the Robinson-Patman Act regulating price discrimination. Complementing and de-

veloping regulations in the area of competition protection continued in the forthcoming period.

The significance of implementing anti monopoly policy derives from the impact this policy has on consumers' welfare, enterprises' productivity and economic growth of the country. This brings benefits for consumers which are derived from low prices and high quality products, as well as a wide selection of different and high quality products.

The competition policy should harmonize the conditions of competition in all parts of the market and for all market participants, with a number of priorities that the competition policy should implement, among which the most significant are these (Begović and Pavić 2012, 9):

- Fighting the cartels and preventing their emergence;
- Improving and accelerating privatization and economic restructuring;
- Increased economic freedom of companies and private entrepreneurs;
- Reducing the uncertainty of all participants, especially companies and private entrepreneurs;
- Avoiding price control as a mechanism of anti monopoly policy;
- Engaging in other policies that have an impact on the competitiveness of market structures or behaviours, especially those that create barriers to entry.

By limiting the companies' excessive market power, competition policy improves allocative efficiency, i.e. production efficiency and consumer and market welfare. The implementation of the competition policy is based on analysing the market conditions (production and geographic). The competition policy establishes allocative efficiency by preventing and sanctioning all participants in the market that distort free competition in the market by their behaviour.

## **1. COMPETITION POLICY**

### **1.1. Legal and economic frameworks of competition policy**

Competition policy is an area in which law and economy meet and complement each other. Positive economic analysis (Duvnjak 2018) is the basis for the adoption of regulations that make up the legal framework for regulation, which implies that the implementation of the competition policy must be observed both from a legal and an economic point of view.

The economic analysis of the situation in a given market investigates and interprets the events on the market, and the causes and consequences of different market processes, so that, based on the results obtained, various measures in the competition policy domain could be adopted. When analysing market conditions and adopting measures of competition policy, the degree of freedom of market participants has to be considered on one hand, and the possibility of efficient functioning of the competitive economy on the other (Clarke 2011, 42). Only if both conditions are fulfilled at the same time there are conditions for an efficient market competition and maximizing the welfare of consumers and society as a whole.

The competition policy is conceptually and essentially different from the competition law. Competition law is defined as a set of legal norms which should ensure that competition is not distorted in a way that reduces social welfare, while competition policy is a wider concept which, in addition to competition law, includes all activities of state agencies and bodies that are directly or indirectly involved in competition protection, i.e. Prevention of its disruption (Ma 2011, 307). The consumers law is closely related to competition, as well as the establishment of different production standards, state subsidies, determination of minimum and maximum prices of products or services, etc. (Begović and Pavić 2012, 23).

The competition law, as a special branch of law, regulates the most important issues of functioning of competition in a single market. It includes several specific elements (restrictive agreements, abuse of dominant position, concentration of companies, state aid and state monopolies) depending on the way in which the functioning of healthy and fair competition in a single market is compromised (Spasić 2008, 72). The aim of the competition law is to pro-

mote the economic efficiency of market participants and to optimize the allocation of resources through the ensurance of free competition. In addition, the competition law seeks to protect small market participants and consumers from the hostile practices of large and powerful market participants who dominate the market and/or make mutual agreements thus restricting free market competition. And finally, one of the aims of the competition law is its impact on the creation of a single market (which is particularly related to the common markets of several countries like the European Union) and the prevention of market distortion by some of its participants (Feldmann 2009, 58).

## **1.2. The main task of competition policy**

The most important task of the competition policy is to monitor and regulate the work of the monopolies (hence the name anti monopoly policy), that is, large companies that have a large power on the market. The purpose of this policy is to protect the general interest of society in circumstances where monopoly companies abuse their power and threaten other participants on the market, firstly the consumers. Therefore, the competition policy must constantly balance between the potential benefits and the likely unwanted consequences made by existence of a monopoly on a particular market.

Another important area within the competence of the competition policy is monitoring and regulation of concentration, i.e. connecting the participants of the market. Increasing the size of the company through internal development, especially by merging and taking over other companies, can undermine the freedom of competition in the market, resulting in the need for monitoring and possible regulation, including the ban on mergers. Regulatory bodies have a very difficult task to balance the benefits that arise by mergers due to a more efficient operation of the new company compared to the previous ones that operated independently and the costs incurred due to the potential abuse of the dominant position of the new company in the market.

The competition policy also monitors and regulates the occurrence of restrictive activities (practices) carried out by individual market participants. These are activities undertaken by one or more large companies, which threaten or significantly restrict competition in the market. These restrictive activities include agreements regarding fixed prices, defining non-market prices, various forms of discriminatory practice focused on either suppliers or buyers. Restrictive agreements are implemented in practice through various types of formal and/or informal agreements between companies in the market. Regardless of whether formal or informal arrangements exist, they can be horizontal and vertical depending on whether they are companies belonging to the same branch or companies from different parts of the value chain, i.e. production and turnover phases. Horizontal agreements exist between companies belonging to the same branch. They can cooperate through an agreed price policy, production quotas, market sharing, exchange of important information on prices and the scope and type of offer, etc. Vertical agreements include companies belonging to different areas in the production chain and are related to the so called exclusive agreements signed by dominant companies with suppliers and buyers. These agreements determine the price, quality and other essential elements, such as the right of priority, which puts all other companies in an unfavourable position compared to other participants with whom such agreements had not been signed (Hüscherath and Peyer 2013, 122).

The implementation of competition policy, in addition to strictly economical elements, are also influenced by other elements, such as social, political, developmental and ecological ones. Regulatory bodies implementing the competition policy also take into account social factors, especially in times of economic crisis, when an anti-competitive behaviour of market participants (the so called crisis cartels) is tolerated in order to reduce social tensions and to maintain the level of employment. It is based on the hypothesis that the damage caused by the non-market behaviour of some companies is less than the unemployment that would arise in

the event of their failure. Of course, in the long run it is an unjustified economical behaviour, so it is applied only in exceptional circumstances for a limited period.

Regardless of the various impacts, any law on protection of competition originally addresses issues of creating, strengthening and abusing the market power of the participants in the market. The Law on Protection of Competition with relevant regulations (rulebooks, decrees, guidelines, etc.) defines the rights and obligations of market participants and the manner of acting of the regulating bodies (institutes, commissions, agencies, services, etc.). Such an approach insists on controlling all the activities that lead to changes in the market structure and, where appropriate, the imposition of warnings, prohibitions and penalties. In this way, the market participants are prevented and discouraged from disturbing the free competition in the market and from violating the provisions of the competition law.

## **2. ANTI MONOPOLY POLICY OF THE EUROPEAN UNION**

The competition policy of the European Union is implemented in the Union as a whole and at the level of the member states, which also adopt laws and regulations that are in some respects different from state to state. Nevertheless, these regulations and regulatory practices must be in line with the fundamental rules defined by the European Union.

The core of the EU competition policy is contained in the *acquis communautaire*, the most developed part of which is the competition law. Sources of the *acquis communautaire*, depending on who passes them, can be classified into primary and secondary sources (Lopez 2013, 31). The primary sources of the *acquis communautaire* are adopted or passed by member states during the organisation of mutual relations and by the European Union (community), on the basis of their contractual capacity, as a subject of international law, by signing agreements with the international organizations and third countries. Secondary sources of EU law must be harmonized with the primary ones: decrees, instructions and decisions, guidelines, recommendations and opinions.

### **2.1. Competition law of the European Union**

The emergence and development of competition law and the anti monopoly policy of the EU was largely impacted by the United States Antitrust Policy. In the Treaty of Rome establishing the European Community, the issue of competition law and protection was one of the key issues, and articles 81 through 90 deal with this issue. The most significant goal of EU is to create a single market.

The competition law and control of state aid are the most important part of the rules for the creation of a single market. Article 3(1) of the Treaty on the Functioning of the European Union defines the exclusive competence of the Union. Point (b) defines the establishment of competition rules necessary for the functioning of the internal market; In Title VIII, Economic and monetary policy, Article 119(1) the following is defined: For the purposes set out in Article 3 of the Treaty on European Union, the activities of the Member States and the Union shall include, as provided in the Treaties, the adoption of an economic policy which is based on the close coordination of Member States' economic policies, on the internal market and on the definition of common objectives, and conducted in accordance with the principle of an open market economy with free competition. In the Treaty on the Functioning of the EU, competition rules are defined by Articles 101 and 102.

Competition protection in the European Union is also regulated by secondary acts adopted by EU bodies. At present, every member of the European Union has a national institution dealing with the fight against monopoly and the protection of competition. The first EU state to form such institution was Germany in 1954. Luxembourg did not adopt the Competition Law until 2004 while the Competition Commission in this country was formed even after the one formed in Serbia. Luxembourg formed this institution in 2007 (Hylton and Deng 2007, 289).

According to the regulated subject, the system of the *acquis communautaire* consists of two sets of regulations. The first one regulates organizational and constitutional issues, such as the composition, the manner of operation and the competencies of the common bodies of the European Community, i.e. the European Union today, their mutual relationship and the relationship towards member states.

By their nature and origin, these norms can be compared to the constitutional and administrative law of the member states' internal law, and they constitute the institutional law of the European Union. The second set of norms regulates the establishment and functioning of the internal market, i.e. the realization of the four freedoms underlying the European Union: free movement of goods, free movement of persons and labour, freedom to provide services and to establish companies, and free movement of capital, as well as competition regulations. All of these norms make up the law of the internal market, i.e. the economic law of the European Union (Nicholson 2008, 1017). Even when European integrations were just in the beginning stage, there was a need for a common competition policy. Provisions concerning the competition were contained in the Treaty of Rome and in its later versions.

## **2.2. Sources of competition law**

There are many sources of the economic law of the European Union. They are diverse, and some are specific. The basic source for this law, as well as for the whole of EU law, is the Treaty on the Functioning of the European Union, also known as the Treaty of Lisbon, preceded by the Treaty on European Union signed on 7 February 1992 (The Maastricht Treaty) and the Treaty establishing the European Economic Community of 1957, as amended by the 1986 Single European Act.

The provisions on competition law are contained in the Title VI, Chapter I, Articles 81 through 89 of the Treaty establishing the European Community. Given the immediate regulated subject, the provisions are divided into regulations applicable to companies: Articles 81 through 86, and state subsidies: Articles 87 through 89 of the Treaty of Establishment. Until the Treaty of Amsterdam amending the Treaty on European Union (EC), the provisions of Article 91 regulated damping, but were subsequently abolished as redundant. The general objectives of the said provisions are set out in Article 2 of the Treaty of Establishment, while the provisions of Article 3(1)(g) provide for a Community obligation to provide a system which does not infringe competition rules in the internal market (Mestmäcker and Schweitzer 2014, 28).

Article 81 of the Treaty establishing the European Community is being implemented in cases of restricting competition through inter-company agreements, decisions on company mergers and concerted practices. Article 81(1) of the Treaty establishing the European Community prohibits any inter-company agreements, company merger decisions and concerted practices that may have an effect on trade between member states and which are intended or result in the prevention, restriction or threat of competition in the common market. The competition law of the European Union has the principle of prohibiting illegal cartel behaviour, with the possibility of individual and group exemptions.

Article 82 of the Treaty establishing the European Community is concerned with the violation of competition by a company or group of companies by abusing dominant position. Article 82(1) of the Treaty on the Establishment of the European Community prohibits any kind of abuse in the use of dominant position on the common market or in the significant part of it by one or more companies, which may have an effect on trade between member states. There is no possibility for the Commission to adopt a decision on exemption of the ban on abuse of dominant position. It should be noted that the acquisition of a monopoly or dominant position alone cannot be characterized as prohibited and contrary to the principle of free trade, except in exceptional circumstances, the Treaty limits only the abuse of dominant position.

Articles 83 through 85 of the Treaty of Establishment define the powers of the European Union bodies to adopt implementing rules and guidelines for the application of Articles 81 and 82. Article 86 regulates the position of public companies and companies to which the states have granted special or exclusive rights or are empowered to provide services of general economic significance. Articles 87 and 88 of the Treaty establishing the European Community relate to the cases of restriction of competition through the use of state aid. Article 87 prohibits any state aid or state resources in any form whatsoever which restricts or may restrict competition by favouring certain companies or the production of certain products. State aid is prohibited to the extent that it allows certain companies to influence trade between member states or restrict the competitiveness of other companies.

In the domain of competition, the *acquis communautaire* implies a policy of examining competition violations, controlling concentrations and controlling state subsidies. The *acquis* of the European Union, in the domain of competition law, implies rules and procedures for fighting monopoly behaviour of companies (restrictive agreements between companies and abuse of dominant position) and which prevent the executive authority from granting state aid which would endanger free and fair competition on the domestic market. When it comes to preventing unauthorized concentrations, the Commission has the authority to reconsider concentrations exceeding the defined turnover thresholds, while member states may control concentrations up to that level of turnover.

When referring to the Treaty on the Functioning of the European Union, the provisions defining competition law are set out in Article 37 (State monopolies of commercial nature), in Title VII - Common rules on competition, taxation and approximation of laws, Chapter 1 - Rules on competition, Section 1 - Articles 101 through 105 (Rules applying to undertakings), Article 106 (Public undertakings and undertakings with special or exclusive rights) and Section 2 - Aid granted by the state, regulated by Articles 107 through 109 (Rules on state aid) of the Treaty on the Functioning of the European Union. In the area of competition and concentrations violation, national level bodies competent for the protection of competition must cooperate closely with the Commission in EU competition protection procedures. Starting 1 May 2014, all national authorities responsible for protection of competition were also given the authority to fully apply Articles 101 and 102 of the Treaty on the Functioning of the European Union to prevent distortion or restriction of competition. To this end, these authorities should have powers similar to those of the European Commission. National courts can also directly apply EU rules to investigate a breach of competition law.

Article 101 of the Treaty on the Functioning of the European Union, as well as Regulation 139/2004 on the control of concentrations, are the key legal norms regulating the issues of restrictive agreements and concentrations in the European Union, i.e. relations involving two or more participants in the market. Regulation 139/2004 regulates relationships that lead to permanent changes in the control over a company, and thus the changes in market shares in the relevant market. Article 101 of the Treaty on the Functioning of the European Union refers to restrictive agreements of a horizontal or vertical type with an influence on competition which is not insignificant. Article 102 of the Treaty on the Functioning of the European Union, regulates prohibited conduct in the market, but refers only to abuses of those market participants that can be found to be in a dominant position in the relevant market. Article 102 on abuse of dominant position is part of the competition law of each member state and is applied by the European Commission and national authorities responsible for protection of competition. The application of EU competition law in this segment envisages the determination of a dominant position, and then actions or behaviour of a dominant market participant that can be considered as abuse of that position (Dobrašinović and Matić and Prokopijević and Plahutnik and Radojčić 2014, 49-50).

The priority of the work of the European Commission and the national regulatory authorities for protection of competition are violations of competition that produce the most severe and worst consequences for consumers. In addition to the Treaty on the Functioning of the Euro-

pean Union and the *acquis communautaire*, other sources of competition law include: secondary sources (implementing legislation adopted by the European Commission and the Council of Ministers) and court practice.

Secondary sources are regulations, guidelines and decisions, recommendations and opinions adopted by the Council and the Commission for the purpose of implementing the provisions of the Treaty on the Functioning of the European Union and of the Treaty establishing the European Community in relation to competition law. Namely, the Council has been empowered to adopt certain regulations or guidelines by a qualified majority in order to implement principles under Articles 101 and 102 (formerly 81 and 82), upon a proposal from the Commission, and after consulting the European Parliament.

The regulations are of general importance (Savić Božić 2016), they are fully and directly applied in each member state. Guidelines are binding on the member states with regard to the objectives to be achieved, respecting the full freedom of choice of the competent national authorities in terms of manner, form and means by which the set objectives are achieved.

The first and most important regulation is the Council Regulation No. 1/2003, which replaces Regulation No. 17 of 1962, which defines the procedure for the implementation of Articles 101 and 102 of the Treaty on the Functioning of the EU, thus ensuring their uniform implementation in all member states, regardless of the differences in their legal systems. The Council also adopted other important decisions for the implementation of EU competition law.

Particularly important is the Council Regulation No. 139/2004, which replaced Council Regulation No. 4064/89 on control of concentrations between companies. Article 2 of the Council Regulation No. 139/2004 prohibits concentrations that create or enhance a dominant position and which may result in a significant reduction in effective competition in the common market or its essential part. Council Regulation No. 139/2004 applies to concentrations with a *communautaire* dimension, while other forms of competition violations are regulated by Articles 101 and 102 of the Treaty on the Functioning of the European Union (Treaty of Lisbon), i.e. Articles 81 and 82 of the Treaty establishing the European Community. Regulation No. 2790/1999 on vertical restrictive agreements also has an important role in the competition law. Announcements and decisions of the Commission have a huge practical significance in the implementation of competition policy. They are used to adopt guidelines on behaviour of companies in the areas not fully regulated by the *acquis communautaire* of competition.

Other sources of law include the practice of the Court of Justice and the First Instance Court in so-called leading (typical) cases in which the Court used certain provisions of primary or secondary legislation.

The European Court of Justice has the authority to interpret the *acquis communautaire* in proceedings and to control the legality of acts of Union bodies. Jurisdiction over the actions of individuals and legal entities against the decisions of EU bodies to enforce the competition rules has been transferred to the First Instance Court, which is why its decisions have an impact on the competition law.

The scope of implementation of the European Union competition law is limited by the so-called clause of interstate trade. The prerequisite for any agreement or behaviour on the market to become a focus of the *acquis communautaire* is the existence of the possibility of endangering trade between member states of the Union. Non-EU companies can also be regulated in accordance with the EU competition law, if their agreements or behaviour can affect trade between member states. In order to determine whether a violation of the EU competition law has occurred, it is not mandatory for this to really happen in practice, it is enough if a restrictive agreement or behaviour exists.

The European Union competition law does not address the issue of unfair competition, because fighting unfair competition is under the jurisdiction of member states and their national legislation. Thus, the regulations on restricting competition may endanger the national and community norms of competition law. Before the implementation of the common market in

cases of differences between national and community norms, provisions that provided for stricter sanctions were used.

After the establishing a common market, the Court and the Commission practice gave priority to the community norms. The European Commission and the European Courts have the most important role in defining and implementing EU competition policy and law. The European Union competition policy is a de facto European Commission policy. The Commission has significant powers in conducting the investigation, including unannounced inspections (Clarke 2011, 44).

Penalties for violating the competition law norms are high and may amount to over 10% of the company's total revenue. European courts also play an indispensable role in enforcing and protecting the competition law. By putting market integration in the forefront, the European Court of Justice has promoted competition policy as the key link in the European integration process, often neglecting other principles such as efficiency and consumer protection. The European Parliament has no significant role in regulating competition law. The European Parliament adopts the annual report on competition policy, prepared by the Commission. The role of the Council of Ministers is limited to the adoption of legislative acts which regulate the application of the provisions of the EU Treaty more closely. Since 2004, the powers given to the Commission for full implementation of the EU competition law have been extended by onto the anti monopoly authorities of the member states. In this way, a system of parallel powers was established under which the Commission and the anti monopoly authorities of the member states can apply the norms of EU competition law, with the establishment of mechanisms and their coordination rules.

## CONCLUSION

Free trade and the protection of competition in the market provides little benefit to the majority, while the monopolized market brings enormous profits to individuals. This sentence summarizes the importance of the protection of competition. In the broader sense, the lack of free competition prevents the effective functioning of the market mechanism. Lack of effective competition causes reduction or deprivation of choice, unjustifiably high prices of products or services of lower quality. Free competition has a great importance to the economy, just like the democracy is important for the political system.

The issue of protection of competition is a multidisciplinary area that can be viewed from several aspects. Regulators of protection of competition are primarily lawyers and economists, but the model of regulation in this area certainly reflects to the position of ordinary citizens and the economy. As far as the general social interests and consumers are concerned, competition is mostly a desirable market phenomenon, but it is not desirable for individual companies, because it compels them to work harder, bring innovations and lower the profit. That is why the technical intelligence is very interested in regulation of this area. Namely, the task of all engineers is to use their patents, innovations, or rationalizations in production to reach a dominant position on the market, which is a legitimate objective and is one of the prerequisites for social progress.

On the other hand, lawyers and economists have a task of defining a permissible limit before which there is no disturbance of fair market relations, and penalties for situations involving concentrations, restrictive agreements, abuse of dominant position and other practices that may cause a disturbance of free competition and the functioning of the market mechanism in a particular market. The rules of competition law (anti monopoly law, anti competitive law or cartel law) have the task of eliminating this constant conflict between general social interests and individual interests of companies which can eliminate the application of competition law through their mutual agreements or the level of their market power.

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**PREGLEDNI RADOVI**

*REVIEW*

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## UTICAJ TEHNOLOŠKOG PROGRESA I INOVACIJA NA EKONOMSKI RAZVOJ

**Rezime:** *Promene sa kojima se suočavaju kompanije na početku ovog veka rezultat su uticaja više faktora. Prvi faktor je globalizacija – ogroman porast razmene i raspoloživost novih proizvoda i usluga, kao i dramatično povećanje mobilnosti inostranih investicija, kretanja ljudi i međunarodne konkurenkcije. Sledeći faktor je uticaj savremenih komunikacijskih tehnologija. Brze promene svih oblika tehnologije omogućavaju brz pristup brojnim načinima komunikacija, uz niske troškove, što vodi otvaranju tržišta potrošačima širom sveta. Ova dva faktora su uticala na promenu moći na tržištu, od proizvođača ka potrošaču ili krajnjem korisniku.*

*U savremenom globalističkom okruženju ekonomija svake pojedinačne zemlje zavisi od posledica tehnološkog razvoja i primena inovacija.*

**Ključne reči:** *tehnologija, ekonomija, inovacija, efikasnost, ekonomski razvoj*

**JEL klasifikacija:** *A12, Q14*

### UVOD

Implementacija novih tehnologija i inovacija ne izazivaju samo pozitivne efekte u ekonomiji i društvu, već postoje i mogućnosti za eskalaciju negativnih efekata. Održivo ulaganje je investicioni pristup koji na dugi rok integriše zaštitu životne sredine, društvo i upravljanje od strane države, odnosno njihove kriterijume za ulaganje i vlasničko odlučivanje sa ciljem stvaranja rizično prihvatljivih finansijskih prihoda. Cilj je da se ukaže na osnovne trendove u svetskoj ekonomiji, kao i mere za poboljšanje pozitivnih efekata tehnološkog razvoja. Tehnologija treba da podršku ljudima u svim sferama društva, dajući im više informacija, više opcija, veći uticaj u svetu i veću kontrolu nad sopstvenim zdravljem i njihov uticaj na životnu sredinu. Tehnološke prednosti omogućavaju izuzetan nivo saradnje u realnom vremenu što znači da uticaj na te informacije nikada nije bio lakši (Bertomeu and Marinovic 2016, 10).

Najnovija istraživanja u svetskoj ekonomiji i međunarodna poslovna praksa je pokazala da postoji povezasnost između unapređenja kvaliteta poslovanja i uspostavljanja i razvoja konkurenčne sposobnosti poslovnih organizacija, kao i tendencije koje se baziraju, pre svega, na tehnološkom razvoju čiji su nosioci takozvani pioniri tehnologije i sve se više vodi računa da primenjene inovacije omogućavaju ne samo razvoj društva, već i da taj razvoj bude održiv (Bašić i Đorđević i Čoćkalo i Bešić-Vukašinović 2014, 288).

Privredni razvoj je složen ekonomski i društveni proces kojim se jedna zemlja postepeno oslobođa ekonomske nerazvijenosti i siromaštva dostižući sve više razvojne nivoe. Čine ga dve osnovne komponente: privredni rast i promene u strukturi privrede. Privredni razvoj predstavlja ne samo kvantitativne promene, kada je u pitanju ekonomski položaj određene zemlje, već i kvalitativne promene (menjanje privredne strukture, pojava novih grana u

delatnosti, novih zanimanja i slično) koje vode ka boljem i potpunijem zadovoljavanju svih čovekovih potreba (ne samo ekonomskih već i npr. kulturnih). Porast proizvodnje po glavi stanovnika u ekonomskoj teoriji se izražava kao privredni rast bez kojeg nema privrednog razvoja, ali ne mora svaki privredni rast da bude u funkciji privrednog razvoja. Privredni rast obuhvata promene u materijalnoj proizvodnji u toku jednog relativno kratkog vremenskog perioda, najčešće period od godinu dana. U ekonomskoj teoriji pod pojmom ekonomskog rasta podrazumeva se godišnji porast materijalne proizvodnje iskazan vrednosno, kroz stopu rasta društvenog proizvoda ili nacionalnog dohotka. Rast se može ostvariti, a da se pritom ne ostvari razvojni tok privrede. Stoga, privredni razvoj ne uključuje samo porast materijalne proizvodnje, nego i svih drugih društveno-ekonomskih procesa i promena uslovljenih dejstvom ekonomskih i van ekonomskih faktora (Dodig i Kozić-Rađenović 2017, 229).

Savremeni privredni tokovi u svetskoj privredi, a pogotovo kretanja u okviru regionalnih integracija, postaju sve dinamičniji i unapred usmeravani, koordinacijom ekonomske politike u međunarodnim ekonomskim regionalnim integracijama. Naučno-tehnološka revolucija postavila je tehnološki faktor u ulogu najbitnijeg pokretača privrednog razvoja i pokrenula snažan proces reindustrijalizacije razvijenih zemalja Zapada i ne samo njih. U takvim uslovima, uz rast međuzavisnosti nacionalnih privreda i uz sve izraženiju potrebu opiranja američkoj i japanskoj konkurenciji (u pojedinim visokotehnološkim oblastima dominacije) gotovo je završen proces formiranja jedinstvenog unutrašnjeg tržišta, EU, odnosno evropskog privrednog prostora. Ekonomsko i tehnološko nadmetanje iz 1990-ih, između trijade (SAD, EU i Japan) i Kine, u koje se uključila i Rusija, za superioriju ili što povoljniju poziciju u svetskom sistemu nastavilo se i u 21. veku.

Proces globalizacije, zahvaljujući prevashodno dostignućima sredstava saobraćaja i veza, pretvorio je našu planetu u „globalno selo“, odnosno u „svetsko društvo“. U suštini, globalizacija je složen proces kojim se obavlja tehnološko, ekonomsko i političko ujedinjavanje sveta, odnosno ovaj proces garantuje i sve veću homogenizaciju svih ljudskih društava nezavisno od njihovog istorijskog porekla i kulturnog nasleđa.

Standardizacija je suština procesa globalizacije svetske proizvodnje i trgovine. Samo prihvatanje standarda ne znači da su iščezle prepreke za njihovu potpunu i stvarnu primenu u svim zemljama.

Značaj međunarodnih aktivnosti preduzeća svake nacionalne ekonomije, a pogotovo malih zemalja, je nesumnjiv i ujedno ključni faktor razvoja i rasta u savremenim uslovima. Međutim, srpsko iskustvo je po mnogo čemu bilo tokom niza godina praćeno mnogim zabludama, negativnim rezultatima, opterećeno zastarem pristupima i neefikasnim rešenjima (Vesić 2010, 135).

## 1. NOVE TENDENCIJE U POSLOVNOM OKRUŽENJU

Nova naučno-tehnološka revolucija, informatička tehnologija, sve više razvija međunarodnu podelu rada povezujući nacionalne ekonomije u jedinstvenu celinu preko svetskog tržišta. Današnji svet karakteriše dominacija transnacionalnih kompanija, snažno dejstvo države u privredi i globalizacija svetske privrede. Proces globalizacije počinje formiranjem ekonomskih integracija (EU, NAFTA i ASEAN). Između njih se vodi borba za dominaciju na svetskom tržištu u svetskoj privredi. To uslovljava internacionalizaciju proizvodnje i kapitala u cilju ostvarivanja profitnog interesa. Ovaj proces se intenzivira krajem 20. veka tako da finansijski kapital najrazvijenijih zemalja sveta uspeva povezati svaku tačku (nacionalnu ekonomiju, preduzeće) na zemaljskoj kugli, u jedno "globalno selo".

Danas se obično govori o svetskoj privredi, kao privredi transnacionalnih kompanija. Transnacionalne kompanije posle 80-ih godina 20. veka, kontrolišu preko 50% svetske proizvodnje, 2/3 svetske trgovine,  $\frac{3}{4}$  međunarodnog transfera tehnologije, s tendencijom daljeg rasta. Primetno je, da se interesovanje gotovo svih zemalja sveta prebacuje sa ideoološko-političkog i vojnog kompleksa na ekonomsko-tehničko-tehnološki razvoj.

Zavisnost između zemalja uspostavlja se preko novih tehnologija i finansijskih tokova (izvoz kapitala i proizvodnje).

Imperativ razvoja nauke i tehnologije – informatička tehnologija, telekomunikacije, genetski inženjerинг, biotehnologija i sl. ubrzavaju proces globalizacije svetske privrede i dovode do međuzavisnosti u svetskoj privredi, koja se različito odnosi na razvijene i nerazvijene zemlje. Dovoljno je napomenuti da razvijene zemlje različito preferiraju saradnju sa ostalim zemljama. Njima odgovara saradnja oko snabdevanja sirovinama i energijom, jeftinom radnom snagom, korišćenje apsorpcionih mogućnosti tržišta.

Globalizacija kao permanentan proces doveo je do niza značajnih promena u poslovnoj politici preduzeća, organizacija i institucija. Razlog leži u samoj suštini procesa globalizacije koju karakteriše univerzalizacija, homogenizacija i unifikacija sveta po nekim značajnim principima, odrednicama i normama poonašanja, kao i afirmacija eastuće uzajamne povezanosti i uslovljenosti između pojedinih zemalja, regionala i velikih kompanija (Drašković i Jovović 2006, 121). Iako globalizacija ima za cilj stvaranje jedinstvenog svetskog tržišta, ona nosi sa sobom i neke veoma značajne negativne posledice, posebno za nerazvijene zemlje sveta. Tako se na primer, veći deo trgovine odvija unutar tri pomenute integracione celine – regionala (Evropska unija, NAFTA, Azijska unija) a ne između zemalja koje pripadaju različitim integracionim celinama.

Od svih nedostataka globalizacije, najbolniji je problem jaz između bogatih i siromašnih. Prema statističkim podacima, odnos između prihoda 20% najbogatijih i 20% najsiromašnijih zemalja se smanjio sa 15:1 na 13:1 u poslednjih trideset godina. Uz to, samo poređenje nije najbolje jer okosnicu globalizacije ne čini baš 20% najbogatijih zemalja, nego znatno manji broj, gde najznačajnije mesto ima 6–7 (grupa G-7 najrazvijenijih zemalja sveta). Tako globalizacija uvećava moć transnacionalnih kompanija, pogotovo kada se zna da neke transnacionalne kompanije imaju veće prihode od pojedinih država, mada i ova poređenja imaju nedostatak jer se poredi različiti podaci, prodaja i BDP.

Ipak, najveća zamerka globalizaciji je to što je ona ocenjena kao pogubna za radnike. Krilitaca biće više posla nosi sa sobom smanjenje plata. Radnici manje mogu uticati na uslove rada, a pregovaračka moć im opada. I sa ove strane, većina ulaganja odlazi u bogate zemlje. Tako je, na primer, 81% sredstava koje je Amerika plasirala van zemlje u zemljama koje imaju visoka primanja, a manje od 1% odlazi u zemlje gde su lični dohoci niski, mada su plate koje daju transnacionalne kompanije u zemljama sa niskim i srednjim ličnim primanjima u prosjeku 1,8 do 2 puta veća od prosečnih plata u tim zemljama.

Informatička revolucija i snažan razvoj tehnologije i komunikacija doprinose visokom stepenu pokretljivosti kapitala koji doprinosi razvoju bogatih, a destabilizuje zemlje u razvoju i tranziciji. Čim se uoče prvi oblici krize, bogate zemlje, zahvaljujući mobilnosti kapitala, uspevaju da izvuku svoj kapital, što onda kriju još više produbljuje i ubrzava, dok je u nekim zemljama povlačenje kapitala od strane transnacionalnih kompanija bila kap koja je prelila čašu i izazvala ozbiljne ekonomski krize (Petrović 2006, 35).

Za uključivanje privrednih subjekata u međunarodne tokove ekonomska politika treba da stvori određene preduslove: motivisanost preduzeća za obavljanje međunarodnog poslovanja, marketing orijentisanost preduzeća, na domaćem i globalnom tržištu, adekvatna razvijenost međunarodnog informacionog sistema, orijentisanost preduzeća na efektivnost, a ne samo na efikasnost poslovanja, strategijski pristup međunarodnom tržištu rada, usluga, kapitala i informacija, sprega tehnološke i marketing strategije i inovacije u strategiji i strukturi preduzeća.

## 2. GLOBALIZACIJA I RAZVOJ SRPSKIH PREDUZEĆA

U organizaciji privrede kao i treći za sticanje konkurenčkih prednosti, svetski trendovi afirmišu kvalitet a ne kvantitet rasta. Strategijske alijanse su vrlo atraktivna ali i nužna forma

savremenog privređivanja. Uključuju vrlo složen proces istraživanja i upravljanja uopšte a ne samo promenama (Vesić 2010, 144).

Strategijske alijanse se formiraju u cilju proširenja tržišta i stabilizacije privređivanja privrednih subjekata. Ovim alijansama se ostvaruje sinergija po osnovu kombinovanja asimetričnih kompetentnosti, te pacificuju konkurenčiju (mrežom unakrsnog vlasništva i eliminisanjem partikularizma).

Strategijske alijanse preko dinamizma suprotnosti interesa čine obazrivim sve uključene partnerne i time doprinose bržem privrednom razvoju. U tom smislu strategijske alijanse mogu da odigraju značajnu ulogu u ospozobljavanju jugoslovenskih preduzeća za efikasno uključivanje u svetske procese kretanja kapitala i transfera tehnologije. Osim toga, njihovim efikasnijim korišćenjem treba da doprinese svojinsko transformisanje naših preduzeća i tome prilagođen sistem upravljanja (smanjenja transakcionih troškova, umesto pojedinačnog nastupa naših preduzeća). Zatim, strategijske alijanse doprinose stvaranju tehnoloških i vertikalnih mreža, konzorcijalnih sporazuma, naročito u oblasti istraživanja i razvoja.

Globalizacija tržišta izaziva internacionalizaciju poslovanja i globalizaciju preduzeća. Razvojno ponašanje preduzeća je uslovljeno stanjem tržišta proizvoda i kapitala, razvojem inovacija i organizacionih formi. Uglavnom, u savremenim uslovima (pretežno kao trka za sticanje konkurentskih prednosti) sve više se potvrđuje kvalitet, a ne kvantitet rasta preduzeća. Nagli razvoj tehnologije, s jedne strane, i liberalizacija zakonske regulative s druge strane, afirmišu povezivanje preduzeća u stalnoj težnji da se prilagođavaju poslovnom okruženju, i u tom pravcu preduzeća povezivanjem (jačanjem međusobne zavisnosti) povećavaju konkurentsku poziciju na tržištu.

Dakle, pod uticajem globalizacije, stvaraju se strategijske alijanse i koalicije na osnovu kojih (putem sinergije) se povaćava rast svih preduzeća uključenih u poslovne alijanse. Upravo strategijske alijanse prepostavljaju vrlo fleksibilne oblike strategije (marketing aranžmani, licenciranje, istraživanje i razvoj, nabavka, franšizing, zajednička ulaganja, konzorcijumi i slično) u smislu: povećanje obima prodaje (proširivanjem granica tržišta), pristup savremenim tehnologijama, sinergetski efekti (kombinovanje asimetričnih prednosti firmi), pristup retkim resursima, relativiziranje (olakšanje) uslova ulaska na nova tržišta, intenziviranje međunarodnog poslovanja - kapitala i znanja.

Strategijske alijanse su, dakle, vrlo fleksibilna i atraktivna forma za realizaciju razvojnog ponašanja preduzeća. Kombinovanje ekonomije obima i ekonomije širine sve više zahteva drugačije poslovanje i organizacione aranžmane kojima se samostalnost i samodovoljnost preduzeća svesno podređuje propulzivnjem privređivanju. Dakle, umesto konkurentskih sudara zasnovanih na soliranju, traže se putevi koji će voditi pacifikaciji konkurenčije, odnosno ispmaganju u otklanjanju barijera. Uključena preduzeća imaju mogućnost kombinovanja asimetričnih prednosti tako da obezbede obostrane koristi u nastupu na nova tržišta, s jedne strane, i tehnološka područja, s druge strane. Time se sve više afirmišu modaliteti kombinovanog rasta, umesto čistog internog ili esternog rasta (Vesić 2010, 145).

Razvojno ponašanje preduzeća se sve više oslanja na veći broj partnera i specijalne oblike saradnje, u cilju da očuva svoju vitalnost, odnosno da poveća otpornost na udare sa tržišta. U tom smislu razvojno ponašanje preduzeća i unutrašnja konfiguracija su u korelaciji sa relativizovanom samostalnošću, samodovoljnošću i granicama eksternog rasta. Savremeno preduzeće ostvarivanjem sinergije može da ostvaruje puteve svoga razvoja širokim spektrom mogućnosti, koristeći asimetriju u odnosima među delovima, suptilne manevre na planu restrukturiranja poslovnog portfolia i zasnivanja veza sa okruženjem.

Prema tome, strategijske alijanse sve se više javljaju kao racionalan oblik razvojnog ponašanja savremenog preduzeća u njegovom nastojanju da se prilagodi izmenjenim tržišnim, tehnološkim i društvenim trendovima. Procesi proliferacije poslovanja i razvezivanja preduzeća vode ka ustanovljavanju raznih oblika saradnje u realizaciji određenih poduhvata. Brojnost formi i potencijalnih partnera omogućavaju da se kroz alijanse obezbedi široka skala koristi za uključene partnerne (Petković i Vukotić i Čabilovski 2017, 358).

Oblici saradnje u alijansama, utvrđuju se zavisno od prirode posla i očekivanih rezultata. Tako one mogu obuhvatiti: sporazumno ulaganje kapitala (jedne u akcije druge firme), licenciranje, fransizing, zajednička ulaganja, pružanje pomoći u proizvodnji, marketingu, istraživanju i razvoju.

Uglavnom se koristi od alijansi mogu klasifikovati kao sledeće (Petković i Vukotić i Čabilovski 2017, 359): (1) Olakšanje pristupa tržištu prodaje i nabavke (sporazumna realokacija pojedinih proizvoda): kombinovani nastup na odredena tržišta uz prevazilaženje barijera, promocija određenih proizvoda uz čvršće aranžmane, otvaranje, razvoj i kontrola kanala distribucije, ostvarivanje stabilnijih i kvalitetnijih izvora, snabdevanje sirovinama, komponentama i proizvodnim uslugama; (2) Efikasnije upravljanje proizvodnjom (neutralisanje uskih grla, usavršavanje proizvodnih procesa i transfer proizvodnog *know-how*): ravnomernej zapošljavanje kapaciteta, korišćenje superiorne kompetentnosti partnera, promocija novih proizvodnih procesa (pronalažaka); (3) Koristi na području upravljanja proizvodom (uvećanje vrednosti proizvoda odnosno efikasnije komplikiranje ponude): blagovremen razvoj proizvoda i iznošenje proizvoda na tržište (licenca ili drugi oblik), efikasnije kreiranje istraživačke i marketing pomoći (disperzija rizika), obezbeđenje distribucije i postprodajne usluge, smanjenje troškova proizvodnje i marketinga u kompletiraju standarda, povećanje imidža proizvoda (zajedničkim oglašavanjem); (4) Jačanje i efikasnije upravljanje tehnologijom (skupa i neizvesna tehnološka istraživanja lakše podnose alijanse): unakrsnim licenciranjem razvodnjavaju se troškovi, proširuje se istraživački horizont, obezbeđenje kritične mase istraživača, involviranje više partnera (brži proces difuzije inovacija), podsticaji za efikasniju realizaciju istraživanja; (5) Sticanje i jačanje upravljačkog i organizacionog know-how: razvoj novih upravljačkih znanja, promocija nove kulture i organizacije poslovanja, unapređenje internog preduzetništva; (6) Jačanje finansijske snage: određeni aranžmani povećavaju ili ubrzavaju priticanje prihoda: značajno se smanjuju određeni izdaci za finansiranje pojedinih aktivnosti, razvodnjavanje troškova i rizika olakšava finansijsku poziciju; (7) Jačanje razvojnog potencijala: interni faktori (proizvodnja, marketing, istraživanje i razvoj), eksterni faktori (prevazilaženje barijera ulaska u grane, korišćenje anticipiranih mogućnosti).

Korišćenje alijansi za svrhe jačanja tržišne snage preduzeće može da se svede na (Petković i Vukotić i Čabilovski 2017, 365): (1) Individualno ispomaganje: pomaganje partnerima (potrošači, distributeri, snabdevači, konkurenti) sa osnovnom idejom da se pomažući njima pomogne sebi u osiguranju ili proširivanju tržišta prodaje i nabavke; (2) Stvaranje "strategijskih mreža" (kolektivne snage): preko višestranog povezivanja grupe nezavisnih firmi, nastoji se obezbediti zajednička korist, mreže koje su zasnovane na vertikalnom povezivanju (odnosno dodajnoj vrednosti koja otpada na svakog partnera u lancu), mreže za zajedničko korišćenje tehnologije, mreže za realizaciju multidisciplinarnih institucija, mreže koje se zasnivaju na unakrsnom vlasništvu.

Konstantan protekcionizam u razvijenim zemljama, koji je evidentan, uprkos stalnoj priči o slobodnoj trgovini, u stvari je rezultat stava koji prevladava u razvijenim zemljama da je liberalizacija zapravo činjenje ustupaka drugim zemljama. Najbolji primer za ovo je uvođenje carina na uvoz čelika od strane Američke administracije i protivmere EU i drugih zemalja.

Najnovija analiza kretanja BDP-a u svetu i odabranih regionalnih zemalja pokazuje da recesija slabi i da razvijene ekonomije pokazuju znatan oporavak. Predviđa se da će ukupna svetska proizvodnja porasti za 3,5% u 2019. godini (Bojić i Joldić 2018, 220). Ukupna globalna potrošnja, posebno u zemljama u razvoju, pokazuje pozitivan trend poslednje godine, a isto se očekuje za tenuću godinu i naredni period. Međutim, još uvek je visoka stopa nezaposlenosti, i postoje opasnosti od inflacije, posebno zbog intenzivnog ubrizgavanja finansijskog kapitala.

Vlade svih zemalja u borbi za finansijsku i ekonomsku stabilnost moraju da uzmu u obzir predviđanje takozvanog sledećeg talasa. Ovi talasi se odnose na ekonomski i socijalni razvoj koji se očekuje u narednim godinama, posebno posle najnovije svetske ekonomiske i finansijske krize.

Da bi bila konkurentna na globalnom tržištu Evropa mora da stvori veći kvalitet i mnogo inovativnije proizvode i usluge. Konkurentnost nije izolovan fenomen već interdisciplinarna pojava, koja proizilazi iz internog i eksternog okruženja i povezuje poslovnu strategiju, makroekonomsku politiku, pravnu i regulatornu reformu, obrazovanje, motivisanost menadžmenta i radnika i mnoštvo ostalih ekonomskih, poslovnih i društvenih faktora na stvaranju jedinstvenog strategijskog plana i politike konkurentnosti u cilju stvaranja veće dodate vrednosti (Bojić i Joldić 2018, 220-221). Veća produktivnost je osnova za uspostavljanje dobrog društvenog modela. Novi poslovi i nove veštine koje se razvijaju, kao i tehnologija, inovacije, demografske promene i klimatske promene, prouzrokuju nove potrebe i zahtevaju nove strategije. Turbulencije i izlazne strategije ubrzavaju ekonomsko restrukturiranje.

### **Promene u ponudi radne snage**

Sve ovo utiče na vrste veština i kvalifikacija kadrova koji će biti potrebni. Planirani rezultati neće biti korisni samo za one koji se bave politikom već i za ljude koji traže ili imaju potrebe da promene obrazovanje i obuku ili karijeru, zatim za one koji sprovode obrazovanje i obuku, zatim za agencije koje se bave zapošljavanjem i za same kompanije i za ostale vrste preduzeća i institucija. Ukoliko svi budu bolje informisani, onda će i njihove odluke u vezi sa ulaganjem u znanje i veštine biti efikasnije.

Prepoznavanje veština je važan zahtev koji ljudi u obrazovanju i obuci moraju da ispune kao i omogućavanje mobilnosti kadrova.

### **Kretanja u ponudi veština radne snage ka što višim kvalifikacijama**

Budući broj ljudi i kvalifikacije koje poseduju su uglavnom predodređene demografskim razvojem i obrazovanjem i odlukama o obuci. Ove odluke su već donete, tako da većina mladih ljudi starosti od 15 do 24 godine, su još uvek u procesu sticanja kvalifikacija (David and Aghion, 2008, 11). Trend ukupne ponude merene brojem radno aktivnih ljudi (preko 15 godina starosti) sa visokim i srednjim nivoom kvalifikacija ostaje pozitivan.

Značajna povećanja su projektovana za one koji su kvalifikovani. Predviđa se da će potreba za radnom snagom sa niskim nivoom kvalifikacija opasti za oko 15 miliona, dok se očekuje da u 30 evropskih zemalja (EU i Norveška i Švajcarska) u isto vreme broj osoba sa visokom stručnom spremom biti oko 16 miliona. Takođe se očekuje da ponuda onih sa srednjim obrazovanjem, uglavnom strukovnih, poraste za oko milion, i oni će i dalje činiti većinu evropske radne snage (Stojanović 2011, 273). To će se ogledati u efektima da mlađi ljudi koji će se pojaviti na tržištu radne snage poseduju veće kvalifikacije, dok će manje kvalifikovani stariji ljudi napuštati oblast aktivne radne snage.

Uprkos recesiji visoko i srednje kvalifikovana radna snaga će uvek imati veće mogućnosti da nađe posao nego oni sa nižim kvalifikacijama. Rezultati predviđanja takođe nagoveštavaju, da će mnogi ljudi sa višim i srednjim nivoom kvalifikacija raditi na poslovima sa nižim nivoom kvalifikacija (Stojanović 2011, 274).

### **Istaknuti predstavnici pionira novih tehnologija**

Poslednjih godina informacione i komunikacione tehnologije dramatično menjaju svet, omogućavajući porast inovacija i produktivnosti, povezujući ljudе i društva i povećavajući standarde života i mogućnosti u celom svetu. Dok menjaju način individualnog života, interakcija i rada, informaciono komunikacione tehnologije takođe su se dokazale kao ključni preduslov za dostizanje konkurentnosti i ekonomске i socijalne modernizacije, a takođe kao važan instrument za uklanjanje ekonomskih i socijalnih podela i smanjivanja siromaštva.

Svaka država, institucija, odnosno socijalna grupa, u poslednjih 10 godina menja način svoje interakcije sa ciljevima tehnologija (David and Aghion 2008). Na primer vlade koje su se samo koncentrisale na konkretnе predmete kao što je gradnja infrastrukture i obezbeđivanje pristupa građanima, počinju da shvataju da tehnologija po sebi nije tako važna kao društveno ekonomski rezultati koja ona može pojačati, preko zdravstvenih programa, elektronske usluge i forme elektronskih mreža koje obuhvataju digitalnu tehnologiju.

Posedovanje saznanja za informaciono komunikacone tehnologije nije samo način za smanjivanje troškova i mnogo efikasnijih operacija već i kritičan način da se otvori dijalog sa potrošačima i drugim učesnicima, putem svih vrsta digitalne komunikacije, mobilnog advertajzinga, digitalnog marketinga, društvenih mreža i elektronske trgovine. I potrošači se navikavaju na novi stalno uključeni digitalni svet posebno generacije C, koji su spojeni, komuniciraju, sadržajno usmereni, kompjuterizovani, društveno orijentisani, potrošači rođeni posle 1990. godine.

NRI – *Networked Readiness Index* (indeks koji meri sposobnost i afinitet zemalja da iskoriste mogućnosti koje daju informacione i komunikacione tehnologije), za period 2009/2010 pokazuje, da je Švedska na prvom mestu, zatim Singapur pa Finska itd., dok se Srbija nalazi na 93 mestu, iza svih zemalja u okruženju, osim Bosne i Hercegovine.

### Socijalne mreže

Rastući broj tehnoloških pionira, kao na primer „Twitter“, upotrebljavaju tehnologiju da osnaže pojedinca, menjajući društvo u hodu. Ono što je izvesno, političari upotrebljavaju društvene medije da bi dobili izbore i došli na vlast. Kao na primer, u toku izbora predsednika SAD zapošljava se oko 100 ljudi da rade na novim medijima u toku izborne kampanje. Oni koristio društvene mreže kao što je „Facebook“ da mobilisu milione volontera širom zemlje da sakupljaju novac i sprovode kampanju. Takođe, novi predsednik Čilea, zahteva od celog kabinetra da počnu sa korišćenjem twittera. Na osnovu podataka iz štampe mnogi svetski političari koriste usluge društvenih mreža.

Porast korišćenja društvenih mreža doveo je do promene hijararhija, i sada je mnogo više aktivnosti sa podnožja ka vrhu, nego što je ranije bilo sa vrha ka podnožju. I upravo je „Twitter“ jedan primer kako se, zahvaljujući tehnologiji, snaga i moć pomera ka periferiji. Socijalno umrežavanje pomaže spasilačkim ekipama i lekarima na terenu i čini ih mnogo efikasnijim. Pogotovo u jako nerazvijenim zemljama na području Afrike i Azije. To sve može doprineti poboljšanju ljudskog zdravlja i širenju kulturnih uticaja. Sa druge strane to zahteva od svih kompanija da shvate da se, zahvaljujući tehnološkim inovacijama, mnogo više moći transferiše „u ruke kupaca“, pa tako sve kompanije moraju da ponovo procene svoj odnos prema kupcima (Milićević i Arsić i Milićević 2014, 125).

Zanimljiv je primer jednog autora koji je po završetku svog književnog dela umesto da ga objavi na tradicionalni način, on svoje delo publikuje preko socijalne mreže. Ovo mu je omogućilo momentalno elektronsko objavljivanje a zatim i privuklo izdavača koji je prihvatio da ovu knjigu klasično štampa i izda. Nove tehnologije omogućavaju da se izbegnu prepreke koje sprečavaju da proizvodi i usluge lako dospevaju do kupca.

### Moć saradnje i preuzimanje odgovornosti

Jedan od pionira tehnologije koji se specijalizovao za energetsku efikasnost ima nameru da potrošnju energije približi uslovima prodaje u supermarketu, a to je, da se omogući da potrošnja energije ima svoje sastojke, svoju namenu i svoju cenu, a ne da se nakon 30 ili 40 dana dobije račun za potrošenu energiju gde postoji samo dug i nikakve druge informacije. Upravo novo primljena informacija od energetskog sektora omogućice potrošačima isti nivo informacija koja dobijaju u super marketima i motivisaće ih da prave pametnije izbore o njihovoj upotrebi energije.

Tehnološki razvoj, same tehnologije i inovacije omogućavaju ljudima da sarađuju i da se povezuju na nove načine, utičući kako na poslove tako i na humanitarne delatnosti (Bojić i Joldić 2018, 221).

Kompanije koje su svrstane u takozvane pionire tehnologije takođe omogućavaju i podstiču ljude da razumeju tačno koliko energije troše i da preuzmu mnogo više odgovornosti za smanjenje potrošnje energije, i na taj način uštede novac i pomognu smanjivanju negativnih uticaja na životnu sredinu. Primer za to je kompanija koja analizira rad mašina, upotrebljavajući algoritme, da bi omogućila suštinsko sagledavanje potrošnje energije. Na taj način se omogućava upoređenje sopstvene potrošnje energije sa potrošnjom suseda ili drugih kompanija i daju se saveti o tome kako da se smanji potrošnja energije.

Grupa pionira tehnologije iz 2018. godine je omogućila potrošačima i kompanijama mnogo više kontrole nad njihovim uticajima na zaštitu životne sredine na više načina.

Interesantno je da pioniri tehnologije od kada se zvanično evidentiraju, a to znači pre 11 godina, imaju isti broj kompanija koje koriste ekološki prihvatljive tehnologije, kao i broj IT kompanija. Ovo nije slučajno, zato što pritisak da se postane mnogo više energetski efikasan, nikada nije bio veći za kompanije i ne samo zbog zakonodavstva, već i zbog potrošača, pa kompanije moraju da budu evidentirane kao društveno odgovorne. U tome nam pomažu pioniri tehnologije. Pojedini daju ljudima nove ekološke opcije prilikom konstrukcija kuća ili fabrika, koristeći različite tehnologije da bi izgradili ekološki prihvatljive objekte. Međutim, potencijalne opasnosti od uključivanja u globalno tržište ne zaobilaze ranjivosti nacionalnih privreda na globalne fluktuacije proizvodnje i zaposlenosti, negativan uticaj na distribuciju dohotka, pogoršavanje ekoloških problema, i drugo.

Zaštita životne sredine, društveno i korporativno upravljanje, i ESG, jesu tri glavne oblasti koje se uzimaju u obzir kao osnovni faktori u merenju održivog razvoja i etičkih posledica investicija u kompanije ili druge poslove, i kada se svi ti faktori uzmu u obzir imamo takozvano društveno odgovorno investiranje. Efekti ESG fokusa mogu pomoći da identifikujemo nove mogućnosti za poboljšanje profita, na primer kod novih „zelenih“ proizvoda i usluga, zatim, smanjenju troškova, kao što je na primer eliminacija gubitaka i neefikasnosti, u proizvodnom procesu.

Tehnologije pomažu pojedincima da preuzmu odgovornost za sopstveno obrazovanje. Očekuje se da u narednih 10 godina svi tekstovi budi u elektronskom obliku, i oni će biti isporučivani preko poboljšanih elektronskih čitača. Studenti, ma gde se nalazili, biće u mogućnosti da preuzmu akreditovana Web video predavanja, koja će biti vođena od strane najboljih svetskih predavača. Tako je jedan od predstavnika pionira tehnologije razvio algoritam koji pomaže studentima da pronađu najbolji online sadržaj i odgovarajući modus za učenje, prilagođavajući obrazovni sadržaj svojim individualnim potrebama.

Određivanje tehnoloških pionira bazira se na sledećim kriterijumima:

1. Inovacija; kompanija mora biti stvarno inovativna, nove verzije prepakovanih ili već dobro prihvaćena tehnološka rešenja se ne kvalificuju kao inovacije. Inovacija i njena tržišna uloga mora da bude nova. Kompanija mora značajno da investira u istraživanje i razvoj.
2. Potencijalni uticaj; kompanija mora da ima potencijal koji će suštinski na dugi rok da utiče na poslovanje i/ili na društvo.
3. Rast i održivost; kompanija mora da prikaže potencijal sa kojim će ostvariti dugoročno liderstvo na tržištu i da ima dobro formulisane planove za budući razvoj i rast.
4. Dokaz koncepta; kompanija mora da ima proizvod za tržište ili da ima dokazanu praktičnu primenu tehnologije. Kompanija koja nije eksponirana, sa neproverenim idejama ili modelima nije kvalifikovana da bude tehnološki pionir.
5. Rukovodstvo; kompanija mora da ima vizionarsko rukovodstvo, koje igra odlučujuću ulogu u vođstvu kompanije ka zacrtanim ciljevima.

### **3. AKTUELNA PITANJA TEHNOLOŠKOG PROGRESA I INOVACIJA**

Globalizacija je prisutna u celom svetu uključujući i područje na kome mi živimo. Jednostavno rečeno globalizacija i tranzicija su međusobno povezani (Bahar i Hausmann i César 2014; Duvnjak 2018) tim pre što se putem tranzicije oživljava tržište i privatno vlasništvo kao preduslov demokratizacije društva. Stoga vlade svesno menjaju politiku smanjenja i eliminisanja prepreka da bi se kretanje robe, kapitala i usluga nesmetano odvijalo, pogotovo kada vlast kroz sopstveno delovanje sazna koliko ih takve barijere koštaju. S druge strane, moćne kompanije menjaju svoju strategiju poslovanja i stavljaju akcenat na rast profita kroz smanjenje troškova, a ne preko povećanja cena roba i usluga.

Konkurentnost na međunarodnom planu zahteva od kompanija da domaće pozicije pretvore u međunarodne, odnosno da imaju globalnu strategiju nastupa.

Strategija nastupa na inostranim tržištima kao osnovu treba da ima sistem prikupljanja, obrade i distribucije informacija o izvoznim tržištima, odnosno metode selekcije tržišta i proizvoda za data tržišta. Kompanija treba da u strategiju nastupa ugradi informacije o pojedinim tržištima i strukturi tražnje na njima (uz odgovore na pitanja koji proizvodi traže promociju u odnosu na plasman na određenom tržištu i na koja tržišta mogu i treba da se izvoze njihovi proizvodi).

U savremenoj privredi zadovoljenje potreba i zahteva određenih tržišnih segmenata ponekad prevazilazi mogućnosti pojedinačne kompanije, posebno u nastojanju da se obezbedi značajna konkurenčka prednost na određenom tržišnom segmentu.

Jedna od osnovnih specifičnosti prilagođavanja kompanije tržišnom ambijentu jeste povećanje pregovaračke moći na tržištu. Kompanija može kroz dugoročnu saradnju, da poveća svoju stabilnost i uticaj na tržištu i to putem povećanja nivoa zadovoljavanja potreba velikih kupaca, stvaranjem zajedničkog imidža, statusa i većeg učešća na tržištu.

Svaki stepen internacionalizacije biznisa predstavlja i označava neku formu razvojnog napretka i menadžmenta i kompanije. Tipičan pravac zdravog razvoja mnogih kompanija polazi od lokalnog ka nacionalnom (zemaljskom); od nacionalnog ka inostranom (međunarodnom), od međunarodnog ka globalnom. Preduzetničke kompanije koje uspeju da prevaziđu početne pragove razvoja koje im nameće poslovanje na inostranom tržištu, dolaze u situaciju da svoj biznis stabilizuju i ustale, i da potom po osnovu prostorne diverzifikacije i ekonomije obima koje ostvaruju obezbede rentabilno poslovanje sa trajno rastućim prinosima. Osvajanje inostranog tržišta za mnoge velike kompanije procesnog (industrijskog i sličnog) karaktera jedino je rešenje ukoliko žele razvoj. Ponekad se samo penetracijom (prodiranjem) na inostrano tržište mogu stvoriti neophodni uslovi za prevazilaženje ekonomskih, tehnoloških, tržišnih i/ili drugih pragova razvoja sa kojima se suočavaju. Bez savlađivanja tih pragova ove kompanije ne bi mogle da posluju uspešno i da se razvijaju.

Brojne firme iz raznih grana poslovanja čak najveći deo svojih prihoda, svoga profita i/ili zaposlenosti ostvaruju na strani – u zemljama u kojima otvaraju svoje poslovne punktove različitog tipa, ili pak u zemljama u kojima, kroz razne vidove poslovne kooperacije sa domaćim (lokalnim) firmama obavljaju i razvijaju određeni biznis.

Sasvim je jasno da u savremenom društvu, kao i pre njega, postoje nejednakosti. Stoga i ne čudi da postoje različite perspektive razvoja, pa i u ovom savremenom društvu. Razlike, kada se pogledaju trenutni nivoi razvoja, u perspektivama su više nego velike. Zbog toga se mora odvojeno govoriti o perspektivama razvijenih, srednje razvijenih i nerazvijenih zemalja. Razvojne perspektive ne pripadaju samo razvijenim zemljama, međutim utiču na sve globalne društvene promene.

Razvijene zemlje su se prirodno i same nametnule kao lideri kreiranja ne samo svoje, već i budućnosti čitavog sveta. Najbolji pokazatelj takvog pristupa je globalizacija, fenomen savremenog društva koji upravo odslikava savremenog (zapadnog) čoveka. Ona takođe ima za cilj ne samo da pokaže jak uticaj razvijenih (zapadnih) sila na svet i svetske tokove, već i da ih ustoliči kao nosioce društvenog razvoja. U sferi kulture insistira se na stvaranju građanina sveta, a to dovodi do homogenizacije ukusa, stvaranja obrazaca u oblačenju, ishrani i stilu života. Objektivno sagledavajući sliku globalizacije sveta ne može se tvrditi ni samo jedno ni samo drugo. To je priča o svetloj i tamnoj strani globalizacije. Tamna, destruktivna strana postepeno postaje nadmoćnija, dobija preteće razmere, pretvara savremenu arenu u "svetsko društvo rizika". Konstantan protekcionizam u razvijenim zemljama koji je evidentan, uprkos stalne krilatice o slobodnoj trgovini, je u stvari rezultat stava koji prevladava u razvijenim zemljama da je liberalizacija zapravo činjenje ustupaka drugim zemljama. Najbolji primer za ovo je uvođenje carina na uvoz čelika и алуминијума od strane Američke administracije i protiv mere Kine, EU i drugih zemalja.

Na međunarodnom tržištu ne konkurišu države već kompanije, pa je kvalitet menadžera bitna pretpostavka za ostvarenje konkurentske prednosti u određenoj grani. Menadžment mora biti dugoročno, a ne kratkoročno orijentisan da akcentira inovaciju proizvoda, procesa i marketing metoda, da se spremi na prihvatanje podnošljivih rizika i da je spreman na poslovnu saradnju sa preduzećima iz drugih zemalja. U granama koje imaju globalni karakter, konkurentska prednost će sve više zavisiti od sposobnosti menadžmenta, a ne kao što je do sada bio slučaj od rada i kapitala, kao i raspoloživih prirodnih faktora. Međunarodna prednost često se koncentriše u ograničenim industrijskim granama i još ograničenijim segmentima. Takođe, inovativno orijentisan menadžment će tražiti i nalaziti nove tehnologije, uočavati potrebe za nekim proizvodima i uslugama, sagledavati mogućnosti za novim izvorima i institutima proizvodnje i sl. Stepen inovativnosti, u dobroj meri zavisi od konkurentnosti privrede. Zaštićene grane i preduzeća od inostrane konkurenциje nemaju sklonost ka inovaciji.

Ni Srbija ne može biti isključena iz procesa globalizacije. Njen slučaj je pun kontroverzi. Razlozi za kašnjenje, su vezani pre svega za ostatke planske ekonomije i ne do kraja sprovedene privatizacije društvenog sektora privrede.

Uključivanje u međunarodne privredne tokove i međunarodnu podelu rada je suštinski deo strategije privrednog razvoja Srbije, gde susedne zemlje imaju poseban značaj. Zemlje Jugoistočne Evrope, a među njima i Srbija, se nalaze u fazi radikalnih društvenih i ekonomske reformi, i u meri ostvarivanja tih reformi ostvarivaće se i ovi ciljevi, najpre preko Pakta za stabilnost Jugoistočne Evrope, do punopravnog članstvu u EU. Proučavanju faktora regionalnog rasta i ekonomske konvergencije (divergencije) regionala moguće je prići iz različitih uglova. Neki autori smatraju da su postulati teorije lokacije i teorije regionalnog rasta i razvoja od presudnog značaja u postupku vrednovanja faktora regionalnog rasta (Capello and Perucca 2015, 223). U zavisnosti od prihvaćene koncepcije prostora, razlikuju se ključni pokretači regionalnog razvoja. Na produktivnost faktora i veličinu dohodovnih multiplikatora dominantan uticaj imaju međuregionalna alokativna efikasnost i unutarregionalni multiplikativni mehanizmi (Stimson and Stough and Nijkamp 2011, 10).

Globalnu ekonomiju u savremenim vremenskim okvirima, karakteriše rastuća međuzavisnost nacionalnih privreda (Dodig i Kozić-Rađenović 2017, 229). Najnovija analiza kretanja svetske privrede ukazuju na slabljenje recesije, ali još uvek postoji visoka stopa nezaposlenosti i opasnost od inflacije zbog intenzivnog ubrzavanja finansijskog kapitala. Za samu Evropu je bitno da stvori inovativnije i kvalitetnije proizvode i usluge. Tekuće turbulencije i potreba za izlaznim strategijama ubrzavaju celokupno ekonomsko restrukturiranje. Promene u ponudi radne snage kretaju se ka potražnji za višim kvalifikacijama. Informaciono komunikacione tehnologije dramatično menjaju svet, povezujući ljude i društva, povećavajući standard života i dokazuju se kao ključni preduslov za dostizanje konkurentnosti i ekonomske i društvene modernizacije, a takođe kao važan instrument za uklanjanje ekonomskih i socijalnih podela i smanjivanje siromaštva ali i pružaju zastrašujuće mogućnosti manipulacije i zloupotreba.

Svaka država, institucija i socijalna grupa u poslednjih 10 godina menja način svoje interakcije sa ciljevima i rezultatima tehnologije. Odnos tehnologije i ekonomije ukazuje na mogućnost da se otvari dijalog i sa ostalim učesnicima u ovoj interakciji, i da se pojačaju društveno-ekonomski rezultati i izbegnu moguće negativne posledice.

## ZAKLJUČAK

Danas, kompanije moraju biti spremne za novu eru koja zahteva efikasnije i podsticajnije upravljanje novim tehnologijama i inovacijama. Mnoga istraživanja potvrdila su da kompanije, koje prihvataju izazov upravljanja inovacijama, postaju prestižnije i uspešnije na tržištu u odnosu na svoje konkurente. Proširenje Evropske unije stavlja pred Srbiju potrebu da prepozna nove tehnološke procese i inovacije kao neophodan uslov za izlazak iz faze usporenog razvoja. Danas su mala i srednja preduzeća „generator“ savremenih privreda zbog

doprinosa koji se ogleda u tehnološkim inovacijama, zapošljavanju, povećanju izvoza, dinamiziranju konkurenčije, itd. Sposobnost malih i srednjih preduzeća da inoviraju je od velikog značaja, jer inovacije obezbeđuju konkurentsku prednost preduzeću, grani u kojoj posluju, kao i privredi u celini. Nova i postojeća inovativna MSP doprinose povećanju ukupne produktivnosti i konkurentnosti privrede, istiskujući manje efikasna preduzeća sa nižom produktivnošću. Inovativna MSP učestvuju u protoku znanja u okviru inovacionih sistema, sve manje kao pasivni korisnici znanja, a sve više kao značajan izvor znanja. Inovacija je moćno sredstvo za nova mala preduzeća da uspešno uđu na tržište i promene postojeće stanje, a omogućava i postojećim preduzećima da putem inovacija održe ili poboljšaju svoj položaj na tržištu. Inovativna MSP učestvuju u protoku znanja u okviru inovacionih sistema, sve manje kao pasivni korisnici znanja, a sve više kao značajan izvor znanja.

Inovacije predstavljaju novi pristup rešavanju problema, koji često podrazumeva inkrementalne, revolucionarne promene u načinu razmišljanja, proizvodima, procesima ili organizacijama. Da bi bila efektivna, inovacija treba da bude jednostavna. Inovativnost je svojevrsni mentalni stav koji fokusira preduzeće da vidi ispred sadašnjosti, u budućnost. Cilj inovacija je pozitivna promena. Inovativno preduzeće mora imati konzistentnu tehnološku strategiju. Merenje inovativne efikasnosti je vrlo kompleksno, ali i značajno jer se na taj način ukazuje na položaj jedne zemlje. Poslednjih godina MSP poseban značaj posvećuju problemu inoviranja. Jedan od puteva napretka za Republiku Srbiju je i investiranje u znanje, to je put ka održivoj privredi i društvu.

Društveno-ekonomске promene, koje prate ubrzan naučno-tehnološki razvoj, posebno ekspanzija modernih tehnologija, zahtevaju visoko obrazovane ljude koji su u stanju da efikasno funkcionišu u društvenim procesima i koriste raspoloživu tehnologiju. U društvu znanja, preduzeća i nacionalne ekonomije konkurentsku prednost baziraju na znanju i iskorišćavanju potencijalnih šansi i mogućnosti za čiju je realizaciju neophodno. Zbog toga su osnovni razvojni ciljevi najrazvijenijih zemalja povećanje ulaganja u IR i inovativne aktivnosti kroz kontinuirano učenje i obrazovanje ljudskih resursa.

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## THE IMPACT OF TECHNOLOGICAL PROGRESS AND INNOVATION IN ECONOMIC DEVELOPMENT

**Summary:** *The changes with which companies are faced at the beginning of this century are the result of the impact of a number of factors. The first one is globalization – a huge increase in trade and availability of new products and services, as well as dramatic increase in the mobility of foreign investments, people and international competition. The next factor is the influence of contemporary communicational technologies. Fast changes of all types of technology enable fast access to numerous ways of communication, at low cost, which leads to the market opening for the consumers all over the world. These two factors have had an influence on a power change on the market, from the producer to the consumer or the final user.*

*In contemporary global environment the economy of every individual country depends on the consequences of technological development and the implementation of innovations.*

**Key words:** *technology, economy, innovation, efficiency, economic development*

**JEL classification:** *A12, Q14*

### INTRODUCTION

The implementation of new technologies and innovations does not only have positive effects in economy and society, but there are also some possibilities for the negative effect escalation. Sustainable investment is the investment approach which on a long term integrates the protection of living environment, society and governing of a state, i. e. their criteria for investment and ownership decisions aiming to make risky acceptable financial income. The aim is to point out the basic trends in the world economy as well as the measures for the improvement of positive effects of the technological development. Technology should give support to people in all spheres of society, by giving them more information, more options, bigger influence in the world and better control over their own health and their influence on living environment. Technological advantages ensure an exceptional level of cooperation in real time which means that the impact on these pieces of information has never been easier (Bertomeu and Marinovic 2016, 10).

The most recent research in the world economy and international business practice showed that there is an interrelationship between the improvement of the business quality and the establishment and development of competitive ability of business organizations, as well as the tendency in the first place, based on technological development whose carriers are the so called pioneers of technology and so it is more important to take in account that implemented innovations secure not only the development of the society but also make it sustainable (Bašić and Đorđević and Čoćkalo and Bešić – Vukašinović 2014, 288).

Economical development is a complex economical and social process by which a country gradually gets rid of economical underdevelopment and poverty, reaching the better

developed levels. Two basic components make this process: the economic growth and changes in the structure of economy. The economic development means not only quantitative changes concerning the economic position of a country, but also the qualitative changes (change in economic structure, the occurrence of new branches and sectors, new occupations etc.) that lead to better and more accomplished realization of all human needs (not only economical but also cultural, for instance). The increase of per capita production in the theory of economics is expressed as economic growth without which there is no economic development, though not every economic growth is due to lead to economic development. Economic growth comprises changes in material production in the course of a relatively short period of time, mostly lasting a year. In the theory of economics the notion of economic growth means a yearly increase of material production expressed in value, through the rate of increase in gross domestic product or national income. The increase can be achieved without the realization of economic development course. Thus, the economic development does not only include the increase in material production but also all other social – economic processes and changes conditioned by both economic and non – economic factors (Dodig and Kozić – Rađenović 2017, 229).

Contemporary economic trends in the world economy and especially tendencies in regional integrations, are becoming more dynamic and directed in advance, by coordination of economic policy in international economic regional integrations. Scientific – technological revolution positioned the technological factor as the most important moving force of economic development and activated the powerful process of reindustrialization of developed countries in the West, and not only them. In such conditions, together with the growth of mutual dependence of national economies and with more vivid need to resist American and Japanese competitiveness (in some high technological areas of domination) the process of formation of unique internal market has almost been finished in the EU, i.e. European economy area. Economic and technological competition from 1990s, in the triad (the USA, the EU and Japan) and China, in which Russia has taken part, too, for the more superior and more favorable position in the world system, has also continued in the 21<sup>st</sup> century (Petković 2009, 10).

The process of globalization, in the first place due to the development of means of transport and connections, transformed our planet into “the global village” i.e. “the world society”. Basically, globalization is a complex process by which technological, economic and political unification of the world has been done, i.e. “this process guarantees the greater homogeneity of all societies notwithstanding their historical origin and cultural heritage” (Petković 2009, 31).

Standardization is the essence of the globalization process in the world production and trade. Mere acceptance of standards does not mean that obstacles for their entire and true implementation in all countries have disappeared.

The importance of international company activities of every national economy and even more of small countries, is certain and also a key factor of development and growth in contemporary conditions. However, Serbian experience has in many ways been, during a lot of years, followed by numerous wrong opinions, negative results, burdened by old – fashioned approaches and non – efficient solutions (Vesić 2010, 135).

## **1. NEW TENDENCIES IN BUSINESS ENVIRONMENT**

New scientific – technological revolution, informational technology, increasingly develops international division of work connecting national economies in one unique entity through the world market. World today is characterized by the domination of transnational companies, strong impact of government in economy and the globalization of the world economy. The process of globalization begins with the formation of economic integrations (the EU, NAFTA and ASEAN). There is a battle among them for domination on the global market in the world

economy. That conditions the internationalization of the production and capital aiming to make profit interest. This process is intensified by the end of the 20<sup>th</sup> century so that financial capital of the most developed countries in the world manages to connect every point (national economy, enterprise) on the globe, in one "global village" (Pečujlić 2000, 126).

Today the world economy is usually spoken about as the economy of transnational companies. Transnational companies after the 1980s of the 20<sup>th</sup> century, control over the 50% of the world production, 2/3 of the world trade, ¾ of the international technology transfer, with the tendency towards further growth. It is noticeable that the "interest of the almost all countries in the world is switched from ideological – political and military complex to the economic – technical – technological development" (Drucker 1995, 32). The dependence among countries is achieved through new technologies and financial ways (capital and production export).

The imperative of science and technology development – IT, telecommunication, genetic engineering, biotechnology etc. fasten the process of globalization in the world economy and lead to mutual dependence in the world economy, which differs in relation to developed and developing countries. It is enough to point out that developed countries prefer differently the cooperation with other countries. They are satisfied with cooperation concerning raw material supply, energy supply, cheap workforce and using absorbable possibilities of a market.

Globalization as a permanent process has led to a series of important changes in the business policy of companies, organizations and institutions. The reason for that lies in the very essence of the globalization process which is characterized by universality, homogeneity and unification of the world in some crucial principles, directions and norms of behavior, as well as the affirmation of the growing mutual connectivity and dependence among certain countries, regions and big companies (Drašković and Jovović 2006, 121). Although globalization aims to make a uniform world market, it carries some very significant negative consequences with itself, too, especially for developing countries of the world. Thus, for instance, most of the trade is going on within the three, already mentioned integrated units – regions (the EU, NAFTA, Asian Union), and not among countries which belong to different integrated units.

From all disadvantages of globalization, the most striking problem is the gap between the rich and the poor. According to statistical data, the relation between the 20% of the richest and 20% of the poorest countries is lowered from 15:1 to 13:1 in the last thirty years. Besides, the comparison itself is not the best because the core of globalization is not only made of 20% of the richest countries, but much smaller number, in which the most important place is for 6 -7 countries (group G – 7 most developed countries of the world). Thus, globalization increases the power of transnational companies, especially because it is known that some transnational companies have higher incomes than other countries, though these comparisons have some drawbacks due to the comparison of different data, sales and GNP (Petković 2009, 112).

Nevertheless, the biggest disadvantage of globalization is that it is estimated as harmful for workers. The slogan "there will be more work to do" means lower pay. Workers have smaller influence on working conditions and their negotiating power is diminished. Besides, most of the investments go to rich countries. So, for instance, 81% of the financial means were placed by America outside the country into the countries that have high incomes, and less than 1% goes to the countries with low salaries, though salaries given by transnational companies in the countries with low and medium pay on average are 1.8 to 2 times higher than average salaries in these countries (Vesić 2009, 233).

Informational revolution and powerful development of technology and communications contribute to a high degree of the mobility of capital which improves the development of the rich, and destabilize the developing countries and those in transition.

As soon as the first signs of crisis are noted, rich countries, due to the mobility of the capital, manage to pull out their capital, which deepens the crisis and makes it faster, while in certain

countries withdrawal of the capital from transnational companies will be a drop over the glass brim and will cause serious economic crises (Petrović 2006, 35).

For integrating economic subjects into the international currents, economic policy should provide certain preconditions: motivation of companies to do international business, marketing orientation of companies, both on the global and the national market, adequate development of international informational systems, orientation of companies towards efficiency, and not only on the efficiency of business, strategic approach to international services, capital and information, the unity of technological and marketing strategy and innovations in the strategy and structure of companies.

## **2. GLOBALIZATION AND DEVELOPMENT OF SERBIAN COMPANIES**

In the organization of economy as well as in the race for achieving competitive advantages, the world trends affirm quality and not quantity of the growth. Strategic alliances are very attractive and also a necessary form of contemporary economic business. They include a very complex process of research and management in general and not only of changes (Vesić 2010, 144).

Strategic alliances are formed with the aim to broaden market and stabilize business activities of an economic subject. By this, alliance synergy of asymmetric competences is provided, and so competitiveness is pacified (by a network of intersecting properties and eliminating particularism).

Strategic alliances, through dynamism contradictions interest make all patterns included cautious, and in this way contribute to faster economic development. In that sense strategic alliances can play an important role in qualifying Yugoslav companies for efficient inclusion in the world processes of capital movement and technology transfer. Moreover, their more efficient use can be contributed by property transformation of our companies and in this way adapted system or governing (lowering transactional expenses, instead of individual performance of our companies). Then, a strategic alliance contributes to the forming of technological and vertical networks, consortium agreements, especially in the field of research and development (Rakita 1999, 127).

Market globalization causes internationalization of business and globalization of companies. Developing behavior of companies is conditioned by the state of the market of goods and capital, improvement of innovations and organizational forms. Generally, in contemporary conditions (prevailingly as a race for acquiring competitive advantages) quality is more often confirmed, and not the quantity of a company's growth.

Sudden development of technology on one hand and liberalization of law regulative on the other, affirm companies' integration in constant endeavor to adapt to business environment and in this way companies, by integration (strengthening mutual dependence) increase their competitive position on the market.

Thus, under the influence of globalization, strategic alliances and coalitions are formed, by which (through synergy) the growth of all members of an alliance is increased. Strategic alliance themselves presuppose very flexible forms of strategy (marketing arrangements, licensing, research and development, purchase, franchising, joint venture, consortium etc.) in the sense of: increase of sales range (market broadening), access to modern technologies, synergy effects (combining asymmetric advantages of firms), access to rare resources, relativizing (relieving) conditions for entering new markets, intensifying international business capital and knowledge (Rakita 1999, 129).

So, strategic alliances are very flexible and attractive form for the realization of developing behavior of a company. Combining the economy of range and economy of broadness demands more often different business and organizational arrangements by which independence and self sufficiency of a company is awarely submitted to propulsive business economy. So, instead of competitive collisions based on solo performance there is a demand

for ways that will lead to pacification of competitiveness, in other words aiding and removing barriers. Involved companies have the possibility to combine asymmetric advantages to provide benefits on both sides when occurring on new markets, on one hand and in technological spheres, on the other. In this way modalities of combined growth are better affirmed, instead of mere internal or external growth (Vesić 2010, 145).

Developing behavior of companies is more often based on a bigger number of partners and special forms of cooperation, aiming to preserve its vitality, in other words, to increase its resistance to market impacts. In this sense developing behavior of a company and internal configuration are in correlation with relative independence, self – sufficiency and limits of external growth. A modern company can, by realizing synergy, find ways of its development in a broad spectrum of possibilities, by using asymmetry in relations to parts, subtle maneuvers concerning the reconstruction of business portfolio and establishing relations with environment (Petković 2009, 101).

According to this, strategic alliances occur more often as a rational form of developing behaviour of a modern company and its endeavour to adapt to changed market, technological and social trends. Processes of business proliferation and untying of companies lead to establishment of varied forms of cooperation in the realisation of certain endeavours. Numerosity of forms and potential partners make it possible to, through alliances, provide a broad scale of benefits for included partners (Petković and Vukotić and Čabilovski 2017, 358).

Forms of cooperation in alliances are determined in accordance with the business nature and expected results. Thus, they can comprise: agreed capital investment (one in shares of other firm), licensing, franchising, joint venture, aiding in production, marketing, research and development.

In general, benefits from alliances can be classified as follows (Petković and Vukotić and Čabilovski 2017, 359): (1) Easier access to sale and purchase market (agreed reallocation of certain products): combined occurrence on some determined markets with overcoming barriers, promotion of certain products with more stable arrangements, opening, development and control over canals of distribution, realisation of more stable and higher quality sources, raw – material supply, providing components and production services; (2) More efficient production management (neutralizing bottlenecks, improvements of production processes and transfer of production “know – how”): better distributed employment capacities, utilization of superior partner’s competence, promotion of new production processes (inventions); (3) Benefits in the field of production management (increase in the product value i.e. more efficient offer complexity): in time product development and its placement on the market (license or other form), more efficient creation of research and marketing aid (dispersion of risks), providing distribution and post – sale services, diminishing production and marketing expenses in completion of standards, improving the image of a product (by joint advertising); (4) Strengthening and more efficient technology management (more expensive and uncertain technological research are more affordable to alliances): by intercrossed licensing expenses are diminished, research horizon is broadened, significant number of researchers is provided, more partners are included (faster is the process of innovation diffusion), encouragement for more efficient research realization exists; (5) Acquiring and strengthening of management and organizational “know – how”; development of new management knowledge, promotion of new culture and business organization, improvement of internal entrepreneurship; (6) Strengthening of financial capacity: certain arrangements increase or accelerate income influx: certain expenses for financing some activities are significantly lowered, diminishing expenses and risks makes financial position easier; (7) Strengthening of development potential: internal factors (production, marketing, research and development), external factors (overcoming barriers of entering branches, the use of anticipated possibilities).

The use of alliance for the purpose of strengthening a company’s market power can be explained as (Petković and Vukotić and Čabilovski 2017, 365): (1) Individual aid: helping

partners (consumers, distributors, suppliers, competitors) with the basic idea that by helping them, help itself in securing or broadening the market of sale and supply; (2) Creating “strategic networks” (collective force): through multiplied connections of a group of independent firms, it is tried to provide common benefit, networks that are based on vertical connections (in other words on added value that is meant for every partner in the chain), networks for mutual use of technology, networks for the realization of multi discipline institutions, networks which are based on intersectional ownership.

Constant protectionism in developed countries, which is evident, instead of a permanent claim about free trade, is basically the result of the attitude that prevails in developed countries that liberalization is in fact giving allowance to other countries. The best example for this is the introduction of customs duties on steel import by American administration and against measures from EU and other countries.

The most recent analysis of GNP in the world and of selected regions and countries shows that recession weakens and that developed economies show noticeable recovery. It is estimated that the entire world production will rise for 3.5% in 2019 (Bojić and Joldić 2018, 220). Entire global consumption, especially in developing countries, shows a positive trend in the last year, and the same is expected for the current year and the following period. However, the unemployment rate is still high, and there is danger of inflation, especially because of the intensive infusion of the financial capital.

Governments of all countries fighting for financial and economic stability must take in account the foreseeing of the so call next wave. These waves concern economic and social development which is expected in the following years, especially after the most recent world economic and financial crisis. In order to be competitive on the global market Europe must create better quality and more innovative products and services. Competitiveness is not an isolated phenomenon, but an interdisciplinary occurrence, which rises from internal and external environment and connects business strategy, macroeconomic policy, legal and regulative reform, education, management and employee motivation and a lot of other economic, business and social factors to create a uniform strategic plan and policy of competitiveness aiming to increase added value (Bojić and Joldić 2018, 220 – 221). Higher productivity is the basis for establishing a good social model. New jobs and new skills that are being developed, as well as, technology, innovations, demographic changes and climate changes, all of them call for new needs and demand new strategies. Turbulences and outgoing strategies make economic restructuring faster.

### **Changes in labor force availability**

All of this has an influence on types of skills and qualifications of working force that are to be needed. Planned results will not be useful only for those who deal with politics but also for those who conduct education and training, also for agencies that deal with employment and for companies themselves and other types of enterprises and institutions. If they are all informed in a better way, then their decisions about investment in knowledge and skills will be more efficient.

Recognizing skills is an important demand for people in education and training which they must meet as well as to enable the mobility of the workforce.

### **Mobility in the workforce skill offer – towards higher qualifications**

Future number of people and qualifications which they have are mostly predetermined by demographic development and education as well as decisions in training. These decisions have already been defined, so that most young people 15 – 24, are still in the process of acquiring qualifications (David and Aghion 2008, 11). The trend of entire offer measured by the number of active people in work (older than 15) with high and secondary level of education remains positive.

Significant increase is projected for those who have qualifications. It is estimated that the need for employees with low level of education will decrease for about 15 million, while it is expected that in 30 European countries (the EU and Norway and Switzerland) at the same

time demand for the number of people with high education will be 16 million. It is also expected that the offer of those with secondary education mostly vocational, will increase for about 1 million, and so they will still make the majority of European workforce (Stojanović 2011, 273). This will result in occurrence of young people who will be present on the workforce market with higher qualifications, while less qualified, older people will leave the zone of active labor force.

In spite of recession, higher and secondary educated employees will always have better possibilities to find jobs than those with lower qualifications. The results of the prognosis also predict that a lot of people with higher and secondary level of qualifications will do jobs where lower level of education is needed (Stojanović 2011, 274).

### **Outstanding representatives of the pioneers of new technologies**

In recent years informational and communicational technologies have been changing the world dramatically, with increasing innovations and productivity, connecting people and societies and raising living standards and possibilities all over the world. While changing the way of individual life, interactions and work, informational technologies also proved themselves as a key precondition for acquiring competitiveness and economic and social modernization, as well as an important instrument for removing economic and social divisions and diminishing poverty.

Every country, institution and/or every social group, in the last 10 years has been changing its interactions with aims of technology (David and Aghion 2008). For instance, governments which have concentrated only on actual subjects as infrastructure building and providing approach to citizens, are beginning to understand that technology in itself is not so important as social economic results which it can boost, through health programs, electronic service and forms of electronic networks comprising digital technology.

Having knowledge about informational communicational technologies is not only a way of diminishing costs and numerous more efficient operations, but also a critical way to open a dialogue with customers and other participants, through all kinds of digital communication, mobile advertising, digital marketing, social networks and electronic trade. Customers also get used to new permanently present online digital world, especially of generation C, who are connected, communicating, content directed, computerized, socially oriented, customers born after 1990.

NRI – *Network Readiness Index* (index which measures capacity and affinity of countries to use possibilities that are given by informational communicational technologies), for the period 2009/2010 show that Sweden is ranked number one, then Singapore, then Finland etc., while Serbia takes 93<sup>rd</sup> place behind all surrounding countries, except Bosnia and Herzegovina (World Economic Forum 2010, 19).

### **Social networks**

Growing number of technological pioneers, like for example “Twitter”, use technologies to strengthen an individual, changing a society while happening. One thing is certain, politicians use social media to win at elections and come to power. For example, during the presidential elections the USA employed about 100 people to work on new media in the course of election campaign. They used social networks such as “Facebook” to mobilize millions of volunteers all over the country to raise money and work on the campaign. Similarly, the new president of Chile, asked from the whole cabinet to start using “Twitter”. Based on the data from the press, a lot of world politicians use services of social networks.

Increase in the use of social networks has led to hierarchy change and now there are much more activities from the bottom to the top than it used to be, from the top to the bottom. “Twitter” is exactly an example how, thanks to technology, strength and power move towards peripherals. Social networking helps emergency services and doctors to cover terrain and be more efficient, especially in some poor developing countries in parts of Africa and Asia. All of this can contribute the improvement of human health and spreading of cultural influences. Besides, it is necessary for all companies to understand that thanks to technological

innovations, much greater power is transferred “into the hands of customers”, and so all companies must estimate again their attitude towards customers (Milićević and Arsić and Milićević 2014, 125).

It is good to mention an interesting example of the author who after finishing his literary work, instead of publishing in a traditional way, publishes it on a social network. This enabled him to have an instant electronic publishing and also it attracted the publisher who accepted this book for printing in a classical way and issuing it. New technologies make it possible to avoid obstacles that prevent products and services to reach their customers easily.

### **The Power of Cooperation and Responsibility taking over**

One of the technology pioneers which specialized for energy efficiency has the intention to make energy consumption closer to sale conditions in a supermarket, and that is, to make it possible that energy consumption has its components, its purpose, and its price, and not that after 30 or 40 days a bill for electricity is delivered for the used energy and no other information. However, the newly received information delivered from the energy sector will make it possible for the consumers to have the same level of information which they get at supermarkets and will motivate them to make smarter choice in their energy use.

Technological development, technologies and innovations themselves enable people to cooperate and to connect in new ways, influencing both businesses and humanitarian activities (Bojić and Joldić 2018, 221).

Companies which are classified in the so called pioneers of technology also enable and encourage people to understand exactly how much energy they use and to take much more responsibility in order to use it less and so save money and help in diminishing negative effects on living environment. One example for this is a company which analyses the work of machines by using algorithms, so that it can completely comprehend the use of energy. In this way it is possible to compare one's own energy consumption with the neighbor's use or some other companies and advice can be given about how to diminish energy consumption.

A group of technology pioneers from 2018 provided its consumers and companies with more than just control over their influences on the protection of living environment in several ways. It is interesting to say that technology pioneers, since they are officially registered, 11 years ago, have the same number of companies which use ecologically acceptable technologies, as well as the number of IT companies. This is not by chance, as the pressure to become more energy efficient has never been bigger for companies, and that is not only because of legislation, but also because of consumers, so that companies must be registered as socially responsible. Pioneers of energy help us in this. Some of them give people new ecological options in case of house and factory construction, by using varied technologies to make ecologically acceptable buildings. However, potential dangers of being included in the global market do not leave out vulnerability of national economies to global fluctuations of production and employment, negative influence on income distribution, worsening of ecological problems and other (Nutti 2002, 24).

The protection of living environment, social and corporative management and ESG account as basic factors in measuring sustainable development and ethical consequences of investments in companies or other businesses, and when all these factors are taken in account we have the so called socially responsible investment. The effects of ESG focus can help to identify new possibilities for raising profit for instance with new “green” products and services, and then, to lower expenses, as it is for example elimination of losses and non – efficiency, in the production process (World Economic Forum 2011, 24).

Technologies help individuals to take over the responsibility for their own education. It is expected that in the following 10 years all texts are in electronic form, and they will be delivered through improved electronic readers. Students, wherever they are, will be able to download accredited Web video lectures, given by the best world lecturers. In this way, one of the representatives of the technology pioneers developed the algorithm which helps

students to find the best online content and the adequate study mode, adapting the educational content to their individual needs.

The determination of technological pioneers is based on the following criteria:

1. Innovation; a company must be truly innovative, new versions of prepackaged or already accepted technological solutions are not considered innovations. An innovation and its market role must be new. A company must significantly invest in research and development.
2. Potential influence; a company must have a potential which will for a long time essentially have influence on business activities and/or on a society.
3. Growth and Sustainability; a company must show a potential with which it will realize a long – lasting leadership on the market and it must have well – formulated plans for the future development and growth.
4. Concept proof; a company must have a product for the market or a proof for the practical application of technology. A company which is not presented with ideas and models that are not proved is not qualified to be a technological pioneer.
5. Management; a company must have a visionary management, which plays a decisive role in a company's leadership towards already determined aims.

### **3. CURRENT QUESTIONS OF TECHNOLOGICAL PROGRESS AND INNOVATIONS**

Globalization is present all over the world including the region in which we live. Simply said, globalization and transition are interconnected moreover (Bahar, i Hausmann i César 2014; Duvnjak 2018) through transition the market is revived as well as private property as a precondition for the democratization of a society. Thus governments intentionally change the policy of diminishing and elimination of obstacles to enable smooth flow of goods, capital and services, especially when a government through its own activity, finds out how much these barriers cost. On the other hand, powerful companies change their business strategy and put an accent on the profit growth by lowering expenses, and not by means of increasing the cost of products and services.

Competitiveness on the international scale demands from companies to turn national positions into international i.e. to have a global strategy of performance.

The strategy of performance on the international markets, as its basis, should have the system of collecting, digesting and distributing information about export markets, i.e. methods of selecting markets and good for the chosen markets. A company should in its strategy of performance build in information about certain markets and the structure of demand on them (together with answers to questions which products need promotion to be placed on certain market and to which markets their products can and should be exported).

In contemporary economy the fulfillment of needs and demands for certain market segments sometimes overcomes the capacity of a company, especially in endeavor to provide a significant competitive advantage at certain market segment.

One of the basic specific features of a company's adaptation to market ambient is the increase of negotiating power on the market. A company can, through a long – term cooperation, increase its stability and influence on the market through the raising level of satisfying the needs of big buyers, by creating a common image, status and greater participation on the market.

Every degree of business internalization presents and marks some form of developing improvement in management and in a company. A typical direction of a sound development of a lot of companies starts with local and goes to national (a country's); from national proceeds to foreign (international), from international to global. Enterprising companies which manage to overcome the initial strata of development that business on foreign market imposes them, get in the situation to stabilize their business and make it continuous, and after

that to, on the basis of space diversification and range economy which they make, secure rentable business activity with permanently growing incomes.

Conquering foreign market for a lot of big companies of process (industrial and similar) character is the only solution if they want development. Sometimes, only by a penetration (going through) the foreign market necessary conditions can be made for overcoming economic, technological, trade and/or other strata of development, which they face with. Without overcoming these strata companies can neither do business successfully nor develop themselves.

Numerous firms from different branches of business, even the biggest part of their income, their profit and/or employment realize abroad – in the countries in which they have their business branches of different types of business cooperation with domestic (local) firms do or develop certain business.

It is completely clear that in the contemporary society, as it was before it, there is inequality. Hence, it is not surprising that there are different perspectives of development, even in this contemporary society. Differences, when current levels of development are observed, in the future perspectives are more than big. Because of that, it must be spoken separately about the perspectives of developed, medium developed and developing countries. Developing perspectives do not belong only to developed countries, however they influence all global social changes. Developed countries, naturally, imposed themselves as leaders of creating not only their own, but also the future of the whole world. The best indicator of such approach is globalization, the phenomenon of contemporary society which rightly depicts a modern (Western) man. It also has the aim not only to show a big influence of (Western) forces on the world and trends, but also to base them as the carriers of social development. In the culture sphere it is insisted on creating a citizen of the world and that leads to the homogenization of taste, creating patterns in clothes, nutrition and life style. By an objective point of view at the image of the global world neither one nor the other side can be determined. It is the story about one bright and the other dark side of globalization. The dark, destructive side is gradually becoming more dominating, getting threatening size, turning the modern arena into “the world society of risks”. Constant protectionism in developed countries which is evident, in spite of continuous slogan “free trade”, is in fact the result of the attitude that prevails in developed countries which says that liberalization is essentially making allowances to other countries. The best example for this is the introduction of customs duties on steel and aluminum import by the American administration and against measures of China, the EU and other countries.

At the international market countries do not apply but companies and so the quality of managers is an important presupposition for realizing the competitive advantages in a certain branch. Management must be oriented for a long – term and not short – term in order to emphasize the product innovation, process and marketing methods, to be ready for accepting bearable risks and to be prepared for business cooperation with companies from other countries. In branches which have a global feature, competitive advantage will depend more and more on the capability of management, and not as it used to be the case so far on the work and capital, as well as on available natural factors. International advantage is often concentrated in limited industrial branches and in some more limited segments. Also, innovatively oriented management will ask for and find new technologies, will notice the needs for some products and services, will consider possibilities for new sources and institutes of production etc. The degree of innovation, significantly depends on the competitiveness of economy. Branches and companies that are protected from foreign competitiveness do not have the aptitude towards innovation.

Serbia itself cannot be excluded from the process of globalization. Its case is full of controversy. Reasons for delay are first of all in relation to the remains of the planned economy and not completely carried out privatization of the social sector of the economy.

Integration in international economy trends and international work division is an essential part of the strategy of economic development of Serbia, in which neighboring countries have special importance. Countries of Southeastern Europe, and Serbia among them, are undergoing radical social and economic reforms, and in a degree they accomplish these reforms, these aims are going to be achieved, first of all through the Pact for Southeastern Europe Stabilization, and to full membership in the EU. It is possible to approach the study of factors of regional growth and economic convergence (divergence) from different angles. Some authors think that the postulates of the theory of location and the theory of regional growth and development are crucial in the procedure of assessing factors of regional growth (Capello and Perucca 2015, 233). Depending on generally accepted concept of space, vary the key boosters of regional development.

On productivity factors and the size of income multiplicators a dominant impact have interregional allocative efficiency and intraregional multiplicative mechanisms (Stimson and Stough and Nijkamp 2011, 10).

Global economy in contemporary time sphere, is characterized by a growing interdependence of national economies (Dodig and Kozić – Radenović 2017, 229). The latest analysis of the world economy trends shows the weakening of recession, but there is still a high rate of unemployment and the danger of inflation due to intensive influx of financial capital. For Europe itself it is important to create more innovative and better quality products and services. Current turbulences and the need for outgoing strategies accelerate the entire economic reconstructing. Changes in workforce offer will go towards the demand of higher qualifications. Informational communicational technologies change the world dramatically, connecting people and societies, increasing the living precondition for achieving competitiveness and economic and social modernization, as well as an important instrument for removing economic and social divisions and diminishing poverty, but also giving horrifying possibilities for some manipulation and misuse.

Every state, institution and social group in the last 10 years has been changing its interactions with aims and results of technology. The relationship between technology and economy denotes the possibility to open a dialogue with other participants in this interaction, and so to improve social – economical results and avoid possible negative consequences.

## CONCLUSION

Nowadays companies must be prepared for the new era which demands more efficient and more encouraging management of new technologies and innovations. A lot of research has confirmed that companies which accept the challenge of innovation management, become more prestigious and more successful on the market, compared to their rivals. The spreading of European Union imposes on Serbia the need to recognize new technological processes and innovations as an inevitable condition for the exit from a phase of slow development. Today small and medium – sized companies are “generator” of contemporary economies due to the contribution that is mirrored in technological innovations, employment, export increase, dynamism of competitiveness etc. The capability of small and medium – sized companies to innovate is of great importance because innovations provide competitive advantage to a company, branch in which they do business, as well as in economy as a whole. New and existing innovative small and medium – sized companies contribute the increase of entire productivity, and competitiveness in economy, eliminating less efficient companies with lower productivity. Innovative small and medium – sized companies take part in the flow of knowledge within innovational systems, less than passive users of knowledge, and more as important source of knowledge. Innovation is a powerful means for small companies to enter the market successfully and change their present state, and it enables the existing companies to keep or improve their position on the market through innovation. Innovative small and

medium – sized companies take part in the flow of knowledge within innovative systems, less than passive users of knowledge, and more as a significant source of knowledge.

Innovations represent a new approach to problem solving, which often means incremental, revolutionary changes in the way of thinking, products, processes and organizations. In order to be more effective, an innovation should be simple. Innovativeness is a specific mental attitude which focuses a company to look in front of present, into the future. The aim of innovations is a positive change. An innovative company must have a consistent technological strategy. Measuring of innovative efficiency is very complex, but it is also very significant because in this way the position of a country is noted. In recent years small and medium – sized companies give a special importance to the problem of innovation. One of the ways of improvement for the Republic of Serbia is also the investment in knowledge, this is the way to sustainable economy and society.

Social – economic changes, which follow fast scientific – technological development, especially the expansion of modern technologies demand high education from people who are able to function efficiently in social processes and use the available technology. In the unity of knowledge, companies and national economy they base the competitive advantage on knowledge and the use of potential opportunities and possibilities necessary for their realization. That is the reason why the basic development aims of the most developed countries are the increase of investment in IR and innovative activities through continuous studying and education of human resources.

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## OBEZBEĐENJE UTUŽIVE I NEUTUŽIVE OBAVEZE UGOVORNOM KAZNOM

**Rezime:** *U radu autor opisuje strukturu ugovorne kazne kao najčešćeg ličnog sredstva obezbeđenja potraživanja u poslovnoj praksi. Sagledavajući njene mogućnosti kao sredstva obezbeđenja ispunjenja obaveze ili blagovremenog ispunjenja, ukazuje i na njene elemente koji nisu podobni da potpuno obeštete poverioca. Cilj rada je da kroz otkrivanje pravog smisla pojedinih elemenata strukture ugovorne kazne omogući primenu pravila instituta i na nepravu ugovornu kaznu. U vezi sa navedenim upotrebljeni su lingvistički metod i postupak u okviru sociološke metode, analiza dokumenata na izvor nastanka, načelo akcesornosti i cilj ugovorne kazne u ugovorima. Na tim osnovama, u radu je zauzet stav da pozitivno pravo obuhvata i nepravu ugovornu kaznu i omogućava primenu opštih pravila o ugovornoj kazni i na nju. Prema tome, institut ugovorne kazne, kao sporedna obaveza, može biti ugovoren kao sredstvo obezbeđenja glavne ili sporedne obaveze iz nekog ugovora. Nema smetnji da se opšta pravila instituta primene i kao sredstvo obezbeđenja ispunjenja tražbina, koje nisu prinudno izvršive dodeljujući mu u tom slučaju pravni tretman glavne obaveze.*

**Ključne riječi:** ugovorna kazna, neprava ugovorna kazna, akcesornost

**JEL klasifikaciju:** K410

### UVOD

Lice koje ugovorom odgovora za svako neispunjeno, odgovaralo je za svako neispunjene čak i ako je do neispunjena došlo usled okolnosti koje čine višu silu (Šolaja 2017, 361). Ličopravna sredstva obezbeđenja potraživanja (jemstvo, ugovorna kazna, odustanica) daju poveriocu garanciju da će njegovo potraživanje biti ispunjeno i kao takva su determinisana nesigurnošću kao imovinske sankcije (odsustvom potpunog obeštećenja poverioca). Ugovorna kazna (*stipulatio poenae*) regulisana je članovima 270-276 ZOO, glava pod naslovom Dejstva obaveza, odeljak o Poveriočevim pravima i dužnikovim obavezama, odsek Pravo na naknadu štete (Zakona o obligacionim odnosima Republike Srpske-ZOO, *Službeni glasnik SFRJ*, br. 29/78, 39/85, 45/89 i 57/89 i *Službeni glasnik Republike Srpske*, br. 17/93, 3/96, 37/01, 39/03 i 74/04). Prema sadržini instituta predstavlja najpotpunije regulisanu ugovornu klauzulu pozitivnog prava i najčešće zastupljenu u poslovnoj praksi. Retki su ugovori o prodaji robe veće vrednosti, ugovori o građenju, ugovori o inženjeringu, koji nisu obezbeđeni nekom od vrsta ugovorne kazne.

Međutim, evidentno je da odredbe koje pozitivnopravno uobičaju ugovornu kaznu odstupaju od Skice za zakonik o obligacijama i ugovorima prof. Konstantinovića u delu koji se odnosi na regulisanje neprave ugovore kazne. Reč je o klauzuli koja omogućava da se ugovorna kazna ne tiče samo obezbeđenja ispunjenja ili blagovremenog ispunjenja, već ističe njenu samostalnost u odnosu na postojanje glavne ili sporedne obaveze koju obezbeđuje. Neprava

ugovorna kazna je glavna obaveza koja obezbeđuje i obaveze koje pravni poredak ne bi mogao potraživati prinudnim putem kako dužnikove, tako i obaveze trećih lica. Shodno tome, zanimalo nas je koliko se mogu postojće odredbe primeniti i na nepravu ugovornu kaznu?

Određujući uobičajeni pojam ugovorne kazne, razmatranja autora su usmerena na sagledavanje funkcija ugovorne kazne u poslovnom prometu. Ističući bitne osobine ugovorne kazne autor primećuje da i neprava ugovorna kazna može biti subsumirana pod opšta pravila o ugovornoj kazni. U tom smeru, posebno se u tekstu analizira izvor ugovorne kazne, svrha i načelo akcesornosti. Razmatranja u tekstu se zatim usmeravaju na sagledavanje vrste obaveza na koju se ugovorna kazna može primeniti? Koji uslovi moraju biti ispunjeni da bi se ugovorna kazna primenila? Način na koji se sudovi izjašnjavaju o pojedinim pitanjima u vezi sa struktukom ugovorne kazne predstavljeni su nakon teorijskog razmatranja.

## 1. POJAM UGOVORNE KAZNE

Sloboda ugovaranja iz čl. 10 ZOO strane ugovornice ovlašćuje da dogovaraju ugovornu kaznu u granicama prinudnih propisa, dobrih običaja i javnog poretku, kako bi obezbedile ostvarenje poveriočevog interesa za ispunjenje ili blagovremeno ispunjenje obaveze. Sporazum između poverioca i dužnika, kojim se dužnik obavezuje da će platiti poveriocu određeni iznos novca ili pribaviti neku drugu materijalnu korist, ukoliko svoju obavezu ne ispuni ili zadocni sa ispunjenjem, je ugovorna kazna.

Shodno volji ugovornika i dispozitivnom pravilu iz čl. 270-276 ZOO moguće je ugovoriti ugovornu kaznu zbog neispunjerenja i zadocnjenja sa ispunjenjem, ali i druge vrste. Dakle, strane ugovornice su, u načelu, slobodne hoće li zahtev za plaćanje ugovorne kazne biti zavisan od ispunjenja ugovorne obaveze ili kako će se dužnik ugovorne kazne ponašati. S obzirom na oblik povrede obligacije, za koju se ugovorna kazna daje, razmatramo u daljem tekstu vrste ugovorne kazne.

### 1.1. Vrste ugovorne kazne

Pod ispunjenjem obaveze podrazumevamo ispunjenje njene sadržine shodno čl. 307, st. 1 ZOO. „Kazna ugovorena zbog nepridržavanja ugovornih obaveza ima karakter kazne ugovorene zbog neispunjerenja“ (Presuda Vrhovnog privrednog suda Slovenije br. 125/54). Ugovornom kaznom zbog neispunjerenja obaveze ovlašćuje se poverilac, ukoliko dužnik ne ispuni ugovornu obavezu, da zahteva ili ispunjenje ili ugovornu kaznu (*facultas alternativa*), odnosno da ugovor raskine i potražuje naknadu štete zbog neispunjerenja.

Dakle, pozitivno pravo omogućava da se ispunjenje obaveze zbog koga je ugovor zaključen zameni za prijem ugovorne kazne. Da bi poverilac u konkretnom slučaju postupio u skladu sa zakonskim ovlašćenjima, ugovorna kazna mora biti izričito ugovorena. „Zato, nema mogućnosti ostvarenja prava na ugovornu kaznu ako je ugovor raskinut, pošto je raskidom ugovora prestala svrha za koju je ugovorna kazna bila ugovorena“ (Presuda Vrhovnog suda Federacije BiH br. 17 0 Ps 002693 12 Rev. od 03.09.2013. godine).

Alternativna ugovorna kazna postoji i kad je pravo izbora na dužniku i odnosi se na raskid glavnog ugovora od strane dužnika, tj. slučaj kada dužnik odustane od ugovora.

Ugovorna kazna zbog zadocnjenja sa ispunjenjem ovlašćuje poverioca da potražuje kumulativno i ispunjenje glavne obaveze i ugovornu kaznu, pod uslovom da dužniku bez odlaganja saopšti da zadržava i pravo na ugovornu kaznu. Ugovorna kazna zbog zadocnjenja sa ispunjenjem ovlašćuje poverioca da može jednostrano raskinuti ugovor i zahtevati naknadu štete. U vezi sa navedenim, ističemo da u literaturi postoji mišljenje da bi u slučaju raskida ugovora poverilac mogao potraživati ugovornu kaznu u periodu od padanja dužnika u docnju do raskida (Jankovec 1975, 57).

Smatramo da raskidom ugovora poverilac iskazuje tvrdnju da ne želi da bude vezan ugovorom (u skladu sa principom akcesornosti i ugovornom kaznom) i da modifikuje

postojeću pravnu situaciju, tako da ne postoji zadocnjenje, već neispunjene za šta je potrebno izričito ugovoriti ugovornu kaznu.

„Saopštenje o zadržavanju prava na ugovornu kaznu može se dati i usmeno ako stranke nisu ugovorile da se ta izjava može dati samo u određenoj formi. Naime, pravna sigurnost se postiže i neformalnim saopštenjem o zadržavanju prava na ugovornu kaznu, a da bi se postigla izvjesnost dovoljno je da saopštenje bude izričito i određeno. Budući da saopštenje ne kreira subjektivno pravo koje već postoji, već je saopštenje pretpostavka za njegovu realizaciju, a ta pretpostavka je nužan uslov da bi dužnik bio svestan da će ga pogoditi ova sankcija, nema potrebe da se za saopštenje propiše ista forma kao i za ugovornu kaznu. Prema tome, ZOO ne propisuje formu za saopštenje o zadržavanju prava na ugovornu kaznu, pa se to saopštenje može dati i usmeno, osim kada su se ugovorne strane sporazumjele da posebna forma bude uslov punovažnosti saopštenja čl. 69, st. 1 ZOO“ (Stav XL zajedničke sjednice bivših vrhovnih sudova u Ohridu 23. i 24. maj 1989. godine).

Ugovorna kazna za zakašnjenje sa ispunjenjem ne mora biti izričito ugovorena, jer važi zakonska pretpostavka u njenu korist prema čl. 270, st. 2 ZOO. Ona postoji i u slučaju kada je ugovorom preciziran momenat od kojeg se može zahtevati ugovorna kazna, a koji je različit od trenutka zadocnjenja.

Opšte uzanse za promet robe sadržale su ugovornu kaznu za slučaj neurednog ispunjenja koje ne obuhvata samo zakašnjenje u ispunjenju, već i predaju stvari sa materijalnim nedostatkom, loše izvođenje građevinskih radova i sl.

Nema smetnji da u jednom ugovoru budu ugovorene obe ugovorne kazne i tada se duguje samo za neispunjene, jer zadocnjenje znači ispunjenje. Ugovaraju se ne samo kao sredstvo obezbeđenja ispunjenja ili zadocnjenja sa ispunjenjem glavne ugovorne obaveze, već i kao sredstvo obezbeđenja ispunjenja ili zadocnjenja sa ispunjenjem sporednih ugovornih obaveza (npr. u ugovorima o isporuci investicione opreme obezbeđeno je ne samo zakašnjenje isporuke opreme već i zadocnjenje u dostavljanju tehničke dokumentacije i sl.).

Prema mišljenju prof. Konstantinovića iz čl. 220 „Kada je ugovorna kazna obećana ne kao sporedna obaveza, već kao glavna obaveza pod uslovom da obećalač nešto učini ili ne učini, sud je može na zahtev obećalača smanjiti ako nađe da je preterano visoka“ (Miladin 2006, 1765). Posredi je jednostrano obećanje ugovorne kazne za sebe ili treće lice. „Neakcesornom ugovornom kaznom dužnik preuzima kaznu za činidbe činjenja ili propuštanja koje ga inače pravno ne obavezuju“ (Miladin 2006, 1764).

Njena primena na teritoriji Evropske unije evidentirana je kao sredstvo sprovođenja interventnih mera u poljoprivredi (npr. manjak u proizvodnji određenih sorti pšenice) u pogledu razmatranja prednosti koje su izmenile okruženje unutar Evrope (Cash 2015, 6). U pogledu svetskog tržišta, gde dominiraju neobavezujući akti čl. 7.4.13. Načela UNIDROID i čl. 9:509 Principles od International Commercial Contract, oni pod njom ne podrazumevaju i nepravu ugovornu kaznu (Beebe and Fromer 2018, 947). Drugačija je situacija u nemačkom pravu. Nemački građanski zakonik u § 343, st. 2 uređuje kada neko obeća platiti kaznu u slučaju da preduzme neku radnju ili da je propusti preuzeti (Fikentscher and Heinemann 2006, 302).

## 2. FUNKCIJE UGOVORNE KAZNE

Praktična primena ugovorne kazne omogućava sagledavanje njenih funkcija u poslovnoj praksi. Pod funkcijom (pravnom prirodom) ugovorne kazne istražujemo ukupni odnos poverioca i dužnika iz ugla obaveze na plaćanje ugovorne kazne. Teoretičari nemaju jedinstveno stanovište o pravnoj prirodi ugovorne kazne (Patti 2015, 321), njenoj funkciji, no ovom prilikom mi nećemo ulaziti u dublju analizu o funkciji ugovorne kazne. Za potrebe ovog rada izložićemo u najkraćim crtama bitne karakteristike obe glavne funkcije da bismo argumentovali odnos između opštih pravila o ugovornoj odgovornosti za štetu i (ne)efikasnosti ugovorne kazne u kontekstu potpunog obeštećenja poverioca i na taj način

ostvarenja ispunjenja zbog koga je ugovor i zaključio. Sagledavanje funkcija ugovorne kazne od značaja je i prilikom popunjavanja pravnih praznina, tumačenja odredbi, itd.

Polazeći od sistematike zakonopisca, okvira Odseka o pravu na naknadu za prouzrokovano štetu, konstatujemo da je njena prva i primarna funkcija da bude naknada za prouzrokovano štetu. Obe vrste ugovornih kazni se ugovaraju unapred, kada se ne zna ni da li će šteta biti prouzrokovana i kolika će biti njena visina. Ugovorna kazna omogućava „(...) poveriocu da se osloboди tereta dokazivanja visine štete“ (Orlić 1985, 542), ali i da bude potpuno obeštećen, jer su retke situacije u kojima je ugovorna kazna niža od pretrpljene štete. Pri tome, poverilac ima pravo da zahteva ugovornu kaznu i kada njen iznos premaša visinu štete koju je pretrpeo, kao i kada nije pretrpeo nikakvu štetu shodno čl. 275, st. 1 ZOO. Dodajemo i da ako je šteta koju je poverilac pretrpeo veća od iznosa ugovorne kazne, ovlašten je da zahteva razliku do putpune naknade prema čl. 275, st. 2 ZOO. Dakle, ugovorna kazna ne isključuje opšta pravila o ugovornoj odgovornosti dužnika.

Penalna funkcija (sekundarna funkcija) ostvaruje se na način koji je svojstven ličnopravnim sredstvima obezbeđenja urednog ispunjenja obaveze. Polazeći od pretpostavljene visine štete koja bi mogla nastati povredom ugovorne obaveze, dodajući i deo tako da je njen iznos viši od naknade za prouzrokovano štetu i vršila uticaj na dužnika da ispuni ugovornu obavezu. Ukoliko dužnik ne ispuni svoju ugovornu obavezu sekundarna funkcija ugovorne kazne se transformiše u primarnu funkciju, odnosno ugovorna kazna postaje sredstvo naknade za prouzrokovano štetu. Tako, sa stanovišta dužnika ugovorna kazna je uvek pritisak na njega, ne samo u vezi sa obezbeđenjem ispunjenja ugovorne obaveze, već i prilikom ispunjenja ugovorne kazne.

### 3. STRUKTURA UGOVORNE KAZNE

Acesornost je na samom zakonu propisana neposredna zavisnost jednog prava od drugog prava. Načelo akcesornosti znači da sporazum o ugovornoj kazni deli pravnu sudbinu glavne ili sporedne punovažne obaveze, čije ispunjenje osigurava. Ugovorna kazna kao svaka privatnopravna sankcija je uvek akcesorna. Akcesornost nema isti smisao u svakom konkretnom slučaju i zato treba istražiti dublji pravni smisao dva paralelna prava. U vezi sa tim istražujemo kada je neprava ugovorna kazna akcesorna? Polazeći od očekivanja poverioca, on i u slučaju akcesorne i neprave ugovorne kazna očekuje određeno ponašanje od dužnika i u oba slučaja je ono posledica postignutog dogovora prilikom preuzimanja ugovorne kazne. Dakle, ugovorna kazna je jedinstven institut čiji su suprostavljeni polovi akcesorna ugovorna kazna i neprava ugovorna kazna. Sva ostala beskonačnost je otvorena za tuženog (Schechter 1926, 813).

Kao posledice akcesornosti ugovorne kazne ističemo i sledeće: forma ugovorne kazne je forma obaveze za čije se ispunjenje ugovora ugovorna kazna određuje i njenu formu (*forma ad solemnitatem*); nepunovažnost nenovčane obaveze povlači i nepunovažnost ugovorne kazne; ugovorna kazna gubi pravno dejstvo ukoliko je neispunjeno ili zadocnjeno sa ispunjenjem posledica uzroka za koje dužnik ne odgovara; shodno okolnosti da se ugovara za obezbeđenje nenovčanih obaveza ugovorna kazna i kada je ugovorena u novcu subsumira se pod pravila o nenovčanim obavezama; u slučaju cesije prelazi na prijemnika i ugovorna kazna: prestanak obaveze za koju je ugovorena dovodi do prestanka i ugovorne kazne.

Izuzetno ugovorna kazna neće prestati ako je prestala glavna obaveza. Ispunjnjem glavne ugovorne obaveze prestaje i obaveza na plaćanje ugovorne kazne kada je ona ugovorena za slučaj neispunjjenja. Osporavanje ispunjenja poverioca (npr. evikcijom ili materijalnim nedostatkom) dovodi i do raskida ugovora i obnove sticanja prava na ugovornu kaznu.

Drugi izuzetak je jednostrani raskid glavnog ugovora za koji je bila ugovorena ugovorna kazna za neispunjjenje. Polazeći od njene funkcije kao naknade štete koja ne prestaje raskidom ugovora (Presuda Privrednog apelacionog suda, Pž. 2413/1 od 17.5.2013.godine) poverilac i pored raskida ugovora ima pravo da zahteva ugovornu kaznu (Hiber i Pavić 2013, 74). Kada

navedena konstatacija ne bi važila bio bi doveden u dva alternativno po sebe loša rešenja: da se odrekne ugovorne kazne (činjenice da ne mora da dokazuje postojanje i visinu štete) ili da zatraži ugovornu kaznu i odrekne se prava na raskid ugovora što ga onemogućava da traži povraćaj datog.

#### **4. PRIMENA INSTITUTA UGOVORNE KAZNE**

Ugovorom o ugovornoj kazni obavezuje se dužnik da će platiti ugovornu kaznu poveriocu ukoliko svoju ugovornu obavezu ispunii. „Postojanje ugovora je nužna osobina ustanove ugovorne kazne“ (Wéry 2013, 96). Pri tome, mi mislimo na postojanje ugovora o ugovornoj kazni, jednostrano obaveznog ugovora dužnika. Kao i svaki ugovor on mora ispuniti opšte uslove za punovažno zaključenje, a koji se odnose na postojanje pravno ovlašćenih strana ugovornica, saglasnosti volja, predmeta, osnova i forme koja je zavisna od ugovora na koji se odnosi ugovor o ugovornoj kazni. Pored toga je potrebno da budu ispunjeni opšti uslovi za primenu instituta posmatrani sa stanovišta poverioca.

##### **4.1. Opšti uslovi za nastanak i primenu instituta ugovorne kazne**

Opšti uslovi za zaključenja ugovora primenjuju se i na ugovor o ugovornoj kazni. Shodno tome da bi bio punovažan potrebno je da postoji slobodna izjava volja za njegovo zaključenje preciznije zahteva se isključenje postojanje mana volje (pretnje, zablude, prevare).

Ugovorni kazni mora imati predmet, dopušten, određen ili odrediv. Predmet ugovora je obaveza iz ugovora o ugovornoj kazni. Obaveza koja čini ugovornu kaznu i obaveza koja se obezbeđuje ugovornom kaznom nisu iste prirode iako su zavisne jedna od druge. Ugovorna kazna može biti ugovorena u novcu ali može biti i nenovčana (npr. izvršenje nekih radova). Novčana kazna se ugovara u jednom ukupnom iznosu od glavne obaveze ili za svaki dan zadocnjena u procentu, ili na neki drugi način. Iako je moguće ugovoriti i nenovčanu kaznu ona bi mogla zadati poteškoće prilikom sudske kontrole njene visine iz čl. 271, st. 1 ZOO.

Kazna mora biti određena ili bar odrediva kao i svaki predmet ugovora u trenutku zaključenja pre dospelosti obaveze. Ranija sudska praksa je dopuštala da ugovorna kazna bude odrediva, preciznije da u ugovoru bude samo navedena bez preciziranja visine koju može i sud odrediti u zavisnosti od okolnosti konkretnog slučaja. Tako „(...) ako su stranke predvidele ugovornu kaznu, a propustile da predvide njen novčani iznos ili drugu imovinsku korist, sud ne može odbiti zahtev za obračun i naplatu ugovorne kazne, već je dužan utvrditi njenu visinu na osnovu svih okolnosti koje su strane imale i morale imati u vidu prilikom zaključenja ugovora“ (Presuda Vrhovnog privrednog suda, Sl. 720/64 od 18. septembra 1964. godine). Ukoliko postoji upućivanje na tačnu visinu ugovorne kazne iz nekog ranijeg ugovora ili određene tipske uslove poslovanja, značilo bi da je ugovorna kazna precizno određena.

Odredbe o smanjenju preterano visoke ugovorne kazne u funkciji su zaštite dužnika. Potreban je zahtev dužnika za smanjenje ugovorne (izražen u njegovom najširem smislu) o kome će odlučiti sud s obzirom na vrednost i značaj predmeta obaveze. „Protivljenje dužnika obavezi plaćanja ugovorne kazne sadrži u sebi i protivljenje visini u kojoj je zatraženo plaćanje ugovorne kazne. U smislu čl. 274. ZOO sud će na zahtjev dužnika smanjiti svotu ugovorne kazne ako nađe da je ta svota previsoka s obzirom na vrijednost i značenje činidbe, tj. obaveze koju dužnik nije ispunio“ (Vrhovni sud Republike Hrvatske br. Rev. 800/97 od 21.4.1998. godine). Primena ove odredbe ne može biti isključena ili ograničena. Primetili smo da sudska i arbitražna praksa prilikom smanjenja ugovorne kazne polazi od obima prouzrokovane stvarne štete procenjene u trenutku donošenja odluke. Kazna će i nakon smanjenja biti nešto viša od štete koju je pretrpeo poverilac da bi zadržala obeležje pritiska na dužnika.

Ograničenje visine ugovorne kazne vrše i specijalni propisi, podzakonski akti (Hiber i Pavić 2013, 69), a na teritoriji Evropske unije postoji i Direktiva o sprečavanju nepravičnih klauzula u ugovorima sa potrošačima u Evropskoj uniji (Sternlight 2002, 833). Posebne uzanse o

građenju ograničavaju ukupni iznos ugovorne kazne tako da ne može biti veći od 5% vrednosti ugovorenih radova. Sva pravna regulativa je u cilju sprečavanja dužnikove „lakomislenosti, neiskusnosti i nužde“ (Miladin 2006, 1763).

Koja je osnovica za obračun ugovorne kazne? Deljivost obaveze koju obezbeđuje ugovorna kazna povlači i deljivost ugovorne kazne. U slučaju ugovorne kazne za neispunjerenje poverilac ukoliko ima interes može primiti i delimičnu ugovornu kaznu (srazmerno smanjenu za iznos ispunjenja). Dok kod ugovorne kazne zbog zadocnjenja sa ispunjenjem, način određenja njene visine ne znači da je i ona određena kao periodična renta. Obaveštenje poverioca bez odlaganja da zahteva i ugovornu kaznu određuje njenu visinu koja se duguje (od odredive postaje određena) u ukupnom iznosu.

Opšte je stanovište da se mogu obezbediti i obaveze koje se faktički ili pravno ne mogu izvršiti. Mišljenja smo da je opravdano isto tretirati i činidbe činjenja ili propuštanja koje nisu pravno obavezujuće ali za koje se ugovara ugovorna kazna. Obaveze koje su naturalne obligacije i prestacije koje ne mogu biti predmet izvršenja mogu biti obezbeđene ugovornom kaznom budući da su pravno punovažne. Njihova pravna sudbina je iscrpljena u činjenici da su naturalne i da ne mogu biti predmet izvršenja. Tako ako se dužnik obavezao na ugovornu kaznu za zastarelu obavezu takav sporazum treba pravno tretirati kao odricanje od ugovorne kazne ali i prekid roka zastarelosti, izuzev ako iz samog ugovora ne proizlazi nešto drugo. Da bi poverilac ostvario svoje pravo na ugovornu kaznu dovoljno je da dokaže da se dužnik nije pridržavao svoje naturalne obaveze odnosno neutužive prestacije.

#### **4.2. Pravna priroda obaveza na koje se odnosi i na koje se primenjuje**

Ugovorna kazna je sredstvo obezbeđenja ispunjenja ili zadocnjenja sa ispunjenjem svih punovažnih novčanih obaveza prema pozitivnom pravu čl. 270, st. 3 ZOO i ne može se ugovoriti za novčane obaveze jer je njihovo ispunjenje obezbeđeno zateznom kamatom. „Propis čl. 270, st. 3 Zakona o obligacionim odnosima kojim je isključena mogućnost da se ugovara za novčane obaveze ugovorna kazna, predstavlja propis kogentne prirode čiju primenu stranke ne mogu isključiti svojom voljom. Zakašnjenje sa ispunjenjem novčane obaveze sankcionisano je zateznom kamatom (čl. 277 ZOO). Ugovorne klauzule o plaćanju uvećanog iznosa cijene zbog docnje ništave su i ne proizvode pravno dejstvo u slučaju kad se radi o plaćanju novčanih obaveza“ (Vrhovni sud Srbije br. Prev. 40/98 od 18.3.1998. godine). Ugovaranje ugovorne kazne za novčane obaveze imalo bi za posledicu izigravanje propisa o zateznoj kamati čija je stopa zakonom propisana maksimalna. Prema mišljenju prof. Loze „(...) u tom slučaju ugovorna kazna bi se mogla tretirati kao ugovorena kamata“ (Hiber i Živković 2015, 80). Pridružujemo se mišljenju da „polazeći od ove postavke dolazimo čak do zaključka da je zatezna kamata jače sredstvo na strani poverioca za obezbeđenje novčanih tražbina nego ugovorna kazna“ (Jankovec 1975, 52). Pri tome, dužnik bez obzira na krivicu duguje zateznu kamatu.

Nije dopušteno ugvaranje ugovorne kazne za neotvaranje akreditiva. Otvaranje akreditiva je izvršenje novčane obaveze. Naime, nalog dužnika banci da otvari akreditiv u korist poverioca praktično posmatrano isto je kao da je dužnik dao nalog banci da određeni iznos novca prenese u korist poverioca. Razlika je samo u okolnosti da prilikom podnošenja zahteva poverioca kod dokumentarnog akreditiva koji je najčešći u poslovnoj praksi poverilac mora zajedno sa zahtevom za isplatu dokazati da je izvršio svoju ugovornu obavezu (za razliku od virmanskog prenosa sredstava u kome to nije obavezan).

Drugacija je situacija sa neblagovremenim pribavljanjem bankarske garancije koja je formalni pravni posao vezana za određeni ugovor. Obaveza dužnika da pribavi bankarsku garanciju nije i dužnost plaćanja prema poveriocu. Njena je svrha uverenje poverioca da će dužnik ispuniti preuzetu obavezu jer ona samo u tom slučaju proizvodi pravno dejstvo. Bankarske garancije se daju i za novčane i nenovčane obaveze (npr. da će dužnik izvršiti isporuku robe o određenom roku, garancija da će roba imati određeni kvalitet i sl.). S obzirom na pravnu

prirodu obaveze za koju se pribavlja bankarska garancija ne bi bilo sporno dopustiti ugovaranje ugovorne kazne sa stanovišta dužnika iako je sa stanovišta banke bankarska garancija uvek novčana obaveza.

Obezbeđenje ugovornih obaveza izvan privrednog i obligacionog prava ugovornom kaznom nije punovažno. Tako lični odnosi (bračni, vanbračni i sl.) ne mogu biti obezbeđeni ugovornom kaznom. Supružnici saglasnom izjavom volja odlučuju da li će zaključiti brak i kada će ga raskinuti. Međutim, pogrešno je izvući opšti zaključak da se svi lični odnosi ne mogu obezrediti ugovornom kaznom.

Pravno je dopuštena ugovorna kazna kojom se obezbeđuju paušalno određeni troškovi izdržavanja vanbračne supruge koja je napustila posao zbog svog vanbračnog supruga pod uslovom da je izričita i jasno izražena takva namera prilikom ugovaranja konkretnе ugovorne klauzule. Opravdanje za takav stav pronalazimo i u odredbama čl. 192. ZOO Krivičnog zakonika Republike Srpske, *Službeni glasnik*, br. 64/17 koji reguliše izbegavanje davanja izdržavanja. Prema tome ako su je zakonopisci obezbedili kaznenim odredbama zašto je ne bi ugovarači mogli obezrediti odredbama o ugovornoj kazni.

Dopuštena je prema čl. 31. Ustava Republike Srpske sloboda političkog organizovanja, *argumentum a contrario* i istupanje iz opravdanih razlog propisima predviđenim. Analognim tumačenjem proširujemo mogućnost istupanja i na verske zajednice ali i ugovore o ortakluku. Ništava je odredba ugovora o ortakluku prema kojoj ortak koji otkazuje ugovor mora platiti i ugovornu kaznu. Izdvajamo nekoliko presuda iz ranije sudske prakse. „Nema pravnu važnost odredba sporazuma između radnika i organizacije udruženog rada kojom radnik preuzima obavezu da toj organizaciji plati određeni iznos ako u određeno vreme ne stupi na rad“ (Presuda Vrhovnog suda Autonomne pokrajine Vojvodine, Gž. 14/62 od 16. februara 1962. godine).

Ističemo i da „nema pravnu važnost odredba ugovora o davanju stipendije radi specijalizacije, kojom se ustanovljava da primalac stipendije dužan platiti određeni iznos ugovorne kazne ako po završetku specijalizacije ne provede ugovorenog vremena na radu kod davaoca stipendije“ (Presuda Vrhovnog suda Srbije, Gž. 4821/63 od 11. januara 1964. godine).

#### **4.3. Kauza ugovora o ugovornoj kazni**

Kauza ugovora o ugovornoj kazni je razlog zašto se dužnik obavezao. Kauza ugovora o ugovornoj kazni različita je od kauze glavnog ugovora poverioca iako su sadržinski bliske i podudarne. Razlozi njenog postojanja su u težnji da sve glavne i sporedne koristi ugovora za koji se daje učini pravno osnovanim (da ih pravno opravda). Pri tome, sredstvo je obezbeđenja svakog dopuštenog interesa iako najčešće dopuštenog imovinskog interesa.

#### **4.4. Forma ugovora o ugovornoj kazni**

Kada je reč o paralelizmu formi ugovorne kazne onda primećujemo da je reč o pravilu koje je bilo prihvaćeno i u Opštim uzansama za promet robom. Ističemo da sve velike kodifikacije ne spominju i formu u okviru opštih pravila u ugovornoj kazni. „U svakom slučaju, paralelizam formi (glavnog i akcesornog ugovora) ne protivreči stavu da je ugovor o ugovornoj kazni samostalan, mada akcesoran ugovor, kao što se iz te akcesornosti ne može bez ostatka, bez odgovarajuće zakonske odredbe, izvući pravilo o obaveznosti forme glavnog ugovora za sporazum o kazni (...)“ (Hiber i Živković 2015, 417).

#### **4.5. Pozitivnopravni uslovi za primenu**

Da bi se primenila pravila instituta ugovorne kazne nije potrebno da je poverilac pretrpeo štetu. Ugovorna kazna se plaća i kada poverilac nije pretrpeo nikakvu štetu, a ako je pretrpeo

veću od iznosa ugovorne kazne potrebno je da dokaže da ima pravo na naknadu do potpunog obeštećenja prema čl. 275, st. 2 ZOO.

Zatim, dužnik mora biti krv. U domenu ugovorne odgovornosti krivica se pretpostavlja tako da se zahteva odsustvo razloga koji isključuju njegovu odgovornost. Prema čl. 272, st. 2 ZOO sporazum gubi pravno dejstvo ako je do neispunjerenja ili zadocnjena sa ispunjenjem došlo iz uzroka za koje dužnik ne odgovora. Prema čl. 263 ZOO to su okolnosti koje su nastale posle zaključenja ugovora, a koje dužnik nije mogao sprečiti, otkloniti ili izbeći. Naglašavamo da su pravila o ugovornoj odgovornosti dispozitivne prirode i kao takva omogućavaju proširenje odgovornosti i na situacije u kojima dužnik inače ne bi odgovarao.

Mora postojati izričito ugovorena ugovorna kazna za neispunjerenje. Dok kod ugovorne kazne zbog zadocnjena sa ispunjenjem potrebno je da dužnik zapadne u docnju. Dužnik dolazi u docnju kada ne ispuni svoju obavezu u roku određenom za ispunjenje prema čl. 324, st. 1 ZOO. Ukoliko dužnika nije ispunio svoju obavezu o dospelosti poverilac mora uz opomenu (u slučajevima kada ispunjene o roku nije određeno) pozvati ga da ispuni obavezu i zahtevati plaćanje ugovorne kazne (izjava je potrebna i u slučaju kada ga ne mora opomenuti). Pravno je irelevantna mera u kojoj je dužnik obavezан na obavezu. Ističemo da u slučaju akcesorne ugovorne kazne krivica obuhvata i odgovornost dužnika koju ima prema samom sebi.

Arbitražna praksa pokazuje da se ugovorna kazna dosuđuje i kada je poverilac zatražio ispunjenje glavne obaveze i ostavio primeren naknadni rok. Ako dužnik ne ispuni svoju obavezu ni u tom roku poverilac je ovlašćen da ugovor jednostrano raskine odnosno deklarativnom izjavom ukaže da je raskid nastupio i zahteva plaćanje ugovorne kazne (Odluka Spoljno trgovinske arbitraže pri Privrednoj komori Srbije br. T-9/10 od 10.10.2011. godine).

## 5. LIQUIDATED DAMAGES

Englesko pravo kao jedno od prava koje pripada *common law* pravnom sistemu sadrži ustanovu *liquidated damages* koja je slična ustanovi ugovorne kazne u našem pravnom sistemu. Saglasnost ugovornika o klauzuli sa visinom štete koja će nastupiti ukoliko ugovorna disciplina bude prekršena je *liquidated damages*. „Kada jedan ugovor sadrži takvu klauzulu, ugovoreni iznos se plaća bez obzira na to kolika je šteta prouzrokovana povredom ugovorne obaveze“ (Goetz and Scott 1997, 595).

Oba instituta se ne mogu primeniti na novčane obaveze već samo na nenovčane. Ugovorna kazna se ne može ugovoriti ako je predviđeno da će u slučaju povrede ugovora dužnik platiti poveriocu određeni iznos novca pod nazivom penali, naknade, ugovorna kazna ili pod kojim drugim nazivom kada poverilac ne može da zahteva i naknadu određenu zakonom i ugovornu kaznu, izuzev ako je to prema samom zakonu dopušteno shodno čl. 276 ZOO.

U Engleskom pravu „ugovoreni iznos se smatra *pennaly* ako je veći od najveće štete koja se u trenutku zaključenja ugovora mogla pretpostaviti da može nastati ako ugovor bude povređen“ (Goetz and Scott 1997, 596). Ugovaranje *liquidated damages* nije dopušteno za penale. Da li u konkretnom slučaju postoje *pennaly* ili *liquidated damages* treba proceniti s obzirom na okolnosti u trenutku zaključenja ugovora.

*Liquidated damages* dužnik duguje bez obzira na njen iznos, bez mogućnosti smanjenja. Ali ako je ugovoreni iznos veći od štete koja se u trenutku zaključenja ugovora mogla predvideti kao moguća posledica povrede ugovora, takva ugovorna odredba će biti bez dejstva, a poverilac će imati pravo na naknadu štete“ (Goetz and Scott 1997, 597).

## ZAKLJUČAK

Struktura ugovorne kazne, dodeljena pozitivnim pravom, čini je specifičnom imovinskom sankcijom. Koristi koje omogućava poveriocu polaze od izbegavanja troškova parničnog

postupka (dokazivanje štete, vještačenja i sl.) do snošenja štetnih posledica usled njihovog dugog trajanja.

Elementi strukture ugovorne kazne uvažavaju i položaj poverioca i dužnika, dopuštajući dužniku da zahteva smanjenje preterano visoke ugovorne kazne pod zakonom određenim uslovima. Kao i dopuštajući poveriocu da potražuje razliku u naknadi kada visina štete prelazi visinu ugovorne kazne. Shodno prednostima njenog ugovaranja nastojali smo da opravdano primenimo i na nepravu ugovornu kaznu. Razmatranja u radu su pokazala da izostavljanje neprave ugovorne kazne u pozitivnom pravu, ipak, nema za krajnju posledicu zaobilazeњe zakonskih odredbi o ugovornoj kazni. Potvrda navedene tvrdnje izvršena je polazeći od načela slobode ugovaranja, na osnovu koje je ugovorena i cilja da obezbedi očekivanja poverioca za ispunjenje obaveze. Neophodnost njenog pravnog tretiranja u važećem pravu istakli smo i zbog njene samostalnosti, koja ne prepostavlja postojanje glavne ili sporedne punovažne obaveze iz nekoga ugovora, već ide dalje i povećavajući sigurnost da će neutuživa obaveza dužnika ili nekog trećeg lica biti ispunjena. Naglasili smo da u njenom slučaju poverilac treba da dokaže da se dužnik nije ponašao u skladu sa naturalnom ili prirodnom obavezom.

Pozitivni pravni okvir ugovorne kazne, koji smo nakon toga analizirali, uzimao je u obzir i primenu i na nepravu ugovornu kaznu. Odredbe koje regulišu ugovornu kaznu su dispozitivne prirode, tako da ugovorne strane mogu ugovoriti primenu na nepravu ugovornu kaznu.

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## SECURITY AND INSUFFICIENT OBLIGATION BY CONTRACTUAL PENALTY

**Summary:** *The author describes the structure of the contractual penalty as the most common personal means of securing claims in business practice. By examining its capabilities as a means of ensuring the fulfillment of a commitment or timely fulfillment, it also points to its elements that are not eligible to fully compensate the creditor. The aim of the paper is to enable the application of the rules of the institute and the wrong contractual punishment by revealing the true meaning of certain elements of the contractual penalty structure. In connection with the above, the linguistic method and procedure were used within the sociological method, the analysis of documents on the source of origin, the principle of accessibility and the purpose of contractual penalties in contracts. On this basis, the position is taken that the positive right also includes a wrong contractual penalty and allows the application of the general rules on the contractual penalty on it. Accordingly, the institute of a contractual penalty as a subsidiary obligation may be contracted as a means of securing a principal or auxiliary obligation under a contract. There is no impediment to the general rules of the institute of application and as a means of ensuring the fulfillment of non-enforceable claims granting him in that case the legal treatment of the main obligation.*

**Key words:** contractual penalty, wrong contractual penalty, accessory

**JEL classification:** K410

### INTRODUCTION

A person who, under the contract of response for each failure, was appropriate for any failure to fulfill, even if the failure to fulfill it was due to circumstances that constitute a higher power (Šolaja 2017, 361). Personal legal means of securing claims (security, contractual penalty, waiver) give the creditor a guarantee that his claim will be fulfilled and as such they are determined by insecurity as property sanctions (in the absence of a full indemnity of the creditor). The contractual penalty (*stipulatio poenae*) is regulated in articles 270-276 of the ZOO head under the headings of the Act of Obligations, section on the Creditor's Rights and the Debtor's Obligations, section entitled The Right to Compensation of Damages (Law on Obligations of Serbia-ZOO, *Official Gazette of the SFRJ*, No. 29 / 78, 39/85, 45/89 and 57/89 and the *Official Gazette of Serbia*, No. 17/93, 3/96, 37/01, 39/03 and 74/04). According to the contents of the institute, it represents the most fully regulated contractual clause of a positive right and is most often represented in business practice. There are rare contracts for the sale of goods of higher value, construction contracts, engineering contracts that are not provided by some type of contractual penalty.

However, it is evident that the provisions that positively form a contractual penalty deviate from the Draft for the Code of Obligations and Contracts of Prof. Konstantinovic in the part referring to regulating unqualified penalties. It is a clause that allows a contractual

punishment to not only ensure fulfillment or timely fulfillment but emphasizes its independence in relation to the existence of the main or secondary obligation it provides. An unusual contractual penalty is the main obligation that also ensures obligations that the legal order could not claim by force as both the debtor and the obligations of third parties. Accordingly, we were interested in how much the existing provisions can be applied to a wrong contractual penalty?

Determining the usual term of the contractual penalty, the author's considerations are directed to the consideration of the functions of the contractual penalty in business transactions. By emphasizing the essential features of the contractual penalty, the author observes that an unlawful contractual punishment may be sub-contracted under the general rules on contractual penalties. In this direction, the source of the contractual penalty, the purpose and the principle of accessibility is analyzed in the text. The considerations in the text are then directed to the understanding of the type of obligations to which the contractual penalty can be applied? What conditions must be met in order to apply the contractual penalty? The manner in which courts decide on certain issues related to the structure of the contractual penalty are presented after theoretical considerations.

## 1. CONJECTOR PENALTY CONCEPT

Freedom of contract referred to in Art. 10 ZOO by the Contracting Parties authorizes to arrange a contractual penalty within the limits of enforceable regulations, good customs and public order in order to secure the fulfillment of the creditor's interest in fulfilling or timely fulfillment of the obligation. An agreement between the creditor and the debtor obliging the debtor to pay a creditor a certain amount of money or obtain some other material benefit if his obligation fails or is sufficient to fulfill is a contractual penalty.

Pursuant to the will of the contractor and the dispositive rule of Art. 270-276 ZOO it is possible to contract a contractual penalty due to non-fulfillment and delays in fulfillment, but also of other types. Therefore, the Contracting Parties are in principle free whether the application for the payment of the contractual penalty will be dependent on the fulfillment of the contractual obligation or the contracting party's default. Considering the form of the breach of the obligation for which the contractual penalty is given, we shall consider in the following text the type of contractual penalty.

### 1.1. Types of contractual penalty

Under the fulfillment of the obligation we mean the fulfillment of its contents in accordance with Art. 307, para. 1 ZOO. "The penalty imposed for failure to comply with contractual obligations has the character of a penalty contracted for failure to comply" (Supreme Court of the Republic of Slovenia judgment No. 125/54). A contractual penalty for failure to fulfill the obligation is credited to the creditor if the debtor fails to fulfill the contractual obligation to demand either the fulfillment or the contractual penalty (*faculty alternative*), that is, the contract terminates and claims compensation for damages due to failure to fulfill.

Therefore, a positive right allows the fulfillment of an obligation for which the contract is concluded for the substitution for the receipt of a contractual penalty. In order to enable the creditor to act in accordance with legal authority, the contractual penalty must be explicitly agreed. "Therefore, there is no possibility of exercising the right to a contractual penalty if the contract is terminated, since the termination of the contract has ceased the purpose for which the contractual penalty was contracted" (Judgment of the Supreme Court of the Federation of BiH No. 17 0 Ps 002693 12 Rev. dated September 3, 2013).

Alternative contractual penalties exist when the right to choose a debtor is related to the termination of the principal contract by the debtor, i.e., the case where the debtor gives up the contract.

A contractual penalty due to default is authorized by the creditor to claim the cumulative and fulfillment of the main obligation and contractual penalty, provided that the debtor informs the debtor without delay of the right to a contractual penalty. A contractual penalty due to a delay in fulfillment entitles the creditor to unilaterally terminate the contract and claim damages. In the light of the foregoing, we emphasize that in the literature there is an opinion that in case of termination of the contract, the creditor could claim a contractual penalty in the period from the fall of the debtor in the delay to the termination (Jankovec 1975, 57).

We believe that by terminating the contract, the creditor declares the claim that he does not want to be bound by the contract (in accordance with the principle of accessibility and contractual punishment) and to modify the existing legal situation, so that there is no delay, but a failure to fulfill the contractual punishment.

"A statement on the retention of the right to a contractual punishment may also be given orally if the parties have not agreed that this statement can be given only in a particular form. Namely, legal security is achieved by an informal announcement of retaining the right to contractual punishment, and to achieve certainty, it is sufficient that the announcement is expressly and determined. Since the announcement does not create a subjective right that already exists, it is already a statement of the precondition for its realization, and this assumption is a necessary condition for the debtor to be aware that it will be affected by this sanction, there is no need for the announcement to specify the same form as for the contractual punishment. Accordingly, the ZOO does not prescribe a form for a statement on the retention of the right to a contractual penalty, so this announcement can be given either verbally, unless the contracting parties agree that a special form is a condition for the validity of the announcement of Art. 69, para. 1 ZOO" (Paragraph XL of the joint session of the former supreme courts in Ohrid on 23 and 24 May 1989).

The contractual penalty for delays in fulfillment does not have to be explicitly contracted because the legal presumption in its favor under Art. 270, para. 2 ZOO. It exists in the case where the contract specifies the moment from which a contractual penalty may be required, which is different from the moment of default.

The general advances for the traffic of goods contained a contractual penalty in the case of improper fulfillment which does not only include delay in fulfillment, but also surrenders with material defects, poor performance of construction works,

There is no disadvantage in contracting both contractual penalties and then owed only for non-fulfillment, since the delay means fulfillment. They are not only contracted as a means of ensuring fulfillment or default in fulfilling the main contractual obligation, but also as a means of ensuring fulfillment or failure to fulfill the secondary contractual obligations (for example, in contracts on the delivery of investment equipment, not only is the delay in the delivery of equipment, but also the delay in the delivery of technical documentation, etc.).

According to prof. Konstantinović from Art. 220 "when the contractual punishment is promised not as a secondary obligation but as a main obligation, provided the promise is made by a promulgator or not, the court may, at the request of the plaintiff, reduce it if it finds it to be excessively high" (Miladin 2006, 1765). It is a unilateral promise of a contractual penalty for itself or a third party. "A non-reciprocal contractual penalty the debtor takes the punishment for the actions or omissions that he otherwise does not legally bind" (Miladin 2006, 1764).

Its application in the territory of the European Union has been recorded as a means of implementing interventional measures in agriculture (e.g. shortage in the production of certain wheat varieties) in terms of considering the benefits that have changed the environment within Europe (Cash 2015, 6). Regarding the world market where dominated by non-binding acts of Art. 7.4.13. Principles of UNIDROID and Art. 9: 509 Principles of the International Commercial Contract do not imply an inferior contractual penalty (Beebe and Fromer 2018, 947). There is a different situation in German law. German Civil Code in § 343, paras. 2 regulates when somebody promises to pay a fine in case it undertakes an action or that

omissions are taken (Fikentscher and Heinemann 2006, 302).

## **2. CONCLUSION PENALTY FUNCTIONS**

The practical application of a contractual penalty allows you to see its functions in business practice. Under the function (legal nature) of the contractual penalty, we investigate the overall relationship of the creditor and debtor from the angle of obligation to pay the contractual penalty. Theoreticians do not have a single point of view on the legal nature of the contractual penalty (Patti 2015, 321), but on this occasion we will not enter a deeper analysis of the function of the contractual penalty. For the purposes of this paper, we will briefly summarize the essential characteristics of the two main functions to argue the relationship between the general rules on contractual liability for damage and (ineffectiveness) of the contractual penalty in the context of the full indemnity of the creditor and thus the fulfillment of the fulfillment for which the contract was concluded. Observing the functions of a contractual penalty is also important when filling in legal gaps, interpreting the provisions, etc.

Starting from the system of the lawyer, the Department of the Right to Compensation for Damage Caused establishes that its first and primary function is to compensate for the damage caused. Both types of contractual penalties are negotiated in advance when it is not known whether the damage will be caused and how much will be its amount. The contractual penalty allows the "(...)" creditor to be freed from burdens proving the amount of damage" (Orlić 1985, 542), but also to be completely compensated because the rare situations in which the contractual penalty is lower than the damage suffered. In addition, the creditor has the right to demand a contractual penalty and when its amount exceeds the amount of damage it suffered, as well as when it did not suffer any damage pursuant to Art. 275, para. 1 ZOO. Additionally, if the damage suffered by the creditor exceeds the amount of the contractual penalty, it is authorized to require a difference up to the full compensation referred to in Art. 275, para. 2 ZOO. Therefore, the contractual penalty does not exclude the general rules on the contractual liability of the debtor.

The penalty function (secondary function) is realized in a manner that is characteristic of the personal means of ensuring the proper fulfillment of the obligation. Starting from the presumed amount of damage that could result from a breach of a contractual obligation, adding a portion so that its amount is higher than the compensation for the damage caused and influenced the debtor to fulfill the contractual obligation. If the debtor fails to fulfill his contractual obligation, the secondary function of the contractual penalty is transformed into a primary function, i.e. the contractual penalty becomes a means of compensation for the caused damage. Thus, from the point of view of the debtor, the contractual punishment is always a pressure on him not only in connection with securing the fulfillment of the contractual obligation, but also when fulfilling the contractual penalty.

## **3. STRUCTURE OF THE CONTRACTUAL PENALTY**

Actuality is prescribed by the law direct dependence on one's right to another right. The principle of accessibility means that the contractual penalty agreement divides the legal fate of the principal or secondary mandatory obligation that the fulfillment ensures. A contractual penalty like any private sanction is always offensive. Accordance does not have the same meaning in each case and therefore the deeper legal meaning of two parallel rights should be explored. In relation to this, do we investigate when the wrong contract penalty is admissible? Starting from the expectation of the creditor, he also expects a certain behavior from the debtor in the case of an unlawful and unlawful contractual penalty, and in both cases, it is the consequence of the agreement reached upon the taking of the contractual penalty. Thus, contractual punishment is a single institute whose opposing poles are an adjacent contractual

penalty and a non-contractual penalty. All other infinity is open to the respondent (Schechter 1926, 813).

As a consequence of the accuracy of the contractual penalty, we also point out the following: the form of contractual penalty is a form of obligation for which the fulfillment of the contract is a contractual penalty determined by its form (*form ad solemnitatem*); the ineffectiveness of the non-cash obligation also entails the ineligibility of the contractual penalty; a contractual penalty loses legal effect if the failure or failure to fulfill the consequences of the causes for which the borrower does not respond; in accordance with the circumstances of contracting for the provision of non-monetary obligations, the contractual penalty and when contracted in cash is subsumed under the rules on non-cash obligations; in the case of a cession, transfers to the receiver and the contractual penalty: termination of the obligation for which it is contracted leads to termination and contractual punishment.

An exceptionally contractual penalty will not cease if the main obligation has ceased. By fulfilling the main contractual obligation, the obligation to pay the contractual penalty is terminated when it is agreed upon in case of failure. Disputing the creditor's fulfillment (eg eviction or material defect) leads to termination of the contract and renewal of the right to a contractual penalty.

The second exception is the unilateral termination of the main contract for which a contractual penalty for failure to complete has been agreed. Starting from its function as a compensation for damages that does not terminate by termination of the contract (The judgment of the Commercial Court of Appeals, No. 2413/1 dated 17 May 2013), despite the termination of the contract, the creditor has the right to demand a contractual penalty (Hiber and Pavić 2013, 74). When the said statement would not apply, it would have been brought in two alternative solutions by itself: to waive contractual penalties (the fact that it does not have to prove the existence and amount of the damage) or to demand a contractual penalty and waive the right to terminate the contract, which prevents it from asking for a refund.

#### **4. APPOINTMENT OF THE CONTRACTUAL PENALTY INSTITUTE**

A contractual penalty contract obliges the debtor to pay a contractual penalty to the creditor if he fulfills his contractual obligation. "The existence of a contract is a necessary feature of the institution of a contractual penalty" (Wéry 2013, 96). In doing so, we mean the existence of a contractual contract, a one-sided obligatory contract of a debtor. Like any contract, it must meet the general conditions for a valid conclusion, which relate to the existence of legally authorized Contracting Parties, the consent of the will, the case, the basis and the form which is dependent on the contract to which the contractual contract is related. In addition, it is necessary to meet the general conditions for applying the institute observed from the creditor's point of view.

##### **4.1. General conditions for the establishment and application of the institute of a contractual penalty**

The general conditions for concluding a contract also apply to contractual penalties. Consequently, it would be necessary to have a free statement of the will to conclude it. It is more precisely to exclude the existence of a lack of will (threats, delusions, frauds).

A contractual penalty must have an object, admissible, determined or determinable. The object of the contract is the obligation from the contract on the contractual penalty. The obligation that constitutes the contractual penalty and obligation provided for by a contractual penalty are not the same in nature, although they are dependent on one another. A contractual penalty may be contracted in cash but may also be non-cash (eg execution of some works). A fine is a contract in one total amount of the principal obligation or for each day of default as a percentage, or in some other way. Although it is possible to arrange a non-pecuniary penalty,

it could impose difficulties in the judicial control of its level referred to in Art. 271, para. 1 ZOO.

The penalty must be determined or at least determinable as any object of the contract at the time of the conclusion before the maturity of the obligation. Earlier jurisprudence allowed the contractual punishment to be determinative, more precisely in the contract, it was only stated without specifying the amount that the court could determine, depending on the circumstances of the particular case. Thus, "(...) if the parties envisaged a contractual penalty and failed to anticipate its monetary amount or other material gain, the court can not reject the request for the calculation and collection of the contractual penalty, but is obliged to determine its amount based on all the circumstances that the parties had and should have in mind when concluding a contract (Judgment of the Supreme Commercial Court, No. 720/64 of 18 September 1964). If there is a reference to the exact amount of the contractual penalty from an earlier contract or certain typical business conditions, it would mean that the contractual penalty is precisely determined.

The provisions on the reduction of excessively high contractual penalties are in the function of the protection of debtors. A borrower's request for a contractual reduction (expressed in its broadest sense) is required by the court to be decided by the court with regard to the value and importance of the subject of the obligation. "The opposition of the debtor to the obligation to pay the contractual penalty contains in him and opposition to the amount in which the payment of the contractual penalty is requested. In the sense of Art. 274. The ZOO will, at the request of the debtor, reduce the amount of the contractual penalty if it finds that the sum is too high in relation to the value and meaning of the performance, i.e. obligations that the borrower has not fulfilled "(Supreme Court of the Republic of Croatia No. Rev. 800/97 of 21 April 1998). The application of this provision can not be excluded or limited. We observed that court and arbitration practice, when decreasing the contractual penalty, starts from the extent of the actual damages assessed at the time of the decision. After the reduction, the penalty will be slightly higher than the damage suffered by the creditor to keep the pressure on the debtor.

The restriction of the amount of the contractual penalty is done by special regulations, by-laws (Hiber and Pavić 2013, 69), and in the territory of the European Union there is also a Directive on the prevention of unfair clauses in consumer contracts in the European Union (Sternlight 2002, 833). Special knowledge of construction limits the total amount of the contractual penalty so it can not exceed 5% of the value of the contracted works. All legal regulations are aimed at preventing the borrower from "curiosity, inexperience, and necessity" (Miladin 2006, 1763).

What is the basis for calculating the contractual penalty? The division of the obligation provided by the contractual penalty also entails the delimitation of the contractual penalty. In the case of a contractual penalty for failure, the creditor, if he has an interest, may also receive a partial contractual penalty (proportionally reduced by the amount of fulfillment). While the contractual penalty is due to a delay in fulfillment, the method of determining its height does not mean that it is also designated as a periodic rent. The notice of the creditor without delay to request and the contractual penalty determines its amount owed (from the determinable station is determined) in the total amount.

It is a general view that obligations that can't be practically or lawfully enforced can be ensured. We are of the opinion that it is justifiably the same to treat the actions of acts or omissions that are not legally binding, but for which contractual punishment is contracted. Obligations that are natural obligations and restrictions that can not be the subject of execution can be provided by a contractual penalty since they are legally valid. Their legal fate is exhausted in the fact that they are natural and can not be the subject of execution. Thus, if the debtor commits a contractual penalty for an out-of-date obligation, such an agreement should be treated legally as a waiver of a contractual penalty, as well as an interruption of the limitation period, unless otherwise provided by the contract itself. In order for the creditor to

exercise his right to a contractual penalty, it is sufficient to prove that the debtor has not complied with his natural obligations or non-claimed terminations.

#### **4.2. The nature of the obligations to which it applies and to which it applies**

A contractual penalty is a means of ensuring fulfillment or failure to fulfill all valid non-monetary obligations under the positive law of Art. 270, para. 3 ZOO and can't be contracted for monetary liabilities because their fulfillment is provided by a penalty interest. "Regulation Art. 270, para. 3 of the Law on Obligations, which excludes the possibility of contracting for monetary obligations, is a contractual penalty, it is a regulation of a cogenit nature whose application can't be excluded by the party by its will. The delay in fulfilling the monetary obligation is sanctioned by the penalty interest (Article 277 ZOO). Contractual clauses on the payment of the increased amount of the price due to delay have been null and void and do not produce legal effect in the case of payment of monetary obligations" (Supreme Court of Serbia, No. 40/98 of 18 March 1998).

Contraction of a contractual penalty for monetary obligations would result in the enforcement of default interest rate rules, the rate of which is prescribed by the law as the maximum. According to prof. Loze "(...) in that case the contractual penalty could be treated as an agreed interest" (Hiber and Živković 2015, 201). We take the view that "starting from this item, we come to the conclusion that the default interest is a stronger asset on the part of the creditor to secure monetary claims than a contractual penalty" (Jankovec 1975, 52). In doing so, the debtor owes the default interest regardless of guilt.

It is not allowed to contract a penalty for non-repayment of letters of credit. Opening of letters of credit is the execution of a monetary obligation. Namely, the debtor's duty to open a letter of credit in favor of the creditor practically is the same as the debtor gave the order to the bank to transfer a certain amount of money in favor of the creditor. The difference is only in the circumstance that when submitting a creditor's request for documentary credentials, which is the most common in business practice, the creditor, together with the request for payment, must prove that he has fulfilled his contractual obligation (unlike the transfer of assets in which he is not obligated).

There is a different situation with the untimely provision of a bank guarantee that is a formal legal transaction related to a particular contract. The obligation of the debtor to obtain a bank guarantee is not the obligation to pay to the creditor. Its purpose is to convince the creditor that the debtor will fulfill the obligation assumed because it only produces a legal effect in this case. Bank guarantees are also given for monetary and non-monetary liabilities (eg, the borrower will deliver the goods on a certain timeframe, a guarantee that the goods will have a certain quality, etc.). Considering the legal nature of the obligation for which a bank guarantee is obtained, it would not be disputable to allow contracting a contractual punishment from the borrower's point of view, although from a bank's point of view, the bank guarantee is always a monetary obligation.

The securing of contractual obligations outside commercial and contractual law is not mandatory. Thus personal relationships (marital, extra-marital, etc.) can't be secured by a contractual penalty. In accordance with the declaration of will, the spouses decide whether they will marry and when they will break it. However, it is wrong to draw a general conclusion that all personal relationships can't be secured by a contractual penalty.

A contractual penalty is legally permitted to provide lump sums for the maintenance of a spouse who has left the job because of her extramarital husband, provided that such intent is expressly and clearly expressed when contracting a particular contractual clause. We also find the justification for such an attitude in the provisions of Art. 192. ZOO of the Criminal Code of Republika Srpska, *Official Gazette*, no. 64/17 regulating avoidance of support. Accordingly, if the law-makers provided punitive provisions why contractors could not be provided with the provisions on contractual penalties.

It is permitted under Art. 31. Constitution of Republika Srpska freedom of political organization, argumentum a contrario and expulsion for justified reasons provided for by the regulations. Analogous interpretation extends the possibility of extending to religious communities as well as contractual arrangements. Necessity is the provision of the contract on the contract, according to which the contracting partner must pay the contractual penalty. We highlight several judgments from previous case-law. "There is no legal significance of the provisions of an agreement between a worker and an organization of associated labor with which the worker assumes the obligation to pay a certain amount to the organization if he does not enter into work at a certain time" (Judgment of the Supreme Court of the Autonomous Province of Vojvodina, GJ 14/62 of 16 February 1962 years).

We also emphasize that "the provision of the scholarship agreement for the specialization does not have legal significance, which establishes that the recipient of the scholarship is obliged to pay a certain amount of the contractual penalty if after the completion of the specialization he does not spend the contracted working hours at the scholarship" (Judgment of the Supreme Court of Serbia, Ms. 4821 63 of January 11, 1964).

#### **4.3. Cause of the Contract on Contractual Punishment**

The causality of contractual penalties is the reason why the debtor has committed itself. The causality of contractual penalties is different from that of the creditor's main contract, although they are substantially close and coincidental. The reasons for its existence are in the tendency that all the main and secondary benefits of the contract for which it is made is legally founded (to justify them legally). In addition, it is a means of securing any permissible interest, even though it is the most commonly allowed property interest.

#### **4.4. Form Contract Form Contract**

When it comes to parallelism, the form of a contractual punishment then we notice that it is a rule that has been accepted in the General Trade Seals for the Sale of Goods. We emphasize that all major codifications do not mention the form within the general rules in the contractual penalty. "In any case, the parallelism of the form (main and accessory contract) does not contradict the view that the contract of contractual penalties is autonomous, although an accessory contract, such as it can't, without the rest, without the corresponding legal provision, draw up a rule on the obligation of the form of the main contract for a penal agreement (...)" (Hiber and Živković 2015, 417).

#### **4.5. Requirements for application**

In order to apply the rules of the institute of a contractual penalty, it is not necessary that the creditor has suffered damage. The contractual penalty shall be paid even if the creditor has not suffered any damage, and if it has suffered more than the amount of the contractual penalty it is necessary to prove that he has the right to compensation until full compensation under Art. 275, para. 2 ZOO.

Then, the debtor must be guilty. In the domain of contractual liability, guilt is presumed to require the absence of a reason which excludes his liability. According to Art. 272, para. 2 The ZOO Agreement loses its legal effect if the failure to meet or fulfillment of the fulfillment resulted from the cause for which the borrower does not respond. According to Art. 263 ZOO, these are the circumstances that arose after the conclusion of the contract, which the debtor could not prevent, eliminate or avoid. We emphasize that the rules of contractual liability are of a dispositive nature and, as such, allow for the extension of responsibilities and situations in which the borrower would otherwise not be able to respond. There must be an explicit contractual penalty for failure to complete. While a contractual

penalty due to a delay in fulfillment, it is necessary for the debtor to fall due. The debtor is in arrears when he fails to fulfill his obligation within the deadline set for fulfillment under Art. 324, para. 1 ZOO. If the debtor has not fulfilled his obligation of maturity, the creditor must, with a warning (in cases when the deadline has not been determined), invite him to fulfill the obligation and demand payment of the contractual penalty (a statement is also required in case it should not be warned). It is a legally irrelevant measure in which the debtor is obliged to make a commitment. We emphasize that in the case of an exceptional contractual punishment, the guilt also includes the liability of the debtor that he has towards himself.

Arbitrage practice shows that a contractual penalty is awarded even when the creditor has requested the fulfillment of the main obligation and left an appropriate postponement period. If the debtor fails to fulfill his obligation even within this period, the creditor is authorized to terminate the contract with a single-handed termination or declaratory statement that the termination occurred and requires payment of the contractual penalty (Decision of the Foreign Trade Arbitration at the Chamber of Commerce of Serbia No. T-9/10 of 10.10.2011. years).

## **5.LIQUIDATED DAMAGES**

English law as one of the rights that common law belongs to the legal system contains an institution of liquidated damages that is similar to the institution of a contractual penalty in our legal system. The agreement of the contracting party on the clause with the amount of damage that will occur if the contractual discipline is violated is liquidated damages. "When a contract contains such a clause, the contracted amount is paid regardless of the amount of damage caused by the breach of the contractual obligation" (Goetz and Scott 1997, 595).

Both institutes can't be applied to monetary obligations, but only to non-monetary liabilities. A contractual penalty can't be contracted if it is provided that in the event of a breach of contract, the debtor will pay to the creditor a certain amount of money, penalties, fees, contractual penalties or under any other name when the creditor can't claim and compensation determined by law and contractual punishment, this is permitted by law according to Art. 276 ZOO.

In English law, the contracted amount is considered pannal if it is greater than the greatest damage that could be assumed at the time of the contract conclusion that it could arise if the contract is injured "(Goetz and Scott 1997, 596). Negotiating liquidated damages is not permitted for penalties. Whether in the specific case there are pannal or liquidated damages should be assessed with regard to the circumstances at the time of the conclusion of the contract.

Liquidated damages owe the debtor irrespective of its amount, without the possibility of a reduction. But if the contracted amount is greater than the damage that could have been foreseen as a possible consequence of a breach of contract at the time of the conclusion of the contract, such a contractual provision would be ineffective and the creditor would be entitled to compensation for damage "(Goetz and Scott 1997, 597).

## **CONCLUSION**

The structure of the contractual punishment awarded by a positive right makes it a specific property sanction. The benefits that the creditor can derive from the avoidance of the costs of litigation (proving damage, expert judgment, etc.) until the harmful consequences due to their long duration.

Elements of the structure of the contractual penalty also respect the position of the creditor and the debtor, allowing the debtor to demand the reduction of excessively high contractual penalties under the law-stipulated conditions. As well as allowing the creditor to claim a difference in remuneration when the amount of damage exceeds the amount of the contractual penalty. In line with the strengths of her contracting, we were trying to justify applying a

wrong contractual penalty. Considerations in the work have shown that the omission of undue contractual punishment in positive law does not, however, have the ultimate consequence of circumvention of legal provisions on contractual penalties. The assertion of this assertion was made based on the principle of freedom of contracting on the basis of which it was agreed and aims to secure the creditor's expectations to fulfill the obligation. We also stressed the necessity of its legal treatment in the applicable law because of its independence, which does not presuppose the existence of a major or minor liability from a contract. It is already going further and increasing the security that the irrevocable obligation of the debtor or of a third party will be met. We emphasized that in her case the creditor should prove that the borrower did not behave in accordance with the natural or natural obligation.

The positive legal framework of the contractual penalty, which we subsequently analyzed, also considered the application of a wrong contractual penalty. The provisions governing the contractual penalty are of a dispositive nature so that the contracting parties may agree to apply the wrong contractual penalty.

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**NAUČNA KRITIKA**  
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## KONCEPTUALIZACIJA I FORMULACIJA MODELA ODRŽIVOG RAZVOJA U BiH

**Rezime:** Bosna i Hercegovina je mala i siromašna zemlja, ali sa velikim potencijalom implementacije zelene ekonomije i ekološkog preduzetništva. S obzirom na to da razvijene zemlje već imaju velike rezultate u održivom razvoju, ekološkom preduzetništvu i očuvanju ekosistema, pogotovo zemlje EU, u ovom radu nastojaće se prikazati mјere koje su korisne za održivi razvoj Bosne i Hercegovine. Održivi razvoj je skladan odnos ekologije i privrede kako bi se prirodno bogatstvo Zemlje sačuvalo za buduće generacije. U tom kontekstu, cilj rada jeste usmeravanje na balansiranje socijalnog i ekonomskog razvoja i zaštite životne sredine. Deskriptivnom metodom i kabinetskim istraživanjem nastojaće se dati teorijski doprinos, tako da se očekivani doprinos ogleda u definisanju najznačajnijih faktora za rast i očuvanje životne sredine.

**Ključne riječi:** održivi razvoj, ekologija, privreda

**JEL klasifikacija:** 01

### UVOD

Održivi razvoj podržava privredni, društveni i humani razvoj, uz istovremeno olakšanje zaštite, regeneracije i otpornosti ekosistema. Održivi razvoj se ostvaruje podsticanjem održivog, inkluzivnog privrednog rasta, smanjenjem nejednakosti, povećanjem osnovnog životnog standarda, podsticanjem pravičnog društvenog razvoja i uključenosti te podsticanjem integrisanog i održivog upravljanja prirodnim resursima i ekosistemima. Veliki broj međunarodnih organizacija, kroz posebne programe, podržavaju oporavak i razvoj Bosne i Hercegovine. Međutim, Bosna i Hercegovina ne sprovodi konzistentni strateški okvir oporavka i razvoja. Takođe, međunarodna zajednica (Evropska unija, Svjetska banka, programi nekih drugih zemalja) organizovano uvodi u praksi BiH zaštitu okoline, ali ne i održivi razvoj, tako da će se u ovom radu ukazati na faktore održivog razvoja.

### 1. ELEMENTI MODELA ODRŽIVOG RAZVOJA BIH

Pojam *održivi razvoj* različito se shvata i definiše. Spomenute se definicija Svjetske komisije za okolinu iz 1987. godine: „Održivi razvoj je razvoj koji zadovoljava postojeće potrebe i ne ugrožava sposobnosti budućih generacija za zadovoljavanje vlastitih potreba (UNESCO 2007).“

Održivi razvoj, kao model razvoja usredsređuje se na zadovoljavanje potreba ljudi i prevazilaženje sukoba između ekonomije i ekologije. Ostvarivanjem ovog modela u praksi moguće je stvoriti uslove usklađivanja ekonomije i ekologije. Da bi ovaj razvoj mogao teći bez protivrečnosti, neophodno je istovremeno uvažavati socijalna pitanja, počev od najnižeg (lokalnog) do najvišeg (globalnog) nivoa njihovog ispoljavanja. Cilj održivog razvoja –

održivosti održivo korišćenje resursa) ostvaruje se kroz dinamičan proces unapređivanja tehničko-tehnološke osnove rada, porasta društvenog bogatstva i kvaliteta života ljudi. Pri tom se ne zanemaruje potreba zaštite životne sredine, kao i briga o potrebama za resursima narednih generacija (Šrbac i Vuković i Voza i Sokić 2012). Može se konstatovati da Bosna i Hercegovina, kao zemlja koja prolazi kroz veoma težak ekonomski period, ima veliku potrebu za novim ekonomskim idejama i praktočnoj primjeni u cilju prevazilaženja loše ekonomije cijele njene regije.

Pokazatelji loše ekonomije proizilaze iz velike nezaposlenosti koja je naročito izražena kod mlađih ljudi. U Bosni i Hercegovini se ne daje značaj prirodnom okruženju. Prisutna je nelegalna eksploatacija prirodnih resursa. Zatim, velika je ugroženost životinja, kao primjer može se navesti ugroženost autohtone vrste konja tj. Bosanskog brdskog konja. Zatim, prisutna je ugroženost gradskih sredina (sve manje je zelenih površina, neplanska je gradnja stambenih objekata). Zatim, izdvajanje sredstava za unapređenje zdravlja kontinuirano se smanjuje (zatvaranje domova zdravlja u manjim opštinama i veoma loši uslovi za liječenje u većini domova zdravlja). Zatim, izdvajanja za naučnoistraživački rad i obrazovni sistem ispod su evropskog prosjeka, koji iznosi 3% od bruto društvenog proizvoda. Penzijsko invalidski sistem nema jasnou strategiju reorganizacije. U privredi je prisutan stalni rast cijena koji dovodi do troškovne inflacija koja dalje vodi ka stagflaciji privrede, odnosno cijene rastu, a privreda stagnira. Ovo je posljedica smanjene potrošnje, jer sve vrste primanja ostaju ne promijenjene: plate radnika, penzije i socijalna izdavanja te prisutna je nerodovna isplata stečenih i ostvarenih primanja. Smanjena potrošnja negativno se odražava na proizvodnju i investicije, što se dejstvom multiplikatora negativno odražava na zaposlenost i sve druge makroekonomske agregate.

Za rješavanje i poboljšanje ekonomske situacije u Bosni i Hercegovini potrebne su veoma radikalne promjene koje će dovesti do popravljanja standarda građana i izgradnje jednog boljeg i perspektivnijeg društvenog uređenja. Zelena ekonomija, kao dio održivog razvoja, može da bude okosnica razvoja BiH, kako bi sa svim elementima koje sadrži održivi razvoj smanjila siromaštvo i otklonila sve negativne aktivnosti koji ugrožavaju BiH na putu izgradnje boljeg i uređenijeg društva. Zelena ekonomija je možda važnija za BiH, nego za mnoge evropske zemlje.

Iako svim svojim elementima zelena ekonomija pokazuje benefite, koje zemlje mogu da ostvare investiranjem u zelenu ekonomiju, BiH još nema značajnijih investicija u oblasti zelene ekonomije. Sa druge strane, aktuelna praksa u BiH je u suprotnosti sa odredbama direktiva EU, što se negativno odražava na sprovođenje reformskih regulativa definisanih od strane EU.

Iz naprijed navedenog proizlazi da će BiH Evropskoj energetskoj zajednici morati plaćati više od pola milijarde maraka „kazne” zbog visoke emisije stakleničkih plinova. S obzirom na to da faktori koji ugrožavaju životnu sredinu predstavljaju negativne eksternalije (eksterna ekonomija proizvodnje) i oni se sankcionisu mjerama vanržišnog rješenja, a one predstavljaju mјere prelivanja troškova u koristi putem premija, prava, taksi i drugih oblika plaćanja za sanaciju štete. Iznosi za sanaciju štete uvijek su visoki u cilju destimulativne politike za privredne aktivnosti sa štetnim posljedicama na životnu sredinu i preusmjeravanjem privrednih aktivnosti koje su u cilju zaštite životne sredine. Stoga, BiH će morati platiti Emisiju ugljičnoga dioksida (CO<sub>2</sub>). Potencijalno, BiH bi za deset godina mogla postati i članica EU. Međutim, ako i ne bude članica, Bruxelles zasigurno neće dopustiti „veliki dimnjak” u srcu Europe. Vanržišno rješenje za postojeće i planirane termoelektrane iznosi oko 282 miliona eura godišnje, budući da bi se cijena mogla popeti s pet na, čak, 30 eura po toni CO<sub>2</sub>, kolika se očekuje već 2025. godine (Dnevni list 2015). Iz navedenog proizlazi da se Bosna i Hercegovina treba preusmjeriti na zelenu ekonomiju, jer novčani iznosi za sanaciju negativnih eksternalija predstavljaju značajna sredstva za razvojnu ekonomiju BiH.

Uspostavljanjem ciljanih programa obuke i obrazovanja, omogućuje sprovođenje ambiciozne strategije za podsticanje inovacija i zelenih ulaganja. To će omogućiti stvaranje miliona

održivih, visokokvalitetnih zelenih radnih mjesta, mnogih u malim i srednje velikim preduzećima (Đukić i Okanović i Stević 2015).

Uprkos velikim očekivanjima od modela održivog razvoja veliku prepreku na putu njegove realizacije predstavlja nedovoljno razvojena ekološka svijest pojedinaca koji čine generaciju. Motivisanje sadašnjih generacija da deluju aktivno s pogledom uperenim u budućnost i na potrebe potonjih naraštaja prvi je korak za održivi razvoj. Stepen odgovornosti koji se očekuje od sadašnjih stanovnika prema budućim generacijama u raskoraku s protivuslugom je (nadoknadom) na koju mogu da računaju sadašnje generacije. Razvijanje nadgeneracijskog osećaja zajedništva, kao i svijesti o sopstvenom položaju u nizu generacija, moglo bi doprinijeti još izraženijem prisustvu i implementaciji ideje održivog razvoja (Štrbac i Vuković i Voza i Sokić 2012).

## 2. FUNKCIONALNOST MODELA ODRŽIVOG RAZVOJA BiH

Kako bi model održivog razvoja postao funkcionalan BiH, mora da napravi strategiju koja će biti zasnovana na ekonomiji znanja, naučnim dostignućima unapređenju i osavremenjavanju institucija koje će biti funkcionalnije i razvijati se u skladu sa institucijama razvijenih zemalja, što je jedan od uslova za pristupanju BiH EU. Ekonomija znanja sve više dobija primarno mjesto na društvenoj ljestvici i kao takva postaje trend razvijenih zemalja.

Uspješnost prilagodbe globalizacijskim procesima (Petričević 2014; Delić-Jović i Kalamanda 2016; Kalamanda 2016) i mijenjanja sredine u kojoj pojedinci, preduzeća i nacionalne ekonomije (Duvnjak 2018) žive, rade i djeluju, očituje se u vrednovanju znanja kao krucijalnog i strateškog ekonomskog resursa. Ako je vjerovati endogenoj teoriji rasta, ništa drugo ne preostaje, obzirom na to da je unutar iste istaknut značaj znanja tj. obrazovanja, istraživanja, inovacija, invencija te ljudskog kapitala. Odnosno, upravo se akumulacija znanja te investiranje u ljudski kapital javljaju kao ključna determinanta tehnološkog progresa, neograničenog ekonomskog rasta, rastućih prinosa te povećanja životnog standarda (Jakovac 2012).

BiH, kao zemlja poslijeratnih dešavanja, postaje veliki prostor koji žudi za naučnim dostignućima koja bi mogla da unaprijede njen razvoj. Na osnovu ovoga može se zaključiti kako bi se ostvario napredak BiH i njen razvoj neophodno su finansijska izdvajanja koja će nauku staviti u povlašćen i prioritetan položaj kako bi BiH u konačnosti da ostvari stabilno i usmjereno društvo koje će imati za rezultat bolji i perspektivniji život stanovništva na ovim prostorima. S obzirom na to da se malo novca izdvaja za nauku ona je na marginama društva, a trebala bi da bude okosnica razvoja BiH. Ovakvo ponašanje i odnos institucija prema nauci imaće katastrofalne posljedice po razvoju BiH i već je došlo vrijeme da se takve stvari promijene. Društvo zasnovano na znanju jedini je izlaz BiH za rješavanje nagomilanih problema pogotovo u oblasti ekonomije i održivog razvoja, jer BiH svrstavaju u jednu od najsiromašnijih zemalja na prostorima EU.

## 3. ODREĐIVANJE I MEĐUSOBNI ODNOS ZAVISNIH I NEZAVISNIH VARIJABLJI U PREDLOŽENOM MODELU

Održivi razvoj se uopšteno definiše kao skladan (harmoničan, ravnomjeran, uravnotežen, izbalansiran) razvoj, tj. proces promjena u kojem su iskorишćavanje prirodnih resursa, smjer investicionih ulaganja, orijentacija naučno-tehnološkog razvoja, razvoj ličnosti i institucionalne promjene međusobno uskladeni, tako da jačaju sadašnje i buduće resurse (mogućnosti) za zadovoljenje ljudskih potreba. On se, u principu, odnosi na razvoj društva, privrede i prirodnog okruženja (ekologije), što je predstavljeno da ukazuje na značaj institucionalnih promjena u dijelu ekonomskog razvoja, što je dokazano u teoriji i praksi. Međutim, jasno je da navedeni osnovni zadaci koji prate društveni i ekološki razvoj, takođe, prepostavljaju kontinuiranu i snažnu institucionalnu podršku (zakonsku, korporativnu,

informacionu, kulturnu i drugu). Procesi društvenih, ekonomskih i ekoloških promjena su tijesno povezani i isprepleteni (Delibašić 2014).

Može se ustanoviti da institucionalnim jačanjem i kreiranjem zajedničke politike u oblasti životne sredine, na svim nivoima vlasti u Bosni i Hercegovini, treba otkloniti sve barijere za nesmetano sprovođenje politike u oblasti životne sredine kako bi u budućnosti dobili kvalitetniji odnos prema ekosistemu. Institucije svojom zajedničkom saradnjom kreiraju strategiju za očuvanje ekosistema kako bi se što lakše pripremio teren za otklanjanje štetnog dejstva po prirodu i stvorio ambijent za investiciona djelovanje u oblasti zelene ekonomije. U procesu pripremanja područja za investiciona ulaganja i korišćenju prirodnih resursa, u obimu kojem to dozvoljava održivi razvoj, neophodno je da se krajnje ozbiljno pristupi izradi propisa koji će podržati razvoj investicija u zelenu ekonomiju.

Set indikatora održivog razvoja neophodno je razviti kako bi „znali“ gdje se i kuda ide, kroz svima pristupačne i uporedive pokazatelje stanja i trendova. Kompetentno odlučivanje je nemoguće bez relevantnih indikatora, kao pomoći donosiocima odluka na svim nivoima. Razvijati, podsticati i mjeriti razvoj okolinske infrastrukture, koja doprinosi održivosti razvoja (tretmani čvrstog otpada i otpadnih voda, javni vodovodi, sistemi za navodnjavanje i zaštitu od voda i drugo). Razvoj svih segmenata društva zavisi od razvijenosti okolinske infrastrukture (vodosnabdijevanje, kanalizacija, tretman otpadnih voda, upravljanje čvrstim otpadom, itd). S druge strane, zavisno od ekonomске razvijenosti društva, ulaze se u ove segmente tzv. društvenog standarda. Međutim, siromašna društva ostaju siromašna upravo zbog toga što ne razvijaju okolinsku infrastrukturu, jer ona, u stvari, daje ključni doprinos održivosti ukupnog razvoja. Mjerjenje razvoja okolinske infrastrukture je pretpostavka upravljanjem njenim razvojem, a time i ukupnim razvojem. „Razvoj“ kojim se (prekomjerno) zagađuje okoliš može eventualno kratkoročno izgledati uspješan, ali na iole duže staze vraća drastičnim opadanjem kvaliteta života (VMDEP 2009).

Samim približavanjem Bosne i Hercegovine EU, Bosna i Hercegovina se obavezuje da će primjenjivati zakonodavstvo EU i u svom dalnjem razvoju svoje zakonodavne radnje uskladišati sa zakonima EU. Bosna i Hercegovina u svom punom kapacitetu, kroz dva entiteta i Distrikt Brčko već u mnogim segmentima svog zakonskog uređenja provodi zakonodavstvo EU. Uspostavljanjem snažne zakonske regulative iz oblasti zaštite životne sredine Bosna i Hercegovina bi se sve više približila svome krajnjem dometu, a to je održivi razvoj koji se želi postići. Za postizanje boljih standarada u zaštite životne sredine neophodna je stalno inoviranje postojećih projekata i izrada novih ideja iz oblasti zaštite životne sredine i stalno podsticanje projekata, koji će unaprijediti odnos čovjeka prema prirodi i dovesti do kvalitetnijeg života ljudske populacije. Na osnovu rezultata ispitivanja može se zaključiti da se BiH susreće sa ozbiljnim problemima u oblasti okoliša. Posebno treba istaći nedovoljno razvijene kapacitete, kao i mnoge socio-ekonomske i institucionalne probleme: nedostatak okolišne politike i zakonodavstva, nedovoljno razvijeni kapaciteti, koji su uz to i podijeljeni između entiteta i kantona, nedostatak učešća javnosti u procesu odlučivanja u oblasti politike i okoliša, nejasno razgraničenje odgovornosti i obaveza različitim institucijama koje se bave problemom voda, šuma, okoliša, zdravlja, poljoprivrede, itd, nedostatak monitoringa i opreme, nedostatak saradnje između entiteta i zainteresovanih strana (vlada, nevladinih organizacija, građana, i sl), nedostatak ekonomske inicijative (dažbine, takse, princip „zagadivač plaća“), nedovoljna obučenost i nedostatak stručnog znanja, loše upravljanje, nedostatak kadra i finansijskih sredstava, kao i adekvatne obuke, nedovoljna zainteresovanost za probleme okoliša, kao i nedostatak opšte upućenosti javnosti. Nije sporno da je integracija u Evropsku uniju od velike važnosti za budućnost Bosne i Hercegovine. Ulagak BiH u EU mora biti cilj koji će dovesti do pozitivnih promjena u okolišu ove zemlje. Pored ekonomskih, zakonodavnih i političkih problema, koji se moraju rješiti, BiH bi mogla ostvariti i samoodrživost u okolišu (Mehmed i Šeremet i Draganić i Stefanović 2002). Stoga, bitan faktor održivog razvoja je socijalni razvoj čovjeka sa razvojem svijesti o individualnoj i kolektivnoj odgovornosti.

#### 4. EKONOMSKA OPRAVDANOST MODELA ODRŽIVOG RAZVOJA BIH

Održivi razvoj promovišući zelenu privredu kao sastavni dio ekonomske komponente, otvara prostor za nove ideje, tehnologije, investicije, koje će dovesti do efikasnijeg korišćenja prirodnog resursa, jer novi projekti u privredi dovode do otvaranja novih radnih mesta, zapošljavanja, rasta bruto nacionalnog proizvoda, bruto nacionalnog dohotka i stabilnijeg ekonomskog rasta (Ristić i Ristić 2015). Razvoj savremene tehnologije pokreće jedan od novih projekata budućnosti, u kojem će učestvovati čitavo čovječanstvo, a to je zelena privreda. Tehničko-tehnološki progres je doprinijeo stvaranju kvalitetnijih, jeftinijih proizvoda sa manjim stepenom zagađenosti životne sredine. Nove tehnologije doprinose ekonomiji obima i one su generator privrednog razvoja. Stoga, bitan faktor održivog razvoja su nove tehnologije.

Zelena ekonomija unapređuje razvoj ekonomske discipline. Zelena privreda se prepoznaće i kao ključan faktor održivog razvoja, jer sadrži tri komponente održivog razvoja. Zelena privreda ekonomskom komponentom otvara nove vrste poslovanja, socijalnom uspijeva da zaposli novi broj radne snage i komponentom zaštite životne sredine uspijeva da zaštitи postojeće resurse, izgradi novije načine njihovog korišćenja, zaštiti prirodu novim naučnim dostignućima, odnosno koristi nauku u njenom punom kapacitetu za očuvanje eko sistema. Zelena ekonomija svojim razvojnim mogućnostima smanjuje upotrebu sadašnjih energetskih resursa, poput drveta, fosilnih goriva i koristi obnovljive izvore energije poput sunca, vjetra i vode. Tim načinom umanjuje onečišćenje prirode te razvija nove tehnologije za korišćenje obnovljivih izvora energije, čime se razvijaju i nove grane privrede. Zelena privreda svoj obris daje u drugim djelatnostima poput poljoprivrede, proizvodnji odjeće, turizmu, proizvodnji posuda, zelene gradnje, itd. Iz ovih predloženih privrednih djelatnosti može se zaključiti da je zelena privreda najbolji prijatelj čovjeka i održivog razvoja. Sve većim širenjem potrošačkog društva, dolazi se do uništavanja prirodnog kapitala. Uništavanje prirodnog kapitala ima za posljedicu narušen ekološki sistem.

Ključ za funkcionalnu definiciju održivog razvoja je shvatanje da organizacija ljudske zajednice mora biti u skladu sa prirodnim ekosistemom. Ljudska zajednica treba da bude organizovana tako da njen način života, ekonomske i fizikalne strukture i tehnologije ne smetaju stalnoj sposobnosti prirode da se održava, već da joj u tome pomognu. Održive zajednice svoj način života razvijaju u stalnoj interakciji sa drugim ljudskim i neljudskim živim sistemima. To ne znači da „održivi razvoj“ negira promjenu odnosa i stvari. To nikako nije statično stanje, već dinamičan proces koevolucije (Bičo 2015).

Održivi razvoj prepoznaće zelenu ekonomiju kao jednu od okosnica rješavanja problematike održivosti. Zelena ekonomija treba podršku od šire društvene javnosti, kao prepoznatljivi element u koji treba investirati, subvencionisati, težiti ka stalnim inovacijama, sarađivati sa velikim brojem zemalja u svrhu sticanja i širenja saznanja iz ekološke ekonomije, razvijati strategije i usmjeravati kompletno društvo da bi se postigla maksimalna održivost.

Benefiti zelene ekonomije se ogledaju u sljedećem: povećanju atraktivnosti privrede, povećanju stranih direktnih investicija, transferu novih znanja i tehnologija, povećanju izvoza, prodaji proizvoda i usluga sa visokim maržama, energetskoj nezavisnosti, povećanju životne sredine, Low Carb (društvo sa niskim stepenom zagađenosti) stremljenju, zdravim stanovništvom i radnom snagom, smanjenju nezaposlenosti i kreiranju radnih mesta, koje adekvatno plaćaju radnika. Mogućnosti za Bosnu i Hercegovinu u razvoju zelenih radnih mesta ogledaju se u:

- Zelenoj održivoj poljoprivredi (proizvesti zdrav organskih proizvod namijenjen izvozu);
- Prehrambenoj i prerađivačkoj industriji koja će finalizovati proizvode iz poljoprivrede uz nulti nivo upotrebe konzervansa i aditiva;
- Obnovljivim izvorima (hidro i vjetro kapaciteti).

Ako se zna da proizvodnja energije iz renewabels (obnovljivih izvora) upošljava 2,7 radnika na jednog radnika iz tradicionalnog energetskog sektora po megavatu (MW) proizvedene energija, jasno je koji su kapaciteti ovog sektora, reciklaži i izvozu reciklata.

U BiH je neophodno obrazovati tzv. zelene menadžere, koji će pored klasičnog obrazovanja u upravljanju, vladati i materijom kao što su energija, moralno investiranje, društvena odgovornost, zelena poljoprivreda. Vrlo je važno da se razlikuju pojmovi obrazovanja o održivom razvoju i obrazovanju za održivi razvoj. Prvi se bavi teorijskim raspravama o održivom razvoju, dok drugi podrazumijeva korišćenje znanja kao sredstva za postizanje održivosti (Bolesniko i Radisic i Ferenecak i Dobromirov i Bolesnikov 2012).

Jedan od istaknutih američkih ekonomista Pol Krugman, dobitnik Nobelove nagrade za ekonomiju, u svojoj knjizi „Prekinite ovu depresiju odmah“ govori da su investicije u zelenu ekonomiju jedno od rješenja za otvaranje novih radnih mesta, a samim tim, rješavanja mnogih nagomilanih problema, od kojih su prioritetni u BiH, kao što su prevazilaženje siromaštva i zaštita životne sredine.

## ZAKLJUČAK

Na osnovu pregleda dijela fundamentalnih i teorijskih saznanja, ovim radom nastojao se proširiti teorijski značaj održivog razvoja i ekološkog preduzetništva kao jednog od faktora koji imaju uticaj za budući razvoj i rast te očuvanje prirodnih resursa za buduće generacije.

Iako svim svojim elementima zelena ekonomija pokazuje benefite koje zemlje mogu da ostvare investiranjem u zelenu ekonomiju, BiH još nema značajnijih investicija u oblasti zelene ekonomije. S druge strane, Bosna i Hercegovina, kao zemlja, ima sve predispozicije za razvoj ekološkog preduzetništva, prvenstveno zbog bogatih i očuvanih prirodnih potencijala. Ekološko preduzetništvo svojim aktivnostima efikasnije koristi energiju. Zelena privreda svojom ekonomskom komponentom, socijalnom komponentom i zaštitom životne sredine balansira održivi razvoj i unapređuje ekonomski rast. Može se zaključiti da BiH ima mogućnost sa svojim prirodnim potencijalima u razvoju ekološe privrede. Stoga, BiH svoju budućnost treba da gradi na zelenoj ekonomiji te da se na taj način pozicionira na vodeće mjesto u razvoju zelene ekonomije.

Eko biznis je mogućnost da se bude prvi u ekonomskom sektoru koji trenutno doživljava snažan rast kako u Evropi, tako i u svijetu. Zahvaljujući „zelenoj ekonomiji“, eko biznis ima trend rasta, što implicira i rast novih radnih mesta. Ulažući u ekobiznis, ulaže se u tržiste koje napreduje.

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## CONCEPTUALIZATION AND FORMULATION OF THE MODEL OF SUSTAINABLE DEVELOPMENT IN BIH

**Summary:** *Bosnia and Herzegovina is a small and poor country, but with a great potential for the implementation of green economy, environmental entrepreneurship and the preservation of the eco systems. As developed countries have already achieved significant results in sustainable development and environmental entrepreneurship and the conservation of the eco system, in particular the EU countries, this paper strives to present the measures that would be useful for the sustainable development of Bosnia and Herzegovina. Sustainable development constitutes a harmonious relationship between the environment and economy, so that the natural resources of our Planet could be preserved for the future generations. In that context, the aim of this work is to point in the direction of balancing social and economic development with environmental protection. Descriptive method and desktop research have been used in order to provide theoretical contribution by defining the most significant factors of growth and environmental protection.*

**Key words:** *Sustainable development, ecology, economy*

**JEL classification:** 01

### INTRODUCTION

Sustainable development supports economic, social and human development while at the same time facilitating protection, regeneration and resilience of the eco systems. Sustainable development is achieved by enhancing sustainable, inclusive economic growth, reducing inequality, increasing basic living standard, enhancing equitable social development and inclusion, integrated and sustainable management of natural resources and eco systems.

A large number of international organisations, through special programs and ongoing activities, support the reconstruction and development of Bosnia and Herzegovina. However, Bosnia and Herzegovina has not been implementing a consistent strategic framework for reconstruction and development. Also, the International Community (European Union, World Bank, programs of other countries) has been introducing the practice of environmental protection in BiH in an organised manner, but not sustainable development, which is why this paper will present the factors of sustainable development.

### 1. ELEMENTS OF THE MODEL OF SUSTAINABLE DEVELOPMENT IN BiH

The term *sustainable development* has been understood and defined in different ways. Let us mention the definition of the World Commission on Environment from 1987: „Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (UNESCO 2007).

Sustainable development, as the model of development focuses on meeting the needs of people and overcoming the conflict between the economy and ecology. By implementing this

model in practice it is possible to create conditions for the economy and ecology to go hand in hand. In order for this development to take place without contradictions, it is necessary to take into account social issues, starting from the lowest (local) to the highest (global) levels of their appearance. The aim of sustainable development – sustainability (i.e. sustainable usage of resources) – is achieved through a dynamic process of improving the technical-technological basis of work and increasing the social wealth and the quality of life, while being mindful of the need for environmental protection and the need of future generations for natural resources (Štrbac and Vuković and Voza and Sokić 2012). We may say that Bosnia and Herzegovina, as a country going through a very difficult economic period, has a great need for new economic ideas, economic activities in order to improve the economic situation, which affects the entire country.

Indicators of poor economy are reflected in high unemployment rate, in particular among young people. There is little care about the environment in Bosnia and Herzegovina. There is illegal exploitation of natural resources. In addition, there is a great risk for animals, for example an indigenous type of horses Bosnian Mountain Horse is endangered. There is also endangerment of urban areas (less green areas, unplanned construction of residential buildings). Funds allocated for healthcare have continuously been decreasing (closing down of health centers in small municipalities and very poor conditions for providing healthcare services in most of the health centers). Funds allocated for scientific research and education system are below the European average which is 3% of GDP. Pension-disability system does not have a clear restructuring strategy. There is a continuous increase of prices in the economy of Bosnia and Herzegovina, which leads to expense inflation which further leads to stagflation of economy, i.e. the prices are increasing and the economy is stagnating. This is the consequence of reduced spending because all types of income remain unchanged: workers' wages, pensions, social benefits, and on top of that there is irregular payment of income one earns or is entitled to. Reduced spending has a negative effect on the production and investments, which by way of multiplication negatively affects the employment rate and all other macroeconomic aggregates.

Solving and improving the economic situation in Bosnia and Herzegovina requires radical changes which will lead to the improvement of the living standard of the citizens and to building a better and more promising social structure. Green economy as part of the sustainable development and a model can be the foundation for the development of BiH, where all the elements of the sustainable development would reduce poverty and remove all negative activities which jeopardize BiH on its path to building a better and a more regulated society. Green economy may be more important for BiH than it is for many European countries.

Although green economy, with all its elements, shows benefits that can be achieved by countries which invest in green countries, BiH still does not have significant investments in the field of green economy. On the other hand, current practice in BiH is contrary to the provisions of the EU directives. Due to inconsiderate moves promoted by BiH institutions, they could be facing large penalties and sanctions which would put Bosnia and Herzegovina in a more difficult position. Potential penalties for not implementing reforms could be imposed by the EU.

Based on the above, BiH will have to pay more than half a billion marks of "punishment" to the European Energy Community due to high emissions of greenhouse gases. Having in mind that the factors which jeopardize the environment constitute negative externalities (external economy of production) and that they are sanctioned by non-market-based measures and they constitute measures of transposing costs into benefits through premiums, rights, taxes and other ways of paying for repairing the damage. The amounts for repairing the damage are always high in order to stimulate economic activities that have harmful effect on the environment and stimulate environmentally sound economic activities. Therefore, BiH will have to pay for the emission of carbon dioxide (CO<sub>2</sub>). Potentially, in ten years time BiH

could become a member of the EU. However, even if it does not become a member, Brussels will certainly not allow a "big chimney" in the heart of Europe. A non-market-based solution for the existing and planned thermal power plants roughly amounts to 282m Euros a year, as the price could rise from five to even 30 euros per tonne of CO<sub>2</sub>, which is expected already in 2025 (Dnevni list 2015). For these reasons, Bosnia and Herzegovina should switch to green economy, as the amounts of money for repairing negative externalities are too high for BiH's developing economy.

If we are able to establish targeted training and education programs, we will more easily implement ambitious strategies to encourage innovation and green investment. This will enable the creation of millions of viable, high quality green jobs, many in small and medium-sized businesses (Đukić and Okanović and Stević 2015).

Despite the great expectations of a sustainable development model, a major obstacle to its realization is the insufficiently developed ecological awareness of a generation of individuals. The question is how to motivate current generations to work actively with an eye to the future and to the needs of the latter generations. It seems that the level of responsibility expected from the current population towards future generations is in discrepancy with counter-service (compensation) that can be counted on by the present generation. The emergence of an over-generational sense of communion, as well as the consciousness of one's own position in a line of generations, could further contribute to a more expressed presence and implementation of the idea of sustainable development (Štrbac and Vuković and Voza and Sokić 2012).

## **2. FUNCTIONALITY OF THE MODEL OF SUSTAINABLE DEVELOPMENT OF BiH**

In order for the sustainable development model to become functional in BiH, it must develop a strategy based on the economy of knowledge, scientific achievements, and modernization of institutions that will be more functional and developed in accordance with developed country institutions, which is one of the conditions for BiH's accession to the EU. The economy of knowledge is increasingly reaching a primary position on the social scale and as such is becoming a trend in developed countries.

Success in adapting to globalization processes and changing the environment in which individuals, companies and national economies live, work, and act is manifested in evaluating knowledge as a crucial and strategic economic resource. If we are to believe in the endogenous theory of growth, there is no other option left because it emphasises the importance of knowledge, i.e. education, research, innovation, invention and human capital. That is, the very accumulation of knowledge and investing in human capital appear as key determinants of technological progress, unlimited economic growth, rising yields and improvement of the living standard (Jakovac 2012).

BiH as a post-war country has become a major area yearning for scientific achievements that could improve its development. Based on this, we can conclude that in order to achieve BiH's progress and its development, financial allocations are necessary which will put science into a privileged and priority position in order for BiH to finally achieve a stable and focused society that will result in a better and more prosperous life of the population living in these areas. We are witnessing that the governing structures do not care about science and that little money is devoted to science, therefore it is on the margins of society, whilst it should be the cornerstone of BiH development. As little money is being allocated for science, it is on the margins of the society, while it should be the backbone of the development of BiH. Such behavior and position of institutions towards science will have catastrophic consequences for BiH's development, and it is high time for such things to change. Knowledge-based society is the only BiH exit to address the accumulated problems, especially in the area of economy and sustainable development, as BiH is classified as one of the poorest countries in the EU.

### **3. DETERMINATION AND INTERRELATIONSHIP OF DEPENDENT AND INDEPENDENT VARIABLES IN THE PROPOSED MODEL**

Sustainable development is generally defined as a coherent (harmonious, uniform, equitable, balanced) development, i.e. a process of change in which the exploitation of natural resources, the direction of investments, the orientation of scientific and technological development, personality development and institutional change are mutually harmonized, strengthening the present and future resources (opportunities) to meet human needs. It is in principle related to the development of society, economy and natural environment (ecology), which is presented to point to the importance of institutional changes in the part of economic development, as evidenced by theory and practice. However, it is clear that the basic tasks that follow social and environmental development also presuppose a continuous and strong institutional support (legal, corporate, informative, cultural and other). The processes of social, economic and ecological changes are closely linked and intertwined (Delibašić 2014).

It can be established that by institutional strengthening and creation of a common policy in the field of environment at all levels of government in Bosnia and Herzegovina, all barriers to the smooth implementation of environmental policy should be removed in order to obtain a better-quality approach to the ecosystem in the future. Institutions, through their joint collaboration, create a strategy to preserve the ecosystem in order to prepare the ground for the removal of harmful effects by nature and create an environment for investment in the field of green economy. In the process of preparing investment areas and using natural resources to the extent that is allowed by the sustainable development, it is necessary to seriously approach the development of regulations that will support the development of investments in the green economy.

A set of sustainable development indicators needs to be developed in order for us to „know“ where we are and where we are going, through all accessible and comparable indicators of the state and trends. Competent decision-making is impossible without the relevant indicators, to assist decision-makers at all levels. Developing, stimulating and measuring the development of the environmental infrastructure, which contributes to the sustainability of development (solid waste and wastewater treatment, public water supply, irrigation and water management systems and others). The development of all segments of society depends on the development of environmental infrastructure (water supply, sewerage, wastewater treatment, solid waste management, etc.). On the other hand, depending on the economic development of society, investments are made in these segments of the so-called social standard. However, poor societies remain poor because they do not develop environmental infrastructure, which actually gives a key contribution to the sustainability of overall development. Measuring environmental infrastructure development is a prerequisite for managing its development, and thus the overall development. “Development” that (excessively) pollutes the environment may eventually seem successful in a short run, but in any longer period, it returns with a drastic fall in the quality of life (CMED2009).

With the approximation of Bosnia and Herzegovina to the EU, Bosnia and Herzegovina is committed to applying EU legislation and to further aligning its legislative activities with EU legislation. In its full capacity, Bosnia and Herzegovina, through the two entities and the Brčko District, already implements EU legislation in many segments of its legislation. By establishing strong legal regulations in the field of environmental protection, Bosnia and Herzegovina would move closer to its ultimate reach, which is the sustainable development that is aspired to be achieved. To achieve better standards for environmental protection, it is necessary to constantly innovate the existing projects and to develop new ideas in the field of environmental protection and the constant support of projects that will improve the relationship between man and nature and lead to better quality of life of the human population. Based on the results of the investigation it can be concluded that BiH is facing

serious environmental problems. Particular emphasis should be placed on under-developed capacities, as well as on many socio-economic and institutional problems as follows: lack of environmental policy and legislation, insufficiently developed capacities, divided further between entities and cantons, lack of public participation in the policy and environmental decision-making process, unclear delimitation of responsibilities and obligations of various institutions dealing with water, forest, environment, health, agriculture, etc., lack of monitoring and equipment, lack of co-operation between entities and interested parties (Government, NGOs, citizens, etc.), lack of economic initiative (fees, taxes, "the polluter pays" principle), lack of training and lack of professional knowledge, poor management, lack of staff and financial resources, as well as adequate training, insufficient interest in environmental issues, and lack of general public awareness. It is common ground that integration into the European Union is of huge importance for the future of Bosnia and Herzegovina. The entry of BiH into the EU must be a goal that will lead to positive changes in the country's environment. Apart from the economic, legislative and political problems that need to be solved, BiH could also achieve environmental self-sustainability (Mehmed and Šeremet and Draganić and Stefanović 2002). Therefore, an important factor of sustainable development is the social development of humans, along with the development of awareness about individual and collective responsibility.

#### **4. ECONOMIC JUSTIFICATION OF THE MODEL SUSTAINABLE DEVELOPMENT OF BiH**

Sustainable development, by promoting green economy as an integral part of the economic component, opens up space for new ideas, technologies, investments that will lead to a more efficient use of natural resources, which goes in favour of the people from BiH, because new economic projects lead to job creation, employment and a more stable economic situation(Ristić K 2014). The development of modern technology is perhaps a new project of the future, in the form of green economy, which all humanity will take part in. Technical-technological progress contributes to the creation of higher quality, cheaper products with lower level of environmental pollution. New technologies contribute to the economy of scale and they are the generator of economic development. Therefore, new technologies are an important factor of sustainable development.

Green economy improves the development of economic discipline. Green economy is also recognized as a key factor for sustainable development, as it contains all three components of sustainable development. The green economy, with its economic component, opens up new types of business, socially succeeds in employing a new workforce, and the environmental protection component manages to protect the existing resources, develops new ways of their usage, protects the nature with new scientific achievements, i.e. uses science in its full capacity to preserve the eco system.

With its development possibilities, the green economy reduces the use of existing energy sources such as wood, fossil fuels and uses renewable energy sources such as sun, wind and water, thereby reducing the pollution of nature and developing new technologies for the use of renewable energy sources and thus developing new branches of economy. The green economy outlines other industries such as agriculture, wardrobe production, tourism, manufacturing of pottery, green construction, etc. From the proposed economic activities, we can conclude that the green economy is the best friend of humans and sustainable development. Increasingly expanding the consumer society, the destruction of natural capital is created, which leads to a disrupted ecological system. Destruction of the natural capital results in a damaged eco system.

The key to the functional definition of sustainable development is the understanding that ... the human community, ... must be organized by looking at natural ecosystems ... (It) should be organized so that its lifestyle, its economic and physical structures and technologies do not

disturb the permanent ability of nature to be maintained, but to help it. Sustainable communities develop their lifestyles in constant interaction with other human and inhuman living systems. This does not mean that “sustainable development” contradicts the changing of relationships and things. This is by no means a static state, but a dynamic process of coevolution(M Bičo Čar - 2015).

Sustainable development recognizes green economy as one of the cornerstones of solving sustainability issues. The green economy needs support from the wider public as a recognizable element to invest, subsidize, strive for constant innovations, cooperate with a large number of countries for the purpose of acquiring and expanding knowledge from ecological economies, develop strategies, and direct the entire society to achieve maximum sustainability.

Benefits of green economy are reflected in the following: increasing the attractiveness of the economy, increasing foreign direct investment, transferring new knowledge and technology, increasing exports, selling high-margin products and services, energy independence, increasing the environment, Low Carb (a low-pollution society) perseverance, healthy population and workforce, reducing unemployment and creating jobs that adequately pay workers. BiH and its chances of developing green jobs are:

- Sustainable green agriculture (produce healthy organic products for export),
- Food processing industry that will finalize agricultural products with zero levels of preservatives and additives,
- Renewable sources (hydro and wind capacities).

If we know that the production of energy from renewables (renewable sources) employs 2.7 workers per worker from the traditional energy sector by megawatt (MW) of produced energy, it is clear what the capacities of this sector are in recycle and export recyclates, education of so-called green managers who, in addition to classical education in management, will also rule the subjects such as energy, moral investing in social responsibility, green agriculture. It is very important to distinguish the concepts of education on sustainable development and education for sustainable development. The first deals with theoretical discussions on sustainable development while others imply the use of knowledge as a means of achieving sustainability (Bolesnik and Radisic and Ferenecak and Dobromir and Bolesnikov 2012).

One of the prominent US economists, Pol Krugman, the Nobel Prize winner for Economics, in his book “End This Depression Now”, says that investments in green economy are a solution for job creation and solving many of the accumulated problems, the priority of which in BiH are poverty and environmental protection.

## CONCLUSION

Based on the overview of a part of fundamental and theoretical knowledge, with this paper we have tried to emphasize the significance of sustainable development and environmental entrepreneurship as one of the factors of future growth and development, as well as the significance of the preservation of natural resources for future generations.

Although green economy, with all its elements, shows benefits for countries which invest in green economy, BiH still does not have any significant investments in the area of green economy.

On the other hand, Bosnia and Herzegovina has all the predispositions for the development of ecological entrepreneurship, primarily because of its rich and preserved natural resources. Ecological entrepreneurship in its activities utilizes energy more efficiently. Green economy with its economic, social and environmental components balances sustainable development and improves economic growth. It can be concluded that BiH has a chance with its natural potentials in the development of ecological economy. Therefore, BiH needs to build its future on green economy, thus becoming a leader in the development of green economy. Eco

business is a chance to be the first in the economic sector that is currently experiencing strong growth in Europe and the world. Thanks to “green economy”, eco business is growing, which implies increase in job creation. By investing in eco business, investments are also made in a progressive market.

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