Udruženje banaka Srbije

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Bankarstvo

Vladimir Vasić
Impuls iz Vašingtona za regionalni razvoj

Olivera Živković
Strategija kao determinanta organizacione kulture – studija slučaja: A Banka

Miljan Leković
Bihevioralne finansije kao odgovor na nedostatke standardnih finansija

Kristijan Ristić, Aleksandar Živković
Ocena evropskog bankarskog regulatornog okvira sa osvrtom na značaj za Republiku Srbiju

Marija Stojmenović
Društveno-ekonomski aspekti povlačenja gotovine iz upotrebe

Svetlana Pantelić
Novčanica od 50 dinara nastala u miru – puštena u ratu

Dubravka Dolenc
Legitimni interes kao pravni osnov obrade osobnih podataka

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Sadržaj
Contents

uvodnik

Impuls iz Vašingtona za regionalni razvoj

Vladimir Vasić, Udruženje banaka Srbije
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Vašingtonski sporazum, koji su u prisustvu američkog predsednika Trampa potpisali Srbija i Kosovo, pokazuje kapacitet koji može biti od istorijskog značaja. Dok politički analitičari i dobar deo javnosti fokus stavljaju na političke odnose Beograda i Prištine, za ljude od biznisa velika vrata otvaraju se u ekonomskom delu. U tome prednjači najava aktivnosti DFC (*US International Development Finance Corporation*) – američke međunarodne razvojne banke koja sarađuje sa privatnim sektorom i finansira rešenja za najveće izazove sa kojima se danas suočavaju zemlje u razvoju.

Indikativna je brzina kojom su, posle potpisivanja sporazuma, predstavnici DFC požurili u Srbiju, odnosno Kosovo, da pokrenu implementaciju dogovorenog. Mnogo govori i visoki sastav delegacije, a možda i činjenica da je regionalno vođstvo povereno čoveku čije je poreklo sa ovih prostora.

Prema najavama koje smo čuli prilikom posete delegacije američke razvojne agencije DFC Beogradu, može se očekivati finansijska pomoć u najmanje pet oblasti. Pomoć bi trebalo da ubrza razvoj srpske privrede i otvaranje novih radnih mesta i da pomogne zajedničke projekte u oblasti industrije i ekologije.

Ovakav snažan ulazak DFC mora imati uticaj i na ostale, i ne samo američke investitore. Podsetimo se da prema podacima Narodne banke Srbije prilivi od stranih direktnih investicija u Srbiju prelaze 8% bruto domaćeg proizvoda. Srbija je, sa oko 60% ukupnih priliva na Zapadni Balkan, lider u ovoj oblasti, a dolazak DFC pruža priliku da se ovo lidersko mesto učvrsti. Dolazak stranih investicija svakako doprinosi i opštem jačanju poslovne klime i unapređenju uslova za poslovanje svih privrednih subjekata. To važi i za finansijski sektor.

Nije slučajno što su kao ključna oblast saradnje odabrani infrastrukturni projekti. Od oko 4 milijarde evra, najviše novca je planirano za "Autoput mira" koji bi povezivao Niš i Prištinu na ukupno četiri putna pravca u dužini od 267 kilometara – ova investicija je vredna 3,7 milijardi evra. U planu je rekonstrukcija i modernizacija železničkih linija, njihovo povezivanje sa lukama na Jadranskom moru, infrastrukturno opremanje industrijskih zona i obezbeđivanje tehnologije za proizvodnju energije iz otpada.

Aktivnosti DFC usmerene su i na jačanje inicijative poznate kao mini-Šengen. Kao što smo u Udruženju banaka više puta naglašavali, ova vrsta regionalnog povezivanja od izuzetnog je značaja za sve zemlje regiona, a za Srbiju možda najviše. Tržište regiona, bivše Jugoslavije i okolnih zemalja, dobro je poznato privrednicima iz Srbije, ono poznaje srpske brendove. Sa većinom ovih zemalja Srbija ima veliki suficit u razmeni, a jačanje mini-Šengena doprineće ukidanju barijera između nacionalnih tržišta, intenziviranju razmene i porastu međusobnih investicija.

Plan DFC predviđa i garantnu šemu, odnosno finansijsku pomoć za mala i srednja preduzeća. Poznato je da je upravo ovaj deo privrede najteže pogođen krizom izazvanom pandemijom Covid-19. DFC je obezbedio jednu milijardu dolara kredita, a Srbija bi sa svoje strane pokrila rizik prvog gubitka. Svoje projekte su američkoj strani tokom posete već predstavile brojne domaće kompanije.

Četvrta oblast su uslovi za razvoj privrede, a peta poljoprivreda i podrška mladim poljoprivrednicima.

Iz navedenog plana vidi se obim investicija koje planira američka razvojna agencija. Naše banke s pažnjom prate realizaciju ovog ambicioznog plana i spremne su da se uključe u distribuciju planiranih sredstava.

Da bi se realizovala ova složena aktivnost, dogovoreno je osnivanje više timova. Tim za ekonomsku saradnju pod okriljem dve privredne komore, sa kancelarijama u Beogradu i Prištini, formiraće nekoliko posebnih grupa. Ministarstvo saobraćaja i infrastrukture je formiralo tim koji će sa DFC raditi na projektima.

Najavljeno je formiranje radne grupe sa fokusom na održivoj energiji, a čije projekte bi DFC takođe mogao finansijski da podrži. Reč je o mogućoj podršci otvaranju regionalne elektrane na bazi litijumske tehnologije, te istraživanju i eksploataciji litijuma i drugih dragocenih ruda. Na teritoriji naše zemlje nalazi se 10 odsto svetskih rezervi ovog alkalnog metala koji se koristi u proizvodnji baterija i za kojim tražnja konstantno raste. Tako se, primera radi, kod Loznice nalazi jedno od najvećih svetskih nalazišta jadarita iz kojeg se izdvaja litijum, a rezerve rude u Jadarskom basenu, u Zapadnoj Srbiji, procenjuju se na 136 miliona tona. Smatra se da se nalazište rude jadarit nalazi na još 20 lokacija širom Srbije koje se prostiru sve do Zaječara, i da su na tim mestima rezultati početnih istraživanja još impresivniji.

Predviđeno je i osnivanje posebnog tima za izgradnju fabrike stakla koja bi staklenom ambalažom snabdevala proizvođače alkoholnih i bezalkoholnih pića u celom regionu.

Poseban tim baviće se agro turizmom, kako bi se istražile mogućnosti i iskoristili potencijali za razvoj održivog turizma zasnovanog na prirodnim resursima turističkih destinacija kao što su Kopaonik, Brezovica i Rugovska klisura.

Rad EXIM (*Export-Import Bank of the United States*) banke, kao izvozno-uvozne banke SAD, komplementaran je radu DFC-a i one mogu raditi zajedno na različitim dugoročnim projektima koji jačaju veze između regiona i ekonomija.

Sasvim je izvesno da je ključni cilj razvoj i da ćemo zajedno biti angažovani na istom zadatku – jačanju infrastrukture, jačanju privrede, a posebno otvaranju novih radnih mesta. Pored Narodne banke Srbije kao ključne instituticije koja uspešno čuva monetarnu i finansijsku stabilnost, i Udruženje banaka Srbije kao predstavnik bankarske industrije biće jedan od veoma važnih oslonaca na tom putu. Posle značajne uloge koju je odigralo u podršci građanima i privredi tokom prvog talasa pandemije, Udruženje je spremno da preuzme odgovornost i u sledećoj fazi – razvojnim projektima koje donosi američki DFC.

Glavni i odgovorni urednik
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editorial

Regional Development Incentive from Washington

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The agreement signed by Serbia and Kosovo during the recent visit to President Trump shows a possibly historical capacity. While political analysts and a significant portion of the public have been focusing on the political relations of Belgrade and Priština, businessmen see new opportunities on an economic level. This goes hand in hand with the activities planned by the US International Development Finance Corporation – an American international development bank, cooperating with the private sector and financing solutions for the largest challenges faced by developing countries.

After the agreement was signed, the representatives of the DFC headed to Serbia and Kosovo with notable speed, in order to launch the implementation of the agreed. The distinguished members of this delegation speak for themselves, as well as the fact that regional leadership has been entrusted to a man originally from this region.

According to the announcements given during the DFC delegation's visit to Belgrade, financial aid can be expected in at least five fields. This should speed up the development of the Serbian economy, stimulate the creation of new jobs, and help with joint projects in the fields of industry and ecology.

Such a confident entry of the DFC will certainly affect other investors, and not only those from the USA. As a reminder, according to the data of the National Bank of Serbia, the inflow from direct foreign investments in Serbia amounts to more than 8% of the GDP. Serbia is a leader in this regard, with about 60% of total inflow into the West Balkans, and the arrival of the DFC is creating an opportunity to fortify this leadership position. Foreign investments will lead to the general strengthening of the business climate and the advancement of business conditions for all legal entities. The same holds true for the financial sector.

Infrastructural projects have been purposefully chosen as the key area of cooperation. Out of about EUR 4 billion, the largest amount has been set aside for the "Peace Highway" which would connect Niš and Priština with 4 roads and a total of 267 kilometres – this is an investment worth EUR 3.7 billion. These plans also include the reconstruction and modernisation of railway tracks, the connection of the railway network to the Adriatic Sea ports, the infrastructural refurbishment of industrial zones and securing technologies for energy production from waste.

The activities of the DFC are also directed towards strengthening the so-called mini-Schengen initiative. As the Association of Serbian Banks has stated many times before, this type of regional interconnection is extremely important for all countries in the region, and, perhaps, most important for Serbia. The regional market, encompassing the former Yugoslav countries and the neighbouring countries, is quite familiar to Serbian entrepreneurs, and it is familiar with Serbian brands. Serbia has a large surplus in trade with most of these countries, and the strengthening of the mini-Schengen will aid the abolishment of obstacles between international markets, as well as lead to an increase in trade and mutual investments.

The DFC's plan also includes a guarantee scheme, i.e. financial aid for small and medium enterprises. This section of the economy is known to have been the one most affected by the crisis caused by the COVID-19 pandemic. The DFC has set aside a USD 1 billion loan, and Serbia would, in turn, cover the first loss risk. Many domestic companies have already presented their projects to the American representatives, during their visit.

The fourth segment are the economic development conditions, and the fifth are agriculture and support of young farmers.

The mentioned plan demonstrates the scope of the investments planned by the DFC. The banks in Serbia are carefully monitoring the realisation of this ambitious plan and are ready to join in on the distribution of the planned assets.

In order to realise this complex activity, it has been agreed to establish several teams. The Economic Cooperation Team, established under the two chambers of commerce, with offices in Belgrade and Priština, will form several task forces. The Ministry of Transport and Infrastructure has formed a team that will work with the DFC on their projects.

The formation of a task force focusing on sustainable energy has been announced, and the DFC could also financially support their projects. Namely, with regards to the possibility of supporting the opening of a regional power plant based on lithium technology, along with the research and exploitation of lithium and other precious ores. The territory of Serbia holds a 10 percent share of the world's reserves of this alkali metal, which is used in the production of batteries and the demand for which is constantly growing. For example, one of the world's largest deposits of jadarite, from which lithium is extracted, is located near Loznica, while the reserves of ore in the Adriatic basin, in Western Serbia, are estimated at 136 million tons. It is believed that deposits of jadarite ore can be found in another 20 locations throughout Serbia that extend all the way to Zaječar, and that the results of the initial research are even more impressive in those places.

It is also planned to establish a special team for the construction of a glass factory that would supply producers of alcoholic and non-alcoholic beverages in the entire region with glass packaging.

A special team will deal with agricultural tourism, in order to explore the possibilities and use the potentials for the development of sustainable tourism based on the natural resources of tourist destinations such as Kopaonik, Brezovica and Rugova Canyon.

The work of the EXIM Bank (Export-Import Bank of the United States) is complementary to the work of the DFC and they can work together on various long-term projects that strengthen ties between different regions and their economies.

It is quite certain that the key goal is development, and that together we will be engaged in the same task - strengthening the infrastructure, the economy, and particularly the creation of new jobs. In addition to the National Bank of Serbia, as the key institution that successfully preserves monetary and financial stability, the Association of Serbian Banks, as a representative of the banking industry, will be one of the very important pillars in this endeavour. After the significant role it has played in supporting citizens and the economy during the first wave of the pandemic, the Association is ready to take responsibility in the next phase – with the development projects brought by the American DFC.

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Rezime: Savremene uslove poslovanja karakteriše sve dinamičnije i turbulentnije okruženje, te stoga najveći izazov sa kojim se suočavaju organizacije jeste kako postojeću organizacionu kulturu transformisati u pravcu organizacije koja uči i koja se brzo prilagođava promenama u okruženju. Turbulencije na srpskom finansijskom tržištu neretko dovode do promena u vlasničkim strukturama banaka, a što uzrokuje manje ili veće promene strateških orijentacija istih. Ovaj rad ima za cilj da na bazi praktičnih saznanja pojasni postojanje međuzavisnosti između strategije i organizacione kulture banke, kao dva krucijalna koncepta u upravljanju finansijskim institucijama. U radu će biti korišćen metod studije slučaja na primeru A banke. Korisnost rada ogleda se u tome što će prezentovana saznanja pružiti uvid zaposlenima A banke, ali i ostalim učesnicima finansijskog tržišta, u značaj pokretanja aktivnosti koje doprinose kreiranju i održavanju adekvatne organizacione kulture unutar bankarskog sistema. Takođe, rad može biti od koristi i ostalim pravnim subjektima koji posluju unutar drugih delatnosti.

Ključne reči: organizacija, organizaciona kultura, segment bankarstva, strategija, banka, finansijske institucije

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Uvodna razmatranja

Organizaciona kultura se obično definiše kao sistem predpostavki, verovanja, vrednosti i normi ponašanja koje su članovi jedne organizacije razvili ili usvojili kroz zajedničko iskustvo (Stefanović i ostali, 2000). Kao takva organizaciona kultura predstavlja jedinstveni karakter određene organizacije. Organizaciona kultura obuhvata zajedničke vrednosti i uverenja koja vremenom kreiraju određene norme ponašanja pri rešavanju problema (Hofstede i ostali, 1990).

Organizaciona kultura je socijalni fenomen koji nastaje i menja se kroz interakciju zaposlenih, međusobno i sa okruženjem (Cvijanović, 2004). Uz organizacionu kulturu se često spominje i termin organizaciona klima, što nije isto što i organizaciona kultura, već predstavlja uži pojam u komparaciji sa organizacionom kulturom. Organizaciona klima bi se jednostavno mogla objasniti kao odraz trenutnog stanja u kojem se nalazi organizaciona kultura, odnosno kao raspoloženje koje trenutno vlada u određenoj organizaciji (preduzeću ili finansijskoj instituciji). Organizaciona kultura je osnovni element socijalizacije svakog novozaposlenog, a na bazi koje se isti formalno ili neformalno upućuju u pravila ponašanja, odnosno ponašanja koja su poželjna, ponašanja koja se tolerišu, ponašanja koja se ne tolerišu, pravila oblačenja (tzv. dress code), načine donošenja odluka, liderstvo i sl. (Milanović i ostali, 2010).

Organizaciona kultura predstavlja osnovu za rešavanje problema i ista podučava nove članove u cilju stvaranja pravih načina percipiranja i razmišljanja u odnosu na probleme sa kojima se članovi susreću (Schein, 1991). Kahler je isticao da bolje funkcioniše organizacija koja je bazirana na kolektivnim vrednostima i modelima ponašanja u odnosu na organizaciju u kojoj je zastupljena formalna strukturna podela (Kahler i ostali, 1996).

Cilj predmetnog istraživanja usmeren je na identifikaciju postojanja zavisnosti između strategije A banke i organizacione kulture iste. Prezentovana saznanja mogu biti od koristi odgovornom osoblju A banke jer su u predmetnom radu sumirani primenjeni oblici uticaja na organizacionu kulturu banke. Takođe, predmetni rad može biti od značaja ostalim učesnicima na finansijskom tržištu Srbije, koji imaju priliku da vide kako konkurencija gradi svoju organizacionu kulturu. Posebnu korist mogu imati banke koje imaju sličnu strategiju kao A banka, a koja se ogleda u orijentaciji na segment malih i srednjih preduzeća (SME) i segment stanovništva. Pored učesnika na finansijskom tržištu, rad može biti od koristi i ostalim pravnim licima koji posluju izvan segmenta bankarstva, odnosno koji posluju u drugim privrednim granama i delatnostima.

Iako postoje studije koje se bave istraživanjem odnosa strategije i organizacione kulture, originalnost predmetnog rada se ogleda u tome što je isti orijentisan na segment bankarstva, odnosno na konkretan slučaj (case study), kao i iz razloga što u Srbiji i regionu gotovo da ne postoje radovi koje se bave pomenutom temom u kontekstu bankarstva.

Pregled literature

Istraživanje odnosa između strategije i organizacione kulture je tema koja zaokupljuje pažnju mnogih istraživača, ali i menadžera. Poseban akcenat se stavlja na analizu uticaja strategije na jačanje ili promenu organizacione kulture kroz proces institucionalizacije strategije (Janićijević, 2012). Potvrda postojanja međuzavisnosti između strategije i organizacione kulture data je u studiji sprovedenoj 2011. godine od strane Klajna (Klein, 2011).

Obimna istraživanja pomenutog odnosa su upravo sprovedena u Australiji, pri čemu su autori pošli od pretpostavke postojanja međusobne uslovljenosti između organizacione kulture i strategije. Rezultat istraživanja je pokazao postojanje visoke korelacije između organizacione kulture i strategije, dok su autori izveli zaključak da je za implementaciju specifične strategije neophodno graditi specifičnu organizacionu kulturu, a da istovremeno važi i suprotno da specifična organizaciona kultura vodi ka izboru i implementaciji specifične strategije (Baird i ostali, 2007). U prilog postojanja visoke zavisnosti između organizacione kulture i strategije svedoči i studija sprovedena u Rumuniji (Vele, 2013).

Studija autora Gupte je obuhvatila različite sektore ekonomije (različite delatnosti) sa ciljem dokazivanja da je odnos između organizacione kulture i strategije podjednako važan u svim segmentima ekonomije (Gupta, 2011). Istraživanje je potvrdilo da svaka izmena strategije od strane preduzeća mora biti praćena prilagođavanjem organizacione kulture izmenjenoj strategiji, jer bi u protivnom implementacija izmenjene strategije bila neuspešna. Autor je istakao da organizaciona kultura utiče na ponašanje zaposlenih i ponašanje menadžmenta, a koje vodi ka realizaciji postavljene strategije, zbog čega je neophodan sklad između organizacione kulture i strategije preduzeća.

Postojanje međuzavisnosti između organizacione kulture i strategije preduzeća je potvrđeno i u studiji sprovedenoj 2011. godine od strane Naranha i ostalih. Pomenuta studija dokazuje postojanje uticaja organizacione kulture na izbor strategije ulaska na tržište, u smislu izbora između: strategije inovacije i strategije imitacije. Studija ističe da strategija inovacije podrazumeva da preduzeće inovator uvek nastoji da prvo plasira proizvod ili uslugu na tržište. Strategija imitacije podrazumeva da preduzeće imitator na tržište proizvoda i usluga plasira sličan proizvod, ali nakon što je preduzeće inovator plasiralo svoj proizvod/uslugu. Inovativnost zahteva određene karakteristike i ponašanje preduzeća kao što je: fleksibilnost, otvorenost za promene, preduzetništvo, spremnost za prihvatanje rizika i sl. Sa druge strane imitacija kao strategija podrazumeva veću kontrolu i stabilnost, manji rizik i sl. Studija potvrđuje da organizaciona kultura može značajno stimulisati ili ograničiti prethodno pomenuta ponašanja i stavove, i na taj način uticati na izbor finalne strategije preduzeća: strategije inovacije ili strategije imitacije (Naranjo i ostali, 2011). Da li će se preduzeće ponašati kao inovator ili imitator zavisi od mnogo faktora. Suarez i ostali potvrđuju da izbor strategije preduzeća zavisi od razvijenosti tržišta, tehnološkog napretka, od vrste proizvoda koji se plasira i sl (Suarez i ostali, 2007). Kada su rast tržišta i tehnološki razvoj preduzeća zadovoljavajući, inovatori imaju najveće šanse da ostvare benefite od prvog ulaska na tržište. Sa druge strane, postoje studije koje su stava da brži tehnološki razvoji u industriji otežavaju ranim učenicima da zadrže svoje konkurentske prednosti, dok kasniji učesnici mogu koristiti nove tehnologije za proizvodnju proizvoda koji su napredniji i privlačniji za kupce. Potvrde ovakvih statova se mogu naći u sledećim studijama: Kristensen (1997), Bolman i ostali, (2002), Franko i ostali, (2009), Žu i ostali (2012), Fosfuri i ostali (2013). Lejn (1980) i Preskot i ostali (1977) su isticali da u situaciji male diferencijacije proizvoda na tržištu, kasniji učesnici ulažu više sredstava kako bi pridobili tržišni udeo.

U 2009. godini, u Kini je sprovedena studija koja je akcenat stavila na odnos između strategije preduzeća i strategije menadžmenta ljudskih resursa (human resource management - HRM). Istraživanje je bazirano na predpostavci da međusobna usaglašenost organizacione kulture i strategije vodi ka postizanju boljih rezultata preduzeća. Autor je postavio sledeću hipotezu „efikasnost HR strategije zavisi od njene usaglašenosti sa organizacionom kulturom, ali i od usaglašenosti sa strategijom preduzeća". Studija razlikuje dve vrste HR strategija: strategija podsticaja i strategija uključivanja. Specifičnosti strategije podsticaja su: orijentacija na niže troškove zaposlenih, plaćanje zaposlenih prema postignutim rezultatima, odnosno plaćanje prema radnom učinku, jasna podela rada, striktna kontrola i monitoring zaposlenih, jasno preciziran odnos između postignutih rezultata zaposlenih i ostvarivanja bonusa i sl. Zbog prethodno navedenih odlika, strategija podsticaja je zasnovana na predpostavci da je glavni motivacioni faktor za maksimalnu efikasnost radnika isključivo zarada zaposlenih. Strategija uključivanja podrazumeva veću autonomiju zaposlenih, veći naglasak na edukaciji zaposlenih, veća raznolikost posla kojim se zaposleni bave, a zbog čega je pretpostavka da se potpuna iskorišćenost ljudskih resursa bazirana na ovoj strategiji dostiže zbog internih faktora podsticaja zaposlenih, kao što su uključenost u organizaciju, izgradnja sopstvene ličnosti, odnosno da ključni faktor motivacije nisu isključivo veće zarade zaposlenih. Prema ovoj studiji organizaciona kultura nema direktan uticaj na izbog HR strategije, odnosno ista ima indirektan uticaj na izbor HR strategije, a sve iz razloga što organizaciona kultura može podsticati određena ponašanja i stavove zaposlenih i na taj način biti determinanta izbora HR strategije preduzeća (Chow i Liu, 2009).

Istraživanje realizovano takođe u Kini potvrđuje postojanje međuzavisnosti između organizacione kulture i strategije inovacije. Istraživanje je sprovedeno na bazi podataka koji su prikupljeni od ukupno 183 kineskih preduzeća (n=183). Studija je bazirana na hipotezi „da veća usaglašenost između organizacione kulture i strategije inovacije" uzrokuje efikasniju i kvalitetniju implementaciju strategije inovacije, a koja je u studiji i potvrđena (Zhi i ostali, 2018).

U 2000. godini je sprovedena studija na primeru Nemačke virtualne organizacije Sigma. Studija je potvrdila postojanje međuzavisnosti između organizacione kulture i održivog upravljanja znanjem. U virtuelnim organizacijama održivo upravljanje znanjem znači uspostavljanje organizacione memorije koja je fleksibilna i prilagodljiva različitim zahtevima tržišta. Izgradnja organizacione memorije podrazumeva uključenost svih članova u njenu izgradnju. Članovi zajedničkim snagama kreiraju sadržaje, pravila, ciljeve i tako postaju deo organizacione kulture koja je neophodna da bi virtuelna organizacija opstala. Postizanje održivog upravljanja znanjem koje predstavlja deo strategije svake virtuelne organizacije je moguće uz kreiranje jake organizacione kulture, a što je potvrđeno u studiji (Lamken i ostali, 2000).

Podaci i metodologija

U osnovi rada leži istraživanje odnosa strategije banke i organizacione kulture banke, kao dve ključne determinante uspešnog upravljanja finansijskim institucijama. U radu je korišćen metod studije slučaja na primeru A banke. Istraživanje je sprovedeno prikupljanjem i analizom podataka vezanih za primenjene metode promene organizacione kulture A banke, a sve sa ciljem usklađivanja iste sa izmenjenom strategijom banke. Podaci su prikupljeni korišćenjem metode intervjuisanja koje je sprovedeno sa ispitanicima na različitim hijerarhijskim nivoima unutar A banke (član Uprave banke, više direktora različitih odeljenja, ostali zaposleni). Intervjuisanje je obavljeno u periodu od jula 2019. godine do septembra 2019. godine. Intervjuisanje je sprovedeno sa 50 ispitanika. Nije bilo ispitanika stranog porekla, iz razloga što među zaposlenima nije bilo istih. Sa druge strane, značajno je ukazati da je u periodu koji prethodi periodu istraživanja član uprave banke dugi niz godina živeo u inostranstvu (poreklom iz Austrije).

U situaciji promene strategije finansijske institucije, koja u praksi podrazumeva i promenu načina upravljanja, neretko se javlja potreba za promenom organizacione kulture. Povodom strateškog opredeljenja, značajno je istaći da je A banka, kao rezultat promene vlasničke strukture koja se desila u tokom 2016. godine, izmenila svoju stratešku orijentaciju. Ranija strategija je u značajnoj meri bila usmerena na velika pravna lica, dok je izmenjena strategija bazirana na većoj orijentaciji prema malim i srednjim preduzećima i segmentu stanovništva. Izmenjena strategija je stvorila potrebu za kreiranjem drugačije organizacione kulture, potrebu za menjanjem stilova ponašanja zaposlenih, navika zaposlenih, promenu orijentacije zaposlenih na primarnu ciljnu grupu i sl. Korišćenjem metode intervjuisanja i analizom prikupljenih podataka istražene su sve inicijative koje su preuzete od strane uprave A banke sa ciljem stvaranja adekvatne organitacione kulture, a koje su prezentovane u predmetnom radu.

Primenjene metode promene organizacione kulture unutar A banke

Kako promene organizacione kulture zahtevaju promene stavova i vrednosti zaposlenih, a u skladu sa tim i promenu ponašanja zaposlenih, promena organizacione kulture se može realizovati kroz komuniciranje poželjnih stavova i vrednosti zaposlenih i to posredstvom četiri metode komunikacije:

- *direktno verbalno komuniciranje,*
- *neverbalno komuniciranje,*
- *simboličko komuniciranje,*
- *indirektno komuniciranje kroz promenu strukture i sistema.*

Direktno verbalno komuniciranje može biti realizovano kroz obavljanje sastanaka tipa „jedan na više" na kojima se prezentuju potrebne promene u postojećim vrednostima i vrednosti kojima treba težiti.

Direktno verbalno komuniciranje se obavlja i u obliku sastanaka tipa „jedan na jedan" sa ciljem eliminisanja nepoželjnih stavova i prenošenja ciljanih stavova i vrednosti. Uticaj na organizacionu kulturu posredstvom direktnog verbalnog komuniciranja je zadatak koji najčešće pripada lideru organizacije i kao takav njegova uspešnost u velikoj meri zavisi od kredibiliteta samog lidera, ali i od njegove sposobnosti interpersonalnog komuniciranja (veštine ubeđivanja). Takođe, pisano komuniciranje predstavlja jedan od alternativnih metoda prenošenja željenih stavova i ponašanja, ali je ovaj vid komunikacije manje fleksibilan u odnosu na verbalnu komunikaciju i po pravilu je masovnog karaktera.

Direktno verbalno komuniciranje kao metod promene organizacione kulture je u slučaju A banke intenzivno korišćena pri čemu je isti implementiran u sledećim oblicima:

- *intenzivno održavanje sastanaka između članova top menadžmenta sa srednjim menadžerima,*
- *konstantno održavanje sastanaka između lidera banke i operativnih menadžera, ali i sastanaka između lidera banke i službenika, što nije tipično ponašanje koje egzistira u ostalim konkurentskim finansijskim institucijama. Dakle, prisutna je intenzivna komunikacija lidera sa svim hijerarhijskim nivoima, sa namerom davanja jasnih smernica u kom pravcu je potrebno menjati stavove, vrednosti i ponašanja zaposlenih,*
- *kvartalno održavanje sektorskih sastanaka koji vode srednji menadžeri sa ciljem prezentovanja trenutnog finansijskog stanja A banke i komparacija istog u odnosu na postavljene ciljeve, a što ima za cilj ukazivanje na dalje poželjne oblike ponašanja koji će doprineti ostvarivanju postavljenih ciljeva,*
- *pisano komuniciranje poželjnih stavova, u smislu slanja imejlova pohvale od strane top manadžmenta za timove koji su na kvartalnom nivou dostigli postavljene ciljeve u pogledu obima plasiranih kredita, ostvarenih priliva po naknadama, broja izdatih garancija, akvizicija novih klijenata, iznosima deponovanih sredstava i sl., a sve sa namerom podsticanja poželjnih ponašanja ostalih zaposlenih u perspektivi,*
- *pisano komuniciranje – na kvartalnom nivou lider banke upućuje imejl svim zaposlenima sa osvrtom na trenutno finansijsko stanje banke i planove za naredni kvartal,*
- *pisano komuniciranje - sistemski generisani imejlovi koji se na mesečnom nivou šalju svim zaposlenima sa sadržajem poželjnog ponašanja, vrednosti i verovanja (npr. podsećanje na poverljivost informacija, na poželjna ponašanja u ophođenju prema klijentima, podsećanje na bankarsku etiku i sl.).*

Neverbalno komuniciranje kroz ponašanje lidera organizacije je još jedan od vidova strategije promene organizacione kulture. Menadžeri svojim ponašanjem postaju reper za poželjno ponašanje zaposlenih. Dakle, menadžeri svojim ponašanjem šalju jasne poruke zaposlenima o tome šta je poželjno ponašanje, odnosno šta nije poželjno ponašanje.

Simboličko komuniciranje je efikasno sredstvo prenošenja željenih poruka o promeni stavova (Petković i ostali, 2006). Menjajući simbole, menadžment šalje jasnu poruku zaposlenima koje predpostavke i ponašanja treba menjati i u kom smeru. Promena simbola na transparentan način signalizira zaposlenima potrebu da promene svoje individualne oblike ponašanja. Budući da su zaposleni stalno i direktno izloženi dejstvu simbola, skloni su prihvatanju novih značenja koje simboli nose, a zbog čega su efekti simboličkog komuniciranja izvesni.

Simboličko komuniciranje se u bankarskoj praksi svakodnevno koristi, a posebno u situaciji izmenjene strateške orijentacije. Simboličko komuniciranje se može realizovati kroz upotrebu materijalnih simbola, jezičkih simbola i simbola ponašanja (rituala).

Materijalni simboli su sve materijalne stvari koje nose određenu poruku i ovakav vid komunikacije je u bankarstvu izuzetno prisutan. U gotovo svim bankama, pa i u slučaju A banke, sve poslovnice izraženo koriste materijalne simbole:

- *sam izgled poslovnice i lokacija na kojoj se ista nalazi predstavlja materijalni simbol koji šalje određenu poruku,*
- *način oblaćenja zaposlenih (tzv. dress code) je materijalni simbol kojem se u bankarstvu poklanja posebna pažnja, a pre svega u delu zaposlenih koji imaju direktne kontakte sa klijentima, a koji po pravilu imaju uniformisan poslovni izgled,*
- *plakati unutar ekspozitura sa jasno naznačenim porukama,*
- *flajeri sa porukama direktno upućenim klijentima, ali i indirektno upućenim zaposlenima kroz smernice o poželjnom ponašanju sa ciljem realizacije poruke upućene klijentu,*
- *brendiranje izloga poslovnica uz slanje poruka klijentima i zaposlenima,*
- *logotip je takođe jedan od izuzetno značajnih materijalnih simbola koji sa sobom nosi određene poruke i znak je prepoznatljivosti same organizacije ili finansijske institucije i sl.*

Korišćenjem različitih slogana banke nastoje da kreiraju određene stavove, kako kod zaposlenih, tako i kod klijenata, i da po tome postanu prepoznatljive na bankarskom tržištu. Jedan od slogana na srpskom bankarskom tržištu je "Gde su 2+2=4", a što iz perspektive klijenta simbolizuje preciznost u poslovanju, dok sa druge strane daje povratnu poruku zaposlenima da se moraju maksimalno profesionalno ophoditi prema poslu, odnosno biti pouzdan poslovni partner svojim klijentima.

Praksa A banke govori u prilog aktivnog korišćenja simboličkog komuniciranja kroz upotrebu simbola ponašanja, odnosno rituala, na način da se u čast ljudi koji su postigli postavljene ciljeve organizuju rituali tj. proslave kojima pored istaknutih zaposlenih prisustvuju i članovi uprave banke. Ovakav ritual ima za cilj slanje poruka o poželjnom ponašanju ostalim zaposlenima, a koje se zaposlenima prosleđuju putem elektronskih vidova komunikacija (imejlova, intraneta i sl.).

Promena strukture organizacije može biti efikasan način menjanja organizacione kulture unutar finansijske institucije. Ponašanje zaposlenih je u značajnoj meri uslovljeno formalnom podelom uloga unutar organizacije i na taj način je zaposleni usmeren na određene svakodnevne aktivnosti, odnosno na rutinska ponašanja. Zbog prethodno istaknutog, promena organizacione strukture može značajno uticati na promenu ponašanja zaposlenih, a time i na promenu organizacione kulture. U slučajevima menjanja strateškog opredeljenja, kao što je slučaj A banke, promena strukture organizacije je neminovna pojava, a sve sa ciljem zadovoljenja potreba za kadrovima na pozicijama koje su prema izmenjenoj strategiji postale traženije (veći broj zaposlenih u segment malih i srednjih preduzeća i segmentu stanovništva, smanjenje broja zaposlenih u segmentu velikih preduzeća, povećanje broja operativnih menadžera u segmentu koji je strateški važan za banku, ukidanje radnih pozicija na poslovima koji nisu u interesu banke, gašenje neprofitabilnih poslovnica, otvaranje novih poslovnica za koje se proceni da bi bile profitabilne, ukidanje proizvoda koji su prema oceni banke neprofitabilni i sl.). Prema izmenjenoj strategiji A banke, iz kataloga proizvoda su izbačeni stambeni krediti, a što je uzrokovalo ukidanje radnih pozicija vezanih za odobravanje stambenih kredita.

Pored promenjene organizacione strukture i ***promena sistema u preduzeću*** može uticati na ponašanje zaposlenih. Tako npr. zbog veće orijentacije na mala i srednja preduzeća A banka nastoji da prati svetske bankarske trendove u smislu maksimalne automatizacije procesa, te se kontinuirano radi na uvođenju novih sistema (novih automatskih i poluautomatskih odobrenja) i ekspanzivnom razvoju svih vrsta e-banking i m-banking proizvoda (odobravanja kredita bez odlaska u banku), a što ima direktan uticaj na ponašanje zaposlenih. Takođe, potreba za automatizacijom procesa je uzrokovala značajne izmene u organizacionoj strukturi A banke, u smislu da se značajno povećava potreba za IT stručnjacima koji se bave daljom automatizacijom procesa, dok se, sa druge strane, smanjuje potreba za profilima iz sfere ekonomije i prava. Ovakve promene u strukturi zaposlenih su opšti trend u segmentu bankarstva i iste iziskuju izmene u organizacionoj strukturi banke, odnosno otvaranje novih sektora i ujedno ukidanje sektora za kojima prestaje potreba.

Sistem nagrađivanja i kažnjavanja predstavlja još jedan način na koji se može uvesti željeno ponašanje zaposleniih. Takođe, ***sistem unapređivanja i degradacije*** zaposlenih može biti efikasan način indukovanja željenog ponašanja i isti se aktivno koristi u slučaju A banke.

Trening i obuka zaposlenih se mogu koristiti za usmeravanje na željeno ponašanje. Novozaposleni A banke prolaze intenzivnu obuku koja im omogućava uvođenje u sistem i upoznavanje sa pravilima ponašanja. Kreiranjem sadržaja obuke, novozaposleni se usmeravaju na poželjno ponašanje, odnosno putem obuke novozaposleni se profilišu na adekvatan način. Sa druge strane, postojeći radnici A banke su kontinuirano izloženi treninzima sa ciljem uvežbavanja poželjnih ponašanja i usavršavanja znanja. Takođe, u situaciji promovisanja zaposlenog na višu poziciju, isti prolazi dodatne edukacije, a sve u cilju postizanja daljeg profilisanja i kreiranja poželjnog ponašanja zaposlenog. Prema Kipu (2002), trening zaposlenih je „virtuelna komponenta" u procesu promene organizacione kulture koja može obezbediti posvećenost zaposlenih samoj organizaciji, a što bi značilo maksimalno iskorišćenje potencijala zaposlenih. Studija sprovedena 2015. godine bavila se istraživanjem odnosa između obuke zaposlenih i posvećenosti zaposlenih organizaciji. Preduzeće na kojem je sprovedeno istraživanje je Discount House u Lagosu, koje je locirano u jugozapadnoj Nigeriji. Studija je otkrila da obuka zaposlenih povećava posvećenost radnika prema organizaciji (Ajibade i ostali, 2015). Postojanje jasne povezanosti između osposobljenosti svakog zaposlenog i dugoročnog rasta produktivnosti organizacije je takođe potvrđeno u studiji sprovedenoj od strane Slavkovićeve. Učenje i razvoj radnika može biti moćno sredstvo za pridobijanje i zadržavanje zaposlenih, jer ulaganje u njihovo napredovanje ukazuje na to da organizacija ceni svoje radnike, podstiče njihovu karijeru, kroz sistem nagrađivanja zaposlenih podstiče dalje uspehe zaposlenih, a što istovremeno čini i samu organizaciju profitabilnijom (Slavković i ostali, 2019).

Pored promene vrednosti, verovanja i načina ponašanja postojećih zaposlenih, alternativno se može koristiti i ***strategija zamene ljudi*** čime se u sistem inkorporiraju novozaposleni sa već kreiranim adekvatnim stavovima i ponašanjem. Ovakva strategija je gotovo podrazumevana u situaciji promene vlasničke strukture banke, koja sa sobom nosi promenu lidera banke. Obzirom da nije moguće zameniti sve zaposlene u sistemu, ova strategija se može koristiti samo kao dopuna ostalim strategijama.

Homogenost organizacione kulture na srpskom bankarskom tržištu

Strukturu organizacione kulture čine kognitivne komponente i simboličke komponente. Kognitivne komponente organizacione kulture čine: verovanja, očekivanja, etika, način mišljenja, norme ponašanja, pogled na svet i sl. Kognitivne komponente organizacione kulture predstavljaju „srce organizacione kulture“ i obuhvataju pretpostavke, vrednosti, norme ponašanja i stavove (Brawn, 1998). Kognitivne komponente predstavljaju vodič za tumačenje ponašanja zaposlenih (Alvesson, 2002). Simboličke komponente organizacione kulture su: jezik, žargon, rituali, fizički izgled, logotip i sl.

U pogledu kognitivnih komponenti organizacione kulture, kod banaka koje egzistiraju na srpskom bankarskom tržištu postoji prilična uniformisanost (npr. pravila ponašanja u standardnim zahtevima su prilično ujednačena nezavisno o kojoj banci je reč, pravila ophođenja prema klijentima su slična ili gotovo identična u svim bankama, norme ponašanja u komunikaciji sa višim hijerarhijskim nivoima su u značajnoj meri slične u bankarskom svetu, službenici koji se bave istim poslovima u različitim bankama imaju zajedničke ili slične poglede na svet).

Kada je reč o simboličkim komponentama, banke nastoje da svojim simbolima daju jasnu poruku o pouzdanosti i preciznosti, a opet svaka teži da bude individualizovana i posebna na tržištu. Fizički izgled poslovnica je veoma bitan simbolički element na bankarskom tržištu kojem svi učesnici finansijskog tržišta poklanjaju posebnu pažnju. Postoji prilična unifikacija po pitanju fizičkog izgleda ekspozitura i filijala na srpskom bankarskom tržištu, a sa druge strane i različitost u pogledu korišćenja različitih elemenata brendinga banaka.

Značajno je ukazati na evidentno postojanje uticaja nacionalne kulture na organizacionu kulturu u situaciji kada su članovi top menadžmenta banaka u Srbiji inostranog porekla, a što nije retka pojava. Bankarsko tržište Srbije trenutno čini 26 banaka, dok u 6 banaka funkciju predsednika izvršnog odbora imaju predstavnici stranog porekla. Lideri, kao takvi, sa sobom nose stavove, vrednosti i uverenja bazirana na njihovoj nacionalnoj kulturi. U praksi se neretko dešava nastojanje ino lidera da svoje stavove i verovanja inkorporišu u organizacionu kulturu banke u Srbiji. Bankarska praksa govori u prilog postojanja momenata u kojima različiti stavovi i uverenja donosioca odluka, uzrokovani različitim nacionalnim kulturama, dovode do sukoba stavova zbog nerazumevanja specifičnosti određenih poslovnih modela koji se razlikuju u odnosu na isti poslovni model u stranoj zemlji, a sve kao rezultat nacionalne kulture, odnosno nacionalnih specifičnosti (npr. ino donosioci odluka imaju manje razumevanja za delatnost građevinarstva u Srbiji, posebno u delu vremenskog perioda potrebnog za dobijanje građevinskih dozvola, a sve iz razloga što imaju unapred kreirane stavove po tom pitanju, koje nose iz svojih nacionalnih ekonomija). U 2010. godini u Bijeljini je sprovedena studija o uticaju nacionalne kulture na kreiranje stavova, verovanja i ponašanja donosioca odluka. Studija potvrđuje postojanje uticaja nacionalne kulture na kreiranje profila menadžera. Studija ističe da menadžeri, u vođenju međunarodnih poslovnih operacija, moraju poći od toga da stavovi i praksa jedne kulture neće uvek biti odgovarajući u drugoj kulturi. Studija naglašava da su za kreiranje određene strategije međunarodnog poslovanja bitni kompetentnost i fleksibilnost u domenu kulture (Ivanović B. i ostali, 2010).

Kada je reč o izgradnji organizacione kulture, zapravo se misli na stvaranje osećaja pripadnosti svakog pojedinca sistemu u kojem radi, a sve kroz viziju, strategiju, jasne ciljeve organizacije i jasne ciljeve na nivou svakog zaposlenog.

Zaključak

Rezultati empirijskih istraživanja i prezentovana saznanja na primeru A banke nesporno govore u prilog postojanja međusobne uslovljenosti između organizacione kulture i strategije banke, kao i da usaglašenost istih iz perspektive organizacije može značiti ostvarenje definisanih ciljeva. Promena vlasničke strukture A banke uzrokovala je promenu strategije banke, a što je u krajnjoj instanci imalo za rezultat potrebu za kreiranjem drugačije organizacione kulture. Zbog prethodno navedenog, preduzeća i finansijske institucije treba da teže postizanju harmonije između organizacione kulture i strategije.

Praksa pokazuje da usamljene promene simboličkih elemenata organizacione kulture, koje nisu ispraćene značajnim promenama kognitivnih kategorija, ne ostavljaju značajan dugoročan uticaj na organizacionu kulturu preduzeća, a zbog čega je potrebno simultano menjati obe komponente organizacione kulture, a što je u slučaju A banke uspešno ostvareno.

Precizno definisani ciljevi organizacije i zaposlenih uzrokuju željeno ponašanje i time grade adekvatnu organizacionu kulturu na nivou cele organizacije. Zbog prethodno pomenutog, odlika celokupnog bankarskog sistema Srbije je jasno targetiranje (postavljanje ciljeva) po hijerarhijskim nivoima na pozicijama na kojima je to moguće. Kontinuirani tehnološki napreci ostavljaju značajan uticaj na segment bankarstva, te se mnogi procesi u bankarstvu automatizuju, a što zahteva određene izmene u organizacionoj kulturi, promene u svesti i ponašanju zaposlenih.

U budućim istraživanjima korisno bi bilo obuhvatiti ostale učesnike finansijskog tržišta Srbije, ali i segment istraživanja proširiti na druge delatnosti (proizvodne detatnosti, ostale uslužne delatnosti i sl.).

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Strategy as a Determinant of Organizational Culture - Case Study: Bank A

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Summary: Modern business conditions are characterized by an increasingly more dynamic and turbulent environment, due to that, the biggest challenge for organizations is how to transform the existing organizational culture in the direction of an organization that learns and adapts quickly to changes in the business environment. Changes in the Serbian financial market often lead to changes in the ownership structures of banks, which caused larger or smaller changes in their strategic orientations. The aim of this paper is to clarify the dependence between strategies and organizational cultures of banks, as two crucial concepts in the management of financial institutions, all based on practical knowledge. The paper will use the case study method on the case of bank A. The usefulness of this paper is based on the fact that the presented knowledge will provide insight to the employees of bank A and other participants in the Serbian financial market about the importance of activities that contribute to creating and maintaining adequate organizational culture within the banking system. Also, this paper can be useful for all legal entities that operate within other business activities.

Keywords: organization, organizational culture, banking, strategy, bank, financial institutions

JEL: D23, L20, M14

Introduction

Organizational culture is usually defined as a system of assumptions, beliefs, values and norms of behavior that members of an organization have developed or adopted through shared experience (Stefanović et al., 2000). As such, the organizational culture presents the unique character of an organization. Organizational culture is defined as patterns of shared values and beliefs that, over time, produce behavioral norms adopted in solving problems (Hofstede et al., 1990).

Organizational culture is a social phenomenon that arises and changes through the interaction of employees, both with each other and with the environment (Cvijanović, 2004). Beside the organizational culture, another often mentioned term is organizational climate, which is not the same as organizational culture, because organizational culture is a narrower term compared to organizational culture. The organizational climate can be explained as the current organizational culture in a particular organization (enterprise or financial institution). Organizational culture is a primary element of socialization of every new employee and represents the base for formally or informally instructing an employee in the rules of respectfulness, behaviors that are desirable, behaviors that are tolerated, behaviors that are not tolerated, dress code, the ways of decision making, leadership etc. (Milanović et al., 2010).

Organizational culture is a base for solving problems which consistently teaches new members with the aim to create correct ways of perception, thinking in relation to those problems (Schein, 1991). Kahler pointed out that an organization based on collective values and patterns of behavior functions better in relation to an organization in which a formal structural division is represented (Kahler et al., 1996).

The aim of this paper is to clarify the dependence between the strategies of bank A and its organizational cultures. The presented knowledge can be useful for responsible persons of bank A in the sence of summarizing the implemented forms of influence on the organizational culture of the bank. Also, this paper can be usefull for all participants on the Serbian financial market who can see how the competition creates its adequate organizational culture. It can be particularly useful to the banks that have a similar strategy as bank A, which is reflected in the primary orientation on the segment of small and medium enterprises (SME) and the retail segment. Aside from the participants on the financial market, this paper can be useful for all legal entities that operate outside the banking segment, or that operate in other fields of business activities.

Although there are studies that research the relationship between strategy and organizational culture, the originality of this paper is reflected in the fact that it is oriented towards the case study of bank A which operates on the Serbial financial market. Also, it is important to mention that in Serbia and the region there are no papers covering this topic in the context of banking.

Literature Review

Research in the relationship between strategy and organizational culture is a topic that has the attention of many researchers and managers. Special attention is placed on the analysis of the influence of strategy on strengthening or changing the organizational culture through the process of institutionalization of the strategy (Janićijević, 2012). The confirmation of the existence of dependence between strategy and organizational cultures is given in a study conducted by Klein (2011).

Extensive research on this relationship has been conducted in Australia, with the authors starting from the assumption of the existence of interdependence between organizational culture and strategy. The results of the research showed the existence of high correlations between organizational cultures and strategies, while the authors concluded that, in order to apply a specific strategy, it is necessary to create a specific organizational culture (Baird et al., 2007). The research conducted in Romania speaks in favor of the existence of high correlation between organizational culture and strategy (Vele, 2013).

The study conducted by Gupta covered a different segment of the economy, with the aim of proving that the relation between organizational culture and strategy is equally important in all segments of the economy (Gupta, 2011). The research confirmed that all changes to the strategy by the company had to be adapted to the organizational cultures of the changed strategy, otherwise the implementation of the changed strategies would be unsuccessful. The author pointed out that organizational culture influences the behavior of employees and the behavior of managers, which leads to the realization of the defined strategy, which is why a balance is necessary between organizational culture and the company strategy.

The interdependence between organizational cultures and company strategy was confirmed in studies conducted in 2011 by Naranjo et al. The mentioned study shows the existence of the influence of organizational culture on the choice of the market entry strategy in terms of choosing between innovation strategy and imitation strategy. The study highlights that the innovation strategy implies that the innovator company always strives to place the product or service on the market. The imitation strategy implies that the imitator company places a similar product or service on the market, but only after the innovator company has placed its product/service. Innovation requires certain characteristics and behaviors of the company, such as: flexibility, openness to change, entrepreneurship, willingness to accept risks, etc. On the other hand, imitation as a strategy implies larger control and stability, less risk, etc. The study confirms that organizational culture can stimulate or limit the use of previously mentioned behaviors and attitudes and, thus, influence the choice of the company's final strategy: innovation strategy or imitation strategy (Naranjo et al., 2011). Whether a company will be an innovator or an imitator depends on many factors. Suarez and others confirm that the choice of company strategy depends on market development, technological progress, the type of product which is being marketed, etc. When market growth and technology development move at a smooth pace, early entrants have the best chance of benefiting from being the first to make a move on the market. There are several studies saying that rapid technological change in an industry makes it difficult for early entrants to maintain any advantage, while later entrants can use newer technology to produce products that are more advanced and more appealing to the customer. The confirmation of these ideas can be found in the following studies: Christensen (1997), Bohlmann et al., (2002), Franco et al., (2009), Zhu et al. (2012) and Fosfuri et al. (2013). Lane (1980) and Prescott et al. (1977) point out that, in a situation where there is little differentiation between products on the market, later entrants incur greater costs in their efforts to gain market share.

In 2009, a study was conducted in China that focused on the relationship between the enterprise strategy and human resource management (HRM) strategy. The research is based on the assumption that the mutual harmonization of the organizational culture and strategy leads to the company achieving better results. The author set the hypothesis "the effectiveness of the HR strategy depends on its compliance with the organizational culture, but also on the compliance with the company's strategy." The study distinguishes two types of HR strategies: incentive strategy and inclusion strategy. The specifics of the incentive strategy are: orientation towards lowering employee costs, paying employees according to the achieved results, clear division of labor, strict control and monitoring of employees, clearly specified relationship between achieved employee results and bonuses, etc. Due to the previously mentioned specifics, the incentive strategy is based on the assumption that the main motivating factor for worker efficiency is exclusively the earnings of employees. The inclusion strategy implies greater employee autonomy, better employee education and greater diversity of work. According to this strategy, the full utilization of human resources is achieved due to internal incentive factors such as involvement in the organization and building their own personalities, while the earnings of employees are not the main motivating factor.

According to this study, organizational culture has indirect influence on the choice of HR strategy, all because organizational culture can encourage certain behaviors and attitudes of employees, thus influence the company's choice of HR strategy (Chow and Liu, 2009).

Research conducted in China also confirms the existence of interdependence between the organizational culture and the innovation strategy. The research was conducted on data collected from 183 Chinese companies (n=183). The study is based on the hypothesis that a "greater coherence between the organizational culture and the innovation strategy" causes more efficient and better implementation of innovation strategy, which was confirmed in the study (Zhi et al., 2018).

In 2000, a study was conducted on the case study of the German virtual organization Sigma. The study confirmed the existence of interdependence between organizational culture and sustainable knowledge management. In virtual organizations, sustained knowledge management means establishing an organizational memory that is flexible and adaptive to changing requirements. Building up a permanent organizational memory means including all members of the organization in its construction. The participants work together on the development of content, rules and goals, thus becoming a part of the organizational culture, necessary for the survival of the organization. Achieving sustainable knowledge management, which is part of the strategy of virtual organization, is possible with creating a strong organizational culture, as was confirmed in a study (Lamken et al., 2000).

Data and Methodology

This paper is based on the research of the relationship between the bank's strategy and its organizational culture, as two key determinants of successful management of financial institutions. The paper uses the case study method on the example of bank A. The research was conducted by collecting and analyzing data related to the applied methods of changing the organizational culture of bank A, all with the aim of harmonizing it with the changed strategy of the bank. Data were collected using an interview method conducted with respondents at different hierarchical levels within bank A (a member of the Management Board, several directors of different departments, other employees). The interviews were conducted in the period from July 2019 to September 2019. Interviews were conducted with 50 respondents. There were no respondents of foreign origin due to the fact that there were none among the employees. On the other hand, it is important to point out that in the period preceding the research period, the member of the bank's management board was living abroad for many years (of Austrian descent).

When changing the strategy of a financial institution in practice implies a change in the management approach, there is often a need to change the organizational culture. Regarding strategic orientation, it is important to point out that bank A changed its strategic orientation, as a result of the change in ownership structure that occurred in 2016. It used to be significantly more focused on large legal entities, while the changed strategy was orientated towards small and medium enterprises and the retail segment. The changed strategy created the need for establishing a different organizational culture, the need to change the behavioral styles of employees and employee habits, to change the focus of employees towards a new target group etc. By utilizing the interview method and analyzing the gathered data, all initiatives undertaken by the management of bank A, with the aim of fostering an adequate organizational culture, were examined and are presented in this paper.

The Implemented Methods for Changing the Organizational Culture in Bank A

As changes in organizational culture require changes in the attitudes and values of employees, and changes in employee behavior, the strategy of changing organizational culture can be realized through communicating desirable attitudes and values of employees through four forms of communication:

- *direct verbal communication,*
- *non-verbal communication,*

- *symbolic communication,*
- *indirect communication through a change in the structure and system.*

Direct verbal communication can be realized via conducting "one-to-many" meetings, where the necessary changes in existing values and values to be pursued are presented. Direct verbal communication is also performed in the form of one-on-one meetings with the aim of eliminating undesirable attitudes and communicating targeted attitudes and values.

Influencing the organizational culture through direct verbal communication is a task that usually falls to the leader of the organization, and its success largely depends on the credibility of the leader, but also on their ability to communicate interpersonally. Also, written communication is one of the alternative methods of conveying desired attitudes and behaviors, but this type of communication is less flexible compared to verbal communication.

Direct verbal communication, as a strategy for changing the organizational culture, was intensively used in the case of bank A, and it was implemented in the following forms:

- *intensive holding of meetings with members of top and middle management,*
- *intensive holding meetings with bank leaders and operational managers, but also meetings between bank leaders and employees, which is not typical behavior that exists in other competing financial institutions. Therefore, there is an intensive communication of leaders with all hierarchical levels, with the intention of giving clear guidelines on how attitudes, values and behaviors of employees need to be changed,*
- *quarterly meetings organized by middle managers, with the aim of presenting the current financial position of bank A and comparing it in relation to the set results, which aims to indicate further desirable forms of behavior that will contribute to achieving the set targets,*
- *written communication of desirable attitudes, in terms of the top management sending e-mails of praise to the teams that have reached the set goals in terms of volume of loans, realized inflows of fees, number of issued guarantees, acquisition of new clients, amounts of deposited funds, etc., all with the intention of encouraging desirable behaviors of other employees in the future,*
- *written communication - at the quarterly level, the bank leader sends an e-mail to all employees with reference to the current financial condition of the bank and plans for the next quarter,*
- *written communication - systemically generated e-mails that are sent on a monthly basis to all employees , covering desirable behavior, values and beliefs (e.g. reminders on the confidentiality of information, desirable behaviors in dealing with clients, reminders on banking ethics, etc.).*

Non-verbal communication, through the behavior of the leaders of the organization, is another type of strategy for changing the organizational culture. By example of their own behavior, managers become a benchmark for desirable employee behavior. Thus, managers should use their behavior to send clear messages to employees about what is desirable behavior, or what is not desirable behavior.

Symbolic communication is an effective way of conveying the desired messages about changing attitudes (Petković et al., 2006). By changing the symbols used, the management sends a clear message to the employees about which assumptions and behaviors should be changed, and in which direction. Changing symbols in a transparent way signals the to employees to change their individual forms of behavior. Since employees are constantly and directly exposed to the effect of symbols, they tend to accept the new meanings that symbols carry, which is why the effects of symbolic communication are certain.

Symbolic communication is used in banking practice on a daily basis, especially in a situation of changed strategic orientation. Symbolic communication can be realized through the use of material symbols, linguistic symbols and symbols of behavior (rituals).

Material symbols are all things that carry a certain message and this type of communication is extremely present in banking. In almost all banks, and in the case of bank A, all branches use these material symbols:

- *the appearance of the branch and its location are a material symbol that sends a certain message,*
- *the employees' dress code is a material symbol which garners special attention in banking, especially for employees who have direct contacts with clients and these employees usually have a uniformed business look,*
- *posters inside the branches with clearly marked messages,*
- *leaflets with messages sent directly to clients, but also indirectly to employees through guidelines on desirable behavior,*
- *branding of windows of branch offices in order to send messages to clients and employees,*
- *the logo is also one of the very important material symbols which carries certain messages, while simultaneously being a recognizable sign of the organization or financial institution.*

By using different slogans, banks strive to create certain attitudes in cooperation with employees and clients, and thus become recognizable in the banking market. One of the slogans on the Serbian banking market is "Where is 2 + 2 = 4", which symbolizes precision in business, while on the other providing feedback to employees that they must be absolutely professional and a reliable business partners to their clients.

Bank A's practices are characterized by its active use of symbolic communication through the use of symbols of behavior, i.e. using rituals for employees who achieved their set goals (for example celebrations attended by prominent employees and members of the Bank's Management Board). This ritual's aim is to send messages about desirable behavior to other employees, forwarded to employees via means of electronic communication (e-mails, intranet, etc.).

Changing the structure of an organization can be an effective way to change the organizational culture within a company or financial institution. The behavior of employees is significantly conditioned by the formal division of roles within the organization, and the employee is, thus, focused on certain daily activities or routine behaviors. Due to the previously mentioned, changes in the organizational structure can significantly influence the change of employee behavior, and thus the change of the organizational culture.

In instances when the strategic orientation is undergoing a change, such as the case of bank A, a change in the structure of the organization is an inevitable phenomenon, all with the aim of meeting the needs for staff in positions that have become more sought after, according to the changed strategy. The change of strategic orientation, such as in the case of bank A, caused the change in the organizational structure, all with the aim of satisfying the needs for staff in positions that have become more sought due to the changed strategy (increase in the number of employees in the segment of small and medium enterprises and the retail segment, decrease in the number of employees in the segment of large enterprises, increase in the number managers in the segment that is strategically important for the bank, termination of positions which are not in the bank's interest, closing unprofitable branch offices, opening new branch offices that are estimated to be profitable, abolition of unprofitable bank products, etc.) According to the changed strategy of bank A, housing loans were excluded from the product catalog, which caused the termination of all employment positions related to housing loans in the loan approval process.

Moreover, ***a change of the company's system*** can affect the behavior of employees. Due to their orientation towards small and medium enterprises, bank A strives to follow global banking trends in terms of maximizing the automation of the approval process, continuously working on the introduction of new systems (new automatic and semi-automatic approvals) and expansive development of all types of e-banking and m-banking products (loan approval without going to the bank), which has a direct impact on employee behavior. The need for the process automation caused significant changes in the organizational structure of bank A, in the sense that the need for IT developers significantly increased, while, on the other hand, the need for profiles from the field of economics and law decreased. Such changes in the employee structure are a general trend in the banking segment, and they require changes in the organizational structure of the banks, i.e. the opening of new sectors, as well as the termination of sectors which are no longer needed.

The reward and punishment system is another way in which the desired behavior of employees can be introduced. Also, the ***system of promotion and demotion*** of employees can be an effective way of inducing the desired behavior, and it is actively used in the case of bank A.

Training of employees can be an adequate way for directing employees towards the desired behavior. New employees of bank A have intensive training that allows them to be introduced to the system and the rules of conduct. On the other hand, the existing employees of bank A are continuously exposed to trainings with the aim of practicing desirable behaviors and improving their knowledge. Also, in the situation of promoting an employee to a higher position, they are obliged to attend additional training, all with the aim of achieving further profiling and creating desirable behavior of the employee. According to Keep (2002), training of employees is a 'vital component' in the organizational process of cultural change, a behavioral device that can be used to secure workforce commitment and to realize the potential of employees. The study conducted in 2015 explored the relationship between training and employees' commitment to the organization. The organization on which the research was conducted is a Discount House in Lagos, South West Nigeria. A total of 150 completely filled questionnaires was utilized in this study. The study revealed that training increases employee's commitment to the organization (Ajibade et al., 2015). According to the research, there is a positive correlation between the competencies of each individual employee and the long-term growth of organizations' productivity was confirmed in a study conducted by Slavković. The education and development of employees can be a powerful recruitment and retention tool, because investment in employee's development demonstrates that the organization values its people and improves their career, by using the system of rewarding employees to improve their further success, which also makes the organization more profitable (Slavković et al., 2019).

Beside changing the values, beliefs and behavior of existing employees, the ***strategy of replacing people*** can be used, alternatively, since it incorporates new employees into the system who already possess adequate attitudes and behavior. This strategy is almost implied in the case of a changing ownership structure of the bank, which includes a replacement of the bank's leader. Taking into consideration that is not possible to replace all employees in the system, this strategy can only be used as a complement to other strategies.

Homogeneity of Organizational Culture in the Serbian Banking Market

The structure of organizational culture consists of cognitive components and symbolic components. Cognitive components of organizational culture include: beliefs, expectations, ethics, way of thinking, norms of behavior, worldview, etc. The cognitive components of organizational culture represent the "heart of organizational culture" and include assumptions, values, norms of behavior, and attitudes (Brawn A., 1998). Cognitive components are a guide for interpreting employee behavior (Alvesson M., 2002). The symbolic components of organizational culture are: language, jargon, rituals, physical appearance, logo, etc.

In terms of cognitive components of organizational culture in the banks that exist in the Serbian banking market, there is considerable uniformity (for example the rules of conduct in the standard requirements are fairly uniform in all banks, the rules of treatment of clients are similar or almost identical in all banks, norms of conduct in communication with higher hierarchical levels are significantly similar in the banking world, employees on the same position in different banks have common or similar world views, etc.)

In terms of symbolic components, banks on the Serbian market strive to give their symbols a clear message of reliability and precision, but on the other hand, each strives to be individualized and special in the market. The physical appearance of branches is a very important symbolic element to which all participants in the banking market pay special attention. There is considerable unification in terms of the physical appearance of branches and affiliates in the Serbian banking market, while there is still diversity in terms of using different elements of the banks' branding.

It is important to point out the evident existence of the influence of national culture on organizational culture in a situation when members of the top management of banks in Serbia are of foreign origin, which is not a rare occurrence. The Serbia banking market currently consists of 26 banks, while the CEOs (leaders) of 6 banks are foreigners. Leaders, as such, carry with them attitudes, values and beliefs based on their national culture. In practice, it is not uncommon for foreign leaders to try to incorporate their attitudes and beliefs into the organizational culture of the bank in Serbia, through the mechanisms inherent and accessible to them. Banking practice speaks in favor of the existence of instances in which different attitudes and beliefs of decision makers, caused by different national cultures, lead to conflicts of opinion due to lack of understanding of the specifics of certain business models that differ from the same business model in a foreign country (for example foreign decision makers have less understanding for the construction industry in Serbia, especially in relation to the time required to obtain building permits, all because they have preconceived attitudes on the issue, that they learned from their national economies). In 2010, a study was conducted in Bijeljina about the influence of national culture on the creation of attitudes, beliefs and behaviors of decision makers. The study confirms the existence of the influence of national culture on the creation of manager profiles. The study points out that managers in international business operations must start from the fact that the attitudes and practices of one culture will not always be appropriate in another culture. The study emphasizes that competence and flexibility in the field of culture are important for creating a certain strategy of international business (Ivanović B. et al., 2010).

Building an organizational culture actually means creating a sense of belonging for each individual in the system in which they work, through a vision, strategy, clear goals of the organization and clear goals at the level of each employee.

Conclusion

The results of the research and the presented conclusions on the example of bank A speak in favor of the existence of dependence between the organizational culture and strategy of the bank, as well as that their harmonization, from the perspective of the organization, can lead to achieving defined goals. The change in the ownership structure of bank A caused a change in the bank's strategy, which resulted in the need to create a different organizational culture. Because of the abovementioned, companies and financial institutions should strive to achieve harmony between organizational culture and strategy.

Practice shows that changes in the symbolic elements of organizational culture, that are not accompanied by significant changes in cognitive categories, do not have significant long-term impact on the organizational culture of the company, since it is necessary to change both components of organizational culture at same time.

Precisely defined goals of the organization and employees cause the desired behavior and, thus, build an adequate organizational culture at the level of the entire organization. The entire banking system of Serbia is characterized by the clear setting of goals by hierarchical levels, in positions where it is possible. Continuous technological advances cause a significant impact on the banking segment, and many processes in banking are automated, which requires certain changes in organizational culture, as well as changes in employee behavior.

In future research, it would be useful to include other participants in the Serbian financial market, but also to expand the research to other business activities (production activities, other service activities, etc.).

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Bihevioralne finansije kao odgovor na nedostatke standardnih finansija

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Rezime: Udaljavanje standardne finansijske teorije od prakse uslovilo je sve veći broj kritika na račun standardnih finansija. Brojni nalazi u korist odsustva savršene racionalnosti investitora uslovili su potrebu za novim pristupom i novim uglom posmatranja koji nude bihevioralne finansije. Bihevioralne finansije se oslanjaju na standardne finansije, dopunjuju njihovo učenje i, prema mišljenju bihevioralnih ekonomista, postepeno ih zamenjuju, ali se i bihevioralne finansije suočavaju sa brojnim ograničenjima. Cilj istraživanja je traženje odgovara na pitanje da li u finansijskoj teoriji i investicionoj praksi prednost treba dati standardnim ili bihevioralnim finansijama. Primenom metoda kvalitativne ekonomske analize zaključeno je da treba težiti integrisanoj primeni ovih teorijskih okvira u cilju njihovog međusobnog dopunjavanja, iskorišćavanja pozitivnih i istovremenog eliminisanja negativnih aspekata. Primer teorijskog pristupa koji pomiruje razlike između standardnih i bihevioralnih finansija je hipoteza o prilagođavanju finansijskih tržišta (Adaptive Markets Hypothesis – AMH), kojoj je u radu posvećena posebna pažnja, a o kojoj u domaćoj literaturi do sada nije bilo reči.

Ključne reči: bihevioralne finansije, standardne finansije, hipoteza o prilagođavanju finansijskih tržišta

JEL: G00, G12, G14, G40

Uvod

„Cilj svake ekonomske teorije je da uprošteno, ali verno, opiše neku važnu pojavu iz prakse. Ukoliko teorijske implikacije ne odgovaraju realnim događajima, onda teorija gubi kredibilitet, a nastaju pokušaji da se ekonomski mehanizmi sagledaju iz drugog ugla" (Vučković, 2010, 629). Upravo je udaljavanje standardne finansijske teorije od prakse uslovilo pojavu bihevioralnih finansija koje inkorporiranjem psiholoških faktora dopunjuju učenje standardnih finansija i ukazuju na ponavljanje iracionalnosti u složenom svetu finansija.

Finansijska teorija je prošla dug put od opšteprihvaćenosti hipoteze efikasnog tržišta (*Efficient Market Hypothesis – EMH*) koja se nalazi u osnovi standardne finansijske teorije, do pojave bihevioralnih finansija i bihevioralne kritike *EMH*. Veliki broj tržišnih anomalija je doveo u pitanje validnost *EMH* i stvorio prostor za razvoj jednog novog pristupa u finansijama u čijem fokusu je izučavanje ponašanja i psihologije ljudi. Kako tvrdi Águila (2009), rastuće interesovanje za bihevioralne finansije je rezultat upravo akumulacije empirijskih anomalija, a zadatak bihevioralnih finansija je da integracijom psihologije sa finansijama i ekonomijom obezbedi njihovo bolje razumevanje.

Imajući u vidu napred navedeno, predmet istraživanja u radu je uporedna analiza bihevioralne i standardne finansijske teorije. Cilj istraživanja je traženje odgovara na pitanje da li su u finansijskoj teoriji i investicionoj praksi bihevioralne finansije uspele da zamene učenje standardnih finansija. Namera je da se navođenjem pozitivnih i negativnih strana bihevioralnih i standardnih finansija izvrši njihovo poređenje, ali i ponudi objašnjenje potencijalnih optimalnih rešenja koja, poput hipoteze o prilagođavanju finansijskih tržišta, predstavljaju faktor pomirenja standardnih i bihevioralnih finansija.

Shodno definisanom predmetu i postavljenom cilju istraživanja, polazna hipoteza rada glasi:

H: Investitorima, portfolio menadžerima, finansijskim analitičarima i ostalim učesnicima na tržištu jednako su potrebna znanja standardnih i bihevioralnih finansija.

Ispitivanje validnosti polazne hipoteze rada izvršiće se primenom metoda kvalitativne ekonomske analize, koji će putem proučavanja relevantne literature omogućiti da se formulišu validni zaključci o istraživanoj problematici.

Vodeći računa o opredeljenom predmetu, definisanom cilju i formulisanoj hipotezi, u radu će nakon uvodnih razmatranja biti predstavljene ključne razlike između bihevioralnih i standardnih finansija. Potom će biti analizirane pozitivne i negativne strane ovih teorijskih okvira, uz apostrofiranje osnovnih izazova sa kojima se suočavaju. Posebna pažnja biće posvećena tržišnoj efikasnosti koja se, prema Statmanu (1999, 18), nalazi u centru sukoba između standardnih i bihevioralnih finansija. U pretposlednjem delu rada biće objašnjena hipoteza o prilogođavanju finansijskih tržišta kao primer optimalnog rešenja koje pomiruje suprotstavljene stavove tradicionalnih i bihevioralnih ekonomista. Konačno, zaključni deo rada biće posvećen sumiranju stavova o ispunjenosti polazne hipoteze rada i sagledavanju pravaca budućih istraživanja.

Bihevioralne nasuprot standardnim finansijama

U standardnim finansijama vlada mišljenje da se prilikom odlučivanja u uslovima neizvesnosti ljudi rukovode rezonovanjem, odnosno zakonima verovatnoće i maksimiranjem ličnih interesa. Međutim, pored rezonovanja, ne može se poreći značaj intuicije (Vučković, 2010, 630) kojoj predstavnici bihevioralnih finansija pripisuju jednaku važnost.

Razum i intuicija su dva osnovna elementa dvosistemskog pristupa u donošenju odluka, pri čemu se Sistem 1 poistovećuje sa intuicijom, a Sistem 2 sa razumom, odnosno, rezonovanjem. Sistem 1 sadrži automatske, a Sistem 2 kontrolisane operacije. Sistem 1 funkcioniše brzo i bez napora (reakcija pojedinca na iznenadnu buku u svom okruženju, vožnja automobila na praznom autoputu), dok Sistem 2 podrazumeva mentalne aktivnosti koje su spore, zahtevaju napor i kojima se svesno upravlja (fokusiranje na glas jedne osobe u bučnoj prostoriji u kojoj više ljudi istovremeno govori, parkiranje automobila na uzanom prostoru, popunjavanje anketnog upitnika). Sistem 1 i Sistem 2 su u kontinuiranoj interakciji, budući da Sistem 1 generiše inpute Sistemu 2, poput impresije, intuicije, intencije i osećanja. Potom Sistem 2 impresije i intuiciju pretvara u uverenja, a impulse u dobrovoljne poteze (Kahneman, 2011).

Većina svakodnevnih odluka i postupaka potiče iz Sistema 1, jer ljudi prilikom odlučivanja najčešće ne ulažu ili ulažu zanemarljiv misaoni napor. Međutim, kada se Sistem 1 susretne sa nepoznatim ili složenim situacijama, aktivira se Sistem 2. Dakle, kada se odlučuje o važnim pitanjima, pitanjima koja imaju poseban značaj za donosioca odluke i pitanjima na koja Sistem 1 nema odgovor, dominantnu ulogu ima i konačnu odluku donosi Sistem 2. Takođe, Sistem 2 je zadužen za samokontrolu. Njegov zadatak je da nadvlada impulse koji pristižu iz Sistema 1 (Kahneman, 2011). U različitim situacijama ljudi upravo zahvaljujući Sistemu 2 uspevaju da se suzdrže od burnog reagovanja koje sugeriše Sistem 1 i uspevaju da prikriju strah, bol i druga osećanja.

Ukupno posmatrano, zagovornici bihevioralnih finansija smatraju da intuitivno zaključivanje (Sistem 1) zaslužuje jednaku pažnju kao i rezonovanje (Sistem 2) i kritikuju sledeće, u standardnim finansijama podrazumevane, odlike pojedinca (Pompian, 2006):

- *Savršenu racionalnost – čovekovo ponašanje nije rukovođeno isključivo razumom i racionalnošću. Mnogi psiholozi smatraju da je ljudski intelekt podređen ljudskim emocijama, zbog čega je ponašanje pojedinaca dominantno rukovođeno emocijama poput straha, ljubavi, mržnje, zadovoljstva, bola. Oni čak tvrde da ljudi koriste svoj intelekt samo da bi postigli ili izbegli navedene emocionalne ishode.*
- *Rukovođenje isključivo ličnim interesom – navedena pretpostavka implicira odsustvo filantropije, nesebičnosti, ljubaznosti i humanosti koje odlikuju značajan deo društva.*
- *Savršenu informisanost – nijedan čovek ne poseduje sve informacije i sva potrebna znanja.*

Predstavnici bihevioralnih finansija smatraju da usled kognitivnih ograničenja savršeno racionalni tržišni učesnici ne postoje. Bihevioralne finansije umesto savršeno racionalnog, pretpostavljaju normalnog investitora, odnosno, običnog čoveka (*homo sapiens*) koji se ne rukovodi uvek i isključivo ličnim interesima. Pored ekonomskih motiva normalan investitor neretko poseduje i neekonomske motive. On ne nastoji uvek i isključivo da maksimira svoju zaradu, već se rukovodi i drugim ciljevima, poput iskazivanja nesebičnosti i društvene odgovornosti u vidu zaštite životne sredine, izbegavanja kupovine akcija preduzeća koja se bave proizvodnjom oružja i municije, alkoholnih pića, duvanskih prerađevina.

Normalan investitor ne poseduje savršena i neograničena znanja, zbog čega se prilikom odlučivanja u uslovima neizvesnosti često oslanja na subjektivnu procenu i intuiciju. Prema Todoroviću (2011, 277), normalni investitori često odlučuju „spontano, bez iscrpnog razmišljanja, računanja i posebnog napora, a na bazi tzv. mentalnih prečica – heuristika". Normalne investitore odlikuju kognitivne nesavršenosti i kognitivna ograničenja, a puno razumevanje nesavršenosti zasigurno više koristi donosiocima odluka od naivnog verovanja u nepogrešivost njihovog intelekta (Slovic, 1972).

Bihevioralne finansije, dakle, u prvi plan stavljaju nesavršenost ljudskog uma. Nesavršenost se ispoljava prilikom donošenja svakodnevnih životnih odluka, a posebno prilikom složenog odlučivanja kakvo je finansijsko odlučivanje, koje zahteva posedovanje specifičnih znanja i umeća (Ljubojević & Dašić, 2018; Živković i saradnici, 2019). Čak ni investitori poput vrhunskih finansijskih stručnjaka ne poseduju savršena znanja i ne donose savršeno racionalne ekonomske odluke. I oni greše, ne samo pod uticajem kognitivnih pristrasnosti i emocija, već i usled nemogućnosti savršene obrade velikog obima informacija dostupnih u složenim i neizvesnim ekonomskim uslovima. Prema De Bondt-u i saradnicima (2013), u savremeno doba obim dobijenih informacija je toliko veliki da su investitori prinuđeni da se fokusiraju na svega par najvažnijih indikatora.

Dok je u prošlosti brzo donošenje kvalitetnih finansijskih odluka bilo onemogućeno nedostatkom informacija, danas je brzo odlučivanje otežano velikim obimom dostupnih informacija. Normalan investitor raspolaže ograničenim kapacitetima, ograničenim kognitivnim sposobnostima i veštinama, i stoga nije u stanju da obradi veliki broj svakodnevno dostupnih informacija, niti da momentalno prilagodi svoje odluke novopristiglim informacijama, zbog čega njegove odluke nisu savršeno racionalne. Prema Kaporu (2014), u savremenom svetu postoji objektivno informacijsko preopterećenje koje dezorijentiše ljude, utiče na njihovu sposobnost određivanja prioriteta i donošenja dobrih odluka.

Nasuprot bihevioralnim finansijama, standardne finansije pretpostavljaju savršeno racionalnog i savršeno informisanog investitora, homo ekonomikusa (*homo economicus*), koji poznaje složene ekonometrijske modele i raspolaže znanjem i sposobnošću tačne i precizne obrade podataka. Pojedinci u standardnim finansijama ne podležu uticaju emocija, preferencija i subjektivnog doživljaja, već odluke donose na objektivan i profesionalan način. Standardne finansije, dakle, pretpostavljaju da su ljudi savršena ekonomska bića koja uvek donose ispravne odluke u sopstvenom interesu. Dodatno, standardne finansije pretpostavljaju da ljudi nemaju problem samokontrole: drže se svog plana štednje i nikada ne kupuju impulsivno, drže se dijete i lako odbijaju dezert, drže se odluke da prestanu da puše i lako odbijaju ponuđenu cigaretu, drže se odluke da prestanu da se kockaju i lako odbijaju poziv prijatelja na partiju pokera. Standardne finansije, takođe, pretpostavljaju da ljudi nemaju osećaj kajanja: osetiće isto žaljenje kada zakasne na avion za jedan minut kao i kada zakasne na avion za jedan sat (Statman, 1995), ili osetiće isto žaljenje kada izgube utakmicu u sudijskoj nadoknadi vremena, kao i tokom regularnog perioda igre.

Ukratko, u standardnim finansijama ljudi su uvek racionalni, dok u bihevioralnim finansijama ljudi nisu uvek racionalni, ali su uvek normalni (Statman, 1995, 21). Pogrešno je izjednačiti normalne investitore sa iracionalnim investitorima, jer normalni investitori samo ponekad ispoljavaju elemente iracionalnosti. Normalni investitori nisu uvek racionalni, ali nisu uvek ni iracionalni. Statman (2014) normalne investitore deli na normalne-obrazovane (*normal-knowledgeable*) i normalne-neuke (*normal-ignorant*). Normalni-obrazovani investitori su naučili, istina nesavršeno i sa dosta muke, da prevaziđu kognitivne greške, poput kasnog uviđanja i preteranog samopouzdanja, i da se upotrebom naučnih saznanja odupru snažnim emocijama koje ih navode na pogrešne odluke. S druge strane, normalni-neuki investitori nemaju poverenja u naučne nalaze i ne koriste naučna saznanja kako bi premostili prepreke sa kojima se suočavaju.

Sumiranjem prethodno iznetog, zaključuje se da bihevioralne finansije pretpostavljaju ograničenu racionalnost (*bounded rationality*) učesnika na tržištu, dok standardne finansije polaze od koncepta savršene racionalnosti (*perfect rationality*). Bihevioralne finansije ukazuju na pojavu i ponavljanje iracionalnosti, dok standardne finansije polaze od principa savršeno racionalnog finansijskog odlučivanja.

Iracionalnosti prisutne u složenom svetu finansija, bihevioralne finansije nastoje da objasne putem kognitivnih predrasuda kao što su: 1) preterano samopouzdanje (*overconfidence bias*), 2) uokviravanje ili formulacija (*framing bias*), 3) mentalno računovodstvo (*mental accounting bias*), 4) reprezentativnost (*representativeness bias*), tj. dostupnost (*availability bias*) ili pristrasnost sećanja, 5) konzervatizam (*conservatism bias*), tj. sklonost ka izbegavanju promena (*status quo bias*) ili „usidrenje" (*anchoring bias*), 6) odbojnost prema gubitku (*loss aversion bias*), 7) izbegavanje kajanja (*regret avoidance bias*), 8) ponašanje krda (*herd behavior*), tj. mentalitet stada ili psihologija mase, 9) potvrđivanje (*confirmation bias*) ili samopotvrđivanje (*self-confirmation bias*), 10) kasno uviđanje (*hindsight bias*), 11) kognitivna disonanca (*cognitive dissonance bias*) i 12) prokletstvo pobednika (*winner's curse*).[1]

Jedan od najpoznatijih primera iracionalnosti investitora datira iz 16. veka, kada su lale uvezene iz Konstantinopolja u Holandiju postale najpre simbol prestiža među holandskom elitom, a ubrzo i najpoželjnija roba na tržištu i predmet trgovine na Amsterdamskoj berzi. Uvidevši priliku za zaradu koja se ogledala u kontinuiranom rastu cene lala, prosečni Holanđani su prodavali sve što su imali, uključujući i svoje kuće, kako bi kupili lale i njihovom preprodajom ostvarili zaradu. Međutim, krajem 1636. godine formirani balon cena

1 Elaboriranje kognitivnih predrasuda prevazilazi okvire ovog rada, zbog čega će navedene nesavršenosti biti predmet budućih istraživanja autora.

je pukao i za samo mesec dana cena lala se smanjila za 90%, a mnogi investitori su pretrpeli ogromne gubitke i bankrotirali (Pompian, 2006). Opisani sled događaja neodoljivo podseća na uzroke finansijsko-ekonomske krize koja se krajem 2007. godine pojavila na američkom hipotekarnom tržištu. Razlika je što su umesto lalama, Amerikanci, rukovođeni psihologijom mase i preteranim samopouzdanjem, trgovali nekretninama.

Saglasno navedenom, većina ekonomista se slaže da racionalno ponašanje investitora nije stalna odlika ekonomske stvarnosti. Međutim, paradigma o racionalnom ponašanju investitora još uvek traje i zauzima važno mesto u finansijskoj teoriji. Dva osnovna argumenta u korist odbrane pretpostavke o racionalnom ponašanju investitora su (De Bondt & Thaler, 1995):

- *O teorijama ne treba suditi na osnovu validnosti njihovih pretpostavki, već na osnovu validnosti njihovih predviđanja; teorije neizbežno uključuju pojednostavljenja[2];*
- *Iracionalni investitori vremenom gube bogatstvo i bankrotiraju, ili je pak njihovo delovanje neutralisano trgovanjem racionalnih, pametnih i dobro informisanih investitora.*

Osim prethodno iznetih razlika, standardne i bihevioralne finansije se razilaze i kada je reč o načinu kreiranja portfolija i modelima vrednovanja finansijske aktive. U osnovi standardnih finansija nalaze se savremena portfolio teorija (*Modern Portfolio Theory – MPT*) i standardni modeli vrednovanja aktive, dok bihevioralne finansije nude alternativu u vidu bihevioralne portfolio teorije (*Behavioral Portfolio Theory – BPT*) i bihevioralnog modela vrednovanja aktive (*Behavioral Asset Pricing Model – BAPM*). *MPT* se zasniva na sledećim tvrdnjama: a) investitore odlikuje isključivo odbojnost prema riziku, b) investitori posmatraju portfolio kao celinu, imaju jedan nivo tolerancije prema riziku i jedan cilj koji se ogleda u maksimiranju očekivanog prinosa pri datom nivou rizika, c) prilikom kreiranja portfolija investitori se rukovode isključivo odnosom očekivanog prinosa i rizika, d) optimalni portfolio predstavlja kombinaciju tržišnog portfolija i bezrizične aktive, e) optimalni portfolio je portfolio koji maksimira utilitarističku korist investitora. Za svaku od navedenih tvrdnji *BPT* nudi alternativu: a) pored odbojnosti prema riziku investitore istovremeno odlikuje i sklonost prema riziku, b) investitori posmatraju portfolio kao slojevitu piramidu, pri čemu za svaki mentalni račun (sloj piramide) imaju određeni nivo tolerancije prema riziku i određeni cilj koji prelaskom sa nižih na više slojeve piramide postaje ambiciozniji, c) prilikom kreiranja portfolija investitori se rukovode ne samo odnosom očekivanog prinosa i rizika, već i sopstvenim željama, potrebama, emocijama, navikama, d) optimalni portfolio predstavlja kombinaciju subportfolija od kojih je svaki optimalan na određenom sloju piramide, e) optimalni portfolio je portfolio koji maksimira ne samo utilitarističku, već i ekspresivnu i emocionalnu korist investitora.

Pored jasne konfrontacije ovih teorija, važno je ukazati i na ideju o njihovom kombinovanju koju su u svom radu sproveli Das et al. (2010). Autori predlažu da investitori podele svoje bogatstvo na mentalne račune (slojeve) i da se

2 Nažalost, dokazi u korist ekonomskih teorija često izostaju, zbog čega se u finansijskoj javnosti može čuti opaska da se finansije sastoje od teorija za koje ne postoje dokazi i empirijskih činjenica za koje ne postoje teorije (De Bondt & Thaler, 1995).

potom izvrši optimizacija ovih mentalnih računa, kao subportfolija ukupnog portfolija, prema pravilima *MPT*. Das et al. (2010) su na ovaj način, kombinujući elemente *MPT* i *BPT*, utemeljili tzv. portfolio teoriju mentalnog računovodstva (*Mental-Accounting (MA) Portfolio Theory*) i ponudili je kao optimalno rešenje koje pomiruje suprostavljene stavove tradicionalnih i bihejvioralnih ekonomista. Prema Das et al. (2011), rukovodeći se portfolio teorijom mentalnog računovodstva investitori uspevaju da ostvare ciljeve definisane na svakom pojedinačnom sloju piramide, istovremeno zadržavajući poziciju kreiranog portfolija na efikasnoj granici. Na ovaj način investitori uspevaju da kombinacijom znanja standardnih i bihejvioralnih finansija ostvare maksimalnu moguću korist. U prilog tvrdnji da ova nova portfolio teorija pomiruje *MPT* i *BPT* najbolje govori činjenica da su u njenom utemeljenju, kao koautori navedenog rada iz 2010. godine, učestvovali Heri Markovic (Harry Markowitz), rodonačelnik *MPT*, i Meir Statman, koji se uz Herša Šefrina (Hersh Shefrin) smatra rodonačelnikom *BPT*. Opšti zaključak je da, uprkos brojnim razlikama, i *MPT* i *BPT* imaju važnu ulogu u kreiranju i uspešnom upravljanju portfoliom.

Standardne i bihevioralne finansije se razlikuju i kada je reč o modelima vrednovanja finansijske aktive. Standardni modeli vrednovanja aktive se zasnivaju na sledećim tezama: a) očekivani prinos aktive je funkcija rizika, zbog čega su razlike u očekivanom prinosu isključivo rezultat razlika u preuzetom nivou rizika, b) racionalni investitori putem arbitraže poništavaju uticaj iracionalnih tržišnih učesnika i čine ga irelevantnim, c) vrednost aktive se određuje na osnovu utilitarističke koristi, d) na vrednost finansijske aktive ne utiču afekti, mentalne šeme, kognitivne greške i obmanjujuće emocije, e) rizik je objektivna kategorija, odnosno matematički i statistički koncept koji nije pod uticajem afekata. Za svaku od navedenih teza *BAPM* model nudi alternativu: a) razlike u očekivanom prinosu aktive se objašnjavaju ne samo razlikama u nivou rizika, već i uticajem brojnih psiholoških faktora koji idu ili ne idu u prilog izbora određene aktive, b) usled ograničenosti arbitraže racionalni investitori ne uspevaju da ponište uticaj iracionalnih tržišnih učesnika, c) vrednost aktive zavisi od ukupne koristi: utilitarističke, ekspresivne i emocionalne, d) vrednovanje finansijske aktive je pod uticajem afekata, mentalnih šema, kognitivnih grešaka i obmanjujućih emocija, e) rizik je psihološki koncept koji se sastoji od objektivnog i subjektivnog rizika. Uprkos činjenici da je *BAPM* model, zasnovan na psihološkim faktorima, bliži stvarnosti, prema Barberis (2018) prerano je donositi konačan sud i govoriti o njegovoj superiornosti. U potrazi za optimalnim rešenjem treba imati u vidu mogućnost integrisane primene ovih modela i pojave novog modela vrednovanja aktive koji bi sadržao najbolje elemente opisanog standardnog i bihevioralnog pristupa.

Pozitivne i negativne strane bihevioralnih i standardnih finansija

Kao i sve druge teorije, tako i standardna i bihevioralna finansijska teorija imaju svoje prednosti i nedostatke. Ključna prednost standardnih finansija je njihova sistematičnost, dok je glavni nedostatak njihovo oslanjanje na nerealne pretpostavke, poput pretpostavke o homogenim očekivanjima i savršenoj racionalnosti svih učesnika na tržištu. S druge strane, bihevioralne finansije odlikuje odsustvo sistematičnosti i uniformnosti, odnosno, oslanjanje na modele kojima nedostaje međusobna konzistentnost i uniformnost. Navedena karakteristika je najveći nedostatak bihevioralnih finansija, dok realnost polaznih pretpostavki predstavlja njihovu osnovnu prednost (Shefrin, 2010).

Nije teško zaključiti da je ključna prednost standardnih finansija ujedno osnovni nedostatak bihevioralnih finansija, kao i da je ključni nedostatak standardnih finansija istovremeno osnovna prednost bihevioralnih finansija. Prema tome, standardne i bihevioralne finansije se na određeni način međusobno dopunjuju. Čak i najsloženiji ekonometrijski modeli standardnih finansija, zasnovani na restriktivnim pretpostavkama, previše pojednostavljuju ekonomsku stvarnost, dok modeli bihevioralnih finansija vernije predstavljaju ekonomsku stvarnost, ali im nedostaju preciznost i egzaktnost.

Ključni izazov standardne finansijske teorije je pronalaženje adekvatnog objašnjenja brojnih tržišnih anomalija koje već decenijama narušavaju validnost i verodostojnost njenih postavki, dok je osnovni izazov sa kojim se suočavaju bihevioralne finansije uspostavljanje sistematičnog i uniformnog okvira, poput okvira standardnih finansija.

Česta pojava upornih tržišnih anomalija dovela je u pitanje validnost standardnih finansija, zbog čega su brojni teoretičari predložili rekonstrukciju finansijske teorije na bihevioralnoj osnovi. Među anomalijama koje su narušile validnost standardnih finansija i istovremeno uslovile pojavu i razvoj bihevioralnih finansija izdvajaju se (Leković, 2018):

- *P/E efekat (price-earnings effect) – investiranjem u akcije sa niskim odnosom cene akcije i zarade po akciji (niskim P/E raciom) ostvaruje se natprosečan prinos;*
- *Efekat malih preduzeća (small firm effect) ili efekat veličine (size effect) – akcije preduzeća male tržišne kapitalizacije donose znatno viši prinos prilagođen riziku, u poređenju sa akcijama velikih preduzeća;*
- *Efekat likvidnosti (liquidity effect) – investiranjem u manje likvidne hartije od vrednosti ostvaruje se natprosečan prinos;*
- *Efekat zanemarenih preduzeća (neglected-firm effect) – akcije koje finansijski analitičari ignorišu donose više prinose u odnosu na akcije praćenih i proučavanih preduzeća;*
- *Januarski efekat (January effect) – prinosi na hartije od vrednosti u januaru su značajno viši od prinosa ostvarenih tokom ostatka godine;*
- *Efekat ponedeljka (Monday effect) – prinosi ostvareni ponedeljkom su znatno niži u poređenju sa prinosima na hartije od vrednosti ostvarenim tokom ostalih dana u nedelji;*
- *Efekat završetka dana (day-end effect) – cene hartija od vrednosti rastu u poslednjih trideset minuta berzanskog trgovanja;*
- *Efekat praznika (holiday effect) – prinosi na hartije od vrednosti ostvareni dva radna dana pre nacionalnog praznika su znatno iznad godišnjeg proseka;*
- *Unutar-mesečni efekat (intra-month effect) – prvu polovinu meseca odlikuju znatno viši prinosi u odnosu na drugu polovinu meseca;*
- *Efekat prelaska u novi mesec (turn of the month effect) – tokom prelaska iz jednog meseca u drugi ostvaruju se značajno viši prinosi;*

- *B/M efekat (book to market effect) – investiranjem u akcije sa visokim odnosom knjigovodstvene prema tržišnoj vrednosti (visokim B/M raciom) ostvaruje se natprosečan prinos.*

Sve veći broj otkrivenih tržišnih anomalija ukazuje na nedovoljnu potvrđenost *EMH* kao ključne pretpostavke standardnih finansija, i samim tim na nedovoljnu potvrđenost standardne finansijske teorije. Međutim, sve dok teoretičari standardnih finansija uspevaju da objasne anomalije, njihovo prisustvo ne znači odbacivanje *EMH*. Čak su mnoge anomalije nestale kada je investiciona javnost za njih saznala. Ipak, ono što dovodi u pitanje validnost *EMH* su neobjašnjene anomalije. Takođe, pretnju standardnim finansijama ne predstavljaju pojedinačne, već sistemske anomalije, koje ostaju neobjašnjene uprkos brojnim naporima teoretičara standardnih finansija.

EMH tvrdi da kada iracionalni optimisti kupuju akcije, pametni (racionalni) investitori ih prodaju, a kada iracionalni pesimisti prodaju akcije, pametni (racionalni) investitori ih kupuju, eliminišući na ovaj način uticaj iracionalnih trgovaca na tržišnu cenu (Shiller, 2003, 96). Dakle, prema standardnoj finansijskoj teoriji racionalni investitori su preduslov efikasnih finansijskih tržišta, budući da u procesima arbitraže koriguju uticaje trgovine iracionalnih tržišnih učesnika (Todorović, 2011). Međutim, u praksi racionalni investitori često ne uspevaju da ponište uticaj iracionalnih investitora, zbog čega prethodno opisana situacija predstavlja idealizovanu sliku stvarnosti i savršen teorijski slučaj. Pojava u koju je mnogo lakše poverovati jeste ograničenost arbitraže.

Za razliku od standardnih finansija koje se oslanjaju na *EMH*, bihevioralne finansije se zasnivaju na kognitivnoj psihologiji i ograničenosti arbitraže. Kognitivna psihologija se odnosi na način razmišljanja ljudi i ima važnu ulogu u bihevioralnim finansijama, jer su brojna istraživanja pokazala da ljudi prave sistemske greške u načinu razmišljanja: previše su samouvereni, pridaju preveliki značaj skorašnjim iskustvima, koriste mentalne prečice, izbegavaju promene (Ritter, 2003). S druge strane, ograničenost arbitraže se odnosi na situacije kada arbitraža nije efikasna u meri u kojoj obezbeđuje tržišnu efikasnost.

Jedan od najvećih dokaza ograničenosti arbitraže i odsustva tržišne efikasnosti jesu mehurovi koji predstavljaju dugoročna kretanja cene aktive iznad njene fundamentalne vrednosti, a objašnjavaju se kognitivnom anomalijom koja se naziva ponašanje krda, tj. mentalitet stada ili psihologija mase. Mehurovi ukazuju na nedovoljnu sposobnost racionalnih arbitražera da iskoriste arbitražne prilike i vrate cenu aktive na nivo njene stvarne vrednosti (Todorović, 2011).

Prema Riteru (2003), veoma je teško pronaći strategiju trgovanja koja zasigurno donosi zaradu. Navedeno ipak ne znači da su finansijska tržišta efikasna. Pogrešno vrednovanje finansijske aktive je uobičajeno, ali nije lako ostvariti natprosečne prinose po ovom osnovu iz više razloga: teško je pronaći potcenjene i precenjene hartije od vrednosti, postoje transakcioni troškovi, troškovi informisanja i traganja za potcenjenim i precenjenim hartijama od vrednosti, mala razlika između cene hartije od vrednosti i njene unutrašnje vrednosti čini trgovanje neisplativim, prisutan je strah investitora od daljeg pada cene kupljenih potcenjenih hartija od vrednosti, odnosno, daljeg rasta cene prodatih precenjenih hartija od vrednosti.

Stepen ograničenosti arbitraže zavisi i od načina na koji se arbitražer finansira. Arbitražer koji je prinuđen da pozajmi finansijska sredstva kako bi kupio potcenjenu hartiju od vrednosti, izložen je uvećanom riziku, zbog čega samo u slučaju velike potcenjenosti preduzima kupovnu transakciju. Očekivani rast cene mora biti dovoljno veliki da pokrije kamatu na pozajmljena sredstva i obezbedi zaradu za preuzeti rizik. U slučaju male razlike između cene i unutrašnje vrednosti hartije od vrednosti izostaće aktivnosti arbitražera. Dakle, cena hartije od vrednosti će nastaviti da se razlikuje od njene unutrašnje vrednosti u situaciji kada je potencijalni arbitražni profit suviše mali, pa se arbitražerima ne isplati preduzimanje kupoprodajnih operacija.

Ukratko, predstavnici bihevioralnih finansija smatraju da tržišta nisu savršeno efikasna, ali priznaju da ih je teško „pobediti", odnosno, ostvariti prinos veći od prosečnog tržišnog prinosa. Navedeno govori u prilog validnosti polujakog i slabog oblika *EMH*, dok se jaki oblik *EMH* odbacuje. Samo dobro informisani, stručni i profesionalni investitori su u stanju da pobede tržište, dok su pokušaji prosečnog investitora uglavnom neuspešni. Prema Statmanu (2014), nestručni investitor pokušava da pobedi tržište iz dva razloga: 1) zato što je prevaren kognitivnim greškama i obmanjujućim emocijama, i 2) zato što pokušava da ostvari ekspresivnu i emocionalnu korist koju donosi nadmašivanje prosečnih tržišnih rezultata.

Prednost bihevioralnih finansija se, između ostalog, ogleda upravo u objašnjavanju tržišnih anomalija i uzroka tržišne neefikasnosti. Prema *EMH* cena aktive zavisi od pristiglih informacija, dok prema bihevioralnim finansijama cena aktive zavisi od reakcije tržišnih učesnika na pristigle informacije (Fakhry, 2016). Prema bihevioralnoj finansijskoj teoriji različiti učesnici na finansijskom tržištu su različito informisani i različito reaguju na nove informacije. Oni neretko jedne informacije potcenjuju, a druge precenjuju. Dakle, prema bihevioralnoj finansijskoj teoriji, od pristiglih informacija važniji je način na koji tržišni učesnici percipiraju nove informacije, tj. važnija je reakcija tržišnih učesnika na pristigle informacije. Preterana ili nedovoljna reakcija će implicirati tržišnu neefikasnost, odnosno odstupanje cene aktive od njene fundamentalne vrednosti. Kako tvrdi Águila (2009), vrednost aktive se može razlikovati od njene unutrašnje vrednosti kao rezultat investitorove reakcije na prirodne psihološke faktore, kao što su strah, nada, optimizam, pesimizam.

S druge strane, ključna prednost *EMH* iz standardne finansijske teorije se ogleda u činjenici da se ova hipoteza može primeniti kao koristan benčmark za regulatore, dok se bihevioralna finansijska teorija za sada, usled nedostatka uniformnog modela, ne može koristiti kao benčmark. Ipak, značaj bihevioralne finansijske teorije je u njenoj sposobnosti da objasni odstupanja od benčmarka (Fakhry, 2016, 458). Prema Lou (2005, 22), *EMH* se može posmatrati kao ideal koji bi postojao u slučaju odsustva tržišnih nesavršenosti kao što su transakcioni troškovi, porezi, regulatorna ograničenja, i u slučaju odsustva kognitivnih ograničenja i ograničene racionalnosti tržišnih učesnika.

Savremenoj finansijskoj teoriji još uvek nedostaje konačan odgovor na pitanje da li su finansijska tržišta efikasna. Odluka komiteta za dodelu Nobelove nagrade da u 2013. godini ovo najveće priznanje dobiju Judžin F. Fama, koji se smatra ocem *EMH*, i Robert Šiler, zagovornik tvrdnje da su tržišta često iracionalna i pobediva, je u najmanju ruku zbunjujuća i zasigurno ne doprinosi razrešenju ove poluvekovne dileme (Statman, 2014).

Nesporno je da su bihevioralne finansije uspele da dopune standardne finansije i da unaprede proces investicionog odlučivanja. Međutim, i teorija bihevioralnih finansija se suočava sa brojnim ograničenjima (Curtis, 2004):

- *Iskustvo i obrazovanje su važni – ljudi obično donose pogrešne odluke u oblastima koje ne poznaju, ali to ne znači da će pogrešno odlučivanje biti nastavljeno i nakon sticanja odgovarajućeg znanja i iskustva. Kada investitori shvate da su njihove odluke bile pogrešne i, što je još važnije, zbog čega su bile pogrešne, donosiće bolje odluke u budućnosti.*
- *Ukoliko 60% ispitanika napravi pogrešan izbor, odnosno donese pogrešnu finansijsku odluku, da li je od strane finansijskog savetnika ispravno pretpostaviti da će svi njegovi klijenti biti među tih 60%?*
- *Izraz „statistički značajan" („statistically significant") ne znači i ne govori uvek mnogo – postoji suptilna, ali važna razlika između statističke značajnosti i verovatnoće da se rezultati istraživanja mogu primeniti na nekog pojedinca. Ako je uzorak, u smislu subjekata izabranih da učestvuju u studiji, neodgovarajući, testovi statističke značajnosti postaju besmisleni.*
- *Investitori različito reaguju u stvarnim i imaginarnim situacijama – u zamišljenim situacijama investitori donose brze odluke, bez prevelikog istraživanja i razmišljanja, rukovodeći se ne samo razumom, već i mentalnim prečicama, emocijama i intuicijom. S druge strane, u stvarnim situacijama, naročito onim koje podrazumevaju višemilionske uloge, razum je po pravilu ispred emocija, čime bihevioralne finansije gube na značaju.*
- *Očekivanja istraživača utiču na rezultate sprovedenih istraživanja – fenomen utvrđivanja rezultata koje istraživač očekuje da pronađe, ili još gore, koje želi da pronađe, je ozbiljna prepreka koja stoji na putu široke primene bihevioralnih finansija.*

Kritičari ističu i da bihevioralne finansije ne predstavljaju novo područje finansija, već samo skup anomalija, kao i da su predstavnici bihevioralnih finansija zaokupljeniji navođenjem nedostataka standardnih finansija, nego pružanjem alternativnih rešenja. Često se može čuti da bihevioralne finansije nemaju čvrstu i postojanu strukturu kakvu imaju standardne finansije, već da predstavljaju jednostavnu kolekciju priča o investitorima koji su skloni kognitivnim greškama i koji su pogrešno vođeni emocijama (Statman, 2014). Kritičari, takođe, ističu da bihevioralnim finansijama nedostaju celovitost i sistemska zaokruženost.

Uprkos navedenim kritikama i ograničenjima, bihevioralne finansije su ipak mnogo složenije od običnog skupa anomalija i jednostavne kolekcije priča o potezima iracionalnih investitora. Zagovornici bihevioralnih finansija odbacuju tvrdnju da bihevioralne finansije previše pažnje poklanjaju kritikovanju standardnih finansija, ne nudeći sopstvena alternativna rešenja. Jedan od najzaslužnijih za razvoj bihevioralnih finansija, Šiler (2006), kao kontraargument ističe da bihevioralne finansije igraju sve važniju ulogu u sprovođenju javnih politika, a kao primer navodi sprovođenje reforme socijalnog osiguranja u SAD. Bihevioralne finansije se oslanjaju na ekspanziju znanja iz svih ostalih društvenih, nauka nudeći stvarne i opipljive alternative (Shiller, 2006, 7).

Takođe, u poređenju sa standardnim finansijama koje su na određeni način ograničene strogošću svojih analiza, bihevioralne finansije, prema Hiršlajferu (2001), pružaju ekonomskim teoretičarima veći stepen slobode iz kojeg proističe i veća mogućnost pronalaženja najboljih rešenja.

Koristi od bihevioralnih finansija su, prema mišljenju bihevioralnih ekonomista, višestruke, a ogledaju se, pre svega, u boljem razumevanju procesa investicionog odlučivanja, koje je postignuto zahvaljujući inkorporiranju uticaja psiholoških faktora. Bolje razumevanje uticaja psiholoških faktora je važno, jer omogućava investitorima da prevaziđu kognitivne greške i da se odupru uticaju obmanjujućih emocija. Prema Statmanu (2008, 38), bihevioralne finansije su pružile značajan doprinos oblasti investiranja fokusiranjem na kognitivne i emocionalne aspekte procesa donošenja investicionih odluka.

Imajući u vidu sve gore izneto, a u prvom redu navedene prednosti i ključna ograničenja analiziranih teorijskih okvira, postavlja se pitanje da li u finansijskoj teoriji i investicionoj praksi prednost treba dati standardnim ili bihevioralnim finansijama. Odgovor je da su investitorima, portfolio menadžerima, finansijskim analitičarima i ostalim učesnicima na tržištu jednako potrebna znanja i jednog i drugog teorijskog okvira. Bihevioralne finansije su razvijene kao alternativa i veliki izazov standardnoj finansijskoj teoriji, ali je preterano tvrditi da su bihevioralne finansije uspele da zamene učenje standardnih finansija. Realnija ocena je da su bihevioralne finansije inkorporiranjem psiholoških faktora dopunile učenje standardnih finansija i približile standardnu finansijsku teoriju stvarnosti. Pretpostavljajući da standardne finansije najvećim delom tačno opisuju način funkcionisanja tržišta, bihevioralne finansije ukazuju koji je najbolji način da se to znanje iskoristi i ostvari profit (Curtis, 2004, 17).

Standardnim finansijama je nedostajao realniji pogled na kompleksnu finansijsku stvarnost, koji je bio onemogućen primenom strogih pretpostavki i egzaktnih pravila nauke. Viši stepen realnosti obezbedile su bihevioralne finansije koje su, integrišući znanja psihologije, sociologije, antropologije i ekonomije, u prvi plan stavile čoveka, odnosno ljudski faktor. Ograničenost arbitraže i povremene, kognitivnim nesavršenostima uzrokovane, iracionalnosti u ponašanju tržišnih učesnika više odgovaraju stvarnosti od savršene tržišne efikasnosti i savršene racionalnosti učesnika na tržištu koje se nalaze u središtu standardnih finansija.

Ukratko, bihevioralne finansije nastavljaju tamo gde su standardne finansije stale i obezbeđuju zaokruženost finansijske teorije. Bihevioralne finansije opisuju kako se investitori stvarno ponašaju, pre nego kako bi trebalo da se ponašaju. Međutim, ne treba zaboraviti sistematičnost, uniformnost i precizne instrumente standardnih finansija, kao ni međusobnu konzistentnost njenih modela i ostale prednosti standardne finansijske teorije koja je decenijama unazad bila vladajuća finansijska paradigma. Navedene prednosti standardnih finansija su upravo elementi koji nedostaju bihevioralnim finansijama.

U vezi sa prethodno iznetim, De Bondt i saradnici (2008) ističu da je za očekivati da se uskoro pojavi nova paradigma koja će kombinovati elemente standardnih i bihevioralnih finansija. Ova nova paradigma pomirila bi suprostavljena učenja standardnih i bihevioralnih finansija i unapredila proces finansijskog odlučivanja. Dobar primer teorijskog pristupa koji pomiruje razlike između standardnih i bihevioralnih finansija jeste hipoteza o prilagođavanju finansijskih tržišta.

Hipoteza o prilagođavanju finansijskih tržišta – faktor pomirenja standardnih i bihevioralnih finansija

Kombinacijom znanja bihevioralnih finansija i postulata *EMH*, Lo (2004) je kao alternativu tradicionalnoj *EMH* ponudio hipotezu o prilagođavanju finansijskih tržišta (*Adaptive Markets Hypothesis – AMH*). Budući da kombinuje postulate *EMH* i saznanja bihevioralnih finansija, *AMH* predstavlja ništa drugo do modifikovanu verziju tradicionalne *EMH*.

AMH predstavlja novi teorijski okvir koji primenom razvojnih principa: konkurencije, adaptacije i prirodne selekcije, pomiruje razlike između standardnih i bihevioralnih finansija. Tačnije, *AMH* pomiruje tržišnu efikasnost sa bihevioralnim alternativama. Nasuprot tradicionalnom pristupu koji tvrdi da pojedinci nastoje da maksimiraju očekivanu korisnost i imaju racionalna očekivanja, razvojni pristup iznosi znatno skromniju tvrdnju da se u osnovi svakog pojedinca nalazi težnja za preživljavanjem, a samim tim i potreba za konstantnim prilagođavanjem promenljivom okruženju (Lo, 2004).

U osnovi *AMH* nalaze se sledeće ideje (Lo, 2005, 31): 1) pojedinci se rukovode sopstvenim interesom, 2) pojedinci greše, 3) pojedinci uče na greškama i prilagođavaju svoje ponašanje, 4) konkurencija podstiče prilagođavanje i inovativnost, 5) prirodna selekcija oblikuje tržišne uslove koje tvorac *AMH* slikovito naziva „ekologijom tržišta" („*market ecology*")[3] i 6) razvoj determiniše dinamiku tržišta. Prema Lou (2005), prva ideja predstavlja zajedničku polaznu osnovu *EMH* i *AMH*, dok se po pitanju druge i treće ideje navedene hipoteze „razilaze", jer prema *EMH* investitori ne greše, ne uče na greškama i ne prilagođavaju se, budući da je tržišno okruženje statično i uvek u ravnoteži. Četvrta ideja tvrdi da se prilagođavanje i inovativnost ne javljaju nezavisno od tržišnih sila, već pod uticajem konkurencije, odnosno nagona za preživljavanje. Konkurentska borba rezultira „prirodnom selekcijom", u smislu da „najjači opstaju", a „prirodna selekcija" oblikuje „ekologiju tržišta", u smislu da utiče na broj tržišnih učesnika koji međusobno konkurišu za ograničeni broj profitabilnih prilika. Konačno, šesta ideja podrazumeva da prethodno opisani razvojni procesi: konkurencija, adaptacija, učenje na greškama, inovativnost i prirodna selekcija, determinišu i odražavaju dinamiku tržišta.

AMH ne tvrdi ni da je tržišna efikasnost savršena, niti da ne postoji, već ukazuje na to da je tržišna efikasnost karakteristika koja varira u vremenu i među tržištima, pri čemu stepen tržišne efikasnosti zavisi u prvom redu od promenljivih tržišnih uslova i okolnosti. Prema Kuntiji i Patanajaku (2018), usled uticaja bihevioralnih predrasuda i promenljivog tržišnog okruženja, nerealno

3 Lo (2004) upoređuje ekonomiju sa ekologijom, tržišne učesnike sa biljnim i životinjskim vrstama, a profitabilne prilike sa količinom dostupne hrane i vode. U tom smislu, ekonomski profit predstavlja hranu za tržišne učesnike od čijeg konzumiranja zavisi njihov opstanak, tj. preživljavanje.

je očekivati savršeno efikasna, odnosno, savršeno neefikasna tržišta. Usled uticaja navedenih faktora, efikasnost je promenljiva kategorija.

Za razliku od *EMH* koja polazi od pretpostavke da je tržišno okruženje statično i u ravnoteži, *AMH* tvrdi da je tržišno okruženje dinamično i u neravnoteži, pri čemu promene zahtevaju kontinuirano prilagođavanje tržišnih učesnika. Drugim rečima, dok *EMH* podrazumeva statičan pristup, *AMH* podrazumeva razvojni i dinamičan pristup, odnosno, dok je prema *EMH* tržišna efikasnost statična kategorija, prema *AMH* tržišna efikasnost je visoko dinamična kategorija uslovljena brojnim faktorima.

Za razliku od *EMH* koja tvrdi da cene odražavaju sve dostupne informacije, *AMH* ukazuje da stepen u kojem će cene odražavati dostupne informacije zavisi od: 1) promenljivih tržišnih uslova, u prvom redu broja učesnika na tržištu koji konkurišu za ograničen broj profitabilnih prilika i 2) stepena uspešnosti tržišnih učesnika u prilagođavanju promenljivim tržišnim uslovima putem učenja na greškama, konkurencije, adaptacije i inovativnosti. Veći broj tržišnih učesnika koji konkurišu za ograničen broj profitabilnih prilika i veća uspešnost njihovog prilagođavanja izmenjenim tržišnim uslovima implicira veću efikasnost finansijskog tržišta. I obrnuto, manji broj tržišnih učesnika koji konkurišu za ograničen broj profitabilnih prilika i manja uspešnost njihovog prilagođavanja izmenjenim tržišnim uslovima implicira manju efikasnost finansijskog tržišta.

Bez obzira na veću ili manju prilagodljivost tržišnih učesnika promenljivim tržišnim uslovima, za prilagođavanje je potrebno vreme, zbog čega prilike za zaradu opstaju i postoje određeno vreme, odnosno ne nestaju automatski kako je to tvrdila klasična *EMH*. Dakle, *AMH* podrazumeva da se prilike za arbitražu i zaradu javljaju s vremena na vreme pod uticajem promenljivih tržišnih okolnosti i istrajavaju određeno vreme. Prilike za zaradu istrajavaju sve dok učesnici na tržištu ne prilagode strategiju trgovanja izmenjenim tržišnim okolnostima, što govori da se i optimalne investicione strategije menjaju tokom vremena (Tseng, 2006).

U zavisnosti od promenljivih tržišnih uslova, investicione strategije pokazuju veću ili manju profitabilnost, a samim tim finansijsko tržište pokazuje manju ili veću efikasnost. Kao što privredna aktivnost naizmenično prolazi kroz periode recesije i ekspanzije, tako su i za investicione strategije karakteristični periodi neprofitabilnosti i periodi profitabilnosti. Usled promene tržišnih okolnosti i broja konkurenata koji je primenjuju, jedna te ista investiciona strategija u jednom periodu donosi visok dobitak, a u drugom visok gubitak.

Na osnovu prethodno iznetog, jasno je da se sa promenom „ekologije tržišta" ciklus profitabilnosti tržišnih učesnika zamenjuje ciklusom neprofitabilnosti, odnosno, ciklus neefikasnosti finansijskog tržišta ciklusom efikasnosti. *AMH*, dakle, podrazumeva ciklično kretanje stepena tržišne efikasnosti, koje ukazuje da je finansijsko tržište u jednom periodu više, a u drugom manje efikasno. Sa rastom tržišne efikasnosti smanjuje se broj i veličina profitabilnih prilika, a samim tim usled snažne konkurentske borbe tržišnih učesnika dolazi do „prirodne selekcije" i smanjivanja njihovog broja na tržištu. Smanjivanjem broja učesnika na tržištu mnoge novonastale prilike za zaradu ostaće neprimećene i neiskorišćene, što će usloviti pad tržišne efikasnosti i rast broja i veličine profitabilnih prilika. Navedeno dalje implicira porast broja tržišnih učesnika koji tragaju za profitabilnim prilikama, iskorišćavaju ih i doprinose ponovnom rastu tržišne efikasnosti.

Na ovaj način stvara se neka vrsta „začaranog kruga" u kome se naizmenično smenjuju period pada i period rasta nivoa tržišne efikasnosti, što neodoljivo podseća naizmenično smenjivanje perioda pada i perioda rasta nivoa privredne aktivnosti. Dakle, tržišna efikasnost nije statična kategorija, kako je to tvrdila klasična *EMH*, već dinamična kategorija čije je kretanje ciklično, slično kretanju privredne aktivnosti. Period pada i rasta tržišne efikasnosti može se uporediti sa jednim privrednim ciklusom koji počinje recesijom, odnosno padom privredne aktivnosti, a završava se ekspanzijom, odnosno rastom privredne aktivnosti.

Prema Paski (Pasca, 2015, 158), promene u stepenu efikasnosti su konzistentne sa razvojnom interpretacijom finansijskog tržišta. Tržište je efikasno sve dok spoljni faktori ne naruše ravnotežu. Sa narušavanjem ravnoteže tržišni učesnici su prinuđeni da se prilagođavaju novim tržišnim uslovima i tokom procesa prilagođavanja povremeno ispoljavaju ponašanje koje je iracionalno posmatrano sa aspekta prvobitnih tržišnih uslova. Nakon obnavljanja ravnoteže, ispoljeno ponašanje učesnika na tržištu postaje racionalno sa aspekta novih tržišnih uslova, a finansijsko tržište efikasno. Dakle, iracionalno ponašanje u jednom kontekstu, može se smatrati racionalnim u drugom kontekstu. I obrnuto, racionalno ponašanje tržišnih učesnika u jednim tržišnim uslovima je potpuno iracionalno u drugim tržišnim uslovima.

Lo, tvorac *AMH*, ističe da *EMH* nije pogrešna, već nepotpuna, jer ignoriše ljudsku prirodu (Ackert, 2014, 38). Prema Lou (2004), primeri ekonomske iracionalnosti koje navode bihevioralni ekonomisti, poput preteranog samopouzdanja, odbojnosti prema gubitku, mentalnog računovodstva i drugih bihevioralnih predrasuda, predstavljaju ništa drugo do prilagođavanje pojedinaca promenljivom okruženju putem heuristika. Heuristike nisu nužno oprečne racionalnosti, već su izvučene iz konteksta. Donosioci odluka uče na osnovu pozitivnih i negativnih ishoda svojih poteza i razvijaju heuristike kako bi rešili probleme i izazove sa kojima se suočavaju. Sa promenom ekonomskih i tržišnih uslova, prvobitne heuristike postaju neodgovarajuće, zbog čega je neophodan razvoj novih heuristika putem kojih se pojedinci prilagođavaju promenljivom okruženju. Budući da su tržišni uslovi podložni čestim promenama, tržišni učesnici su prinuđeni da se kontinuirano prilagođavaju i adaptiraju (Tseng, 2006, 14).

Sumiranjem prethodno iznetog, zaključuje se da *AMH*, uprkos prilično apstraktnoj i kvalitativnoj prirodi, ima jasne implikacije (Lo, 2004; 2005):

- *Tržišna efikasnost ne funkcioniše po principu „sve ili ništa". Tržišta nisu nužno savršeno efikasna, ili savršeno neefikasna, već stepen tržišne efikasnosti varira u vremenu i među tržištima.*
- *Odnos između prinosa i rizika (premija za rizik) nije konstantan, već varira tokom vremena, pod uticajem promenljivih tržišnih okolnosti, regulatornog okvira i poreskih zakona. Preuzimanje visokog rizika nije garant postizanja jednako visokog prinosa, jer njegova realizacija zavisi i od promenljivosti okruženja.*

- *Nasuprot tradicionalnoj EMH, AMH podrazumeva postojanje povremenih arbitražnih mogućnosti. Kada se arbitražne mogućnosti iskoriste, one nestaju, ali se istovremeno javljaju nove prilike za zaradu. Dakle, sa promenom tržišnih i institucionalnih uslova, u prvom redu regulatornog okvira, jedne arbitražne prilike nestaju, a druge nastaju.*
- *Slično je i sa investicionim strategijama koje jačaju i slabe, donose investicione dobitke u jednom okruženju, odnosno gubitke u drugom okruženju. Jedna te ista investiciona strategija rezultira dobitkom pri jednim, odnosno, gubitkom pri drugim tržišnim i institucionalnim uslovima.*
- *Prilagođavanje (inovativnost) je ključ uspeha. Za razliku od EMH koja sugeriše da se određeni nivo očekivanog prinosa može ostvariti jednostavnim preuzimanjem dovoljnog nivoa rizika, AMH sugeriše da je, usled činjenice da odnos između prinosa i rizika varira u vremenu, bolji način postizanja željenog nivoa očekivanog prinosa prilagođavanje promenljivim tržišnim uslovima.*
- *Preživljavanje je jedino važno. Ne poričući relevantnost maksimiranja profita i korisnosti, Lo (2004) ističe da je preživljavanje organizacioni princip koji pokreće razvoj tržišta.*

Uprkos jasnim implikacijama, tvorac *AMH* priznaje da se ova hipoteza još uvek nalazi u fazi ranog detinjstva i da su potrebna brojna istraživanja i potvrđivanja njene validnosti kako bi ona postala održiva alternativa *EMH* (Lo, 2005, 32). S tim u vezi, istraživanja na temu *AMH* su postala sve učestalija pojava u finansijskoj literaturi. Mogućnosti *AMH* su ubrzo prepoznate, kako od strane teoretičara, tako i finansijskih analitičara, zbog čega je validnost ove hipoteze postala predmet istraživanja brojnih studija.

U istraživanju sprovedenom na američkom tržištu fondova nekretnina specijalizovanih za ulaganje u nekretnine (*US REIT market*), Žou i Li (Zhou and Lee, 2013) su potvrdili dve najvažnije implikacije *AMH*: 1) tržišna efikasnost ne funkcioniše po principu „sve ili ništa" i 2) stepen tržišne efikasnosti zavisi od promenljivih tržišnih uslova. Autori su testirali stepen predvidivosti budućih prinosa na osnovu kretanja prošlih prinosa, jer *EMH* podrazumeva odsustvo ove predvidivosti. Utvrdili su da predvidivost prinosa varira u vremenu pod uticajem tržišnih okolnosti. U određenim periodima utvrdili su prisustvo predvidivosti prinosa i odsustvo validnosti *EMH*, a u drugim periodima odsustvo predvidivosti prinosa i prisustvo validnosti *EMH*. Dodatno, utvrdili su da se stepen predvidivosti prinosa smanjuje tokom vremena, što ukazuje na rast efikasnosti tržišta. Na ovaj način autori su pokazali da je efikasnost tržišta dinamična kategorija. Takođe, utvrdili su da stepen efikasnosti tržišta zavisi od brojnih faktora poput dostignutog stepena razvoja tržišta, inflacije, volatilnosti tržišta, regulatornog okvira.

Slično testiranje *AMH* na tržištu bitkoina sproveli su Kuntia i Patanajak (2018), uz tvrdnju da bi na tržištu koje je u nastajanju i koje je samim tim izloženo brojnim i čestim promenama, bilo nerealno očekivati statično stanje tržišne efikasnosti koje predlaže *EMH*. Studija potvrđuje validnost *AMH*, jer pokazuje da je efikasnost tržišta dinamična kategorija uslovljena promenljivim tržišnim uslovima.

Nalaze u korist validnosti *AMH* pronašli su i Nili i saradnici (Neely et al. 2009), Kim i saradnici (2011), Čarls i saradnici (Charles et al. 2012), Noda (2012), Urkhart i Hadson (Urquhart and Hudson, 2013), Kumar (2018). U navedenim studijama utvrđeno je da predvidivost prinosa varira pod uticajem promenljivih tržišnih okolnosti, što ukazuje na promenljiv stepen i ciklično kretanje tržišne efikasnosti.

Uprkos izloženim nalazima koji potvrđuju validnost *AMH*, još uvek je rano za donošenje konačnog suda o ovom novom teorijskom pristupu. Kao što pola veka istraživanja na temu validnosti *EMH* nije bilo dovoljno da se postigne konsenzus o prisustvu ili odsustvu validnosti ove hipoteze (Leković, 2018), tako je i petnaest godina istraživanja na temu validnosti *AMH* suviše kratak period za donošenje konačnih zaključaka.

AMH je načelno predstavljena kao skup ideja čije vreme tek dolazi i koje će u decenijama koje slede zauzeti važno mesto u finansijskoj teoriji. Da li će se optimistična očekivanja tvorca ove teorije obistiniti pokazaće vreme i rezultati budućih istraživanja koja će zasigurno uslediti, jer je *AMH* uspela da pobudi zavidnu pažnju finansijske javnosti.

Zaključak

Iako su utemeljene na kritici *EMH* i standardnih finansija, bihevioralne finansije ne predstavljaju njihovu negaciju, već ukazuju na odsustvo njihove potpune validnosti. Mnogi bihevioralni ekonomisti priznaju da standardne finansije imaju nespornu relevantnost i ističu da namera zagovornika bihevioralnih finansija nije da proglase standardne finansije „mrtvim". Primena načela bihevioralnih finansija može se shvatiti kao „spasavanje" standardnih finansija (Shiller, 2006, 7). Bihevioralne finansije proširuju domen, odnosno predstavljaju dopunu standardnih finansija, dok standardne finansije predstavljaju osnovu bihevioralnih finansija.

Standardne i bihevioralne finansije u suštini predstavljaju dve strane iste medalje, tj. dve polovine jednog celog koje se naziva finansijska teorija. Uprkos *činjenici da* su zagovornici bihevioralnih finansija glavni kritičari standardnih finansija, a zagovornici standardnih finansija glavni kritičari bihevioralnih finansija, treba težiti pomirenju njihovih suprostavljenih gledišta i integraciji njihovog učenja. Standardne finansije prenaglašavaju značaj ekonometrijskih modela, dok bihevioralne finansije prenaglašavaju uticaj psiholoških faktora, zbog čega praktično rešavanje finansijskih problema i donošenje ispravnih finansijskih odluka zahteva istovremenu primenu oba pristupa.

Prema Šileru (Shiller, 2006, 4), „razlike između standardnih i bihevioralnih finansija su preuveličane...bihevioralne finansije su više eklektične, više spremne da nauče od drugih društvenih nauka i manje zabrinute za elegantnost modela, a više za nalaze koji opisuju pravo ponašanje ljudi". Bihevioralna revolucija započeta osamdesetih godina 20. veka otkrićem velikog broja tržišnih anomalija i primenom psiholoških teorija u ekonomiji, predstavlja povratak ka više eklektičnom pristupu u finansijskom modeliranju.

Polazeći od svega gore iznetog, zaključuje se da su za donošenje ispravnih finansijskih odluka investitorima, portfolio menadžerima, finansijskim analitičarima i ostalim učesnicima na tržištu potrebna znanja kako standardnih, tako i bihevioralnih finansija, čime je potvrđena polazna hipoteza rada. Nobelove nagrade za ekonomiju dodeljene Heriju Markovicu 1990. godine za njegov rad u oblasti standardnih finansija i Danijelu Kanemanu 2002. godine za njegov rad u oblasti bihevioralnih finansija, jesu najbolji dokaz validnosti prethodno iznetog zaključka, jer nedvosmisleno ukazuju da je ekonomska javnost prihvatila elemente i standardnih i bihevioralnih finansija kao validne i tačne.

Optimalno rešenje problema treba tražiti u uspostavljanju ravnoteže između, s jedne strane, primene egzaktnih matematičkih i statističkih modela i, s druge strane, razumevanja ljudske prirode i načina razmišljanja, ponašanja i postupanja ljudi. Drugim rečima, optimalno rešenje treba tražiti u upotpunjavanju standardnih finansija znanjima iz bihevioralnih finansija, odnosno, u kombinovanju najboljih elemenata standardnih i bihevioralnih finansija. Budućnost finansija, prema Šefrinu (Shefrin, 2008; 2010), leži u kombinovanju realnih pretpostavki bihevioralnih finansija i strogih analiza i preciznih istrumenata standardnih finansija. Dobar primer novog teorijskog pristupa koji pomiruje razlike između standardnih i bihevioralnih finansija jeste *AMH* koja zauzima srednju poziciju između savršene tržišne efikasnosti koju zagovaraju predstavnici standardnih finansija i odsustva tržišne efikasnosti na koje ukazuju bihevioralni ekonomisti.

Imajući u vidu dinamični razvoj savremene naučne misli, buduća istraživanja mogu biti usmerena na uporednu analizu bihevioralnih finansija i novih perspektivnih oblasti istraživanja poput neurofinansija koje proučavaju neurološku osnovu procesa donošenja finansijskih odluka. Buduća istraživanja mogu biti usmerena i na ispitivanje uloge hormonskog balansa i genetskih karakteristika u procesu finansijskog odlučivanja, što je među prvima nagovestio Šefrin (2015). Realizacijom navedenih istraživanja bliže bi se objasnio proces finansijskog odlučivanja i napravio bi se iskorak u pravcu boljeg razumevanja istraživane problematike.

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Behavioral Finance as an Answer to the Limitations of Standard Finance

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Abstract: Moving the standard finance theory further away from practice has led to an increased criticism of standard finance. Much evidence in favor of the absence of perfect investor rationality have called for the need of a new approach and a new point of view offered by behavioral finance. Behavioral finance relies on standard finance, supplements its theory and, according to behavioral economists, gradually substitutes it; however, behavioral finance also faces a number of limitations. The aim of this research is to find answers to the question of whether preference should be given to standard or behavioral finance, in terms of finance theory and investment practice. By applying the methods of qualitative economic analysis, it has been concluded that we should strive towards the integrated application of these theoretical frameworks in order to achieve their synergy, exploit the positive and concurrently eliminate the negative aspects. An example of a theoretical approach that reconciles the differences between standard and behavioral finance is *Adaptive Markets Hypothesis (AMH)*, which is given particular attention in the paper and has not been discussed in the literature in the Republic of Serbia thus far.

Keywords: behavioral finance, standard finance, Adaptive Markets Hypothesis

JEL: G00, G12, G14, G40

Introduction

"The goal of every economic theory is to give a simplistic, but realistic, picture of an important phenomenon in practice. If theoretical implications do not fit the actual events, then the theory loses credibility, and attempts emerge to analyze the economic mechanisms from a different angle" (Vučković, 2010, 629). It is the moving away of standard finance theory from practice that has triggered the emergence of behavioral finance, which, by incorporating psychological factors, supplements the teachings of standard finance and points to a repetition of irrationality in the complex world of finance.

Finance theory has come a long way from the general acceptance of the *Efficient Market Hypothesis* (*EMH*), the underlying standard financial theory, to the emergence of behavioral finance and behavioral critique of *EMH*. A large number of market anomalies have called into question the validity of *EMH* and made way for the development of a new approach to finance focusing on studying human behavior and psychology. According to Águila (2009), the growing interest in behavioral finance is the result of the accumulation of empirical anomalies, therefore, the task of behavioral finance is to ensure their better understanding by integrating psychology with finance and economics.

Given the above stated, the subject of the research conducted in this paper is a comparative analysis of behavioral and standard finance theory. The aim of the research is to find the answer to the question of whether behavioral finance has succeeded in replacing the teachings of standard finance in finance theory and investment practice. The objective is to compare the positive and negative sides of behavioral and standard finance by comparing them, but also to offer an explanation of potential optimal solutions which, like the *Adaptive Markets Hypothesis*, are a factor in reconciling standard and behavioral finance.

In accordance with the defined subject and the set goal of the research, the initial hypothesis of the paper reads as follows:

H: Investors, portfolio managers, financial analysts and other market participants equally need knowledge of standard and behavioral finance.

Examination of the validity of the initial hypothesis stated in the paper will be conducted by applying the methods of qualitative economic analysis, which will, through the study of relevant literature, enable the formulation of valid conclusions on the researched topics.

Having in mind the defined subject, determined goal and formulated hypothesis, the paper will present the key differences between behavioral and standard finance, following the introductory considerations. Then, the positive and negative sides of these theoretical frameworks will be analyzed, with an emphasis on the basic challenges they are faced with. Particular attention will be given to market efficiency, which, according to Statman (1999, 18), is at the center of the conflict between standard and behavioral finance. The penultimate section of the paper will explain the *Adaptive Markets Hypothesis* as an example of an optimal solution that reconciles the opposing views of traditional and behavioral economists. Finally, the concluding section of the paper will summarize the positions regarding the confirmation of the initial hypothesis of the paper and offer conclusions on the directions of future research.

Behavioral Finance Versus Standard Finance

As regards the field of standard finance, the general opinion is that, when deciding under uncertainity, people are guided by reasoning, i.e. the law of probability and maximization of personal interest. However, in addition to reasoning, one cannot deny the importance of intuition (Vučković, 2010, 630) to which proponents of behavioral finance give equal importance.

Reason and intuition are two basic elements of a two-system approach to decision making, where System 1 is identified as intuition, and System 2 as reason, i.e. reasoning. System 1 contains automatic operations, while System 2 contains controlled ones. System 1 operates quickly and effortlessly (an individual's reaction to sudden noise in their environment, driving a car on an empty highway), while System 2 involves mental activities that are slow, effortful and consciously controlled (focusing on a person's voice in a noisy room in which several people are speaking at the same time, parking a car in a narrow space, filling out a survey questionnaire). System 1 and System 2 are in continuous interaction, as System 1 generates inputs to System 2, such as impressions, intuitions, intentions and feelings. After that, System 2 turns these impressions and intuitions into beliefs, and impulses into voluntary actions (Kahneman, 2011).

Most of everyday decisions and actions come from System 1, because people usually do not invest any or only make minor mental effort when making decisions. However, when System 1 encounters unknown or complex situations, System 2 is activated. Thus, when deciding on important issues, issues of particular importance to the decision maker and issues to which System 1 has no solution, System 2 plays a dominant role and makes the final decision. In addition, System 2 is in charge of self-control. Its task is to overcome the impulses coming from System 1 (Kahneman, 2011). In different situations, thanks to System 2, people manage to refrain from violent reactions, which are suggested by System 1, thus, they manage to hide fear, pain and other feelings.

In general, proponents of behavioral finance believe that intuitive reasoning (System 1) deserves as much attention as reasoning (System 2) and criticize the following characteristics of a person, which are considered default in the standard finance (Pompian, 2006):

- *Perfect rationality – a person's behavior is not solely guided by reason and rationality. Many psychologists consider that the human intellect is subordinated to human emotions, which is why the behavior of people is predominantly driven by emotions such as fear, love, hate, pleasure, pain. They even claim that people use their intellect only to achieve or avoid these emotional outcomes.*

- *Being guided solely by self-interest – this assumption implies the absence of philanthropy, selflessness, kindness and humanity that characterize a significant part of the society.*
- *Believing that one is perfectly informed (perfect information) – not a single person possesses all the information and all the required knowledge.*

Proponents of behavioral finance believe that, due to cognitive limitations, there are no perfectly rational market participants. Behavioral finance, instead of a perfectly rational investor, assumes a normal investor, that is, an ordinary person (homo sapiens) who is not always driven solely by self-interest. In addition to economic motives, a normal investor often has non-economic motives. They do not always and exclusively try to maximize their earnings, but are guided by other goals, such as showing selflessness and social responsibility by taking into consideration environmental protection and avoiding the purchase of shares in companies associated with products such as weapons and ammunition, alcoholic beverages and tobacco.

A normal investor does not possess perfect and unlimited knowledge, which is why they often rely on subjective assessment and intuition when making decisions under conditions of uncertainty. According to Todorović (2011, 277), normal investors often decide "spontaneously, without too much thinking, calculation and additional effort, relying on the mental shortcuts - heuristics". Normal investors are characterized by cognitive imperfections and cognitive limitations, therefore, a full understanding of imperfections certainly benefits decision-makers more than a naive belief in the infallibility of their intellect (Slovic, 1972).

Behavioral finance, therefore, puts the imperfection of the human mind at the forefront. Imperfection is manifested when making everyday life decisions, and especially when making complex decisions relating to finance that require the possession of specific knowledge and skills (Ljubojević & Dašić, 2018; Živković et al., 2019). Even the investors such as top financial experts do not possess perfect knowledge and do not make perfectly rational economic decisions. They also make mistakes, not only under the influence of cognitive biases and emotions, but also due to the impossibility of perfectly processing a large amount of information available in complex and uncertain economic conditions. According to De Bondt et al. (2013), in modern times, the volume of obtained information is so immense that investors are forced to focus on only a few most important indicators.

While rapid quality financial decision-making used to be hindered by a lack of information in the past, nowadays rapid decision-making is hindered by a large amount of available information. A normal investor has limited capacities, limited cognitive abilities and skills, and therefore is not able to process a large amount of daily available information, nor to immediately adjust their decisions to newly received information, which is why their decisions are not perfectly rational. According to Kapor (2014), there is an objective information overload in the modern world that disorients people, affects their ability to set priorities and make sound decisions.

In contrast to behavioral finance, standard finance assumes a perfectly rational and perfectly informed investor, *homo economicus*, who is familiar with complex econometric models and has the knowledge and ability to accurately and precisely process data. Individuals in standard finance are not susceptible to the influence of emotions, preferences and subjective experience, therefore, they make decisions in an objective and professional way. Standard finance, therefore, assumes that people are perfect economic beings who always make the right decisions in their own interest. In addition, standard finance assumes that people do not have a problem with self-control: they stick to their savings plan and never make impulsive purchases, they stick to their diet and easily refuse the dessert, their decisions to stop smoking make them able to easily refuse the offered cigarette, their decisions to stop gambling make them able to easily refuse a friend's invitation to a poker game. Standard finance also assumes that people do not feel remorse: they will feel the same regret when they miss their flight by a minute as when they miss it by one hour (Statman, 1995), or they will feel the same regret when they lose a game during the stoppage time as when they lose a game within the regular time of the game.

In brief, in standard finance people are always rational, while in behavioral finance people are not always rational, but they are always normal (Statman, 1995, 21). One should not mistake normal investors for irrational investors, because normal investors only occasionally show elements of irrationality. Normal investors are not always rational, but they are not always irrational either. Statman (2014) divides normal investors into *normal-knowledgeable* (normal-smart) and *normal-ignorant* (normal-stupid). Normal-knowledgeable investors have learned, although imperfectly and with great effort, to overcome cognitive errors, such as hindsight and overconfidence, and to use strong scientific knowledge to resist strong emotions that lead them to make new wrong decisions. On the other hand, normal-ignorant investors do not trust scientific evidence and do not use scientific knowledge to overcome the obstacles they face.

By summarizing the above presented facts, it is concluded that behavioral finance assumes the *bounded rationality* of market participants, while standard finance starts from the concept of *perfect rationality*. Behavioral finance points to the occurrence and repetition of irrationality, while standard finance assumes the principle of perfectly rational financial decision-making.

Behavioral finance seeks to explain irrationalities existing in the complex world of finance with cognitive biases, such as: 1) overconfidence bias, 2) framing bias or framing, 3) mental accounting bias, 4) representativeness bias, i.e. availability bias or availability heuristics, 5) conservatism bias, i.e. status quo bias or anchoring bias, 6) loss aversion bias, 7) regret avoidance bias, 8) herd behavior, i.e. herd mentality or crowd psychology, 9) confirmation bias or self-confirmation bias, 10) hindsight bias, 11) cognitive dissonance bias and 12) winner's curse.[1]

One of the most famous examples of investor irrationality dates back to the 16th century, when tulips imported from Constantinople into the Netherlands for the first time became a symbol of prestige among the Dutch elite, and very

1 he elaboration of cognitive biases goes beyond the scope of this paper, which is why these imperfections will be the subject of future research by the authors.

soon the most desirable commodity on the market and subject of trade on the Amsterdam Stock Exchange. Seeing the opportunity for profit, which was reflected in the continuous growth of the price of tulips, the average Dutchmen sold everything they had, including their houses, in order to buy tulips and make money by reselling them. However, at the end of 1636, the formed price bubble burst and in just one month, the price of tulips decreased by 90%; many investors suffered huge losses and went bankrupt (Pompian, 2006). The described sequence of events greatly reminds us of the causes of the financial and economic crisis that occurred on the American mortgage market at the end of 2007. The difference is that instead of tulips, Americans, guided by the crowd psychology and excessive self-confidence, traded in real estate.

Accordingly, the majority of economists agree that rational investor behavior is not a permanent characteristic of economic reality. However, the paradigm of rational investor behavior still persists and holds an important place in finance theory. Two basic arguments in favor of defending the assumption of rational investor behavior are (De Bondt & Thaler, 1995):

- *Theories should not be judged based on the validity of their assumptions, but on the basis of the validity of their predictions; theories inevitably involve simplifications*[2]*;*
- *Irrational investors either lose wealth and go bankrupt over time, or their actions get neutralized by the trading of rational, smart and well-informed investors.*

In addition to the aforementioned differences, standard and behavioral finance are not on the same page regarding the manner in which portfolios are constructed, as well as the asset pricing models. Standard finance rests on *Modern Portfolio Theory (MPT)* and standard asset pricing models, while behavioral finance offers an alternative in the form of *Behavioral Portfolio Theory (BPT)* and *Behavioral Asset Pricing Model (BAPM)*. *MPT* is based on the following postulates: a) investors are solely characterized by risk aversion, b) investors consider the portfolio as a whole, they have one defined level of risk tolerance and one goal which is reflected in maximizing the expected return at the given level of risk, c) when constructing a portfolio, investors are solely guided by the expected return and risk relationship, d) an optimal portfolio is a mix of market portfolio and risk-free assets, e) an optimal portfolio is a portfolio maximizing the investor's utilitarian benefits. For each of the aforementioned postulates, *BPT* offers an alternative: a) in addition to risk aversion, investors are also characterized by risk seeking, b) investors consider a portfolio as a layered pyramid, where each mental account (pyramid layer) is characterized by a defined level of risk tolerance and a specific goal that becomes more ambitious by moving from lower to higher layers of the pyramid, c) when building a portfolio, investors are not only guided by the relationship between the expected return and risk, but also by their wishes, needs, emotions and habits, d) an optimal portfolio is a mix of subportfolios each of which is optimal at a certain level of the pyramid, e) an optimal port-

2 Unfortunately, evidence supporting economic theories is often lacking, which is why the financial public may remark that finance consist of theories for which there is no evidence and empirical facts unsupported by theories (De Bondt & Thaler, 1995).

folio is a portfolio maximizing not only the investor's utilitarian benefits, but also their expressive and emotional benefits.

In addition to a clear confrontation of these theories, it is important to point out the idea of their combination, which was implemented by Das et al. (2010). The authors suggest that investors should divide their wealth into different mental accounts (layers) and then optimize these mental accounts as subportfolios of the overall portfolio, according to the rules of the *MPT*. In this way, by combining the elements of *MPT* and *BPT*, Das et al. (2010) founded the *Mental-Accounting (MA) Portfolio Theory* and offered it as an optimal solution that reconciles the opposing views of the traditional and behavioral economists. According to Das et al. (2011), investors, guided by *Mental-Accounting (MA) Portfolio Theory*, manage to achieve the goals defined at each individual layer of the pyramid, while staying on the mean-variance efficient frontier. In this way, investors manage to achieve the maximum possible benefits by combining the knowledge of standard and behavioral finance. The claim that this new portfolio theory reconciles *MPT* and *BPT* is best illustrated by the fact that Harry Markowitz, the founder of *MPT*, and Meir Statman, who founded *BPT* together with Hersh Shefrin, supported the establishment of *MA Portfolio Theory*. The general conclusion is that, despite numerous differences, both *MPT* and *BPT* play an important role in creating and successfully managing a portfolio.

Standard and behavioral finance also differ in terms of asset pricing models. In standard finance, asset pricing models rest upon the following postulates: a) the expected return on assets is a function of risk, which is why differences in expected return are solely the result of differences in the assumed level of risk, b) rational investors, by implementing arbitration, cancel the influence of irrational market participants and make it irrelevant, c) the value of assets is determined on the basis of utilitarian benefits, d) pricing of financial assets is not affected by affects, mental schemes, cognitive errors and misleading emotions, e) risk is an objective category, i.e. a mathematical and statistical concept that is not influenced by affects. For each of the mentioned postulates, *BAPM* offers an alternative: a) differences in the expected return on assets are explained not only by differences in the level of risk, but also by the influence of numerous psychological factors that go or do not go in favor of the choice of a particular asset, b) due to the limitations to the arbitrage, rational investors fail in their attempts to cancel the effect of the irrational market participants, c) the value of assets depends on total benefits: utilitarian, expressive and emotional ones, d) pricing of financial assets is affected by affects, mental schemes, cognitive errors and misleading emotions, e) risk is a psychological concept which includes objective and subjective risk. Despite the fact that *BAPM*, which is based on psychological factors, better fits the real-life circumstances, Barberis (2018) is of the opinion that it is still too early to make a final conclusion and talk about its superiority. In the search for the optimal solution, one should keep in mind the possibility of integrated application of aforementioned models, as well as the emergence of a new asset pricing model that would include the best elements of the described standard and behavioral approach.

Positive and Negative Sides of Behavioral and Standard Finance

Both standard and behavioral finance theory, as all other theories, have their strengths and weaknesses. The key strength of standard finance is its systematic nature, while the main weakness is its reliance on the unrealistic assumptions, such as the assumption of homogeneous expectations and perfect rationality of all market participants. On the other hand, behavioral finance is characterized by the absence of systematicity and uniformity, that is, reliance on models that lack mutual consistency and uniformity. This feature is the most striking weakness of behavioral finance, while the reality of the initial assumptions is their main strength (Shefrin, 2010).

It is not difficult to conclude that the key strength of standard finance is also the essential weakness of behavioral finance, as well as that the key weakness of standard finance is at the same time the essential strength of behavioral finance. Therefore, standard and behavioral finance complement each other in a certain way. Even the most complex econometric models of standard finance, based on restrictive assumptions, oversimplify economic reality, while behavioral finance models more faithfully represent economic reality, however, they lack precision and exactness.

The key challenge relating to standard finance theory is to find an adequate explanation for the numerous market anomalies that have been undermining the validity and credibility of its assumptions for decades, while the basic challenge faced by behavioral finance refers to establishing a systematic and uniform framework, such as that of standard finance.

The frequent occurrence of persistent market anomalies has called into question the validity of standard finance, which is why many theorists have proposed a reconstruction of finance theory on a behavioral basis. Among the anomalies that have shaken the validity of standard finance and at the same time conditioned the emergence and development of behavioral finance, the following stand out (Leković, 2018):

- *P/E effect (price-earnings effect) – by investing in stocks with* a *low ratio of the stock's current price to its earnings (low P/E ratio) an above-average return is achieved;*
- *Small firm effect or size effect – shares of small-cap companies bring significantly higher risk-adjusted returns, compared to shares of large-cap companies;*
- *Liquidity effect – by investing in less liquid securities, an above-average return is achieved;*
- *Neglected-firm effect – stocks ignored by financial analysts bring higher returns than stocks of followed and observed companies;*
- *January effect – securities returns are significantly higher in the month of January than in any other month of the year;*
- *Monday effect – securities returns on Monday are significantly lower than on any other day of the week;*
- *Day-end effect – securities prices increase in the final thirty minutes of the trading day;*

- *Holiday effect – securities returns realized two working days before a national holiday are significantly above the annual average;*
- *Intra-month effect – the first half of the month is characterized by significantly higher returns compared to the second half of the month;*
- *Turn of the month effect – during the transition from one month to another, significantly higher returns are achieved;*
- *B/M effect (book to market effect) – by investing in shares with a high ratio of book value to market value (high B/M ratio), an above-average return is achieved.*

The growing number of identified market anomalies indicates insufficient confirmation of *EMH* as a key assumption of standard finance, and thus insufficient confirmation of standard finance theory. However, as long as standard finance theorists manage to explain the anomalies, their presence does not result in rejecting *EMH*. What is more, many anomalies had disappeared when the investment public found out about them. However, what calls into question the validity of *EMH* are unexplained anomalies. Also, the threat to standard finance is not reflected in individual, but systemic anomalies, which remain unexplained despite the numerous efforts of standard finance theorists.

EMH argues that when irrational optimists buy stocks, smart (rational) investors sell them, and likewise, when irrational pessimists sell stocks, smart (rational) investors buy them, thus eliminating the influence of irrational traders on the market price (Shiller, 2003, 96). Thus, according to standard finance theory, rational investors are a precondition for efficient financial markets, since they correct the effects of trading conducted by irrational market participants in the arbitration process (Todorović, 2011). However, in practice, rational investors often fail to cancel the influence of irrational investors, which is why the previously described situation represents an idealized picture of reality and a perfect theoretical case. A phenomenon that is much easier to believe in is the limitations to arbitration.

Unlike standard finance that relies on *EMH*, behavioral finance builds on cognitive psychology and limitations to arbitration. Cognitive psychology refers to the way people think and plays an important role in behavioral finance, because numerous studies have shown that people make systemic mistakes in the way they think: they are too confident, they give too much importance to recent experiences, use mental shortcuts, and avoid change (Ritter, 2003). On the other hand, the limitations to arbitration refer to situations where arbitration is not efficient to the extent that it ensures market efficiency.

One of the greatest proofs of the limitations to arbitration and the absence of market efficiency are bubbles that represent long-term movements in the price of an asset above its fundamental value, which are explained by a cognitive anomaly called herd behavior, i.e. herd mentality or crowd psychology. Bubbles point to the insufficient ability of rational arbitrageur to take advantage of arbitration opportunities and return the price of assets to the level of their real value (Todorović, 2011).

According to Ritter (2003), it is very difficult to find a trading strategy that guarantees profit. However, this does not imply that financial markets are efficient. Misevaluations of financial assets are common, however, it is not easy to achieve above-average returns on this basis for several reasons: it is difficult to find undervalued and overvalued securities, there are transaction costs, information costs and there is a search for undervalued and overvalued securities, as well as small price difference between security price and its intrinsic value, which all make trading unprofitable; in addition, investors also fear that a decline in the price of purchased undervalued securities may occur, i.e. a further increase in the price of sold overvalued securities.

The degree of limitations to arbitrage also depends on the way in which the arbitrageur is funded. An arbitrageur who is forced to borrow financial assets in order to buy an undervalued security is exposed to greater risk, which is why they undertake purchase transactions only in the case of a large undervaluation. The expected price increase must be large enough to cover the interest on the borrowed funds and provide earnings for the risk taken. In case of a small difference between the price and the intrinsic value of the security, there will be no activities of the arbitrageur. Thus, the price of a security will continue to differ from its intrinsic value in a situation where the potential arbitrage profit is too small, so it does not profitable for the arbitrageurs to undertake purchase activities.

In short, the representatives of behavioral finance believe that the markets are not perfectly efficient, however, they admit that it is difficult to "beat" them, that is, to achieve a return higher than the average market return. This goes in favor of the validity of the semi-strong and weak form of *EMH*, while the strong form of *EMH* is thus rejected. Only well-informed, skilled and professional investors are able to beat the market, while the attempts of the average investor are mostly unsuccessful. According to Statman (2014), a non-expert investor tries to beat the market for two reasons: 1) because they have been deceived by cognitive errors and misleading emotions, and 2) because they are trying to achieve the expressive and emotional benefits of surpassing average market results.

The strengths of behavioral finance are, among other things, reflected in the explanation of market anomalies and the causes of market inefficiency. According to *EMH*, the price of assets depends on the received information, while according to behavioral finance, the price of assets depends on the reaction of market participants to the received information (Fakhry, 2016). Based on behavioral finance theory, different participants in the financial market are differently informed and react differently to new information. They often underestimate some information and overestimate other. Thus, according to behavioral finance theory, the way in which market participants perceive new information is more important than the received information, i.e. the reaction of market participants to the received information is more important than the received information itself. Excessive or insufficient reaction will imply market inefficiency, i.e. deviation of the asset price from its fundamental value. According to Águila (2009), the value of an asset may differ from its intrinsic value as a result of the investor's reaction to natural psychological factors, such as fear, hope, optimism and pessimism.

On the other hand, the key advantage of *EMH* compared to standard finance theory is reflected in the fact that this hypothesis can be applied as a useful benchmark for regulators, while behavioral finance theory still cannot be used as a benchmark, due to the lack of a uniform model. Nevertheless, the significance of behavioral finance theory involves its ability to explain deviations from the benchmark (Fakhry, 2016, 458). According to Lo (2005, 22), *EMH* can be seen as an ideal that would exist in the case of absence of market imperfections such as transaction costs, taxes, regulatory constraints, as well as the absence of cognitive constraints and bounded rationality of market participants.

Modern financial theory still does not have a final answer to the question of whether financial markets are efficient. The decision of the Nobel Prize Committee to award 2013 Nobel Prizes to Eugene F. Fama, who is recognized as "the father of *EMH*", and Robert Shiller, the proponent of the claim that markets are often irrational and can be beaten, is confusing to say the least and certainly does not contribute to solving these half-century dilemmas (Statman, 2014).

It is undeniable that behavioral finance has succeeded in supplementing standard finance and improving the investment decision-making process. However, the behavioral finance theory also faces a number of limitations (Curtis, 2004):

- *Experience and education are important – people usually make wrong decisions in areas they are not familiar with, but this does not mean that wrong decisions will continue to occur even after gaining the appropriate knowledge and experience. When investors realize that their decisions were wrong and, more importantly, why such decisions were wrong, they will make better decisions in the future.*
- *If 60% of respondents make the wrong choice or make the wrong financial decision, is it correct for a financial advisor to assume that all his clients will be among these 60%?*
- *The term "statistically significant" does not always mean or say much – there is a subtle but important difference between statistical significance and the likelihood that research results can be applied to an individual. If the sample, in terms of subjects selected to participate in the study, is inadequate, statistical significance tests become meaningless.*
- *Investors react differently in real and fictional situations – in imagined situations, investors make quick decisions, without too much research and thinking, guided not only by reason, but also by mental shortcuts, emotions and intuition. On the other hand, in real-life situations, especially those involving multimillion-dollar stakes, reason is usually put before emotions, thus making behavioral finance lose its significance.*
- *Expectations of the researchers influence the results of the research – the phenomenon of determining the results that the researcher expects to find, or even worse, that they want to find, is a significant obstacle that stands in the way of extensive use of behavioral finance.*

Critics point out that behavioral finance is not a new field of finance, but rather a set of anomalies, as well as that representatives of behavioral finance are more preoccupied with citing the weak points of standard finance than with providing alternative solutions. It can often be heard that behavioral finance does not have the solid and stable structure that standard finance has, but rather represents a simple collection of stories about investors who are prone to cognitive errors and misleading emotions (Statman, 2014). Critics also point out that behavioral finance lacks exhaustiveness and systemic integrity.

Despite the abovementioned criticisms and limitations, behavioral finance is still much more complex than a simple set of anomalies and a simple collection of stories about the moves of irrational investors. Proponents of behavioral finance reject the claim that behavioral finance pays too much attention to criticizing standard finance, without offering its own alternative solutions. One of the most deserving scientists for the development of behavioral finance, Shiller (2006) as a counter-argument, points out that behavioral finance is playing an increasingly important role in the implementation of public policy, citing the implementation of social security reform in the United States as an example. Behavioral finance draws on the expansion of knowledge from all other social sciences by offering real and tangible alternatives (Shiller, 2006, 7). In addition, compared to standard finance, which is in some way limited by its rigorous analysis, behavioral finance, according to Hirshleifer (2001), provides economic theorists with a greater degree of freedom, resulting in a greater ability to find the best solutions.

According to behavioral economists, the benefits of behavioral finance are multiple, and they are reflected, above all, in a better understanding of the investment decision-making process, which is achieved thanks to the incorporation of the workings of psychological factors. A better understanding of the influence of psychological factors is important, because it enables investors to overcome cognitive errors and resist the influence of misleading emotions. According to Statman Statman (2008, 38), behavioral finance has made a significant contribution to the field of investment by focusing on the cognitive and emotional aspects of the investment decision-making process.

Given all of the above, and primarily the advantages and key limitations of the analyzed theoretical frameworks, the question arises whether preference should be given to standard or behavioral finance in financial theory and investment practice. The answer is that investors, portfolio managers, financial analysts and other market participants equally require knowledge of both theoretical frameworks. Behavioral finance has been developed as an alternative and a great challenge to standard finance theory, but it would be an exaggeration to say that behavioral finance has succeeded in replacing the teachings of standard finance. A more realistic assessment is that behavioral finance, by incorporating psychological factors, has supplemented the teachings of standard finance and brought standard finance theory closer to reality. Assuming that standard finance, for the most part, accurately describes how the market works, behavioral finance indicates the best way to use that knowledge and make a profit (Curtis, 2004, 17).

Standard finance lacked a more realistic view of the complex financial reality, which was obstructed by the application of strict assumptions and exact rules of science. A higher degree of reality was provided by behavioral finance, which, by integrating the knowledge of psychology, sociology, anthropology and economics, put the individual, i.e. the human factor, in the foreground. The limitations to arbitrage and the occasional irrationality of market participants caused by cognitive imperfections are more in line with reality than the perfect market efficiency and perfect rationality of market participants, which are at the center of standard finance.

To summarize, behavioral finance picks up where standard finance has left off and ensures the completeness of financial theory. Behavioral finance describes how investors actually behave, rather than how they should behave. However, we should not forget the systematicity, uniformity and precise instruments of standard finance, as well as the mutual consistency of its models and other strong points of standard finance theory, which has been the ruling financial paradigm for decades. These strengths of standard finance are precisely the elements that behavioral finance lacks.

With this in mind, De Bondt et al. (2008) point out that a new paradigm is expected to emerge soon which will combine elements of standard and behavioral finance. This new paradigm would reconcile the conflicting teachings of standard and behavioral finance and improve the financial decision-making process. A good example of a theoretical approach that reconciles the differences between standard and behavioral finance is *Adaptive Markets Hypothesis*.

Adaptive Markets Hypothesis – a Factor of Reconciliation Between Standard and Behavioral Finance

By combining knowledge of behavioral finance and postulates of *EMH*, Lo (2004) developed the *Adaptive Markets Hypothesis (AMH)* as an alternative to traditional *EMH*. Since *AMH* integrates the postulates of *EMH* and the knowledge of behavioral finance, *AMH* is practically a modified version of traditional *EMH*.

AMH represents a new theoretical framework which, by applying the following development principles: competition, adaptation and natural selection, reconciles the differences between standard and behavioral finance. Specifically, *AMH* reconciles market efficiency with behavioral alternatives. In contrast to the traditional approach that claims that individuals strive to maximize expected utility and have rational expectations, the developmental approach makes a much more modest claim that at the core of each individual is the desire to survive, and thus the need for constant adaptation to changing environments (Lo, 2004).

AMH builds on the following ideas (Lo, 2005, 31): 1) people are guided by their own interests, 2) people make mistakes, 3) people learn from mistakes and adapt their behavior, 4) competition encourages adaptation and innovation, 5) natural selection shapes market conditions which the creator of *AMH* figuratively calls "market ecology"[3] and 6) development determines market dynamics. According to Lo (2005), the first idea represents a common starting point for *EMH* and *AMH*, while, in terms of the second and third ideas, the stated hypotheses "differ", because, according to *EMH*, investors do not make mistakes, do not learn from mistakes and do not adapt, since the market environment is static and always in balance. The fourth idea claims that adaptation and innovation do not occur independently of market forces, but under the influence of competition, i.e. the instinct for survival. Competitive struggle results in "natural selection", in the sense that "the strongest survive"; also, "natural selection" shapes the "ecology of the market", in the sense that it affects the number of market participants competing for a limited number of profitable opportunities. Finally, the sixth idea implies that the previously described development processes: competition, adaptation, learning from mistakes, innovation and natural selection, determine and reflect market dynamics.

AMH does not claim that market efficiency is perfect or non-existent, but indicates that market efficiency is a characteristic that varies over time and between markets, with the degree of market efficiency depending primarily on changing market conditions and circumstances. Based on Khuntia and Pattanayak (2018), due to the influence of behavioral biases and the changing market environment, it is unrealistic to expect perfectly efficient, i.e. perfectly inefficient markets. Due to the influence of these factors, efficiency is a changeable category.

Unlike *EMH*, which assumes that the market environment is static and in equilibrium, *AMH* argues that the market environment is dynamic and unbalanced, with changes requiring continuous adjustment of market participants. In other words, while *EMH* implies a static approach, *AMH* implies a developmental and dynamic approach, that is, while according to *EMH* market efficiency is a static category, according to *AMH* market efficiency is a highly dynamic category conditioned by numerous factors.

In contrast to *EMH*, which argues that prices reflect all available information, *AMH* indicates that the extent to which prices reflect available information depends on: 1) changing market conditions, primarily the number of market participants competing for a limited number of profitable opportunities, and 2) the degree of success of market participants in adapting to changing market conditions through learning from errors, competition, adaptation and innovation. A larger number of market participants competing for a limited number of profitable opportunities and a greater success of their adaptation to the changing market conditions implies greater efficiency of the financial market. In contrast, fewer market participants competing for a limited number of profitable opportunities and their lower success in adapting to changing market conditions implies lower financial market efficiency.

Regardless of the greater or lesser adaptability of market participants to changing market conditions, adaption takes time, which is why earning

3 Lo (2004) compares economics with ecology, market participants with plant and animal species and profitable opportunities with the available quantities of food and water. In this respect, economic profit is food for market participants on whose consumption depends their very survival.

opportunities survive and exist for a certain period of time, i.e. they do not automatically disappear as argued by the classic *EMH*. Therefore, *AMH* implies that opportunities for arbitrage and earning occur from time to time, under the influence of changing market circumstances, and exist for a certain period of time. Profit opportunities are present until market participants adjust their trading strategy to changed market circumstances, which suggests that optimal investment strategies also change over time (Tseng, 2006).

Depending on the changing market conditions, investment strategies show greater or lesser profitability, therefore, the financial market is more or less efficient. Just as economic activity goes through both periods of recession and expansion, the investment strategies are also characterized by unprofitable and profitable periods. Due to the change in market circumstances and the number of competitors who apply a certain investment strategy, this investment strategy brings high profit in one period and significant loss in another.

Based on the abovementioned, it is evident that, with the change of "market ecology", a profitability cycle of market participants is superseded by a cycle of unprofitability, i.e. an inefficient cycle of the financial market is replaced by an efficient cycle. *AMH*, therefore, implies a cyclical movement of the degree of market efficiency, which indicates that the financial market is more efficient in one period and less efficient in another. With the growth of market efficiency, the number and the scope of profitable opportunities decrease, and thus, due to the strong competition of market participants, a "natural selection" occurs, as well as a smaller number of profitable opportunities on the market. By reducing the number of market participants, many emerging earning opportunities will go unnoticed and unexploited, which will lead to a decline in market efficiency and an increase in the number and scope of profitable opportunities. This further implies an increase in the number of market participants who seek profitable opportunities, exploit them, and contribute to the new growth of market efficiency.

In this way, a sort of "vicious circle" is created, where periods of decline and periods of growth of the degree of market efficiency come one after another, which irresistibly resembles the superseding of the period of decline and the period of growth in terms of the level of economic activity. Thus, market efficiency is not a static category, as claimed by the classical *EMH*, but a dynamic category whose movement is cyclical, similar to the movement of economic activity. The period of decline and the period of growth of market efficiency can be compared with one economic cycle that begins with a recession, or decline in economic activity, and ends with expansion, or increase in economic activity.

According to Pasca (2015, 158), changes in the degree of efficiency are consistent with the developmental interpretation of the financial market. The market is efficient as long as external factors do not upset the balance. However, when the imbalance occurs, market participants are forced to adapt to new market conditions and, during the adjustment process, they occasionally exhibit behavior that is considered irrational from the aspect of the original market conditions. After the balance is restored, the manifested behavior of market participants becomes rational from the aspect of new market conditions, and the financial market becomes efficient. Thus, irrational behavior in one context can be considered rational in another and vice versa - the rational behavior of market participants in certain market conditions is completely irrational in other market conditions.

Lo, the founder of *AMH*, points out that *EMH* is not wrong, but incomplete, because it ignores human nature (Ackert, 2014, 38). According to Lo (2004), examples of economic irrationality cited by behavioral economists, such as overconfidence, aversion to loss, mental accounting, and other behavioral biases, are nothing more than individuals who adapt to a changing environment through heuristics. Heuristics are not necessarily opposed to rationality, but are rather taken out of context. Decision makers learn from the positive and negative outcomes of their actions and develop heuristics to solve the problems and challenges they face. With the change of economic and market conditions, the original heuristics become inadequate, which is why it is necessary to develop new heuristics through which individuals adapt to the changing environment. Because market conditions are subject to frequent changes, market participants are forced to continuously adjust and adapt (Tseng, 2006, 14).

By summarizing the above, it is concluded that *AMH*, despite its rather abstract and qualitative nature, involves clear implications (Lo, 2004; 2005):

- *Market efficiency does not operate on an "all-or-none" principle. Markets are not necessarily perfectly efficient or perfectly inefficient – the degree of market efficiency varies over time and between markets.*
- *The relationship between return and risk (premium risk) is not constant, but varies over time under the influence of changing market circumstances, the regulatory framework and tax laws. Undertaking high risk is not a guarantee for achieving an equally high return, because its realization also depends on the changes in the environment.*
- *In contrast to traditional EMH, AMH implies the existence of occasional arbitration possibilities. When arbitrage opportunities are exploited, they disappear, but at the same time new opportunities for earnings emerge. Therefore, with the change of market and institutional conditions, primarily of the regulatory framework, some arbitration opportunities disappear and other arise.*
- *The situation is similar regarding investment strategies that tend to both strengthen and weaken, bringing investment gains in one environment, or losses in another environment. One and the same investment strategy results in a gain in a certain market and institutional conditions, as well as a loss in other.*
- *Adaptation (innovation) is the key to success. Unlike EMH, which suggests that a certain level of expected return can be achieved by simply taking a sufficient level of risk, AMH suggests that, due to the fact that the relationship between return and risk varies over time, a better way to achieve the desired level of expected return is to adapt to changing market conditions.*
- *Survival is the only thing that matters. Without denying the relevance of maximizing profits and utility, Lo (2004) points out that survival is an organizational principle that drives market development.*

Despite its clear implications, the founder of *AMH* admits that this hypothesis is still in its infancy and that numerous studies and confirmations of its validity are needed to make it a viable alternative to *EMH* (Lo, 2005, 32). In this respect, research on *AMH* has become an increasingly popular topic in the finance literature. The possibilities of *AMH* have been quickly recognized by both theorists and financial analysts, which is why the validity of this hypothesis has become the subject of numerous studies.

In a study conducted on the *US REIT market*, Zhou and Lee (2013) confirmed the two most important implications of *AMH*: 1) market efficiency does not operate on the "all-or-none" principle and 2) the degree of market efficiency depends on changing market conditions. The authors tested the degree of predictability of future returns based on the movement of past returns, because *EMH* implies the absence of this predictability. They found that predictability of returns varies over time under the influence of market circumstances. They identified the presence of return predictability and the absence of *EMH* validity in certain periods, however, in other periods, the absence of return predictability and the presence of *EMH* validity was detected. In addition, they found that the degree of return predictability decreases over time, indicating an increase in market efficiency. In this way, the authors proved that market efficiency is a dynamic category. Furthermore, they found that the degree of market efficiency depends on a number of factors such as the achieved level of market development, inflation, market volatility and regulatory framework.

A similar testing of *AMH* was conducted by Khuntia and Pattanayak (2018), in the Bitcoin market, who assumed that in an emerging market that is, therefore, exposed to numerous and frequent changes, it would be unrealistic to expect a static market efficiency situation proposed by *EMH*. The study confirms the validity of *AMH*, as it proves that market efficiency is a dynamic category caused by changing market conditions.

Evidence supporting the validity of *AMH* was also found by Neely et al. (2009), Kim et al. (2011), Charles et al. (2012), Noda (2012), Urquhart and Hudson (2013), Kumar, (2018). The mentioned studies found that return predictability varies under the influence of changing market circumstances, which indicates a variable degree and cyclical movement of market efficiency.

Despite the presented evidence confirming the validity of *AMH*, it is still early to make a final opinion on this new theoretical approach. Just as half a century of research on the validity of *EMH* was not sufficient to reach a consensus on the presence or absence of validity of this hypothesis (Leković, 2018), thus fifteen years of research on the validity of *AMH* is a too short a period to draw any final conclusions.

AMH is, in principle, presented as a set of ideas whose time is yet to come and which will take an important place in finance theory in the coming decades. Time will tell whether the optimistic expectations of the founder of this theory will come true, as well as the results of future research that will surely follow, because *AMH* managed to attract the significant attention of the financial public.

Conclusion

Behavioral finance, although drawing on criticism of *EMH* and standard finance, does not repudiate the mentioned theories, but rather points to the absence of their full validity. Many behavioral economists admit that standard finance has undeniable relevance and stress that it is not the intention of advocates of behavioral finance to declare standard finance "dead". What behavioral finance offers can be thought of as, in fact, the salvation of standard finance (Shiller, 2006, 7). Behavioral finance expands the scope, i.e. it supplements standard finance, while standard finance represents the basis of behavioral finance.

Standard and behavioral finance essentially represent two sides of the same coin, i.e. two halves of a whole that is called finance theory. Despite the fact that proponents of behavioral finance are the main critics of standard finance, as well as proponents of standard finance the main critics of behavioral finance, one should strive to reconcile their opposing views and integrate their teachings. Standard finance overemphasizes the importance of econometric models, while behavioral finance overemphasizes the influence of psychological factors, which is why practical solving of financial problems and making correct financial decisions requires the synchronized application of both approaches.

According to Shiller (2006, 4), "The distinctions between standard and behavioral finance have therefore been exaggerated... behavioral finance is more eclectic, more willing to learn from other social sciences and less concerned about elegance of models and more with the evidence that they describe actual human behavior". The behavioral revolution that began in 1980s with the discovery of a large number of market anomalies and the application of psychological theories in economics, represents a return to a more eclectic approach to financial modeling.

Given all abovementioned facts, it is concluded that investors, portfolio managers, financial analysts and other market participants need knowledge of both standard and behavioral finance to make the right financial decisions, which confirms the initial hypothesis of the paper. The Nobel Prizes in Economics awarded to Harry Markowitz in 1990 for his work in the field of standard finance and to Daniel Kahneman in 2002 for his work in the field of behavioral finance are the best proof of the validity of the above stated conclusion, as they unequivocally indicate that the economic public has accepted elements of both standard and behavioral finance as valid and accurate.

The optimal solution to the problem should be sought in establishing a balance between, on the one hand, the application of exact mathematical and statistical models and, on the other hand, the understanding of human nature and the way people think, behave and act. In other words, the optimal solution should be sought in supplementing standard finance with knowledge of behavioral finance, that is, in combining the best elements of standard and behavioral finance. The future of finance, according to Shefrin (2008; 2010), lies in combining realistic assumptions of behavioral finance and rigorous analysis and precise instruments of standard finance. A good example of a new theoretical approach that reconciles the differences between standard and behavioral finance is *AMH*. This new hypothesis occupies a middle position between the perfect market efficiency advocated by the representatives of standard finance and the absence of market efficiency pointed out by behavioral economists.

Having in mind the dynamic development of contemporary scientific thought, future research may focus on a comparative analysis of behavioral finance and new promising areas of research such as neurofinance that examines the neurological basis of financial decision-making processes. Shefrin (2015) was among the first scientists to suggest investigating the role of hormonal balance and genetic characteristics in the process of financial decision-making, therefore, future research can be also focused on this field of research. The realization of the mentioned research would explain the process of financial decision-making in more detail and make a step towards a better understanding of the researched topics.

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Ocena evropskog bankarskog regulatornog okvira sa osvrtom na značaj za Republiku Srbiju

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Rezime: Poznato je da je kriza duga u Evropskoj uniji izazvana međuzavisnošću bankarske i državne finansijske stabilnosti, a zajedno sa nepostojanjem fiskalne unije poprimila je i egzistencijalne dimenzije samog projekta EU. U okrilju finansijske fragmentacije unutar finansijskih tržišta evrozone, a sa aspekta izbijanja krize, države članice EU pribegavale su nacionalnim intervencijama, time zatvarajući i nacionalna bankarska i finansijska tržišta, što je u krajnjoj instanci rezultiralo produbljivanjem i jačim strukturnim utemeljenjem krize i njenih ekonomskih i finansijskih posledica. Bankarska unija je, u tom kontekstu, regulatorni i institucionalni odgovor EU nakon globalne finansijske krize, o kojoj su prvi predlozi našli mesto u institucionalnim polemikama već od 2012. godine. Pored ključnog momenta i motiva za osnivanje ovakvog institucionalnog regulatornog aranžmana, razlog je, štaviše, stvoriti uniju koja je povezana sa stvaranjem jedinstvenog tržišta za finansijske usluge i slobodan promet novca, svakako i sa tendencijom potpunije monetarne integracije. Međutim, postavljala su se pitanja koja su i dalje aktuelna, a to su: da li su zacrtani, a sada već instrumentalizovani i ustanovljeni okviri, mehanizmi i procedure uistinu dovoljni; da li bankarska unija EU, konceptualno osmišljena, zaista predstavlja bankarsku integraciju; da li će i dalje prisutan odnos „centralizovano-zajedničko" i „suvereno-nacionalno" u finansijskoj arhitekturi EU, korišćenje principa u implementaciji Bazel III sporazuma „jedna mera za sve", zatim neobuhvatanje svih tipova banaka, sukob emisione i nadzorne uloge ECB (Evropska Centralna banka), biti strukturni konflikt u postizanju željene finansijske stabililnosti koja je i krajnji cilj. Finansijska stabilnost se, u širem kontekstu funkcionisanja EU, može tumačiti i kao faktor opstanka zajedničke valute i same Evropske unije, bez obzira na utkane suprotnosti i konstukcioni konflikt.

U radu analiziramo funkcionalne domete regulatornog okvira nadzora banaka u EU, u vremenu petogodišnje egzistencije do današnjeg dana, kao i efekte i uticaj koji je taj okvir imao na regulatorno prilagođavanje bankarskog sektora Srbije.

Ključne reči: finansijske regulatorne mere EU, bankarski sektor, stabilnost.

JEL: G28

Uvod u razumevanje bankarske supervizije EU

Prvom bankarskom direktivom koja je doneta još davne 1997. godine utvrđen je princip da je matična zemlja (zemlja porekla) nadležna za superviziju i kontrolu svoje banke u drugoj zemlji u kojoj posluje. Nešto više od desetak godina kasnije, doneta je druga bankarska direktiva koja se oslanjala na liberalnije uslove poslovanja banaka na globalnom nivou, koja je predviđala da banka koja ima dozvolu (licencu) za rad u bilo kojoj EU zemlji može da osnuje filijalu ili da posluje u inostranstvu, bez potrebe dobijanja bilo kakvih dozvola donetih od lokalnih regulatornih tela, centralnih banaka. U tom vremenskom periodu, taj princip se nazivao princip „jedinstvenog pasoša". No, i pored toga, ipak je ostavljena mogućnost da domaćin banke iz druge zemlje sprovede mere regulacije ako se ona odnosi na pitanja od „javnog interesa" što je u suštinskom, a i formalnom smislu značilo da se kontrola vrši iz „matice", a kompletna odgovornost je na državi domaćinu. Obzirom na to da je takvo institucionalisano rešenje bilo problematično, sama finansijska kriza nastala na globalnom planu sada već davne 2008. godine u SAD, uslovila je da stabilnost finansijskih tržišta postane prioritet Evropske unije. Godine za vreme krize i neposredno posle njenog izbijanja i prelivanja u EU, regulatorna tela su, radi očuvanja finansijske stabilnosti, preduzimale aktivnosti na nivou unapređivanja propisa koji uređuju finansijski sektor EU i jačanja nadzora finansijskog sektora. U početnim godinama krize, države su davale ogromna sredstva kako bi spasile svoje bankarske sektore. Kreditori banaka, za razliku od poreskih obveznika, nisu morali da snose trošak ovog spasavanja (Ristić, Živković, 2018).

Vremenom, kriza je dobijala izgled začaranog kruga u kome su vlade država članica sve manje bile u stanju da pomažu svoje banke. Produbljenje problema predstavljalo je i postojanje velikih posledica koje je bankarski sektor izazvao po države članice. Stanje opšte nesigurnosti, kao i porast troškova finansiranja, upravo je bilo posledica posezanja za sredstvima bankarskih kreditora. Obzirom na bankocentričnost tržišta, monetarna unija i jedinstveno tržište su se našli pred ozbiljnim problemom (Mališ, 2014).

Sagledavajući položaj najvećih banaka („too big to fall") u Evropi pa i šire, tokom krize, skorašnji nobelovac, Žan Tirol, ukazivao je da bi sve banke koje su imale koristi od direktne podrške države trebalo da budu suočene sa čvrstom regulativom. (Ristić, Živković, 2018). Stoga je Evropska centralna banka tada, a i danas, obavljala novu funkciju jedinog kontrolora najvećih banaka u evrozoni i preuzela je odgovornost za stabilnost u bankarskom sektoru, pa time i generalno za finansijsku stabilnost. Međutim to je predstavljalo, kao što i danas predstavlja, najveću pretnju njenoj reputaciji (Đukić, 2014).

Svaki bankarski sektor, generalno govoreći, ima specifičnu ulogu u ekonomiji jedne zemlje. U okviru dinamičnog odnosa instumenata, institucija i samog tržišta, bankarski sektor obavlja funkcije koje su od suštinske važnosti za ekonomsku aktivnost zemlje, čime se i funkcionalno kreira kontekst za ekonomski rast i razvoj (http//www.nbs.rs/regulative, pristupljeno 20.04.2020). Tu se prvenstveno misli na usluge plaćanja, štednje, osiguranja, kredita, zaštite od rizika i slično, pri čemu se problemi u obavljanju ovih funkcija negativno odražavaju na stabilnost finansijskog sistema i realnog sektora.

Ta dinamička interakcija institucija, instrumenata, korisnika usluga, tržišta i informacija kreira složen kontekst koji mora biti regulisan određenim regulativama koje će imati za primarni cilj da obezbede stabilnost sistema u dugom roku. Ako pri tome, a u duhu ovog rada, mislimo na finansijsku stabilnost, osvrnuli bismo se na tvrdnje Mirjane Jemović koja u svojoj doktorskoj disertaciji kaže: „U cilju očuvanja i jačanja finansijske stabilnosti, regulatorni okvir treba biti postavljen duž celog životnog veka finansijskih institucija. Kao takav, on ne uključuje samo ex-ante komponente, regulaciju i superviziju, čiji je cilj sprečiti propast banaka; već i ex-post komponente – funkciju poslednjeg utočišta, osiguranje depozita i politiku restrukturiranja. Iako bitne u različitim periodima poslovanja banaka, jedino sinergetskim efektom svih komponenti zajedno moguće je postići očuvanje i jačanje finansijske stabilnosti " (Jemović, 2016, str. 107).

Ako nam je generalno to okosnica ovog rada, onda ukazujemo na to da je svetska finansijska kriza na globalnom planu pokazala da su zemlje širom sveta bile nespremne na udar krize i da nisu raspolagale odgovarajućim pravnim okvirom za rešavanje problematičnih banaka i njihovog poslovanja. Samim tim, spasavanje banaka podneli su poreski obveznici zemalja u svetu. Jedino im je na raspolaganju bila opcija biranja između sprovođenja stečajnog postupka, koji nosi visok rizik prouzrokovanja sistemskih poremećaja, i spasavanja banaka korišćenjem budžetskih ili drugih javnih sredstava (http/www.nbs.rs/regulative, pristupljeno 20.04.2020).

Pitanje etike takvih poduhvata je pitanje koje su postavljali i kreatori ekonomskih politika, građani i institucije i odnosilo se na to da li banke obavljaju značajne funkcije na planu ekonomije i rasta, obzirom na to da generišu profit u vreme tržišnog prosperiteta za sebe i svoje akcionare, dok se u uslovima krize i eventualno pretrpljenih gubitaka okreću finansijskoj podršci budžeta (http//www.nbs.rs/regulative, pristupljeno 20.04.2020).

Kako su banke inače osnovni mehanizam eksternog finansiranja kompanija u EU, bankarski sistem, koji je kvalifikovan kao bankocentričan, o čemu smo već govorili, u vremenu krize bio je krhk i neotporan na finansijske šokove, konstatovao je Sedlarević (2014).

Tome u prilog, možemo se osvrnuti na rezultate testova izdržljivosti koje je sprovela Evropska služba za nadzor banaka (EBA) koji su pokazivali da bi trebalo da se stabilizuje finansijsko tržište evrozone koje je uzdrmano dužničkom krizom.

Ristić K. i Živković A. (2018) ukazuju da su tada testirane banke iz 21 zemlje, koje su zajedno predstavljale 65% bankarskog sektora u Evropi. Testovi su bili osmišljeni kao finansijska provera i trebalo je da utvrde da li banke imaju dovoljno kapitala da podnesu scenario teških ekonomskih uslova.

Korišćena su dva scenarija, i to jedan koji je uzimao u obzir trenutna makroekonomska predviđanja i drugi koji je pretpostavljao ekonomski šok. Krizni scenario predviđao je rast BDP-a od samo 0,5% u evrozoni i pad na evropskoj berzi od 15%, kao i krizu na tržištu nekretnina, s tim da one banke koje ne budu imale više od 5% osnovnog kapitala u odnosu na svoja druga sredstva u „zamišljenim" ekonomskim uslovima neće steći uslove da prođu test (Ristić, Živković, 2018). Rezultati testiranja, iako test nije bio toliko strog, pokazuju upravo ono što je rezultiralo potrebom za strožiji nadzor banaka u evrozoni, a to je velika osetljivost na šokove.

Generalno govoreći i osvrćući se na Oksfordski priručnik o bankarstvu, u prevodu i izdanju Udruženja banaka Srbije iz 2015. godine, nalazimo činjenicu koja se i godinama unazad permanentno potvrđuje, a to je da finansijski sistemi zahtevaju razvijene zakonske i informacione infrastrukture da bi dobro funkcionisali. Pravovremena raspoloživost kvalitetnih informacija podjednako je značajna, pošto pomaže da se smanje informacione asimetrije između korisnika kredita i kreditora. U tom smislu i empirijski rezultati pokazuju da je obim bankarskog kredita znatno veći u zemljama u kojima je protok informacija veći (Demirgus-Kunt, 2015).

Kako tvrdi Demirguč-Kunt (2015), od kada postoje banke, postoje i države koje ih regulišu. Iako većina ekonomista smatra da je važna uloga države u regulisanju i superviziji finansijskih sistema, stepen takvog angažovanja je pitanje o kojem se aktivno debatuje.

Jemović M. (2016, str. 107-108) tvrdi da regulatorna uloga države doprinosi nesmetanom funkcionisanju i razvoju ukupnog finansijskog tržišta i da su, u tom smislu, banke podvrgnute posebnom regulacijom koja „čuva" solventnost, ograničava rizično poslovanje, štiti deponente i omogućava kontrolu novčanih tokova i, u tom smislu, pravičnu raspodelu finansijskih resursa.

Demirguč-Kunt (2015) tvrdi da se od supervizora očekuje da osiguraju stabilnost finansijskog sistema i da vode banke u njihovim poslovnim odlukama regulativom i supervizijom. Međutim, obzirom na generalno ograničeno znanje zvaničnika i ekspertizu za donošenje poslovnih odluka, kao i tendencije ka podleganju političkim i regulatornim zamkama, ovakav pristup ne mora da bude efektivan. Razloge slabe regulacije banaka u vremenu pre krize možemo tražiti u ovakvim stavovima.

No, bilo kako bilo, kriza je pokazala slabosti funkcionisanja nesupervizovanog bankarskog tržišta EU, pri čemu je Evopska centralna banka, u godinama koje su sledile, preduzela sledeće korake u uspostavljanju tkzv. Bankarske unije i koji se mogu sistematizovati na sledeći način:

- *Doneta su nova pravila o kapitalnim zahtevima za banke, kao i za oporavak i rešavanje problema banaka;*
- *Obezbeđeni su jači prudencionalni zahtevi za banke, unapređena je zaštita deponenata i pravila upravljanja problematičnim bankama;*
- *Formiran je jedinstveni pravilnik za sve finansijske učesnike u zemljama članicama Evropske Unije.*

Dakle, krize su ukazale na nedostatak regulatornog okvira sanacije banaka na integracionim nivoima. Zato je reforma regulative u ovoj oblasti, posebno u evrozoni, imala dvostruki cilj, i to da sanira posledice krize i stvori održiv politički okvir u bankarstvu Evropske unije ili Bankarske unije, u dugom roku (Petrović, P., Ristić, K., 2018).

Pravni osnov za formiranje Bankarske unije, po Petroviću P. i Ristiću K. (2018), zasnovan je na članu 127. stav 6 Ugovora o funkcionisanju Evropske unije, po kome Savet EU može, a u skladu sa specijalnom zakonodavnom procedurom, da nakon konsultacija sa Evropskim parlamentom i Evropskom centralnom bankom, poveri posebne zadatke Evropskoj centralnoj banci koji se odnose na donošenje i sprovođenje politika vezanih za prudencijalnu kontrolu kreditnih institucija.

Uredba o jedinstvenim pravilima i jedinstvenoj proceduri oporavka i sanacije banaka konkretizovala je odredbe Direktive u primeni na države članice Jedinstvenog mehanizma supervizije, formirajući Jedinstveni mehanizam sanacije, pri čemu su države članice evrozone, ali i druge države članice Bankarske unije, prihvatile uniformna pravila i procedure sanacije banaka kao centralizovani mehanizam sanacije kojim upravlja formiran Jedinstveni sanacioni odbor. Odbor čine izabrani članovi i predstavnici nacionalnih sanacionih regulatora, a finansira se iz centralizovanog fonda za sanaciju. Takva koncepcija je utvrdila postojanje jedinstvenog mehanizma supervizije i sanacije gde su ključne uloge poverene institucijama evrozone i Evropske centralne banke (Petrović, Ristić, 2018).

Ekonomska nota evidentne potrebe za jačanjem infrastrukturnog kapaciteta Bankarske unije upućuje na zaključak da je u Evropskoj uniji neophodan dublji fokus na bankarstvo. To bi, dalje, značilo da se time omogući dalje jačanje evropske ekonomske i finansijske integracije, bez obzira na dalja preispitivanja fiskalne i političke integracije. Postavlja se pitanje o kome ćemo govoriti u narednom poglavlju, a to je domet takve regulative, jer ako nije „fino" podešena i dobro izbalansirana, to bi moglo da znači i početak novih problema finansijskog funkcionisanja EU i preipitivanja njenog daljeg opstanka (Ristić, Živković, 2019; Živković, A. i dr., 2019).

Polemika o superviziji banaka upućuje i na debate o sistemskom riziku, koje se do danas uglavnom svode na razmatranje iznenadnih egzogenih poremećaja, pri čemu sistemski poremećaji mogu imati svoj izvor i u domaćem i u međunarodnom okruženju. Koncept stabilnosti finansijskog sistema je direktno proporcionalno povezan sa pojmom sistemskog rizika, te se, u tom smislu, sistemski rizik odnosi na verovatnoću nastanka određenih negativnih događaja na nivou čitavog finansijskog sistema. (Drvendžija, 2015) Od ključnog je značaja poentirati prethodno rečeno, jer pravi jasno razgraničenje u odnosu na mnoštvo (mikro) rizika koji mogu pogoditi određenu finansijsku instituciju. Sistemski rizik „leži" i u činjenici da repetitivno i prociklično ponašanje finansijskih institucija može dovesti do vidljivih promena u kreditnoj aktivnosti i zaduženosti ekonomskih agenata tokom vremena, a da one budu van kontrole pojedinačnih institucija i regulatora. Prema Drvedžiji (2015), kriza, kao i period koji je prethodio, odlična je ilustracija prekomernih cikličnih fluktuacija na finansijskom tržištu.

Osvrt na konstitutivne aspekte bankarskog regulatornog okvira EU

Postojeći institucionalisani mehanizmi su se, u uslovima globalne finansijske krize, ali svakako i u vremenskom periodu posle, pokazali nedovoljnim i neodgovarajućim za rešavanje problema banaka koje su se suočile sa ozbiljnim poteškoćama u svom poslovanju. Obzirom na to da nisu pružali mogućnosti za dovoljno brzu i efikasnu intervenciju, niti su u optimalnoj meri obezbeđivali uslove za održavanje kritičnih funkcija u poslovanju banke, konkretan je zaključak da nije bilo ni okvira, nacrta ili plana za očuvanje finansijske stabilnosti sistema kao celine (http//www.nbs.rs, pristupljeno 20.04.2020).

Zbog svega toga je i na međunarodnom nivou sazrela svest o neophodnosti postojanja jasno definisanih pravila i mehanizama po kojima će se postupati u kriznim situacijama. Na nivou Evropske unije to je, u maju 2014. godine, konačno rezultiralo donošenjem Direktive o utvrđivanju okvira za oporavak i restrukturiranje kreditnih institucija i investicionih društava (Directive 2014/59/EU on Establishing a Framework for Recovery and Resolution of Credit Institutions and Investment Firms). Ova Direktiva je u svim državama članicama Evropske unije počela da se primenjuje 1. januara 2015. godine (http/ www.nbs.rs, pristupljeno 20.04.2020).

Međutim, poseban problem predstavljale su banke i bankarske grupe u teškoćama, koje su poslovale u više država članica evrozone, zbog fragmentiranosti regulativa u nacionalnim okvirima, što je zahtevalo koordinisanu akciju više država članica. Nepobitno, dugotrajna finansijska kriza usporila je monetarnu integraciju Evropske Unije. "*Ona je neposredno i najdublje pogodila finansijsko tržište EU, a njeno kombinovano dejstvo sa krizom javnog duga bankarski sistem evrozone, kao centralni mehanizam sprovođenja jedinstvene monetarne politike*" (Petrović, Ristić, 2018).

Glavne karakteristike koncipiranja i institucionalisanja Bankarske unije u EU jeste da se na nivou evrozone podigne regulativa koja se odnosi na nadzor nad poslovanjem banaka i to:

1. *supervizija, prudenciona kontrola,*
2. *sanacija i njeno finansiranje,*
3. *osiguranje depozita banaka,*
4. *prekidanje veze – „začaranog kruga" – između banaka i nacionalnog javnog duga,*
5. *osnova jedinstvenog mehanizma za likvidaciju banaka.*

U konstitucionalnom smislu, a u skladu sa navedenim ciljevima Bankarske unije, samo ćemo pomenuti ključna mesta u arhitekturi Unije i to formiranje Jedinstvenog sanacionog fonda za države članice Bankarske unije. Zatim uspostavljanje Evropske šeme osiguranja depozita (European Deposit Sheme – EDIS), koja će važiti za države članice Bankarske unije, a obavezna je za države evrozone. Direktiva o oporavku i sanaciji banaka (Bank Recovery and Resolution Directive – BRRD) koja važi na celoj teritoriji Evropske unije, Uredba o jedinstvenim pravilima i jedinstvenoj proceduri oporavka i sanaciji banaka (Single Resolution Regulation – SRR), koja uključuje i jedinstven fond za sanaciju banaka (Single Resolution Fund – SRF) i predstavlja konkretizaciju navedene direktive za evrozonu i druge države članice Jedinstvenog mehanizma supervizije. (EuroCommision, 2013; 2014; 2015; Petrović, P., Ristić, K. 2018). Razlog daljeg neelaboriranja navedenih mehanizama utemeljujemo na činjenici da su bili predmet ranijih istraživanja akademske javnosti, a cilj nam je prevashodno diskutovati na temu procene i ocene efikasnosti okvira

Bankarske unije sa aspekta njene funkcionalnosti, kapaciteta i dometa, što sledi u daljem tekstu.

Kvalitativna ocena regulatornog okvira za banke u EU

Složeni sistem koordinacije monetarne i fiskalne politike, kao i institucionalni deficit integracije, uticali su na sporost prilagođavanja bankarskog sistema okolnostima nastale krize. Regulacije na nacionalnom nivou nisu bile adekvatne kretanjima na bankarskim i finansijskim tržištima, što je još više produbilo krizu, s tim da nije zabeležen efekat „juriša na banke" koji se obično očekuje u finansijskim krizama. Upravo je reakcija država na prve znake krize pojačavanjem „zaštitne mreže" deponenata, dakle podizanjem granice osiguranja depozita, dovela do efekta nerasplamsavanja krize u smislu povlačenja depozita iz banaka.

Bejatovič (2008, str. 891-902) ukazuje na to da je državna intervencija kroz dokapitalizaciju i spasavanje banaka imala sve odlike negativne selekcije. Suočene sa nenaplativim zajmovima i njihovim otpisom, kao i regulatornim zahtevima za visinom kapitala, banke su pribegavale rigoroznijem pristupu kreditnim zahtevima zdravih klijenata. Zbog navedenih okolnosti, međunarodna praksa se kreće u pravcu usvajanja standarda regulative za različite segmente svetskog finansijskog tržišta. Standardi regulative znače da se prihvate pravila, formulisana u okviru međunarodnih organizacija i primenjuju kao deo unutrašnjeg prava, na osnovu odluka nadležnih nacionalnih regulatornih organa.

Problem koji se javlja i u vreme konstituisanja bankarske unije, pa i danas, jeste sama valuta evro, koju određeni broj država ima mogućnost da ne prihvati. Logična celina Bankarske unije je evrozona, zbog jedinstvene valute, centralizovane monetarne politike i integrisanog bankarskog sistema. Zato je i moguće samo konstituisati nadzor nad bankama u delu supervizije poslovanja, sanacije i jedinstvenog sistema osiguranja depozita. Međutim problem se može javiti kada, na zahtev regulatornih organa, u slučaju da iz prihoda izvrše rezervacije za realne i potencijalne gubitke, i u toj meri smanje svoju kapitalnu osnovu i nemaju odgovarajući kapital za pokriće gubitaka, banke postaju nesolventne i ne mogu na duži rok očuvati stabilnost poslovanja (Petrović, Ristić, 2018, str. str 234-249).

Ekonomskoj i monetarnoj uniji potrebna je Bankarska unija kako bi se osigurala efikasna transmisija jedinstvene monetarne politike, bolja diverzifikacija rizika kroz države članice i adekvatno finansiranje privrede. Samim tim, kompletiranje i dalje jačanje Bankarske unije će ojačati finansijsku stabilnost, vraćanjem poverenja u bankarski sektor kroz kombinaciju mera koje su usmerene i na podelu i na smanjenje rizika (Šubara, Dželetović, 2017).

Kvalitativno se okvir regulative može oceniti da je uspostavljen da osigurava različita nacionalna rešenja, da se ne stvaraju linije razdora unutar Bankarske unije, odnosno da ne narušava funkcionisanje jedinstvenog tržišta. Okvirom su predviđene i zabrane trgovanja finansijskim instrumentima i robom za vlastiti račun tj. trgovanje za vlastiti račun isključivo u cilju stvaranja dobiti za banku i utvrđena su pravila o privrednim, pravnim, upravljačkim i operativnim vezama između razdvojenih trgovinskih subjekata i ostatka bankarskih grupa (Ristić, Živković, 2019).

U odlučivanju o opsegu Bankarske unije preovladao je stav da ona obuhvati obavezno države članice evrozone zbog navedenih prednosti, ali da bude otvorena i za druge države članice Evropske unije, koje izjave saglasnost za članstvo u njoj, kao i druge države po okončanju procesa pridruživanja. Supervizija banaka, makar i najobuhvatnija, ne može sprečiti da se banka, u nekom vremenskom periodu, ne nađe u teškoćama. Preuzimanje rizika i profitna motivacija, dve osnovne poluge bankarskog ulaganja, i pored modernih tehničkih sredstava, stručnih procedura i savremenih modela predviđanja i ocene, ne mogu uvek parirati tržišnim tokovima u kojima se banka nalazi (Šubara, Dželetović, 2017).

Bankarska unija se od samog početka suočava sa sumnjama, strahovima i problemima. Najveća prepreka je nekada bila, pa i u aktuelnom trenutku jeste, nedovoljna kooperativnost nacionalnih regulatornih tela, naročito kada je reč o politički osetljivim institucijama. Iako ECB ima značajne mogućnosti kontrole, ipak se suočava sa ograničenjima u praksi. S obzirom na to da je ECB, kao jedinstveni supervizor, ta koja upozorava na neophodno restrukturiranje pojedinačnih banaka, države neće želeti, niti će moći to da prenebregnu, jer na taj način gube diskreciona prava koja su do sad imale. (Mališ, 2014). Po rečima Mališa (2014) da bi se odrekle toga, zajednički fondovi moraju biti više nego primamljivi. Strah koji provejava je da su problemi bankarskog sektora znatno veći nego sposobnost zajedničkih fondova da reše probleme, te da neće biti jednostavno ubediti nacionalna vođstva da lako pristanu na takav prenos suvereniteta. A kad se to i desi, neizbežno je da će dolaziti do konflikata između ECB, koja će u svojoj novoj ulozi morati da dokaže svoj autoritet, i nacionalnih regulatora (Mališ, 2014).

Mališ (2014) ukazuje na niz problema u konceptualnom funkcionisanju Bankarske unije. Kao prvo, složen način odlučivanja i veliki broj zainteresovanih strana izaziva strah od sporosti u donošenju odluka. Drugo, učešće nacionalnih predstavnika ne otklanja u potpunosti vezu između nacionalnih regulatora i njihovih banaka. Treće, male i srednje banke ne potpadaju pod nadležnost ovog tela dok će, sa druge strane, formiranje zajedničkog fonda iziskivati period od 10 godina, a u međuvremenu će finansiranje biti omogućeno kroz nacionalne fondove i Evropskog mehanizma za stabilnost (European Stability Mechanism). Četvrto, strah od potencijalnog konflikta interesa između monetarne uloge ECB i uloge supervizora takođe postoji. Ukoliko ne bude raspolagala dovoljnim kapacitetima, kako u institucionalnom, tako i u punom finansijskom smislu, ECB može biti u situaciji da ne želi da prikazuje pravo stanje banaka koje bi inače bile predmet restrukturiranja. Peto, preterano ekspanzivna monetarna politika ECB može biti instrument da se ove banke održe u funkciji, u nedostatku odgovarajućih zajedničkih fondova za spasavanje. I šesto, najveći izazovi su svakako oni političke prirode, jer Evropska komisija želi jačanje svega što znači centralizovano odlučivanje na nivou EU, uz obavezno ograničavanje dometa nacionalnih institucija (Mališ, 2014).

Događaji svetske finansijske krize od 2007-2009. godine pokazali su da čak i dobro koncipirano osiguranje depozita neće uvek sprečiti pojavu krize i da je važno pitanje, po Kejnu (Kane, E. 2015), da se sagleda funkcionisanje šeme osiguranja depozita u vreme kada nema krize. Kejn (2015) poentira i da nefinansijske institucije mogu da budu isto toliko značajne koliko i komercijalne banke i izvori sistemskog rizika, te da mogu da traže pristup delovima sigurnosne mreže čak i u normalnim vremenima. Osiguranje depozita u svom konceptualnom smislu može izazivati i ponašanje moralnog hazarda, te i loše agencijsko ponašanje regulatora. U tom smislu se Kejn (2015) osvrće na tvrdnje Minskog iz 1977. godine i na njegove stavove da, ukoliko agencije za osiguranje ne vrednuju i ne administriraju korektno osiguranje depozita, to može uticati da se ohrabri takvo ponašanje banaka da uzimaju veći rizik i da biraju rizičnije portfolije nego što bi to inače činile u uslovima nepostojanja osiguranja.

Iako je odluka o formiranju Bankarske unije suštinska i svakako dugoročna odluka, te i u tom smislu predstavlja i okosnicu jačanja monetarne integracije uopšte, postavljamo pitanje da li je davanje ovako velikih ovlašćenja ECB, pravi način da se izgradi i dalje utemeljuje i jača sada već poljuljana konzistentnost i održivost EU integracije pogotovo kada se postavlja pitanje legitimiteta zajedničkih tela Unije, njenog vođstva, kapaciteta institucija i krize zajedničke valute.

Približavanje bankarske regulative NBS regulativama EU

Bankarsko okruženje i arhitektura bankarske regulative u velikoj meri se razlikuju od zemlje do zemlje. Po Kejnu (2015) supervizija finansijskih institucija kombinuje kapacitet za posmatranje fluktuacija bilansnih vrednosti banaka sa kapacitetom da utiče na menadžerske akcije u bankarskom poslovanju. U zemljama sveta Kejn (2015) tvrdi da, u okviru pojedinačne zemlje postoje sukobi između regulatora i preduzeća koje oni regulišu, zatim, regulatora i političara kojima oni moraju da podnose izveštaje, te i poreskih obveznika i političara i regulatora koje oni postavljaju.

EU je školski primer Kejnovih tvrdnji, i samo za primer navodi da mnoge zemlje Evropske unije nadziru banke odvojeno od drugih finansijskih institucija, a neke od njih to i ne čine. U tome se ističu Austrija, Nemačka, Danska, Švedska, Holandija i Velika Britanija.[1] (Kane, 2015). Radi se dakle, o integrisanom i delimično integrisanom sistemu nadzora banaka i finansijskog tržišta uopšte.

Generalno govoreći, zdrav i stabilan finansijski sistem, i u tom smislu sektor banaka, neophodan je preduslov održivog i razvojno orijentisanog realnog sektora. Banke predstavljaju ključne institucije preko kojih se transmituje monetarna politika centralne banke.

U tom smislu, globalna finansijska kriza zahtevala je pravovremenu reakciju Narodne banke Srbije (NBS) u cilju očuvanja stabilnosti finansijskog sistema i posebno bankarskog sektora kao njegovog najznačajnijeg i najvitalnijeg segmenta. Najvažniji pokazatelj stremljenja Narodne banke Srbije i strateškog

1 Odnosi se na vreme pre Bregzita.

opredeljenja Republike Srbije za evrointegracijom bilo je usvajanje pravnih tekovina EU i u tom smislu ispunjenje pristupnih i kriterijuma konvergencije. Republika Srbija je 9. oktobra 2008. godine usvojila Nacionalni program integracije Republike Srbije u EU za period 2008-2012, čime je pokazala spremnost da svoje regulatorne okvire vezane za finansijski sektor uskladi sa pravnim tekovinama i tendencijama EU (Jemović, Krstić, 2015).

U daljem tekstu ćemo se osvrnuti na pravno i zakonodavno usklađivanje NBS sa finansijskom regulativnom u EU i generički pobrojati skorašnje i aktuelne aktivnosti NBS. Naime, uporedo sa regulatornim inicijativama na polju očuvanja finansijske stabilnosti u zemljama EU, NBS je veliku pažnju posvetila usklađivanju svoje politike finansijske stabilnosti sa politikom finansijske stabilnosti ESCB. S tim u vezi, a radi očuvanja i jačanja stabilnosti finansijskog sistema i unapređenja funkcije supervizije banaka, Narodna banka Srbije je radila i kontinuirano radi na unapređenju regulatornog okvira i supervizorskih aktivnosti. Ističe se proces supervizorske procene koji objedinjuje rezultate svih sprovedenih supervizorskih aktivnosti usmerenih na pojedinačnu banku. Za ovaj proces je karakteristično utvrđivanje jedinstvene ocene za banku, po potrebi i preduzimanje supervizorskih mera od strane Narodne banke Srbije. Zatim, princip dijaloga sa bankama u slučaju da se utvde određene nepravilnosti u poslovanju, podelu banaka po grupama, praćenje osnovnih pokazatelja rizika, analizu i preispitivanje poslovnog modela, adekvatnost korporativnog upravljanja, procenu adekvatnosti kapitala i likvidnosti (http//www.nbs.rs, pristupljeno 20.04.2020).

Posebne aktivnosti NBS usmerene su svojevremeno i na donošenje zakonskih izmena u vezi sa restrukturiranjem banaka. Cilj je bio da se upotreba budžetskih i drugih javnih sredstava u cilju očuvanja finansijske stabilnosti svede na najmanju moguću meru. Ovo se prvenstveno odnosi na regulatorne tendencije otelotvorene u konceptu Bankarske unije EU.

Dakle, potencijalne gubitke zbog propasti banke snosiće najpre akcionari i poverioci banke, uz poštovanje propisanih ograničenja i zaštitnih mehanizama, čime će akcionari i poverioci banke morati biti svesni rizika od gubitaka koje će pretrpeti u slučaju propasti banke, te i taj rizik moraju adekvatno da procenjiju i vrednuju. NBS u postupku restrukturiranja može birati instumente ili kombinaciju instumenata kojim bi na najbolji način mogli da se ostvare ciljevi restrukturiranja. Očekuje se da će se time znatno doprineti tržišnoj disciplini (http//www.nbs.rs, pristupljeno 20.04.2020).

Preventivno delovanje i adekvatna priprema banaka, NBS i drugih nadležnih institucija, što je takođe karakteristika usaglašavanja finansijske regulative Republike Srbije sa tekovinama EU, odnosi se na propisanu obavezu za banke da izrade planove oporavka koji će se primenjivati u slučaju pogoršanja njenog finansijskog stanja a radi ponovnog uspostavljanja njenog daljeg održivog poslovanja i odgovarajućeg finansijskog položaja (http//www.nbs.rs, pristupljeno 20.04.2020).

Bitno je istaći da je NBS potpisala i multilateralni sporazum o saradnji sa Evropskim telom za bankarstvo (European Banking Authority – EBA) i nadzornim organima zemalja jugoistočne Evrope. Ovim sporazumom se uspostavlja okvir za saradnju i razmenu informacija u oblasti kontrole poslovanja banaka.

Prethodno izloženi argumenti na polju prilagođavanja institucionalnih kapaciteta i zakonodavnog okvira NBS ukazuju na visok stepen kompatibilnosti naše centralne banke sa standardima i principima ESCB, što predstavlja dobar preduslov za brže pristupanje EU, a potom i EMU (Jemović, Kristić, 2015).

Pored svega navedenog, Srbija nije članica EU, pa ne može biti članica SSM-a i to je stavlja u dvostruko neugodan položaj *„niti su lokalne banke u vlasništvu međunarodnih banaka sa sedištem u EU predmet nadzora ECB, niti su to banke u domaćem ili vlasništvu banaka sa sedištem van EU“* (Drvendžija, 2015).

Zaključak

Rad zaključujemo konstatacijom, a na osnovu svega navedenog, da zajednički bankarski sistem u EU treba da podrazumeva nešto više od nadzora banaka. Jedino tako bi bilo omogućeno finansijsko ocelovljenje EU. Dakle zajednički okvir za osiguranje depozita bio bi uslov koji dalje treba da osigura jednake procedure oko toga šta se radi sa bankama koje ne ispunjavaju svoje obaveze. U odsustvu ove vrste zajedništva u EU može se desiti da se novac odliva iz bankarskih sistema „slabih“ zemalja u banke koje posluju u „jakim“ zemljama. To direktno, dodatno i proporcionalno slabi one koji su već slabi. Zato je potrebno da regulatorni sistem prevashodno bude okrenut podsticanju ekspanzije u zemljama u kojima je potrebno podstaći ekonomiju i ograničavati kreditiranje u pregrejanim ekonomijama. To, pak, znači da je nužno proširiti okvir ovlašćenja i paletu instrumenata jer u protivnom bez takve fleksibilnosti i prilagođavanja može se desiti da ceo sistem deluje destabilizirajuće i da sam podstiče dodatno slabljenje već „slabih“ ekonomija. Međutim dokazivanje uspešnosti i efikasnosti konstituisane finansijske arhitekture o kojoj smo govorili u ovom radu, traži vreme i identifikovanje „najbolje prakse“, do tada rigidnost u primeni propisa može nanositi velike posledice po kreditiranje, nenaplativost kredita, afirmaciju krhkosti bankarskih sistema i samim tim i održivost već oslabljene, politički konfliktne, konstukcije EU.

Kada govorimo o mestu Srbije u ovoj arhitekturi i vrlo osetljivim međunarodnim ekonomskim odnosima, možemo očekivati negativno odražavanje na privlačenje perspektivnih investitora u naš bankarski sektor. S tim da postojeće bankarske grupe koje su pod nadzorom ECB mogu biti motivisane i strategijski usmerene da umanje svoju izloženost prema tržištima kakvo je srpsko i koje možemo kvalifikovati kao malo. U tom smislu izuzetno je važno da se nadzor u Srbiji obavlja operativno prema istim kriterijumima kao u EU, postupno i dosledno prema trenutnim administrativnim, institucionalnim i regulatornim kapacitetima kao i sa strogim fokusom na razvoj kompetencija finansijskih eksperata zaposlenih u institucijama čija je nadležnost kontrola finansijskog tržišta i bankarskog sektora.

Međutim, ne možemo se oteti utisku da će se razvoj regulative u bankarskom sektoru Republike Srbije prilagođavati u fazama koje će biti karakteristične po rigidnom konstrukcijskom odnosu „suvereno – nacionalno“ na nivou EU.

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Assessment of the European Banking Regulatory Framework in Light of its Significance for the Republic of Serbia

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Summary: The debt crisis in the European Union is known to be caused by the interdependence of banking and state financial stability, and, together with the non-existence of the fiscal union, it has taken on the existential dimensions of the EU project itself. Under the guise of financial fragmentation within the financial markets of the Eurozone, and from the aspect of the outbreak of the crisis, EU member states resorted to national interventions, thus closing national banking and financial markets, which ultimately resulted in deepened and stronger structural foundation of the crisis and its economic and financial consequences. In that context, the Banking Union is the regulatory and institutional response of the EU after the global financial crisis, about which the first proposals have found a place in institutional controversies since 2012. In addition to the key moment and motive for establishing such an institutional regulatory arrangement, the reason for its creation is more to create a union that is connected with the creation of a single market for financial services and free money circulation, and certainly with the tendency of fuller monetary integration. However, certain questions which arose remained relevant to date: whether these established and instrumentalized frameworks, mechanisms and procedures are in fact sufficient; whether the EU banking union, conceptually designed, really represents banking integration; and whether the "centralized-common" and "sovereign-national" relationships continued in the EU financial architecture, the use of the principle "one measure for all" in the implementation of the Basel III, non-inclusion of all types of banks, and the conflict of emission and supervisory roles of the Central Bank, be a structural conflict in achieving the desired financial stability, which is the ultimate goal. In the broader context of the functioning of the EU, financial stability can also be interpreted as a factor in the survival of the common currency and the European Union itself, regardless of the intertwined contradictions and construction conflict.

In this paper, we analyze the functional scope of the regulatory framework for banking supervision in the EU during the five-year existence to date, and finally the effects and impact that this framework has had on the regulatory adjustment of the Serbian banking sector.

Key terms: EU financial regulatory measures, banking, stability.

JEL: G28

Introduction to Understanding the European Banking Authority

The first banking directive, which was passed back in 1997, established the principle that the home country (country of origin) is responsible for the supervision and control of its bank in a country where it operates. Just over ten years later, another banking directive was passed, which relied on more liberal conditions for banks to operate globally, which provided that a bank licensed to operate in any EU country could establish a branch or operate abroad, without the need to obtain any permits issued by local regulatory bodies, central banks. At that time, this principle was called the "single passport" principle. Nevertheless, there was still a possibility for the host bank from another country to implement regulatory measures in case of "public interest", which in its essential and formal sense meant that the control was performed by the "parent bank" and the complete responsibility lay with the host state. Given that such an institutionalized solution was problematic, the financial crisis itself, which broke out in the United States, back in 2008, and spread on a global level, has conditioned the stability of financial markets to become a priority of the European Union. In the years during the crisis and immediately after its outbreak and spillover into the EU, regulators have taken action to preserve financial stability at the level of improving regulations governing the EU financial sector and strengthening financial sector supervision. In the early years of the crisis, states provided huge funds to save their banking sectors. Bank lenders, unlike taxpayers, did not have to bear the cost of this bailout (Ristić, Živković, 2018).

Over time, the crisis became a semblance of a vicious circle in which member state governments were less and less able to help their banks. The deepening of the problem was also due to the existence of great consequences that the banking sector caused for the member states. The state of general uncertainty and, assuredly, the increase in financing costs, was precisely the consequence of reaching for the funds of bank creditors. Given the bank-centric nature of the market, the monetary union and the single market have faced a serious problem (Mališ, 2014).

Considering the position of the largest banks („too big to fail") in Europe and beyond, during the crisis, the recent Nobel laureate Jean Tirole pointed out that all banks that have benefited from direct state support should be faced with strict regulations (Ristić, Živković, 2018). Therefore, the European Central Bank has since performed the new function of the sole controller of the largest banks in the Eurozone and is responsible for the stability in the banking sector and thus for financial stability in general. However, that posed and still poses the greatest threat to its reputation (Đukić, 2014).

Each banking sector, generally speaking, has a specific role in a country's economy. Within the dynamic interaction between instruments, institutions and the market itself, the banking sector performs functions that are essential for the economic activity of the country, thus functionally creating a context for economic growth and development. (http//www.nbs.rs/regulation, accessed 20.04.2020). This primarily refers to the services of payment, savings, insurance, loans, risk protection, etc., where the problems in performing these functions have a negative impact on the stability of the financial system and the real sector.

This dynamic interaction of institutions, instruments, service users, markets and information creates a complex context that must be regulated by certain regulations that will have the primary goal of ensuring the stability of the system in the long run. If we mean financial stability in the context of this paper, we would refer to the claims of Mirjana Jemović, who says in her PhD thesis: "In order to preserve and strengthen financial stability, the regulatory framework should be set throughout the life of financial institutions. As such, it does not only include ex-ante components, regulation and supervision, aimed at preventing bank failures; but also ex-post components - the last resort function, deposit insurance and restructuring policy. Although important in different periods of banks' operations, only the synergetic effect of all components together can achieve the preservation and strengthening of financial stability" (Jemović, 2016, p. 107).

If this is the general backbone of this paper, then we point out that the global financial crisis at the global level has shown that countries around the world were unprepared for the crisis and did not have an appropriate legal framework for resolving problematic banks and their operations. Therefore, the rescue of banks was borne by the taxpayers of the countries worldwide. The only option available was to choose between conducting bankruptcy proceedings that carry a high risk of causing systemic disruptions and rescuing banks using budget or other public funds (http://www.nbs.rs/regulation, accessed 20.04.2020).

The issue of the ethics of such ventures is a question posed by economic policy makers, citizens and institutions and related to whether banks perform important functions, in terms of economy and growth, given that they generate profits in times of market prosperity for themselves and their shareholders, while in conditions of crisis and possible losses, they turn to the financial support of the budget (http://www.nbs.rs/regulation, accessed 20.04.2020).

As banks are the basic mechanism of external financing of companies in the EU, the banking system, qualified as bank-centric, which we have already talked about, was fragile and not resistant to financial shocks during the crisis, stated Sedlarević (2014).

In support of this, we can refer to the results of endurance tests conducted by the European Banking Authority (EBA), which showed that the financial market of the Eurozone, which was shaken by the debt crisis, should be stabilized.

Ristić K. and Živković A. (2018) indicate that banks from 21 countries were tested at the time, which together represented 65% of the banking sector in Europe. The tests were designed as a financial check and were to determine whether the banks had enough capital to withstand the scenario of difficult economic conditions.

Two scenarios were used, one that took into account current macroeconomic forecasts and the other that assumed an economic shock. The crisis scenario predicted a GDP growth of only 0.5% in the Eurozone and a decline in the European stock market of 15%, as well as a crisis in the real estate market, with those banks that do not exceed 5% of share capital compared to their other assets in "hypothetical" economic conditions, will not qualify to pass the test. (Ristić, Živković, 2018). The results of the testing, although the test itself was not overly strict, show exactly what later resulted in the need for stricter supervision of banks in the Eurozone, and that is a high sensitivity to shocks.

Generally speaking and referring to the Oxford Handbook on Banking, translated and published by the Association of Serbian Banks in 2015, we find a fact that has been recurrently confirmed for years - that financial systems require well-developed legal and information infrastructure to function well. The timely availability of quality information is equally important, as it helps to reduce information asymmetries between loan users and lenders. In this sense, the empirical results show that the volume of bank loans is significantly higher in countries where the flow of information is higher. (Demirgus-Kunt, 2015).

According to Demirgus-Kunt (2015), since the establishment of the banks, there have also been states that regulate them. Although most economists believe that the role of the state is important in regulating and supervising financial systems, the degree of such engagement is an issue that is being actively debated.

Jemović M. (2016, pp. 107-108) claims that the regulatory role of the state contributes to the smooth functioning and development of the overall financial market and in that sense banks are subject to special regulation that "preserves" solvency, limits entering into risky transactions, protects depositors and enables control of money flows and a fair distribution of financial resources.

Demirgus-Kunt (2015) argues that supervisors are expected to ensure the stability of the financial system and to guide banks in their business decisions, through regulation and supervision. However, given the generally limited knowledge of officials, the expertise needed to make business decisions and their tendency to succumb to political and regulatory pitfalls, such an approach may not be effective. The reasons for the weak regulation of banks in the pre-crisis period can be found in such attitudes.

However, the crisis showed the weaknesses in the functioning of the unsupervised banking market of the EU, and in the following years, the European Central Bank took the next steps in establishing the so-called Banking Union, which can be systematized as follows:

- *New rules have been adopted on capital requirements for banks, as well as for the recovery and resolution of bank problems.*
- *Stronger prudential requirements for banks, improved protection of depositors and rules for managing problematic banks have been provided,*
- *A single rulebook has been formed for all financial participants in the member states of the European Union.*

Thus, the crises have indicated a lack of a regulatory framework for bank resolution at integration levels. That is why the reform of regulations in this area, especially in the Eurozone, had a double goal, and that was to repair the consequences of the crisis and create a sustainable political framework in the banking of the European Union or the Banking Union, in the long run (Petrović, P., Ristić, K., 2018).

According to Petrović P. and Ristić K. (2018) the legal basis for the formation of the Banking Union stems from the Article 127 paragraph 6 of the Treaty on the Functioning of the European Union, according to which the EU Council may, in accordance with a special legislative procedure, after consultations with the European Parliament and the European Central Bank, entrust specific tasks to the European Central Bank, relating to the adoption and implementation of policies related to the prudential control of credit institutions.

The Regulation on Uniform Rules and Uniform Procedure for Bank Recovery and Resolution specified the provisions of the Directive applicable to the Member States of the Single Supervision Mechanism, establishing the Single Resolution Mechanism whereby Eurozone Member States and other Banking Union Member States adopted uniform rules and procedures for bank resolution, as a centralized remediation mechanism managed by the formed Single Resolution Board. The Board consists of elected members and representatives of national resolution regulators, and which is funded by a centralized resolution fund. Such a conception has established the existence of a single supervision and resolution mechanism where key roles are entrusted to the institutions of the Eurozone and the European Central Bank (Petrovic, Ristic, 2018).

The economic note of the evident need to strengthen the infrastructure capacity of the Banking Union points to the conclusion that a deeper focus on banking is necessary in the European Union. This would mean the enabling of further strengthening of European economic and financial integration, regardless of further re-examinations of fiscal and political integration. The question which we will talk about in the next chapter is that of the scope of such regulations, because if it is not „finely tuned" and well balanced, it could mean the beginning of new problems of financial functioning of the EU and questioning its further survival (Ristić, Živković, 2019; Živković, A. et al., 2019).

The controversy over banking supervision also points to debates about systemic risk, which to date have largely been reduced to the consideration of sudden exogenous disturbances, with systemic disturbances having their source in both the domestic and international environments. The concept of stability of the financial system is directly proportionally related to the concept of systemic risk, and in that sense, systemic risk refers to the probability of occurrence of certain negative events at the level of the entire financial system (Drvendžija, 2015). It is crucial to point out the above because it makes a clear distinction in relation to the multitude of (micro) risks that can affect a particular financial institution. The systemic risk „lies" in the fact that repetitive and pro-cyclical behavior of financial institutions can lead to visible changes in the lending activity and indebtedness of economic agents over time, and that they are beyond the control of individual institutions and regulators. According to Drvendžija (2015), the crisis, as well as the period that preceded it, is an excellent illustration of excessive cyclical fluctuations in the financial market.

Overview of Constitutional Aspects of EU Banking Regulations

In the conditions of the global financial crisis, but certainly in the period afterwards, the existing institutional mechanisms proved to be insufficient and inadequate for solving the problems of banks that faced serious difficulties in their operations. Given that they did not provide opportunities for sufficiently fast and efficient intervention, nor did they optimally provide conditions for maintaining critical functions in the bank's operations, the conclusion is that there was no framework, draft or plan, whatsoever, to preserve the financial stability of the system as a whole (http// www.nbs.rs, accessed 20.04.2020).

Due to all that, the awareness of the necessity of the existence of clearly defined rules and mechanisms according to which we will act in crisis situations has matured at the international level. At the level of the European Union, in May 2014, this finally resulted in the adoption of the Directive on Establishing a Framework for Recovery and Resolution of Credit Institutions and Investment Firms (Directive 2014/59/EU). This Directive entered into force in all Member States of the European Union on 1 January 2015 (http//www.nbs.rs, accessed 20.04.2020).

However, a particular problem was posed by banks and banking groups facing difficulties, which were operating in several Eurozone Member States, due to the fragmentation of regulations within national frameworks, which required coordinated action by several Member States. Undoubtedly, the protracted financial crisis has slowed the monetary integration of the European Union. "It has directly and deeply affected the EU financial market, and its combined effect with the public debt crisis affected the banking system of the Eurozone, as the central mechanism for implementing the single monetary policy" (Petrović, Ristić, 2018).

The main characteristics of the conception and institutionalization of the Banking Union in the EU are that at the level of the Eurozone, regulations related to the supervision of banks' operations are raised, as follows:

1. *Supervision, prudential control;*
2. *Resolution and its financing;*
3. *Bank deposit insurance;*
4. *Breaking the link - a „vicious circle" - between banks and national public debt;*
5. *Basis of a single mechanism for liquidation of banks.*

In the constitutional sense, and in accordance with the stated goals of the Banking Union, we will only mention the key places in the architecture of the Union: formation of the Single Resolution Fund for the member states of the Banking Union, establishment of the European Deposit Insurance Scheme (EDIS), which will be valid for the member states of the Banking Union, and is mandatory for the Eurozone countries, the Bank Recovery and Resolution Directive (BRRD), which is valid throughout the European Union, the Single Resolution Regulation (SRR), which includes a single bank resolution fund (Single Resolution Fund - SRF) and represents the implementation of the said directive for the Eurozone and other member states of the Single Supervision

Mechanism (EuroCommision, 2013; 2014; 2015; Petrović, P., Ristić, K. 2018). The reason for further non-elaboration of these mechanisms is based on the fact that they were the subjects of previous research by the academic public, and our goal is primarily to discuss the assessment and evaluation of the effectiveness of the framework of the Banking Union from the aspect of its functionality, capacity and scope, which follows below.

Qualitative Assessment of the EU Banking Regulatory Framework

The complex system of coordination of monetary and fiscal policy, as well as the institutional deficit of integration, influenced the slow adjustment of the banking system to the circumstances of the crisis. Regulations at the national level were not adequate to the developments in the banking and financial markets, which further deepened the crisis, with no effect of the "bank raid" that is usually manifested in financial crises. It was the reaction of the states to the first signs of the crisis by strengthening the „safety net" of depositors, i.e. by raising the deposit insurance limit that led to the effect of not igniting the crisis in terms of withdrawing deposits from banks.

Bejatović (2008, pp. 891-902) points out that state intervention through recapitalization and bank rescue had all the characteristics of negative selection. Faced with non-performing loans and their write-offs, as well as regulatory requirements for the amount of capital, banks resorted to a more rigorous approach to the credit requirements of healthy clients. Due to these circumstances, international practice is moving in the direction of adopting regulatory standards for various segments of the global financial market. Regulatory standards mean accepting rules, formulated within international organizations and applied as part of domestic law, based on decisions of the competent national regulatory authorities.

The problem that had appeared at the time of the constitution of the banking union, and is still relevant today, is the euro itself, which a certain number of countries have the option not to accept. The logical whole of the Banking Union is the Eurozone, due to the single currency, centralized monetary policy and integrated banking system. That is why it is only possible to constitute supervision over banks in the field of business supervision, resolution and a single deposit insurance system. However, the problem may arise when, at the request of regulatory authorities, in case they make provisions from revenues for incurred and expected losses, and to that extent reduce their capital base and do not have adequate capital to cover losses, banks become insolvent and cannot maintain business stability in the long run (Petrović, Ristić, 2018, pp. 234-249).

The Economic and Monetary Union needs a Banking Union to ensure the efficient transmission of a single monetary policy, better risk diversification across Member States and adequate financing of the economy. Thus, completing and further strengthening the Banking Union will strengthen financial stability by restoring confidence in the banking sector, through a combination of measures aimed at both sharing and reducing risk (Šubara, Dželetović, 2017).

In qualitative terms, the regulatory framework can be assessed as having been established to ensure different national solutions, not to create lines of disagreement within the banking union, i.e. not to disrupt the functioning of the single market. The framework also envisages bans on trading in financial instruments and goods for one's own benefit, i.e. for the purpose of generating profit for the bank and therefore rules were established on economic, legal, management and operational relations between the separated trade entities and the rest of the banking groups (Ristić, Živković, 2019).

In deciding on the scope of the Banking Union, the prevailing view is that it must include Eurozone member states due to the stated advantages, but also be open to other EU member states, which agree to join it, as well as other states after the accession process. Supervision of banks, even the most comprehensive, cannot prevent the bank from finding itself in difficulties for a certain period of time. Risk taking and profit motivation, the two basic levers of bank investment, and in addition to modern technical means, professional procedures and modern models of forecasting and evaluation, cannot always match the market flows in which the bank is located (Šubara, Dželetović, 2017).

From the very beginning, the Banking Union has been facing doubts, fears and problems. The biggest obstacle in the past, and in the current moment as well, is the insufficient cooperation of national regulatory bodies, especially when it comes to politically sensitive institutions. Although the ECB has significant control capabilities, it still faces limitations in practice. Given that the ECB, as the sole supervisor, warns of the necessary restructuring of individual banks, states will not want and will not be able to ignore this, because in that way they lose the discretionary rights they had had so far. (Mališ, 2014). According to Mališ (2014), in order to give that up, mutual funds must be more than tempting. The fear is that the problems of the banking sector are much bigger than the ability of mutual funds to solve problems, and that it will not be easy to convince national leaders to easily agree to such a transfer of sovereignty. And when that happens, it is inevitable that there will be a conflict between the ECB, which will have to prove its authority in its new role, and national regulators (Mališ, 2014).

Mališ (2014) points to a number of problems in the conceptual functioning of the Banking Union. First, the complex way of decision-making and the large number of stakeholders raises fears of slowness in decision-making. Second, the participation of national representatives does not completely remove the link between national regulators and their banks. Third, small and medium-sized banks do not fall under the jurisdiction of this body, while on the other hand, the formation of a mutual fund will require a period of 10 years, while in the meantime funding will be provided through national funds and the European Stability Mechanism. Fourth, there is a fear of a potential conflict of interest between the monetary role of the ECB and the role of the supervisor. If it does not have sufficient capacity, both institutionally and in full financial terms, the ECB may be reluctant to show the true state of banks that would otherwise be subject to restructuring. Fifth, the ECB's overly expansive monetary policy can be an instrument to keep these banks in place, in the absence of adequate mutual funds. And sixth, the biggest challenges are certainly those of a political nature, because the European Commission wants to strengthen everything that means centralized decision-making at the EU level, with the obligatory limitation of the reach of national institutions (Mališ, 2014).

Events of the global financial crisis from 2007-2009 showed that well-conceived deposit insurance will not always prevent the occurrence of a crisis, and it is an important issue according to Kane E. (2015) to consider the functioning of the deposit insurance scheme in times when there is no crisis. Kane E. (2015) also points out that non-financial institutions can be just as important as commercial banks and sources of systemic risk and that they can seek access to parts of the security network even in normal times. Deposit insurance in its conceptual sense can cause both the behavior of moral hazard and the bad agency behavior of the regulator. In this regard, Kane E. (2015) refers to the claims of Minsk from 1977 and his views that if insurance agencies do not evaluate and administer correct deposit insurance, it can influence and encourage such behavior of banks to take higher risk and choose riskier portfolios than they would otherwise do in the absence of insurance.

Although the decision to form the Banking Union is an essential and certainly a long-term decision, and in that sense it is the backbone of strengthening monetary integration in general, we ask whether giving such vast powers to the ECB will be the right way to build and further consolidate and strengthen the already shaky consistency and sustainability of EU integration, especially when it comes to the legitimacy of the Union's joint bodies, its leadership, the capacity of institutions and the crisis of the common currency.

NBS Banking Regulations Approaching EU Regulations

The banking environment and the architecture of banking regulation vary greatly from country to country. According to Kane E. (2015), the supervision of financial institutions combines the capacity to observe fluctuations in the balance sheet values of banks with the capacity to influence managerial actions in banking operations. Kane (2015) claims that within every country there are conflicts between regulators and the companies they regulate, between regulators and politicians to whom they have to report, and between taxpayers and politicians and regulators that they appoint.

The EU is a textbook example of Kane's claims, and only as an example does he state that many European Union countries supervise banks separately from other financial institutions, and some of them do not. Austria, Germany, Denmark, Sweden, the Netherlands and the United Kingdom[1] stand out. (Kane, 2015). It is therefore an integrated and partially integrated system of banking and financial market supervision in general.

Generally speaking, a healthy and stable financial system, and the banking sector in general, is a necessary precondition for a sustainable and development-oriented real sector. Banks are the key institutions through which the monetary policy of the central bank is transmitted.

1 Refers to the pre-Brexit period.

In that sense, the global financial crisis required a timely reaction of the National Bank of Serbia (NBS) in order to preserve the stability of the financial system, and especially the banking sector as its most important and vital segment. The most important indicator of the aspirations of the National Bank of Serbia and the strategic commitment of the Republic of Serbia to European integration was the adoption of the acquis communautaire and, in that sense, the fulfilment of accession and convergence criteria. On 9 October 2008, the Republic of Serbia adopted the National Program for the Integration of the Republic of Serbia into the EU for the period 2008-2012, which showed its readiness to harmonize its regulatory frameworks related to the financial sector with the acquis communautaire (Jemović, Krstić, 2015).

In the following pages, we will have a look at the legal and legislative harmonization of the NBS with the financial regulatory in the EU and generically list the recent and current activities of the NBS. Namely, along with regulatory initiatives in the field of preserving financial stability in EU countries, the NBS paid great attention to harmonizing its financial stability policy with the ESCB's financial stability policy. In this regard, in order to preserve and strengthen the stability of the financial system and improve the function of banking supervision, the National Bank of Serbia has been working continuously to improve the regulatory framework and supervisory activities. The process of supervisory assessment is emphasized, which combines the results of all conducted supervisory activities aimed at an individual bank. This process is characterized by the establishment of a single assessment for the bank, and, if necessary, the undertaking of supervisory measures by the National Bank of Serbia. Also, the principle of dialogue with banks in case certain irregularities in operations are identified, division of banks into groups, monitoring of basic risk indicators, analysis and review of business model, adequacy of corporate governance, assessment of capital adequacy and liquidity (http//www.nbs.rs, accessed 20.04.2020).

Special activities of the NBS are aimed at the adoption of legal changes regarding the restructuring of banks. The aim was to minimize the use of budget and other public funds in order to preserve financial stability. This primarily refers to the regulatory tendencies embodied in the concept of the EU Banking Union.

Therefore, potential losses due to the bank's failure will be borne first by the bank's shareholders and creditors, in compliance with the prescribed restrictions and protection mechanisms, so that the bank's shareholders and creditors will have to be aware of the risk of losses they will suffer in the event of bank failure. In the restructuring process, the NBS may choose instruments or a combination of instruments that could best achieve the objectives of the restructuring. It is expected that this will significantly contribute to market discipline (http// www.nbs.rs, accessed 20.04.2020).

The preventive action and adequate preparation of banks, the NBS and other competent institutions, which is also a characteristic of harmonization of financial regulations of the Republic of Serbia with the EU acquis, refers to the prescribed obligation for banks to develop recovery plans to be applied in case of deterioration of its financial condition, and with the aim of further improving sustainable business and an appropriate financial position (http// www.nbs.rs, accessed 20.04.2020).

It is important to point out that the NBS has also signed a multilateral agreement on cooperation with the European Banking Authority (EBA) and the supervisory authorities of the countries of Southeast Europe. This agreement establishes a framework for cooperation and exchange of information in the field of banking supervision.

The previously presented arguments in the field of adjusting the institutional capacities and the legislative framework of the NBS indicate a high degree of compatibility of our central bank with the standards and principles of the ESCB, which is a good precondition for faster accession to the EU and then the EMU (Jemović, Kristić, 2015).

In addition to all the above, Serbia is not a member of the EU, so it cannot be a member of the SSM and this puts it in an additionally awkward position: "Neither the local banks owned by international banks based in the EU, nor the domestic banks owned by the banks based outside the EU are subject to ECB supervision" (Drvendžija, 2015).

Conclusion

Based on all of the above, we can infer that a common banking system in the EU should imply something more than banking supervision. This is the only way to enable the financial survival of the EU. Thus, a common deposit insurance framework would be a condition that should further ensure equal procedures for what is done with banks that do not meet their obligations. In the absence of this type of community in the EU, money can flow from the banking systems of „weak" countries to banks operating in „strong" countries. This directly and proportionally further weakens those who are already weak. Therefore, it is necessary that the regulatory system is primarily aimed at encouraging expansion in countries where it is necessary to stimulate the economy and limit lending in overheated economies. This, in turn, means that it is necessary to expand the scope of authority and the range of instruments, because, otherwise, without such flexibility and adjustment the whole system can prove to be destabilizing and encourage further weakening of already „weak" economies. However, proving the success and efficiency of the constituted financial architecture discussed in this paper requires time and the identification of „best practices", until then, the rigid implementation of legislature can produce huge consequences on lending, the NPL ratio, affirmation of banking systems fragility and sustainability of the already weakened, politically conflicted construction of EU.

When we talk about Serbia's place in this architecture and its very sensitive international economic relations, we can expect a negative impact on attracting promising investors to our banking sector. However, the existing banking groups that are supervised by the ECB can be motivated and strategically oriented to reduce their exposure to markets such as Serbia, which we can qualify as small. In this sense, it is extremely important that supervision in

Serbia is performed operationally according to the same criteria as in the EU, gradually and consistently according to current administrative, institutional and regulatory capacities, as well as with a strict focus on developing competencies of financial experts employed in financial market control institutions and the banking sector.

However, we cannot escape the impression that the development of regulations in the banking sector of the Republic of Serbia will be adjusted in phases that will be characterized by a rigid, constructivist, „sovereign - national" relationship at the EU level.

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Društveno-ekonomski aspekti povlačenja gotovine iz upotrebe

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Rezime: Pojam bezgotovinskog društva polako postaje neminovnost savremenog načina poslovanja. Povlačenje gotovine iz upotrebe je rezultat široke primene informaciono-komunikacionih tehnologija. Sve veća digitalizacija je doprinela tome da se većina transakcija obavlja putem pametnih uređaja (telefona, tableta, desktop računara), bez korišćenja gotovine i bez odlaska u banku. Razvoj tehnoloških inovacija, kao i inovacija u finansijama, nesumnjivo je doprineo povećanju efikasnosti u poslovanju, ali se postavlja pitanje da li je sve veća digitalizacija života i poslovanja, koja se ogleda u stvaranju bezgotovinskog društva, ipak toliko poželjna za čoveka. Rad je fokusiran na društveno-ekonomske aspekte povlačenja gotovine iz upotrebe. S jedne strane, države dobijaju mogućnost da preko svojih centralnih banaka još direktnije utiču na ekonomske aktivnosti, dok se sa druge strane postavlja pitanje ljudskih sloboda i prava u digitalnom svetu u kojem će biti moguće elektronski kontrolisati celokupno poslovanje.

Ključne reči: bezgotovinsko društvo, povlačenje gotovine iz upotrebe, digitalizacija, tehnološke inovacije, finansijske inovacije

JEL: E42, O30, A13

Uvod

Digitalizacija, oličena u ekspanziji i primeni savremenih informaciono-komunikacionih tehnologija i u porastu broja transakcija koje se obavljaju elektronskim putem, od krucijalnog je značaja za razvoj budućeg bezgotovinskog društva. Na osnovu sadašnjih tendencija se može zaključiti da će budući poslovni modeli dovesti do potpunog povlačenja gotovog novca iz upotrebe.

Povlačenje gotovine iz upotrebe, uslovljeno rastućim trendom bezgotovinskih transakcija (Fabris, 2019), dovelo je do brojnih pozitivnih efekata: mogućnost prenosa novca sa jednog računa na drugi u par minuta i uz minimalne troškove, nepostojanje geografskih prepreka i ograničenja za elektronski novac, mogućnost pregleda svih transakcija, itd. Bezgotovinsko društvo, osim mnogobrojnih prednosti, sa sobom nosi i određene nedostatke, kojima se treba posvetiti posebna pažnja.

Mišljenja o bezgotovinskom društvu su podeljena, kako u akademskim krugovima, tako i između običnih građana. Dok starije generacije smatraju da keš ne treba ukidati, mlađi deo društva se pak više oslanja na korišćenje informaciono-komunikacionih tehnologija i gotovinu smatra prošlošću. Informaciona tehnologija menja svaki aspekt života pojedinca i stvara ogromne mogućnosti za celokupno društvo. Široka i konstantna upotreba interneta, tableta i pametnih telefona utiče na promenu navika potrošača, koji očekuju jednostavnije, efikasnije, sigurnije i brže obavljanje poslova, i koji posluju i žive u skladu sa krilaticom „vreme je novac".

Predmet istraživanja ovog rada su efekti digitalizacije i novih tehnologija, oličenih u elektronskom načinu poslovanja, na stvaranje potpuno bezgotovinskog društvo. Cilj istraživanja je da se izvrši analiza efekata povlačenja gotovine iz upotrebe na aktivnost države, centralne banke, finansijskih institucija i pojedinaca.

Rad je strukturiran kroz tri dela. U prvom delu će biti razmotren odnos digitalizacije i novca, odnosno kako je digitalizacija uticala na to da tradicionalni novac polako prepušta primat svom elektronskom obliku. U drugom delu rada će posebna pažnja biti posvećena implikacijama koje povlačenje gotovine iz upotrebe ima na državu, centralnu banku i pojedince, kao i na prednosti i nedostatke koje sa sobom donosi. U trećem delu rada će biti razmotreni trendovi u Švedskoj i njene tendencije kretanja ka prvom bezgotovinskom društvu na svetu. Na kraju rada će biti sublimirane ključne činjenice i biće dati zaključci.

Digitalizacija i novac

„Novac je sve što je opšte prihvaćeno kao merilo vrednosti i sredstvo razmene. Novac je definisan opisivanjem funkcije koju vrši, ali se može definisati i kao opšta kupovna moć, ili kao dug društva prema imaocu novca. Ponekad se novac definiše i kao ono čime se kupuju stvari." (Sausse, 1972, str. 4)

Pojavu prvobitnog novca je uslovila potreba za međusobnom razmenom proizvoda. Kroz istoriju su se kao novac koristili: predmeti iz prirode, plemeniti metali i novčanice. Najveći deo današnjeg novca u opticaju čini žiralni novac (potraživanja na tekućim računima), dok neznatni deo čini elektronski novac.

Novac je specifična društveno-ekonomsko-kulturološka pojava, bez čijeg prisustva bi mnogo više vremena bilo potrebno za kupovinu i prodaju, što bi uslovilo veće troškove razmene. Osnovne funkcije novca su: novac kao sredstvo plaćanja, novac kao mera vrednosti i funkcija čuvara vrednosti. Funkcija novca kao sredstva plaćanja omogućava da se za određenu količinu novca može kupiti neka roba ili izvršiti usluga. Novac kao mera vrednosti određuje cenu robe ili usluge. Funkcija novca kao čuvara vrednosti omogućava da novac ne izgubi svoju vrednost, niti u sadašnjem niti u nekom budućem trenutku.

Sveprisutna digitalizacija društva utiče na to da se sve više poslova obavlja elektronskim putem. U ovakvim okolnostima, novac je postao elektronsko sredstvo plaćanja (gotovina se transformisala u elektronski novac). S obzirom da se sve više transakcija obavlja elektronskim putem, elektronski novac polako zamenjuje tradicionalni. Razvijene zemlje i zemlje u razvoju, pod uticajem procesa digitalizacije, počinju da traže efikasnije načine za uključivanje u elektronske tokove poslovanja (Savić i saradnici, 2017).

U kratkom roku su digitalizacija, elektronsko poslovanje i upotreba elektronskog novca širom sveta uzdrmali temelje tradicionalnim tokovima poslovanja i tradicionalnom modelu razmene novca (pojava digitalnih valuta). Vudford (Woodford, 2000) navodi da su informacione tehnologije i digitalizacija probudile nesigurnost i strah kod nekih preduzeća da će nestati u budućnosti, ako ne budu radila u skladu sa inovacijama, kao i opreznost centralnih banaka koje strahuju da neće uspeti da održe stabilnost svojih nacionalnih valuta. Brunermajer i saradnici (Brunnermeier, 2019) navode da će pojava digitalnih valuta doneti promene u ekonomskim aktivnostima, utičući pre svega na: promenu prirode valutne konkurencije, arhitekturu međunarodnog monetarnog sistema i ulogu novca koji izdaje vlada.

Tabela 1: Osnove funkcije tradicionalnog i elektronskog novca

Tradicionalni novac	Elektronski novac
Novac kao sredstvo plaćanja	Novac kao sredstvo plaćanja
Novac kao obračunska jedinica	Novac kao obračunska jedinica
Novac kao sredstvo odloženog plaćanja	Novac kao sredstvo odloženog plaćanja
Novac kao čuvar vrednosti	-

Izvor: Hubbard, R. G. (2008). Money, the financial system and the economy. Pearson International edition

Sedlarević, L., Furtula, S., & Tomić, N. (2015). Potencijalni efekti elektronskog novca na monetarnu politiku. *Teme*, 4, 1235 – 1255

Iz Tabele 1 se vidi da elektronski novac ne obavlja funkciju čuvara vrednosti, što je, kako navode Sedlarević i saradnici (2015), zbog činjenice da su sredstva koja se drže u formi gotovine zadužena za obezbeđivanje likvidnost u svakom trenutku.

Pretpostavlja se da će novac u budućnosti imati potpuno digitalnu formu. Četiri glavne oblasti u kojima će digitalizacija i informacione tehnologije moći da modifikuju tradicionalne oblike novca i kredita će biti: potpuna zamena gotovine elektronskim novcem, zamena tradicionalnih bankarskih depozita i novčanica sa kriptovalutama, zamena depozita banaka depozitima centralne banke i zamena bankarskog zajma sa P2P (peer-to-peer) kreditiranjem na osnovu digitalnih platformi (Bofinger, 2018).

U skladu sa sve većom zastupljenošću bezgotovinskih plaćanja, a prema Evropskom izveštaju o metodama plaćanja za 2019. godinu, da se zaključiti da su informacione tehnologije nesumnjivo doprinele promenama u načinu plaćanja. Prema ovom izveštaju, u strukturi sredstava plaćanja u savremenom društvu dominantno mesto polako zauzimaju: digitalni novčanici, plastične kartice, virtuelni novac i ostala elektronska sredstva plaćanja (European Payment Council, 2019).

Implikacije povlačenja gotovog novca iz upotrebe na društvo i ekonomiju – pozitivni i negativni aspekti

Elektronski način obavljanja platnog prometa će u budućnosti postati značajna komponenta svetske ekonomije. Iako elektronski novac neće moći u potpunosti da zameni gotovinu, ipak će jedino on sa svojim karakteristikama moći da funkcioniše u skladu sa najnovijim tehnologijama i u budućem bezgotovinskom društvu (Savić i saradnici, 2017). Bak (Buck, 1997) je smatrao da će se to dogoditi tek kada se reše dva ključna problema: zaštita vlasničkih prava i zaštita obavljene transakcije.

Povlačenje gotovine iz upotrebe nije beznačajna pojava, ona ima važne implikacije na čitavo društvo i ekonomiju u celini. Povlačenje gotovine iz upotrebe će možda omogućiti državama da preko svojih centralnih banaka direktnije utiču na ekonomska kretanja. Takođe će uticati na to da se ljudi zapitaju da li će elektronsko kontrolisani platni promet uticati na ograničenje njihovih prava i sloboda. Stabilnost i sigurnost ovakvog platnog sistema može, takođe, biti dovedena u pitanje.

Evropska centralna banka (engl. European Central Bank) (1998) je ukazala na pitanja kojima se posvećuje posebna pažnja prilikom izgradnje bezgotovinskog društva, kao što su: sprovođenje monetarne politike, stabilnost finansijskih tržišta, zaštita potrošača i trgovaca, zaštita od nelegalnih radnji i funkcionisanje platnog sistema. Stabilnost i funkcionisanje platnog sistema, kao i njegovu sigurnost, obezbeđuje centralna banka. Na primeru Republike Srbije, Narodna banka Srbije je ta institucija koja je zadužena za obezbeđivanje stabilnosti, sigurnosti i efikasnosti funkcionisanja platnog sistema. Narodna banka igra ulogu „nadzornika" platnog sistema. Principi kojima se NBS rukovodi u obavljanju nadzora su: transparentnost, primena međunarodno priznatih standarda i konzistentnost u primeni zahteva i standarda na uporedive platne sisteme (Narodna banka Srbije, 2020). Platni sistem funkcioniše kao vaga koja teži da održi ravnotežu. S jedne strane podržava uvođenje elektronskog načina poslovanja i povlačenje gotovine iz upotrebe, dok s druge strane teži da u tom digitalnom društvu održi stabilnost i sigurnost.

Lukić i Živković (2017) navode da platni sistem koji promoviše elektronski način poslovanja polazi od decentralizovane strukture, koja, osim korisnika računa i njegove banke, omogućava uključivanje i treće strane (države) u praćenju i kontroli vođenja tog računa i obavljanju transakcija. Na osnovu ovoga se može pretpostaviti da će u budućnosti naglasak države biti na donošenju niza propisa kojima će se regulisati i garantovati sigurnost korisnika, kao i sigurnost obavljanja transakcija.

Aktivna uloga države i centralne banke (adekvatno vođenje monetarne politike; usklađivanje instrumenata monetarne politike; efikasna kontrola širenja i korišćenja elektronskog novca) je veoma bitna prilikom transformacije tradicionalne ekonomije u digitalnu ekonomiju (Qin, 2017; Rogoff, 2017). Digitalizacija i elektronsko poslovanje utiču na promenu u monetarnom sistemu, u kome su tri atributa novca vezana za državu: država propisuje šta se koristi kao zakonsko sredstvo plaćanja unutar njenih granica, država jedina poseduje pravo emisije novca i država se nameće kao suvereni kontrolor novčanog opticaja u zemlji (Lukić i Živković, 2017). Al-Laham, Abdalat i al-Taravne (2009), kao i Sedlarević i saradnici (2015), smatraju da će se uticaj elektronskog novca na vođenje monetarne politike najviše ogledati u: smanjenju kontrole centralne banke nad novčanom ponudom, povećanju brzine opticaja novca, volatilnosti kurseva, smanjenju potrebe za štampanjem gotovine, senjoraži, visini rezervi i međunarodnoj kontroli. O uticaju elektronskog novca na vođenje monetarne politike postoje oprečna mišljenja. Fridman (1999) i Koen (2001), s jedne strane, smatraju da monetarna politika neće biti efikasna u bezgotovinskom društvu, dok ih, s druge strane, Bujter (2005), Vudford (2000) i Fridman (2000) demantuju i navode da će monetarna politika ipak biti u stanju da se nosi sa njegovim izazovima. Nesumnjivo je da će monetarna politika morati da prati promene i da se prilagođava stalnim inovacijama u elektronskom načinu poslovanja (Popovska – Kamnar, 2014). Prilagođavanje instrumenata monetarne politike novonastalim okolnostima će centralnoj banci obezbediti mogućnost efikasnijeg upravljanja i kontrolu korišćenja elektronskog novca.

Jedna od prednosti bezgotovinskog društva, prvenstveno zbog mogućnosti praćenja toka novca i transakcija, biće mogućnost rešavanja problema pranja novca i utaje poreza (Cerulus & Contituglia, 2018), kao i mogućnost rešavanja problema korupcije (primena blokčejn tehnologije za poslove evidencije) (Lukić i Živković, 2017). Nesumnjivo je da bi rešavanje pomenutih problema vodilo bržem ekonomskom rastu i razvoju, međutim, Vulf (2019) i Kalaf (2018) demantuju ove tvrdnje i navode da bi upravo korišćenje digitalnih valuta i elektronskog novca otvorilo brojna pitanja vezana za ove probleme. Problemi korupcije, pranja novca i utaje poreza ne bi mogli biti rešeni jer ne bi postojala mogućnost identifikacije niti učesnika u transakcijama, niti iznosa sredstava (Tomić i saradnici, 2016).

Bezgotovinsko društvo nosi brojne prednosti i za banke, koje bi u takvom društvu bile oslobođene velikih troškova transporta, obezbeđenja i čuvanja novca. Ovim bi se, u poslovanju sa gotovinom, kako navodi Nađ (2014), sprečio rizik povezan sa organizovanim kriminalnim upadom u prostorije banke ili institucije koja obavlja platni promet, kojim su one vrlo podložne. Elektronsko poslovanje doprinosi smanjenju troškova transfera novca i povećava brzinu njegovog opticaja (Raičević i saradnici, 2012). Takođe je posebna prednost elektronskog poslovanja u njegovoj dostupnosti svim korisnicima interneta.

Međutim, ukidanje gotovine i na toj osnovi stvaranja bezgotovinskog društva ima određene nedostatke. Koliko razvijene zemlje i zemlje u razvoju teže bezgotovinskom društvu, toliko su nerazvijene zemlje u nezavidnom položaju. Njihovi najsiromašniji građani nemaju mogućnost da sebi priušte niti račun u banci, niti mobilni telefon, niti internet. Takve zemlje nemaju odgovarajuću infrastrukturu koja bi mogla da podrži stvaranje bezgotovinskog društva, te se troškovi rukovanja gotovinom svaljuju na siromašne slojeve, što njihov položaj čini još težim.

Negativna strana povlačenja gotovine iz upotrebe je i ta što može doći do zloupotrebe od strane lica koja poseduju poverljive podatke, u smislu profiliranja kupaca, komercijalne upotrebe ličnih podataka, stvaranja psiholoških profila, stvaranja baze podataka o potrošačkim navikama i uvid u njihovu imovinu (Fabris, 2019). Još jedan problem bezgotovinskog društva će biti i zadržavanje privatnosti (Van Steenis, 2019). Bankarski serveri su daleko od „neprobojnih" kakvim se predstavljaju, s obzirom na činjenicu da organizovani sajber kriminalci mogu sebi vrlo lako priuštiti pristup sistemu neke velike finansijske institucije (primeri: sajber kriminal je Australiju 2003. godine koštao oko 3,5 miliona dolara, dok je Veliku Britaniju iste godine koštao 120 miliona funti).

Nestanak struje i pad mreže bi napravio ogroman problem u društvu gde bi primat imale plastične kartice, jer bi korišćenje kartica bilo onemogućeno zbog prekida rada čitača (2015. godine je u Ukrajini došlo do privremenog zamračenja kada je izvršen hakerski napad na tri elektrodistributivne kompanije), dok bi padom mreže bilo onemogućeno korišćenje elektronskih sistema plaćanja. U društvu gde bi se još upotrebljavala gotovina, ovo i ne bi predstavljalo neki preveliki problem, ali bi u bezgotovinskom društvu sigurno dovelo do haosa i panike.

Primena informacione tehnologije u bankarskom poslovanju je donela ogromne promene, što pozitivne, što negativne. Kako navode Tomić i Sedlarević (2014), sa usavršavanjem bankarskih procesa dolazi do širenja rizika koji će postati karakteristični za digitalno društvo. Prema Bazelskom komitetu za bankarski nadzor (engl. Basel Committee on Banking Supervision) rizici digitalnog društva se mogu podeliti na: operativni rizik (narušavanje sistema sigurnosti u poslovanju prilikom obavljanja transfera novca); reputacioni rizik (narušeni ugled neke institucije koji vodi gubitku sredstava i korisnika proizvoda i usluga); pravni rizik (nepoštovanje zakona i poslovanje mimo njega); rizik internacionalnog poslovanja (poznavanje međunarodnih propisa i pravila poslovanja) i ostali rizici (kreditni rizik, tržišni rizik, rizik likvidnosti, kamatni rizik) (Basel Committee on Banking Supervision, 1998).

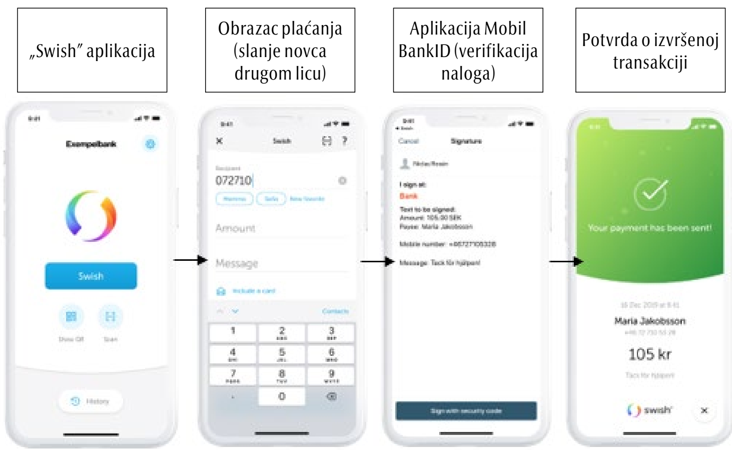
Projekat stvaranja prvog bezgotovinskog društva

Težnja razvijenih zemalja jeste ukidanje gotovine i potpuni zaokret prema bezgotovinskom društvu. Švedska je preduzela najkonkretnije korake kako bi postala prvo bezgotovinsko društvo na svetu. U poslednjih par godina, Švedska je doživela pravu ekspanziju elektronskih oblika plaćanja i ekspanziju u korišćenju platnih kartica (1% obavljenih gotovinskih transakcija u 2016. godini).

U ovoj skandinavskoj zemlji se toliko promoviše bezgotovinsko društvo, da se na nekim mestima za plaćanje mogu upotrebiti samo kartice, čija se upotreba, pritom, stalno povećava. Digitalno plaćanje putem kartice ili mobilnih aplikacija toliko je često i pouzdano da mnogi Šveđani sa sobom više ne nose gotovinu (Sweden – Sverige, 2019). Plastične kartice su izgradile infrastrukturu prihvatanja i poverenja, te svojim korisnicima omogućavaju korišćenje kako u regionu, tako i u inostranstvu. Beskontaktno plaćanje, za koje se smatra da je prilično sigurno, praktično i brzo, omogućava potrošačima da plate jednostavno koristeći karticu ili mobilni telefon (Zacks, 2019).

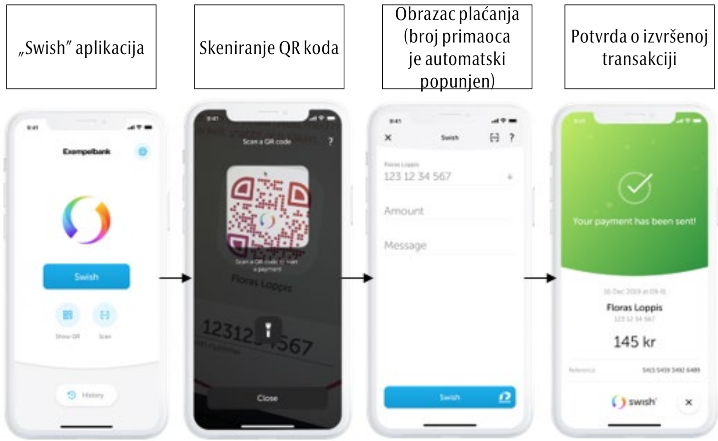
Mobilna aplikacija „Swish", razvijena 2012. godine, kao rezultat saradnje šest skandinavskih banaka (Danske Bank, Handelsbanken, Lansforsakringar, Nordea, SEB, Swedbank i Sparbankerna own Getwish AB), takođe doprinosi smanjenju korišćenja gotovine. Zahvaljujući „Swish" aplikaciji vrši se povezivanje broja telefona i bankovnog računa, i omogućavaju se plaćanja bilo kada i bilo gde. Korisnik mora imati i još jednu dodatnu aplikaciju Mobil BankID Säkerhetsapp koja predstavlja elektronsku identifikaciju, tj. korisnik mora imati bankovni račun u nekoj banci u Švedskoj i matični broj (https://www.swish.nu/private). Aplikacija omogućava slanje novca nekom drugom licu i to jednostavnim ukucavanjem njegovog broja telefona, iz bilo koje zemlje da je, i odgovarajućeg iznosa u obrazac plaćanja u aplikaciji (Slika 1), kao i skeniranje QR koda (gde za to postoji mogućnost) za izvršavanje uplate (Slika 2).

Slika 1: Način korišćenja Swish aplikacije (slanje novca drugom licu)



Izvor: How Swish works. Preuzeto 25. februara 2020., sa https://www.swish.nu/private

Slika 2: Način korišćenja Swish aplikacije (plaćanje putem QR koda)



Izvor: How Swish works. Preuzeto 25. februara 2020., sa https://www.swish.nu/private

Švedska centralna banka (Riksbank) svake druge godine sprovodi istraživanje kako bi se dobili podaci o obrascu plaćanja u Švedskoj i kako bi se razumele navike plaćanja stanovništva. Istraživanje je sprovedeno uz pomoć ankete na uzorku od 2000 osoba koje pripadaju starosnoj grupi od 16 do 84 godine. Rezultati istraživanja su predstavljeni u narednoj tabeli.

Tabela 2: Procenat korišćenja gotovine, kartice i Swish-a, za period 2014, 2016. i 2018. godine

Način plaćanja	2014	2016	2018
Gotovina	87%	79%	61%
Kartica	93%	93%	93%
Swish	10%	52%	62%

Izvor: Riksbank (2020). Payment patterns. Preuzeto 8. februara 2020, sa https://www.riksbank.se/en-gb/statistics/payments-notes-and-coins/payment-patterns/

Rezultati sprovedenog istraživanja (smanjenje korišćenja gotovine iz godinu u godinu i rast korišćenja platnih kartica i elektronskih sredstava plaćanja) potvrđuju činjenicu da se Švedska kreće ka bezgotovinskom društvu. Međutim, poučena negativnim implikacijama povlačenja gotovog novca iz upotrebe, Švedska je stopirala proces potpunog ukidanja gotovine. Guverner Švedske centralne banke, Stefan Ingves, je nametnuo zakonsku obavezu najvećim bankama da moraju nastaviti da primaju gotovinu, prvenstveno iz razloga što neki građana ili neće biti u mogućnosti ili neće biti sposobni ili jednostavno neće želeti da upravljaju svojim plaćanjima na savremeniji način. Uprkos ovome Jenkins (2018), na osnovu dosadašnjih trendova u Švedskoj, navodi da će poslednja novčanica biti predata Švedskoj centralnoj banci do 2030. godine.

Projekat P27 ima za cilj da uspostavi jedinstvenu, pan-nordijsku infrastrukturu za plaćanje u realnom vremenu, koja bi obuhvatala 27 miliona stranovnika Danske, Švedske, Norveške i Finske. Vizija ovog projekta je da se u ovim zemljama uspostavi prva integrisana regija na svetu za sve domaće i prekogranične isplate, u više valuta, kroz zajedničku infrastrukturu otvorenog pristupa, koja bi trebalo da olakša plaćanje kupcima u ovim zemljama. Plaćanja bi se odmah pretvarala u naznačenu valutu, a transakcije i prateći skrining bi se izvršavali u realnom vremenu. Projekat P27 je na putu da ostvari ovu pan-nordijsku viziju sa prvim obavljenim transakcijama tokom 2021. godine (European Payment Council, 2019).

Švedska centralna banka je u proleće 2017. godine pokrenula projekat stvaranja državne digitalne valute, e-krune. E-kruna je švedska kruna koja se može čuvati na računima u Švedskoj centralnoj banci i koja može biti na karticama ili u aplikaciji za mobilne telefone (Juks, 2018). Projektom se istražuju i analiziraju potrebe za uvođenjem e-krune. Istraživanje se kreće u pravcu razvoja predloga tehničkog rešenja za e-krunu, uticaja e-krune na Švedsko zakonodavstvo i potreba i efekata e-krune na Švedsku ekonomiju (Sveriges Riksbank, 2019). Uvođenjem e-krune (dodatak fizičkom novcu), centralna banka bi nastavila da promoviše sigurnost i efikasnost platnog sistema, jer ne bi u potpunosti prepustila tržište plaćanja i korisnike privatnim rešenjima, oličenim u pojavi kriptovaluta (Sveriges Riksbank, 2018).

E-kruna bi mogla ponuditi konkurentnu i neutralnu infrastrukturu koja bi pružaocima usluga platnog prometa omogućila pridruživanje, ako bi oni želeli da razvijaju i ponude svoje proizvode i usluge korisnicima (Juks, 2018). Ovim bi se uticalo na povećanje konkurencije, na promovisanje inovacija u platnom sistemu i na smanjenje troškova koji se naplaćuju (Sveriges Riskbank, 2018).

Uticaj e-krune na monetarnu politiku i finansijsku stabilnost zavisiće od tražnje za njom, dok će tražnja zavisiti od dizajna ove elektronske valute. Ono što će odrediti potražnju za e-krunom jesu njene karakteristike (može da se koristi za plaćanja u realnom vremenu; ima nezavisnu platformu za plaćanje; može se držati u svrsi štednje; bilo ko je može posedovati (Juks, 2018); kamatne stope vezane za e-krunu su u skladu sa implementacijom monetarne politike i njenim instrumentima (Nessen i saradnici, 2018).

Projekat stvaranja e-krune bi doneo značajne koristi realnom sektoru u obliku ekonomske i tehnološke otpornosti, jer bi ona omogućila i olakšala pristup sigurnom, opšte prihvaćenom načinu plaćanja, čak i onda kada druga sredstva plaćanja postanu ekonomski ili tehnološki nepouzdana (Juks, 2018). Svrha ovog pilot projekta je istraživanje mogućnosti e-krune kao alternativnog sredstva plaćanja budućnosti za koje garantuje država (Ozturkcan i saradnici, 2019). S jedne strane se navodi da bi e-kruna mogla poboljšati efikasnost i otpornost platnog sistema podsticanjem ekonomske aktivnosti (iz razloga što je izdaje i reguliše centralna banka), dok bi se sa druge strane mogli očekivati štetni dugoročni efekti ako bi e-kruna ometala finansijsku stabilnost (Armelius i saradnici, 2018).

Pored e-krune, u narednoj tabeli su predstavljeni i drugi načini plaćanja koji će biti dostupni u Švedskoj.

Tabela 3: Pregled budućih načina plaćanja u Švedskoj

	Gotovina	Sredstva na računu	Kripto-sredstva	E-kruna
Od koga se potražuje?	Švedska centralna banka	Banke	-	Švedska centralna banka
Forma (oblik)?	Fizički	Digitalni	Digitalni	Digitalni
Ko garantuje sigurnost?	Švedska centralna banka	Banka, garanacija depozita, regulacije, monetarna politika centralne banke	Osnovni protokol	Švedska centralna banka
Da li predstavlja novac?	Da	Da	Ne	Da

Izvor: Soderberg, G. (2018). What is money and what type of money would an e-krona be?. Sveriges Riksbank Economic Review, 2018:3, 17-28

Valja napomenuti da je Švedskoj na putu ka bezgotovinskom društvu umnogome doprinela istorijska saradnja i uslovljenost razvoja bankarskog sektora i ekonomskog rasta (banke su posle Drugog svetskog rata obavljale poslove vezane za pružanje aktivne podrške ekonomskoj politici) (Lazarević, 2012).

Zaključak

Digitalna revolucija je uticala na promene u društvu i ekonomiji. Promene koje se dešavaju danas, nastaviće se istim, ili čak ubrzanim tempom i u budućnosti. Aktuelna dešavanja ukazuju da se savremeno društvo polako, ali sigurno, kreće ka bezgotovinskom društvu. Digitalizacija je uslovila pojavu i razvoj elektronskog načina poslovanja, što je dalje uticalo na odluku centralnih banaka i država da polako počnu sa povlačenjem gotovine iz upotrebe.

Unapređivanje pozitivnih i smanjenje negativnih implikacija koje ima povlačenje gotovine iz upotrebe, kao i stvaranje bezgotovinskog društva, zadaci su i države i njene vlade, finansijskih institucija, centralne banke i kreatora ekonomske politike. Uloga države bi trebalo da bude razvijanje potrebne infrastrukture i strategije koja će biti podrška elektronskom poslovanju i koja nikoga neće ostaviti izvan „kola" digitalizacije, kao i razvijanje međunarodne saradnje sa drugim državama u borbi protiv raznih oblika internet prevara i internet kriminala. Vlade bi trebalo da zagovaraju bolju digitalnu identifikaciju, koja bi upravo bila od krucijalnog značaja za suzbijanje sajber prevara, kao i za smanjenje troškova. Zadatak finansijskih institucija bi trebalo da bude stimulacija pojedinaca i preduzeća da svoje poslove završavaju putem elektronskih kanala i promocija prednosti ovakvog vida poslovanja, a sve u cilju razvijanja „digitalnije" kulture društva. Aktivnosti centralnih banaka bi trebalo da idu u pravcu delovanja u vidu platforme za inovacije u ovoj oblasti i u pravcu obezbeđivanja i ažuriranja pravila obavljanja elektronskog platnog prometa, radi prevazilaženja rizika, kao i adekvatnog vođenja monetarne politike. Kreatori ekonomske politike bi trebalo da izrade odgovarajući plan za smanjenje gotovine. Primer Švedske pokazuje da se koordinisanim akcijama uspelo u tome da gotovinske isplate opadnu za 80 odsto u poslednjoj deceniji, a tendencija kaže da će opasti još više u budućnosti, zbog stremljenja zemlje ka bezgotovinskom društvu.

Kao što se može videti u radu, povlačenje gotovine iz upotrebe ima svojih prednosti, ali ima i svojih mana. Inovacije u plaćanju kreću se vrtoglavim tempom i uzlaznom putanjom. Pitanja koja se odnose na to da li bezgotovinsko društvo vodi ekonomskom rastu, kakve implikacije ima na društvo i ekonomiju, kao i pitanje rizika od sajber kriminala svakako će postati istaknutija u budućim raspravama o prednostima i nedostacima tog društva. Na kraju se mora naglasiti činjenica da je gotovina, ipak, previše važna, da bi prepustila potpuni primat njenom elektronskom obliku.

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Socio-Economic Aspects of Cash Withdrawal From Use

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Summary: The notion of a cashless society is slowly becoming an inevitability of the modern way of doing business. Withdrawal of cash from use is the result of wide application of information and communication technologies. Increasing digitalization has contributed to the fact that most transactions are performed via smart devices (phones, tablets, desktops), without the use of cash and without going to the bank. The development of technological innovations, as well as innovations in finance, has undoubtedly contributed to increasing efficiency in business, but the question is whether the increasing digitalization of life and business, which is reflected in the creation of a cashless society, is still so desirable for humanity. The paper focuses on the socio-economic aspects of withdrawing cash from use. On the one hand, states are given the opportunity to influence economic activities even more directly through their central banks, while on the other hand, the issue is raised concerning human freedoms and rights in the digital world, in which it will be possible to electronically control the entire business.

Keywords: cashless society, cash withdrawal from use, digitalization, technological innovations, financial innovations

JEL: E42, O30, A13

Introduction

Digitalization, embodied in the expansion and application of modern information and communication technologies and in the increase in the number of transactions performed electronically, is crucial for the development of the future cashless society. Based on current trends, it can be concluded that future business models will lead to the complete withdrawal of cash from use.

Withdrawal of cash from use, conditioned by a growing trend of non-cash transactions (Fabris, 2019), led to a number of positive effects: the ability to transfer money from one account to another in a few minutes and with minimal costs, the absence of geographical barriers and restrictions for electronic money, the ability to view all transactions, etc. Cashless society, in addition to the many advantages, also brings certain shortcomings, to which special attention should be paid.

Opinions about the cashless society are divided, both in academic circles and among ordinary citizens. While the older generations believe that cash should not be abolished, the younger part of society relies more on the use of information and communication technologies and considers cash a thing of the past. Information technology changes every aspect of an individual's life and creates huge opportunities for the whole society. Extensive and constant use of the Internet, tablets and smartphones is changing the habits of consumers, who expect simpler, more efficient, safer and faster business, and who do business and live in accordance with the motto "time is money".

The subject of this paper is the effects of digitalization and new technologies, embodied in the electronic way of doing business, on the creation of a completely cashless society. The aim of the research is to analyze the effects of withdrawing cash from use on the activity of the state, central bank, financial institutions and individuals.

The paper is structured into three parts. The first part will consider the relationship between digitalization and money, apropos of how digitalization has influenced the fact that traditional money is slowly giving way to its electronic form. In the second part of the paper, special attention will be paid to the implications of withdrawing cash from use on the state, central bank and individuals, as well as the advantages and disadvantages that it brings. The third part of the paper will discuss the trends in Sweden and its tendencies towards becoming the first non-cash society in the world. At the end of the paper, the key facts will be sublimated, and conclusions will be given.

Digitalization and Cash

"Money is everything that is generally accepted as a measure of value and a means of exchange. Money is defined by describing the function it performs, but it can also be defined as general purchasing power, or as a debt of society to the holder of money. Sometimes money is also defined as what is used to buy things." (Sausse, 1972, p. 4)

The appearance of the original money was conditioned by the need for mutual exchange of products. Throughout history money came in the forms of objects from nature, precious metals and banknotes. The largest part of today's money in circulation is giro money (receivables on current accounts), while an insignificant part is electronic money.

Money is a specific socio-economic-cultural phenomenon, without the presence of which much more time would be needed for buying and selling, which would lead to higher exchange costs. The basic functions of money are: money as a means of payment, money as a measure of value and the function of custodian of value. The function of money as a means of payment allows for a certain amount of money to be able to buy some goods or perform a service. Money as a measure of value determines the price of a good or service. The function of money as a custodian of value enables money not to lose value, neither in the present nor in some future moment.

The ubiquitous digitalization of society means that more and more work is done electronically. In such circumstances, money became an electronic means of payment (cash was transformed into electronic money). With more and more transactions being done electronically, electronic money is slowly replacing traditional money. Developed and developing countries, under the influence of the digitalization process, are beginning to look for more efficient ways to engage in electronic business flows (Savić et al., 2017).

In the short term, digitalization, e-business and the use of e-money around the world have shaken the foundations of traditional business flows and the traditional model of money exchange (the emergence of digital currencies). Woodford (2000) states that information technology and digitalization have aroused insecurity and fear in some companies that they will disappear in the future if they do not work in line with innovation, as well as the prudency of central banks which fear they will fail to maintain the stability of their national currencies. Brunnermeier et al. (2019) state that the emergence of digital currencies will bring changes in economic activities, affecting primarily: changing the nature of currency competition, the architecture of the international monetary system and the role of money issued by the government.

Table 1: Basics of Traditional and Electronic Money Function

Traditional money	Electronic money
Money as a means of payment	Money as a means of payment
Money as a unit of account	Money as a unit of account
Money as a means of deferred payment	Money as a means of deferred payment
Money as a custodian of values	-

Source: Hubbard, R. G. (2008). Money, the financial system and the economy. Pearson International edition

Sedlarević, L., Furtula, S., & Tomić, N. (2015). Potential effects of electronic money on monetary policy. *Teme*, 4, 1235 – 1255

Table 1 shows that electronic money does not perform the function of a custodian of values, which, as Sedlarević et al. (2015) state, is due to the fact that funds held in the form of cash provide liquidity at all times.

It is assumed that money will have a fully digital form in the future. The four main areas in which digitalization and information technology will be able to modify traditional forms of money and loans will be: complete replacement of cash with electronic money, replacement of traditional bank deposits and banknotes with cryptocurrencies, replacement of bank deposits with central bank deposits and replacement of bank loan with P2P (peer-to-peer) lending based on digital platforms (Bofinger, 2018).

In line with the growing prevalence of non-cash payments, and according to the European Report on Payment Methods for 2019, it can be concluded that information technologies have undoubtedly contributed to changes in the method of payment. According to this report, in the structure of means of payment in modern society, the dominant place is slowly being occupied by: digital wallets, plastic cards, virtual money and other electronic means of payment (Payment Methods Report, 2019).

Implications of the Withdrawal of Cash from Use on the Society and the Economy – Positive and Negative Aspects

The electronic way of performing payment operations will become a significant component of the world economy in the future. Although electronic money will not be able to completely replace cash, only electronic money will be able to function with its characteristics, in accordance with the latest technologies in the future cashless society (Savić et al., 2017). Buck (1997) believed that this would happen only when two key issues were resolved: the protection of property rights and the protection of a completed transaction.

Withdrawal of cash from use is not an insignificant phenomenon, it has important implications for the entire society and the economy as a whole. Withdrawal of cash from use may allow states to influence economic trends more directly, through their central banks. It will also make people wonder if electronically controlled payment transactions will affect the restriction of their rights and freedoms. The stability and security of such a payment system may also be questioned.

The European Central Bank (1998) pointed out issues that are given special attention when building a cashless society, such as: implementation of monetary policy, stability of financial markets, protection of consumers and traders, protection against illegal activities and the functioning of the payment system. The stability and functioning of the payment system, as well as its security, is provided by the central bank. On the example of the Republic of Serbia, the National Bank of Serbia is the institution in charge of ensuring the stability, security and efficiency of the functioning of the payment system. The National Bank plays the role of "supervisor" of the payment system. The principles that guide the NBS in performing supervision are: transparency, application of internationally recognized standards and consistency in the application of requirements and standards to comparable payment systems (Narodna banka Srbije, 2020). The payment system functions as a scale that strives to maintain balance. On the one hand, it supports the introduction of electronic business and the withdrawal of cash from use, while on the other hand, it strives to maintain stability and security in this digital society. Lukić & Živković (2017) state that the payment system that promotes the electronic way of doing business starts from a decentralized structure, which, in addition to the account user and his bank, enables the involvement of third parties (states) in monitoring and controlling the account management and transactions. Based on this, it can be assumed that, in the future, the emphasis of the state will be on the adoption of a series of regulations that will regulate and guarantee the safety of users, as well as the security of transactions.

The active role of the state and the central bank (adequate conduct of monetary policy; harmonization of monetary policy instruments; effective control of the spread and use of electronic money) is very important in transforming the traditional economy into a digital economy (Qin, 2017; Rogoff, 2017). Digitization and e-business affect the change in the monetary system, in which three attributes of money are tied to the state: the state prescribes what is used as a legal tender within its borders, the state alone has the right to issue money and the state imposes itself as a sovereign controller of money circulation in the country (Lukić & Živković, 2017). Al-Laham, Abdallat & Al-Tarawneh (2009) and Sedlarević et al. (2015) believe that the impact of electronic money on monetary policy will be mostly reflected in: reducing central bank control over money supply, increasing the speed of money circulation, volatility courses, reducing the need for cash printing, seigniorage, the amount of reserves and international control. There are conflicting opinions about the impact of electronic money on monetary policy. Friedman (1999) and Cohen (2001), on the one hand, believe that monetary policy will not be effective in a cashless society, while, on the other hand, Buiter (2005), Wootford (2000) and Friedman (2000) deny that and state that monetary policy will still be able to cope with its challenges. There is no doubt that monetary policy will have to follow changes, and adapt to constant innovations in the electronic way of doing business (Popovska - Kamnar, 2014). Adapting monetary policy instruments to the new circumstances will provide the central bank with the possibility of more efficient management and control of the use of electronic money.

One of the advantages of a cashless society, primarily due to the possibility of monitoring cash flow and transactions, will be the possibility of solving money laundering and tax evasion (Cerulus & Contituglia, 2018), as well as the possibility of solving corruption (application of blockchain technology for records business) (Lukić & Živković , 2017). There is no doubt that solving these problems would lead to faster economic growth and development, however, Wolf (2019) and Khalaf (2018) deny these claims and state that the use of digital currencies and electronic money would open many issues related to these problems. The problems of corruption, money laundering and tax evasion could not be solved because there would be no possibility to identify either the participants in the transactions or the amount of funds (Tomić et al., 2016).

A cashless society also has numerous advantages for banks, that would be exempt from the high costs of transport, security and storage of money. According to Nadj (2014), this would prevent the risk associated with organized criminal intrusion into the premises of a bank or institution that performs payment operations, to which they are very susceptible. E-business contributes to reducing the cost of money transfer and increases the speed of its circulation (Raičević et al., 2012). A special advantage of e-business also lies in its availability to all Internet users.

However, the abolition of cash and, on that basis, the creation of a non-cash society has certain shortcomings. As much as developed and developing countries aspire to become a cashless society, underdeveloped countries are still in an unenviable position. Their poorest citizens do not have the opportunity to afford a bank account, mobile phone or internet. Such countries do not have the appropriate infrastructure to support the creation of a cashless society, and the costs of handling cash fall on the poor, making their situation even more difficult.

The downside of withdrawing cash from use is that it can lead to misuse by persons who have confidential data, in terms of customer profiling, commercial use of personal data, creating psychological profiles, creating a database of consumer habits and insight into their assets (Fabris, 2019). Another problem of a cashless society will be maintaining privacy (Van Steenis, 2019). Banking servers are far from being as "impenetrable" as they present themselves, given the fact that organized cybercriminals can very easily afford access to the system of a large financial institution (examples: cybercrime cost Australia about $ 3.5 million in 2003, while cost the UK £ 120 million in the same year).

Power outages and network failures would create a huge problem in a society where plastic cards would take precedence, because the use of cards would be disabled due to the interruption in the work of card readers (in 2015 there was a temporary blackout in Ukraine when hackers attacked three electricity distribution companies), while the collapse of the network would prevent the use of electronic payment systems. In a society where cash would still be used, this would not be too big of a problem, but, in a cashless society, it would certainly lead to chaos and panic.

The application of information technology in banking has brought huge changes, both positive and negative. According to Tomić & Sedlarević (2014), with the improvement of banking processes, there is a spread of risk that will become characteristic of the digital society. According to the Basel Committee on Banking Supervision, the risks of a digital society can be divided into: operational risk (disruption of the business security system when making money transfers); reputational risk (damaged reputation of an institution leading to loss of funds and users of products and services); legal risk (non-compliance with the law and business outside it); international business risk (knowledge of international regulations and business rules) and other risks (credit risk, market risk, liquidity risk, interest rate risk) (Basel Committee on Banking Supervision, 1998).

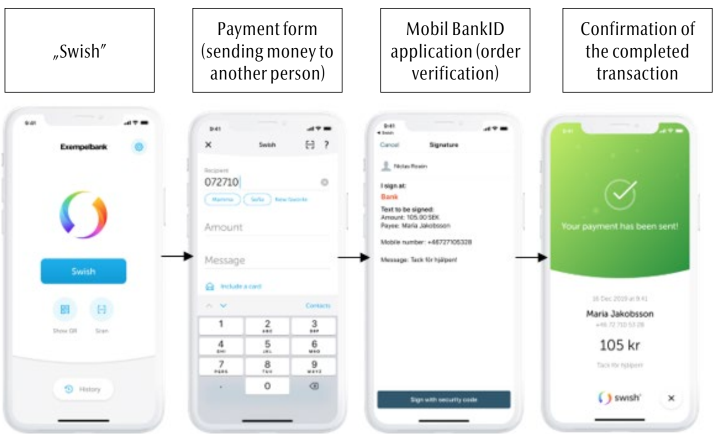
The Project of Creating the First Cashless Society

The aspiration of developed countries is the abolition of cash and a complete turn towards a non-cash society. Sweden has taken the most concrete steps to become the first non-cash company in the world. In the last few years, Sweden has experienced a real expansion of electronic forms of payment and expansion in the use of payment cards (1% of cash transactions performed in 2016).

In this Scandinavian country, the non-cash society is being promoted so much that in some places only cards can be used for payment, the use of which is constantly increasing. Digital payments via card or mobile applications are so common and reliable that many Swedes no longer carry cash with them (Sweden – Sverige, 2019). Plastic cards have built an infrastructure of acceptance and trust, and enable their users to use them both in the region and abroad. Contactless payment, which is considered to be quite secure, practical and fast, allows consumers to pay simply by using a card or mobile phone (Zacks, 2019).

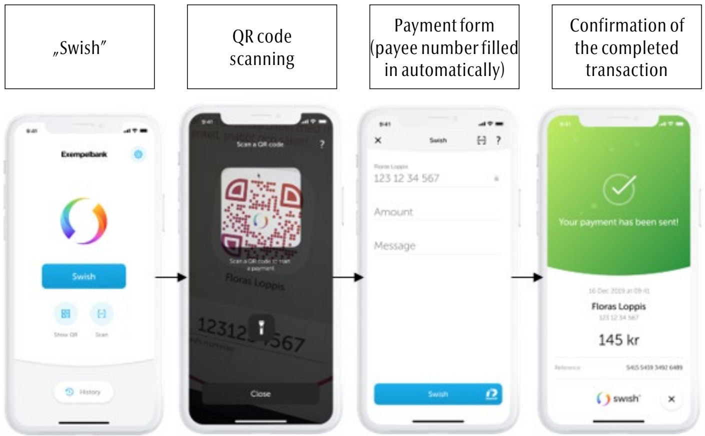
The Swish mobile application, developed in 2012 as a result of cooperation between six Scandinavian banks (Danske Bank, Handelsbanken, Lansforsakringar, Nordea, SEB, Swedbank and Sparbankerna own Getwish AB), also contributes to reducing the use of cash. Thanks to the "Swish" application, the user's phone number and bank account are connected, and payments are enabled anytime and anywhere. The user must also have another additional application Mobil BankID Säkerhetsapp which represents electronic identification, i.e. the user must have a bank account in a bank in Sweden and a personal identification number (https://www.swish.nu/private). The application allows you to send money to another person by simply typing their phone number, from any country, and the appropriate amount in the payment form in the application (Figure 1), as well as scanning the QR code (where possible) to execute payments (Figure 2).

Figure 1: How to Use the Swish Application (sending money to another person)



Source: How Swish works. Downloaded 25 February 2020, from https://www.swish.nu/private

Figure 2: How to Use the Swish Application (payment via QR code)



Source: How Swish works. Downloaded 25 February 2020, from https://www.swish.nu/private

The Swedish Central Bank conducts a survey every other year to obtain data on the payment pattern in Sweden and to understand the payment habits of the population. The research was conducted with the help of a survey on a sample of 2000 people belonging to the age group from 16 to 84 years. The results of the research are presented in the following table.

Table 2: Percentage of Cash, Card and Swish Usage, for the Period 2014, 2016 and 2018

Method of payment	2014	2016	2018
Cash	87%	79%	61%
Card	93%	93%	93%
Swish	10%	52%	62%

Source: Riksbank (2020). Payment pattern. Downloaded 8 February 2020, from https://www.riksbank.se/en-gb/statistics/payments-notes-and-coins/payment-patterns/

The results of the conducted research (decrease in the use of cash from year to year and increase in the use of payment cards and electronic means of payment) confirm the fact that Sweden is moving towards a non-cash society. However, cautioned by the negative implications of withdrawing cash from use, Sweden has stopped the process of completely abolishing cash. The governor of the Swedish Central Bank, Stefan Ingves, has imposed a legal obligation on the largest banks to continue to receive cash, primarily because some citizens will either be unable or simply unwilling to manage their payments in a more modern way. Despite this, Jenkins (2018), based on current trends in Sweden, states that the last banknote will be handed over to the Swedish Central Bank by 2030.

Project P27 aims to establish a single, pan-Nordic real-time payment infrastructure that would include 27 million people from Denmark, Sweden, Norway and Finland. The vision of this project is to establish in these countries the first integrated region in the world for all domestic and cross-border payments, in multiple currencies, through a common open access infrastructure, which should facilitate payments to customers in these countries. Payments would be immediately converted into the specified currency, and transactions and follow-up screening would be executed in real time. Project P27 is on track to realize this pan-Nordic vision with the first completed transactions during 2021 (European Payment Council, 2019).

In the spring of 2017, the Swedish Central Bank launched a project to create a state digital currency, the e-krona. The e-krona is the Swedish krona that can be kept in accounts with the Swedish Central Bank, which can be on cards or in a mobile phone application (Juks, 2018). The project explores and analyzes the needs for the introduction of the e-krona. The research is moving in the direction of developing a proposal for a technical solution for the e-krona, the impact of the e-krona on Swedish legislation and the needs and effects of the e-krona on the Swedish economy (Sveriges Riksbank, 2019). With the introduction of the e-krona (physical money supplement), the central bank would continue to promote the security and efficiency of the payment system, as it would not completely leave the payment market and users to private solutions, embodied in the emergence of cryptocurrencies (Sveriges Riksbank, 2018).

The e-krona could offer a competitive and neutral infrastructure that would allow payment service providers to join if they wanted to develop and offer their products and services to customers (Juks, 2018). This would increase competition, promote innovation in the payment system and reduce the costs charged (Sveriges Riksbank, 2018).

The impact of the e-krona on monetary policy and financial stability will depend on the demand for it, while demand will depend on the design of this electronic currency. What will determine the demand for the e-krona are its characteristics (it can be used for real-time payments; it has an independent payment platform; it can be held for the purpose of saving; anyone can own it (Juks, 2018); interest rates related for the e-krona are in line with the implementation of monetary policy and its instruments (Nessen et al., 2018).

The e-krona project would bring significant benefits to the real sector in the form of economic and technological resilience, as it would enable and facilitate access to a secure, generally accepted method of payment, even when other means of payment become economically or technologically unreliable (Juks, 2018). The purpose of this pilot project is to explore the possibilities of the e-krona as an alternative, future means of paying, guaranteed by the state (Ozturkcan et al., 2019). On the one hand, it is stated that the e-krona could improve the efficiency and resilience of the payment system by stimulating economic activity (because it is issued and regulated by the central bank), while, on the other hand, harmful long-term effects could be expected if the e-krona hindered financial stability (Armelius et al., 2018).

In addition to the e-krona, the following table presents other payment methods that will be available in Sweden.

Table 3: Overview of Future Payment Methods in Sweden

	Cash	Funds in account	Crypto-assets	E-krona
Claim on?	Sveriges Riksbank	Bank	-	Sveriges Riksbank
Form?	Physical	Digital	Digital	Digital
Confident in?	Sveriges Riksbank	Bank, deposit guarantee, regulations, the Riksbank's monetary policy	Underlying protocol	Sveriges Riksbank
Money?	Yes	Yes	No	Yes

Source: Soderberg, G. (2018). What is money and what type of money would an e-krona be?. Sveriges Riksbank Economic Review, 2018:3, 17-28

It should be noted that, on its way to a cashless society, Sweden was greatly aided by the historical cooperation and conditionality of the development of the banking sector and economic growth (after the Second World War, banks performed activities related to providing active support to economic policy) (Lazarević, 2012).

Conclusion

The digital revolution has led to changes in society and the economy. The changes that are happening today will continue at the same or even faster pace in the future. Current events indicate that modern society is slowly, but surely, moving towards a cashless society. Digitization conditioned the emergence and development of electronic business, which further influenced the decision of central banks and states to slowly begin withdrawing cash from use.

Improving the positive and reducing the negative implications of withdrawing cash from use and creating a cashless society is the task of the state and its government, financial institutions, the central bank and economic policy makers. The role of the state should be to develop the necessary infrastructure and strategy that will support e-business and that will never leave anyone out of the "circle" of digitalization, as well as developing international cooperation with other countries in the fight against various forms of internet fraud and internet crime. Governments should advocate for better digital identification, which would be crucial to combating cyber fraud, as well as reducing costs. The task of financial institutions should be to stimulate individuals and companies to complete their business through electronic channels and promote the benefits of this type of business, all with the aim of developing a "more digital" culture of society. The activities of central banks should go in the direction of forming a platform for innovation in this area and towards providing and updating the rules of electronic payment operations, in order to overcome risks, as well as towards adequate monetary policy. Economic policy makers should develop an appropriate cash reduction plan. The example of Sweden shows that coordinated actions have succeeded in making cash payments drop by 80 percent in the last decade, and that tendency predicts that they will drop even further in the future, due to the country's aspirations towards a cashless society.

As can be seen in the paper, withdrawing cash from use has its advantages, but it also has its disadvantages. Innovations in payments are moving at a dizzying pace and with an upward trajectory. Issues related to whether a cashless society leads to economic growth, what implications it has for society and the economy, as well as the issue of the risk of cybercrime will certainly become more prominent in future discussions about the advantages and disadvantages of that society. Finally, it must be emphasized that cash, however, is too important to give full primacy to its electronic form.

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Novčanica od 50 dinara nastala u miru – puštena u ratu

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Rezime: Rad pruža osvrt na aktivnosti Ministarstva finansija i Narodne banke Kraljevine Jugoslavije u periodu od 1931. do 1941. godine, u kojem je novčanica od 50 dinara pripremana, štampana i nakon skoro deset godina čekanja puštena u promet sa kratkim periodom opticaja. Pripreme za izradu novčanice od 50 dinara koja na sebi nosi datum 1. decembar 1931. godine započete su početkom te godine. Novčanica je izrađena da u slučaju vanredne situacije u zemlji, kada dolazi do nestajanja srebrnog novca iz opticaja, zameni isti kovani novac i omogući nesmetani gotovinski promet. Puštena je u opticaj 8. aprila 1941. godine kada je Kraljevina Jugoslavija već bila u ratnom stanju, u tiražu od 30.792.000 komada. Narodna banka je samo njen manji deo pustila u opticaj, a veći deo uništila, ali su ga i okupatori koristili za plaćanja u zemlji. Povlačenje iz opticaja obavila je Srpska narodna banka u okupiranoj Srbiji od 14. do 22. oktobra 1941. godine.

Ključne reči: novčanica, 50 dinara, Ministarstvo finansija, Narodna banka, Kraljevina Jugoslavija, Milan Stojadinović, Aleksandar I Karađorđević, Petar II Karađorđević, Drugi svetski rat

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Kako bi se bolje razumeo period od 1931. do 1941. godine u kojem je novčanica od 50 dinara pripremana, štampana i nakon skoro deset godina čekanja puštena u promet sa kratkim periodom opticaja, potrebno je osvrnuti se na rad Ministarstva finansija i Narodne banke Kraljevine Jugoslavije tog perioda. To je vreme u kojem se Jugoslavija suočava sa ekonomskom krizom, potom beleži lagani oporavak i na kraju se priprema za nadolazeću strahotu – Drugi svetski rat.

Stvaranje ratne rezerve novčanica

Sredinom 1931. godine Jugoslavija, pogođena svetskom ekonomskom krizom, ulazi u recesiju. Turbulencija na svetskim berzama i kriza vodećih svetskih valuta primorala je Narodnu banku da 27. juna 1931. suspenduje zamenu novčanica za zlato i devize. Nepovoljna ekonomska kretanja dovode do pogoršanja u međunarodnim odnosima, zbog čega nadležni državni organi i Narodna banka shvataju neophodnost stvaranja ratne rezerve novčanica u iznosu od šest milijardi dinara. Početak realizacije ovog zaključka usledio je nakon donošenja Programa rada Zavoda za izradu novčanica za period od 1931. do 1935. godine, koji je Upravni odbor Narodne banke usvojio 14. marta 1931. godine. Četiri godine kasnije, ministar finansija dr Milan Stojadinović obavešten je pismom od 18. juna 1935. godine da je formirana ratna rezerva prema sledećoj apoenskoj strukturi novčanica:

- *1.000 dinara – godina izdanja 1931. u tiražu od 4 miliona (tečajna novčanica);*
- *100 dinara – godina izdanja 1934. u tiražu od 10 miliona, iznos u dinarima 1.000.000.000 (rezervna novčanica);*
- *50 dinara – godina izdanja 1931. u tiražu od 20 miliona, iznos u dinarima 1.000.000.000 (rezervna novčanica).*

„Novčanice za potpuno izvanredne potrebe“

Prilike u svetu najavljivale su, mnogo izvesnije, da će doći do rata, zbog čega Narodna banka nastavlja, u saradnji sa državnim organima, da preduzima potrebne mere. Tako je, Programom rada Zavoda za izradu novčanica za period od 1936. do 1939. godine, pored izrade redovnih novčanica za bančine potrebe, utvrđena nova kategorija pod nazivom „novčanice za potpuno izvanredne potrebe“. Narodna banka je predložila, polazeći od činjenice da u vanrednim okolnostima metalni novac izrađen od srebra nestaje iz opticaja, izradu nove rezervne novčanice u apoenu od 20 dinara. Takođe, predviđajući rast gotovinskih plaćanja u vanrednim prilikama, predložena je rezervna novčanica nominalne vrednosti deset hiljada dinara.

Ministarski savet je na sednici održanoj 26. avgusta 1935. godine usvojio sve ove predloge Narodne banke, o čemu je Banku obavestio ministar finansija, Dušan Letica, poverljivim aktom od 27. avgusta 1935. godine. Dve kategorije novčanica, koje su potpuno zavisile od odluka države, razlikovale su se u sledećem: dok ukupan iznos novčanica „za potpuno izvanredne potrebe“

nije bio maksimiziran, niti je apoenska struktura bila propisana, novčanice „za potrebe zemaljske odbrane", bile su kontingentirane na iznos od šest milijardi dinara i podeljene na depo Ministarstva finansija I i na depo Ministarstva finansija II.

Dva ministra – dve različite životne priče

U ovih deset turbulentnih godina, od 1931. do 1941. bilo je više ministara finansija u Vladi Kraljevine Jugoslavije. To su: Stanko Švrljuga, Đorđe Đurić, Milorad Đorđević, Milan Stojadinović, Dušan Letica, Miloš Bobić, Marko Kožulj, Vojin Đuričič i Juraj Šutelj. Kratka biografija Milana Stojadinovića data je u članku „Novac od nikla iz 1925. godine", objavljenom u časopisu *Bankarstvo* br. 4 iz 2018. godine. U ovom tekstu, osim Milana Stojadinovića, pominju se i ministri finansija Dušan Letica i Juraj Šutelj.

Dušan Letica je rođen 23.10.1884. godine u Valjevu (Srbija) iz koga nakon dve godine odlazi sa roditeljima u Beograd. Osnovno i vojno obrazovanje završio je u Beogradu. Bio je učesnik Balkanskih ratova 1912. i 1913. i Prvog svetskog rata 1914-1918. godine. Zajedno sa Vladom, vojskom i narodom prelazi Albaniju i boravi u Grčkoj. U Beograd dolazi 1918. godine nakon studija na fakultetu u Madridu vraća se za Beograd i u proleće 1934. godine završava školovanje.

Kao pravnik bavio se advokaturom i prevođenjem jer je govorio više jezika: poljski, engleski, ruski, francuski i španski. Ministar finansija u Vladi Kraljevine Jugoslavije postaje juna 1935. godine. Podržao je 27. marta 1941. puč generala Simovića, a 30. marta 1941. ulazi u Vladu nacionalnog spasa Milana Nedića. U toj vladi Letica je bio ministar finansija od 1941. do 1943. godine. Ministarsku funkciju napušta 26. oktobra 1943. Godinu dana kasnije odlazi iz zemlje u Kicbil (Tirol, Austrija). U Hamburgu, nakon rata, 16. maja 1945. uhapsila ga je Crvena armija kada je pokušao da ode za Portoriko. Izručen je jugoslovenskoj vladi i nakon suđenja je je streljan 19. septembra 1945. godine.

Juraj Šutej rođen je 1889. godine u Podorašcu kod Konjica (današnja Bosna i Hercegovina). U Zagrebu je stekao doktorat prava. Od 1913. godine radi u sudskoj službi, a potom otvara advokatsku kancelariju u Sarajevu. Jedan je od osnivača Hrvatske radničke stranke. Na parlamentarnim izborima 1927, 1935. i 1938. godine izabran je za zastupnika u Splitu i okrugu Duvno.

Bio je ministar finansija u vladama Cvetković - Maček i D. Simovića u periodu od 1939. do 1941. godine. Nakon što su snage Osovine napale Jugoslaviju, emigrirao je sa članovima Vlade. U Šubašićevoj vladi, od jula 1944. do marta 1945. godine, bio je ministar finansija, trgovine i industrije. U Vladi Josipa Broza, od marta 1945. godine preuzeo je funkciju ministra. Nezadovoljan nepoštovanjem sporazuma Tito-Šubašić, podnosi ostavku. Potom je pokušao da osnuje seljačko-demokratski blok nekomunističkih partija i borio se za aktivniju politiku HSS-a. Nakon neuspeha u realizaciji ovih inicijativa povukao se iz politike i kao penzionisani ministar živeo je u Zagrebu sve do smrti 1976. godine.

Pripreme za evakuaciju

Novčanica

Već sredinom 1939. godine počinje preseljenje Bančinih vrednosti iz centrale u Beogradu u unutrašnjost zemlje. Najveći deo novčanica svih kategorija (oko 37 milijardi dinara) bio je smešten u trezorima Narodne banke u Sarajevu. Problem smeštaja drugih novčanica, pre svega onih rezervnih čija je količina bila mnogo veća od ukupne količine novčanica u tečaju, rešen je izgradnjom podzemnih trezora nove filijale u Užicu. Tokom oktobra 1940. godine bilo je završeno preseljenje novčanica u ovu tek izgrađenu filijalu. Prema planu evakuacije, u slučaju rata, bila su predviđena prihvatna i pribežišna sedišta Narodne banke. „Četiri milijarde dinara bilo je smešteno u trezoru centrale Narodne banke u Beogradu, a kao prihvatna sedišta bile su određene filijale Sarajevo, Banja Luka, Niš, Zagreb, Šabac i Užice. Pribežišna sedišta su bila: Užice – za prihvatanje centrale iz Beograda i zbirne filijale iz Niša, i filijala u Sarajevu – za prihvatanje zbirnih filijala iz Banje Luke, Zagreba i Šapca. U Arilju je pripremljen ratni pogon Zavoda za izradu novčanica" (*Novčanice Narodne banke 1884 – 2004*). Magacin u Arilju korišćen je za smeštaj rezervi papira i manjih iznosa redovnih i vanrednih novčanica, ali nema podataka da su se one tu i štampale. Ministar finansija, Juraj Šutej, je rešenjem od 11. septembra 1939. i 23. marta 1940. godine, kao i serijom drugih poverljivih akata, obezbedio pravnu osnovu za puštanje u tečaj rezervnih novčanica.

Uprava Narodne banke je 6. aprila 1941. godine, nakon nemačkog bombardovanja Beograda, krenula za Užice. Iz Užica, preseljenje novčanica i zlata za Sarajevo realizovano je 11. aprila 1941. godine. Sutradan, po rešenju ministra finansija od 9. aprila 1941. godine, uprava Banke je objavila puštanje u opticaj rezervnih novčanica od 100, 50, 20 i 10 dinara. Pošto su filijale Narodne banke, nakon napada na Kraljevinu Jugoslaviju, već obavile isplatu vojnim jedinicama iz depoa Ministarstva finansija I, važnost objave je utvrđena retroaktivno od 8. aprila 1941. godine.

U Bančinim trezorima na dan 31. marta 1941. nalazilo se ukupno 51,4 milijarde dinara od čega je u periodu do 15. aprila pušteno u opticaj 4,2 milijarde dinara. Ministar finansija je naredio da se preostali iznos od 38,2 milijarde dinara uništi u Užicu i drugim gradovima gde su se nalazile filijale Narodne banke, a 9 milijardi dinara su opljačkali okupatori.

Zlato

Narodna banka Kraljevine Jugoslavije je od 1939. do 1941. godine preduzela mere da svoju imovinu u zlatu sačuva u slučaju rata. Na inicijativu Narodne banke, ministra finansija i ministra vojske i mornarice, a na osnovu akta Saveta zemaljske odbrane od 4. maja 1939. godine krenula je, u velikoj tajnosti, njegova evakuacija. Prema poslednjem pregledu zlatnih rezervi sredinom aprila 1941. godine u trezorima Narodne banke nalazilo se 10,7 tona čistog zlata, a u inostranstvu je bilo deponovano 52,9 tona, 78,8% kod Federalnih rezervi u Njujorku i 21,2% kod Banke Engleske u Londonu.

Nemačke trupe su u Skoplje ušle 8. aprila, Niš je zauzet dan kasnije, a 10. aprila su ušle u Zagreb, uz proglašenje Nezavisne države Hrvatske. Italijani su

12. aprila zauzeli Ljubljanu, kada su i prve nemačke trupe ušle u Beograd, a tri dana kasnije palo je Sarajevo. Kraljevina Jugoslavija je kapitulirala 17. aprila, a već 29. aprila 1941. godine u Beograd je stigao jedan od direktora Rajhsbanke (Reichsbank) na mesto nemačkog komesara u Narodnoj banci.

Meštrovićev Kraljević Marko

S obzirom na to da se na naličju novčanice od 50 dinara nalazi replika skulpture Kraljevića Marka vajara Ivana Meštrovića, potrebno je izneti najvažnije podatke o ovom delu i njegovom tvorcu.

Ivan Meštrović rođen je 15.8.1883. godine u Vrpolju, Slavonija (današnja Hrvatska), a najveći deo detinjstva proveo je u Otavicama, selu u Dalmaciji, odakle su mu roditelji i gde se nalazi mauzolej kojeg je sam osmislio i u kome je sahranjen nakon smrti u Saut Bendu, SAD 1962. godine. Diplomirao je na Likovnoj akademiji u Beču 1906. godine. Za vreme Prvog svetskog rata bio je u emigraciji, a potom se vratio u zemlju, sada Kraljevinu Srba, Hrvata i Slovenaca. U periodu između dva rata bio je rektor na Akademiji u Zagrebu od 1923. do 1942. godine i član JAZU od 1934. godine. Na početku Drugog svetskog rata ustaše ga zatvaraju i osuđuju na smrt. Intervencijom nemačkih vlasti biva pušten nakon tri i po meseca. Emigrirao je 1942. godine, prvo u Italiju, a potom u Švajcarsku. U SAD stiže 1947. godine. U ovom periodu bio je profesor vajarstva u Sirakuzi i Saut Bendu. U posleratnu Jugoslaviju došao je samo jednom, 1959. godine.

Autor je mnogih vajarskih dela: Zdenac života (Zagreb), Povijest Hrvata (Zagreb), Marko Marulić (Split), Mauzolej Meštrović (Otavice), Indijanci (Čikago), Mauzolej Njegošu (Crna Gora) itd. U Srbiji se nalaze njegova brojna dela među kojima su najpoznatija: Spomenik neznanom junaku na Avali, Zahvalnost Francuskoj u Beogradu, Spomenik Pobednik na Kalemegdanu, Nadežda Petrović u Čačku, Nikola Tesla u Beogradu, itd.

Meštrović je bio fasciniran Kosovskim bojem koji se odigrao 1389. između srpske i turske vojske. Od svojih sredstava je napravio maketu Kosovskog hrama koju je izložio na Svetskoj izložbi 1911. godine u Rimu. U Kraljevini Srbiji je, povodom izgradnje hrama na Gazimestanu (Kosovo i Metohija), formiran odbor, ali je sve prekinuto zbog Prvog svetskog rata. Nakon rata nije bilo novca a ni državne volje za njegovu gradnju. Interesantna je sudbina same makete. Bila je predstavljena u Londonu 1915. godine, a potom i u Americi gde joj se gubi svaki trag, Pronađena je u Njujorku 1968. godine, vraćena potom u Beograd, a 1971. godine poklonjena je Narodnom muzeju u Kruševcu gde se i danas nalazi.

Skulptura Kraljevića Marka na konju bi se, prema projektu, nalazila u največoj dvorani ovog hrama, gde bi bile i skulpture drugih kosovskih junaka: cara Lazara, Miloša Obilića, Srđe Zlopogleđe, Banović Strahinje, devet Jugovića, starog Jug Bogdana, Ivana Kosančića, Milana Toplice, Kosovke devojke, itd. Neke od ovih skulptura nalaze se u Narodnom muzeju u Beogradu.

Deset godina čekanja i sedam meseci opticaja

Novčanica od 50 dinara koja nosi datum 1. decembar 1931. godine bila je svedok svim ovim dešavanjima tokom deset godina od svog idejnog nastanka pa do konačnog povlačenja. Dakle, godinu dana nakon svečanog otvaranja Zavoda za izradu novčanica u Beogradu (26. januara 1930. godine) počele su pripreme za izradu novih novčanica. Prva za koju su urađeni osnovni elementi lica novčanice bila je pedesetodinarka. U septembru 1931. godine, u Narodnoj banci doneta je odluka da se za štampanje ove novčanice hartija naruči od engleske firme Portals (Portals Ltd., Hants, England). Prve količine hartije su stigle u Zavod 21. maja 1932. godine. Papir ove renomirane engleske firme isporučivan je Zavodu i za izradu drugih novčanica.

Ova banknota je izrađena sa namerom da, u slučaju vanredne situacije u zemlji, kada dolazi do nestajanja srebrnog novca iz opticaja, zameni isti kovani novac i omogući nesmetan gotovinski promet. Imajući u vidu datum koji se nalazi na novčanici, očigledno je da je, pripremljena za opticaj, ležala u trezorima Narodne banke skoro punih 10 godina. Njeno puštanje u opticaj realizovano je 8. aprila 1941. godine, kada je Kraljevina Jugoslavija već bila u ratnom stanju, što je i objavljeno u službenom listu Kraljevske banske uprave Drinske banovine *Narodno jedinstvo*, broj 30, od 12. aprila 1941. godine. Ovaj rezervni apoen sa tiražom od 30.792.000 komada odlikuje se originalnim dizajnom, funkcionalnošću i kvalitetnom zaštitom. Narodna banka je manji deo tiraža pustila u opticaj, a veći deo uništila, ali su ga i okupatori koristili za plaćanja u zemlji. Povlačenje novčanice obavila je tada Srpska Narodna banka u okupiranoj Srbiji, od 14. do 22. oktobra 1941. godine.

Osnovne karakteristike

Na ovoj novčanici izostavljen je deo klauzule o isplati „u metalnoj zakonskoj moneti" koji je karakterističan za sve do tada izdate papirnate novčanice Narodne banke Kraljevine SHS i Narodne banke Kraljevine Jugoslavije. Razlog tome su nova zakonska rešenja o pokriću zasnovana na standardu u zlatu i devizama plativim u zlatu.

Veličina crteža ove višebojne novčanice je 134mm dužine i 78mm širine. Vodotisak na njenoj desnoj strani lica i levoj strani naličja ima pravilan šestougaoni oblik visine 40mm u kome je oslikana glava kralja Petra II Karađorđevića sa sokolskom kapom. Tekst na licu novčanice je dat ćirilicom, a na naličju latinicom.

Lice novčanice:

- *Na levoj strani u stilizovanom osmougaonom ovalu visine 52mm nalazi se lik kralja Aleksandra I Karađorđevića u generalskoj uniformi sa ordenom Karađorđeve zvezde sa mačevima;*
- *Ispod ovala je broj 50 sa ornamentikom u prepletu i dva bela krina levo i desno od brojke;*
- *Više vodotiska, s desne strane, je veći broj 50, a ispod toga je ornamentika širine 25mm;*

- *Pejzaž Boke Kotorske je na sredini lica novčanice;*
- *Više pejzaža je stilizovana ornamentika sa tekstom „plaća donosiocu pedeset dinara";*
- *Ispod teksta je datum 1. decembar 1931. i potpisi člana Uprave dr Melka Čingrije i guvernera Ignjata J. Bajlonija;*
- *Na vrhu sredine je natpis „Narodna banka Kraljevine Jugoslavije", a levo i desno oznake u slovima azbuke i brojevima serije;*
- *Ispod pejzaža je klauzula o falsifikatu i višecifreni kontrolni broj;*
- *Oko celog lica novčanice je okvir sa stilizovanom ornamentikom iz Miroslavljevog Jevanđelja širok 9mm;*
- *Na donjoj ivici okvira nalaze se potpisi autora crteža Pante Stojićevića i gravera Veljka Andrejevića Kuna.*

Naličje novčanice:

- *Na levoj strani više vodotiska je tekst: Narodna banka Kraljevine Jugoslavije, a ispod toga „plaća donosiocu 50 dinara";*
- *Na desnoj strani je državni grb, stilizovan beli dvoglavi orao raširenih krila sa krunom na glavi, a iznad je broj 50;*
- *Na sredini je figura kraljevića Marka na konju, po skulpturi vajara Ivana Meštrovića iz ciklusa Kosovski hram, u visini od 70mm;*
- *Na postamentu figure je tekst o falsifikatu;*
- *Ispod celog naličja nalazi se okvirna stilizovana ornamentika u prepletu od 10mm;*
- *Na donjoj ivici okvira su imena autora Stojićevića FEC i gravera Kuna SC.*

Kreatori novčanice

Ovo je prva novčanica koju su kreirali i izradili domaći umetnici i stručnjaci.

Panta Stojićević, autor novčanice, bio je u periodu njene izrade šef odeljenja za štampanje u Zavodu za izradu novčanica. Nažalost, o njemu je malo dostupnih podataka. Istakao se kao talentovani autor i koautor sledećih novčanica:

- *50 dinara sa datumom 1.12.1931. godina,*
- *100 dinara sa datumom 15.7.1934. godina, zajedno sa slikarem Vasom Pomorišcem,*
- *20 dinara sa datumom 6.9.1936. godina,*
- *1.000 dinara sa datumom 6.9.1935. godina, zajedno sa Vasom Pomorišcem koja nije puštena u opticaj.*

Veljko Andrejević Kun (1877- 1948) bio je graver svih novčanica koje su se stvarale u Zavodu za izradu novčanica nakon njegove izgradnje, osim banknote od 1000 dinara sa likom kraljice Marije, autora slikara Paje Jovanovića, za koju je graver bio E. Deloche. Kun je bio jedan od najpoznatijih crtača i ksilografa u Evropi tog doba. Ovom zanatu se posvetio nakon završene gimnazije u Beogradu. Prvo se zaposlio u Državnoj štampariji kako bi izučavao drvorez. Odlazi zatim u Budimpeštu, potom u Beč i Vroclav. U Berlinu izrađuje drvoreze za ilustrovane kataloge, naučne knjige i za ostalu višebojnu štampu. Po povratku u Beograd otvara štampariju u Balkanskoj ulici. Tokom Prvog svetskog rata radi kao grafičar u Komandi vojske Srbije. U Zavodu za izradu novčanica bio je graver do kraja Drugog svetskog rata.

Kun se rodio i umro u Beogradu. Imao je petoro dece, a dvojica sinova nastavili su da se bave grafikom i umetnošću: Đorđe Andrejević Kun, slikar i graver mnogih novčanica posle Drugog svetskog rata i Andreja Andrejević Kun, takođe slikar i grafičar.

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50-Dinar Banknote Created During Peace - Released During the War

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Abstract: The paper provides a review of the activities of the Ministry of Finance and the National Bank of Yugoslavia in the period from 1931 to 1941, during which the 50-dinar banknote was prepared, printed and, after almost ten years of waiting, put into circulation for a short amount of time. The preparations for the production of the 50-dinar banknote, which bears the date 1 December 1931, began at the beginning of the same year. The banknote was made for the event of an emergency situation in the country, when silver coins disappear from circulation, to replace those coins, and to enable unhindered cash circulation. It was released on 8 April 1941, when the Kingdom of Yugoslavia was already at war, in the total amount of 30,792,000 pieces. The National Bank only put a small part of that into circulation, and destroyed a larger part, but the occupying forces also used it for payments in the country. The withdrawal from circulation was carried out by the Serbian National Bank in the occupied Serbia, from 14 to 22 October 1941.

Keywords: banknote, 50 dinars, Ministry of Finance, National Bank, Kingdom of Yugoslavia, Milan Stojadinović, Aleksandar I Karađorđević, Petar II Karađorđević, World War II.

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In order to better understand the period from 1931 to 1941, in which the 50-dinar banknote was prepared, printed and, after almost ten years of waiting, put into circulation for a short amount of time, it is necessary to consider the activities of the Ministry of Finance and the National Bank of Yugoslavia in that period. It was a time when Yugoslavia was facing an economic crisis, then recorded a slight recovery and finally started preparing for the looming horror - World War II.

Creating a War Reserve of Banknotes

In the middle of 1931, Yugoslavia, affected by the world economic crisis, entered into recession. The turbulence on the world stock exchanges and the crisis of the world's leading currencies forced the National Bank to suspend the exchange of banknotes for gold and foreign currency on 27 June 1931. Unfavourable economic trends lead to a deterioration in international relations, which is why the competent state authorities and the National Bank understood the necessity of creating a war reserve of banknotes in the amount of six billion dinars. The beginning of the realisation of this conclusion followed the adoption of the Work Program of the Institute for Manufacturing Banknotes and Coins for the period from 1931 to 1935, which was adopted by the Governing Board of the National Bank on 14 March 1931. Four years later, the Minister of Finance, dr Milan Stojadinović, was informed by a letter as of 18 June 1935 that the war reserves were formed according to the following denomination structure of banknotes:

- *1.000-dinar – year of issue 1931, 4 million in circulation (exchange rate banknote);*
- *100-dinar – year of issue 1934, 10 million in circulation, amount in dinars 1,000,000,000 (reserve banknote);*
- *50-dinar – year of issue 1931, 20 million in circulation, amount in dinars 1,000,000,000 (reserve banknote).*

"Banknotes for Utterly Extraordinary Needs"

The circumstances in the world announced, much more certainly, that a war was about to break out, which is why the National Bank, in cooperation with state bodies, continued to take the necessary measures. Thus, the Work Program of the Institute for Manufacturing Banknotes and Coins for the period from 1936 to 1939, in addition to the production of regular banknotes for the bank's needs, established a new category called "banknotes for utterly extraordinary needs". The National Bank proposed to make a new reserve banknote in the denomination of 20 dinars, seeing as how, in extraordinary circumstances, metal coins made of silver disappear from circulation. Also, predicting the growth of cash payments in emergency situations, a reserve banknote with a face value of ten thousand dinars was proposed.

At the session held on 26 August 1935, the Council of Ministers adopted all these proposals of the National Bank, of which the Minister of Finance, Dušan

Letica, informed the Bank in a confidential act dated 27 August 1935. The two categories of banknotes, which depended entirely on the State's decisions, differed in the following: while the total amount of banknotes "for utterly extraordinary needs" was not maximized, nor was the denomination structure prescribed, banknotes "for the needs of national defence", were determined at the amount of six billion dinars and divided into the depot of the Ministry of Finance I and the depot of the Ministry of Finance II.

Preparations for Evacuation

The Banknote

As early as mid-1939, began the relocation of the Bank's valuables from the headquarters in Belgrade to the interior of the country. The largest part of banknotes of all categories (around 37 billion dinars) was placed in the vaults of the National Bank in Sarajevo. The problem of storing other banknotes, primarily the reserve ones, the amount of which was much higher than the total amount of banknotes in circulation, was solved by building underground vaults in the new branch in Užice. During October 1940, the relocation of banknotes to this newly built branch was completed. According to the evacuation plan, in case of war, the contingency seats of the National Bank were planned. "Four billion dinars were placed in the vault of the National Bank's headquarters in Belgrade, and the branches Sarajevo, Banja Luka, Niš, Zagreb, Šabac and Užice were designated as contingency seats. The contingency seats were as follows: Užice - for accepting the headquarters from Belgrade and the collective branch from Niš, and the branch in Sarajevo - for accepting the collective branches from Banja Luka, Zagreb and Šabac. A war-time office of the Institute for Manufacturing Banknotes and Coins was prepared in Arilje" (*Banknotes of the National Bank 1884 - 2004*). The warehouse in Arilje was used to store reserves of paper and small amounts of regular and extraordinary banknotes, but there is no information on whether they were printed there. The Minister of Finance, Juraj Šutej, according to the decisions as of 11 September 1939 and 23 March 1940, as well as a series of other confidential acts, provided the legal basis for the issuance of reserve banknotes.

On 6 April 1941, after the German bombing of Belgrade, the management of the National Bank left for Užice. From Užice, the relocation of banknotes and gold to Sarajevo was realised on 11 April 1941. The next day, according to the decision of the Minister of Finance from 9 April 1941, the Bank's management announced the release of reserve 100-, 50-, 20- and 10-dinar banknotes. Since the branches of the National Bank, after the attack on the Kingdom of Yugoslavia, had already made payments to military units from the depot of the Ministry of Finance I, the validity of the announcement was determined retroactively on 8 April 1941.

As of 31 March 1941, the Bank's vaults contained a total of 51.4 billion dinars, out of which 4.2 billion dinars were put into circulation by 15 April. The Minister of Finance ordered that the remaining amount of 38.2 billion dinars be destroyed in Užice and other cities where the branches of the National Bank were located, and 9 billion dinars were robbed by the occupying forces.

Two Ministers - Two Different Life Stories

In these ten turbulent years, from 1931 to 1941, there were several finance ministers in the Government of the Kingdom of Yugoslavia. These were: Stanko Švrljuga, Đorđe Đurić, Milorad Đorđević, Milan Stojadinović, Dušan Letica, Miloš Bobić, Marko Kožulj, Vojin Đuričič and Juraj Šutelj. A short biography of Milan Stojadinović is given in the article Nickel Coins from 1925, published in *Bankarstvo* Journal no. 4 from 2018. In this text, apart from Milan Stojadinović, the ministers of finance Dušan Letica and Juraj Šutelj are also mentioned, which is the reason for presenting their short biographies.

Dušan Letica was born on 23 October 1884 in Valjevo (Serbia), and left for Belgrade with his parents at two years of age. He completed his primary and military education in Belgrade. He was a participant in the Balkan Wars of 1912 and 1913 and the First World War in 1914-1918. Together with the Government, the army and the people, he made the Great Retreat across Albania and resided in Greece. He came to Belgrade in 1918. After studying at the University of Madrid, he returned to Belgrade and finished school in the spring of 1934.

As a lawyer, he practiced law and translation, since he spoke several languages: Polish, English, Russian, French and Spanish. He became Minister of Finance in the Government of the Kingdom of Yugoslavia in June 1935. He supported the coup of General Simović on 27 March 1941, and on 30 March 1941, he entered the Government of National Salvation of Milan Nedić. In that government, Letica was the Minister of Finance from 1941 to 1943. He left the ministerial post on 26 October 1943. A year later he left the country for Kitzbühel (Tyrol, Austria). In Hamburg, after the war, on 16 May 1945, he was arrested by the Red Army when he tried to go to Puerto Rico. He was extradited to the Yugoslav government and, after the trial, was shot on 19 September 1945.

Juraj Šutej was born in 1889 in Podorašac near Konjic (today's Bosnia and Herzegovina). He obtained a doctorate in law in Zagreb. He had been working in the court service since 1913, and subsequently opened a law office in Sarajevo. He is one of the founders of the Croatian Workers' Party. In the parliamentary elections of 1927, 1935 and 1938, he was elected a representative for Split and the Duvno district.

He was the Minister of Finance in the governments of Cvetković-Maček and D. Simović in 1939-41. After the Axis forces invaded Yugoslavia, he emigrated with members of the government. In Šubašić's government, from July 1944 to March 1945, he was Minister of Finance, Trade and Industry. In the government of Josip Broz, from March 1945, he took over the function of minister. Dissatisfied with the non-compliance with the Tito-Šubašić agreement, he resigned. He then tried to establish a peasant-democratic bloc of non-communist parties and fought for a more active policy of the Croatian Peasant Party. After the failure in the realisation of these initiatives, he withdrew from politics and lived in Zagreb as a retired minister until his death in 1976.

Gold

From 1939 to 1941, the National Bank of the Kingdom of Yugoslavia took measures to preserve its property in gold in the event of war. At the initiative of the National Bank, the Minister of Finance and the Minister of the Army and Navy, and on the basis of the act of the National Defence Council as of 4 May 1939, the evacuation of the gold began in great secrecy. According to the last survey of gold reserves from mid-April 1941, 10.7 tonnes of pure gold were in the vaults of the National Bank, and 52.9 tonnes were deposited abroad, 78.8% with the Federal Reserve in New York and 21.2% with the Bank of England in London.

German troops entered Skopje on 8 April, Niš was occupied a day later, and on 10 April they entered Zagreb, with the proclamation of the Independent State of Croatia. The Italians captured Ljubljana on 12 April, when the first German troops entered Belgrade, and three days later Sarajevo fell. The Kingdom of Yugoslavia capitulated on 17 April, and already on 29 April 1941, one of the directors of the Reichsbank arrived in Belgrade, to the position of German commissioner at the National Bank.

Ten Years of Waiting and Seven Months of Circulation

The 50-dinar banknote, dated 1 December 1931, witnessed all these events during the ten years from its ideological origin until its final withdrawal. So, a year after the ceremonial opening of the Institute for Manufacturing Banknotes and Coins (26 January 1930), preparations for the production of new banknotes began. The 50-dinar banknote was the first one for which the basic elements of the obverse were made. In September 1931, the National Bank decided to order the paper for the printing of this banknote from the English company Portals (Portals Ltd., Hants, England). The first quantities of paper arrived at the Institute on 21 May 1932. The paper of this renowned English company was also delivered to the Institute for the production of other banknotes.

This banknote was made so as to replace the silver coins, disappearing from circulation in case of an emergency situation in the country, and thus to enable unhindered cash circulation. Having in mind the date on the banknote, it is obvious that it lay in the vaults of the National Bank for almost 10 years, prepared for circulation. Its release into circulation was realized on 8 April 1941, when the Kingdom of Yugoslavia was already at war, which was published in the official gazette of the Royal Ban's Administration of the Drina Banovina *Narodno jedinstvo*, no. 30, as of 12 April 1941. This spare denomination with a circulation of 30,792,000 pieces is characterised by its original design, functionality and high level of protection. The National Bank put a smaller part of the total pieces into circulation, and destroyed a larger part, but the occupying forces also used it for payments in the country.

Meštrović's "Kraljević Marko"

Considering that there is a replica of the sculpture of Kraljević Marko, sculpted by Ivan Meštrović, on the reverse of the 50-dinar banknote, it is necessary to present the most important information about this work and its creator.

Ivan Meštrović was born on 15 August 1883, in Vrpolje, Slavonia (today's Croatia), and spent most of his childhood in Otavice, a village in Dalmatia, where his parents were from and where the mausoleum he designed is now located, and where he was buried after his death in South Bend, USA in 1962. He graduated from the Academy of Fine Arts in Vienna in 1906. During the First World War, he was in exile, and then returned to the country, then the Kingdom of Serbs, Croats and Slovenes. In the period between the two wars, he was the rector of the Academy in Zagreb from 1923 to 1942 and a member of the Yugoslav Academy of Sciences and Arts (JAZU) from 1934. At the beginning of the Second World War, the Ustashas imprisoned him and sentenced him to death. He was released after 3.5 months with the intervention of the German authorities. He emigrated in 1942, first to Italy and then to Switzerland. He arrived in the United States in 1947. During this period he was a professor of sculpture in Syracuse and South Bend. He came to post-war Yugoslavia only once - in 1959.

He is the author of many sculptural works: Well of Life (Zagreb), History of Croats (Zagreb), Marko Marulić (Split), Mausoleum Meštrović (Otavice), Indians (Chicago), Mausoleum of Njegoš (Montenegro), etc. There are his numerous works in Serbia, the most famous of which are: Monument to the Unknown Hero on Avala, Gratitude to France in Belgrade, The Victor on Kalemegdan, Nadežda Petrović in Čačak, Nikola Tesla in Belgrade, etc.

Meštrović was fascinated by the Battle of Kosovo, which took place in 1389 between the Serbian and Turkish armies. From his own funds, he made a model of the Kosovo Temple, which he exhibited at the World's Fair in 1911 in Rome. In the Kingdom of Serbia, on the occasion of the construction of the temple in Gazimestan (Kosovo and Metohija), a Board was formed, but everything was interrupted due to the First World War. After the war, there was no money or the desire of the State to build it. The fate of the model itself is interesting. It was presented in London in 1915, and then in America, where all trace of it was lost. It was found in New York in 1968, then returned to Belgrade, and in 1971 it was donated to the National Museum in Kruševac, where it is still located today.

According to the project, the sculpture of Kraljević Marko on horseback was to be located in the largest hall of this temple, where there would also be the sculptures of other Kosovo heroes: Emperor Lazar, Miloš Obilić, Srđa Zlopogleđa, Banović Strahinja, the nine Jugović brothers, the Old Jug Bogdan, Ivan Kosančić, Milan Toplica, the Kosovo Maiden, etc. Some of these sculptures are currently in the National Museum in Belgrade.

Basic Characteristics

On this banknote, a part of the clause on disbursement "in metal legal tender", which is characteristic of all paper banknotes issued by the National Bank of the Kingdom of Serbs, Croats and Slovenes and the National Bank of the Kingdom of Yugoslavia, has been omitted. The reason for that were the new legal solutions on coverage based on the standard in gold and foreign currency payable in gold.

The size of the drawing on this multicolour banknote is 134mm long and 78mm wide. The watermark on the right side of the obverse and the left side of the reverse has a regular hexagonal shape 40mm high, which features the head of King Petar II Karađorđević with a falcon feather hat. The text on the obverse of the banknote is given in Cyrillic, and on the reverse in the Latin script.

Obverse of the Banknote:

- *On the left side, in a stylized octagonal oval 52mm high, there is a figure of King Aleksandar I Karađorđević in a general's uniform with the Order of Karađorđe's Star with Swords;*
- *Below the oval is the number 50 with interlaced ornaments and two white lilies to the left and right of the figure;*
- *Above the watermark, on the right side, is a larger number 50, and below that is an ornament 25mm wide;*
- *The landscape of the Bay of Kotor is in the middle of the obverse of the banknote;*
- *Above the landscape are stylized ornaments with the text „pays the bearer fifty dinars";*
- *Below the text is the date of 1 December 1931 and the signatures of the member of the Management Board Melko Čingrija, PhD, and the Governor Ignjat J. Bajloni;*
- *At the top of the middle is the inscription "National Bank of the Kingdom of Yugoslavia", and on the left and right are serial marks with letters and series numbers;*
- *Below the landscape is a forgery clause and a multi-digit control number;*
- *Around the entire obverse of the banknote is a frame with stylized ornaments from Miroslav's Gospel, 9mm wide;*
- *On the lower edge of the frame are the signatures of the author of the drawing, Panta Stojićević, and the engraver Veljko Andrejević Kun.*

Reverse of the Banknote:

- *On the left side of the watermark is the text: National Bank of the Kingdom of Yugoslavia, and below that "pays the bearer 50 dinars";*
- *On the right side is the state coat of arms, a stylized white double-headed eagle with outstretched wings with a crown on its head, and above is the number 50;*
- *In the middle is a figure of Prince Marko on a horse, based on a sculpture by sculptor Ivan Meštrović, from the Kosovo Temple Cycle, 70mm in height;*
- *On the pedestal of the figure is a text about a forgery;*

- *Below the entire reverse there is a stylized ornamental frame in a 10mm weave;*
- *On the lower edge of the frame are the names of the author Stojićević FEC and the engraver Kun SC.*

Banknote Makers

This is the first banknote created by local artists and experts.

Panta Stojićević, the author of the banknote, was the head of the printing department at the Institute for Manufacturing Banknotes and Coins during the period of its production. Unfortunately, little information is available about him. He distinguished himself as a talented author and co-author of the following banknotes:

- 50-dinar banknote as of 1.12.1931,
- 100-dinar banknote as of 15.7.1934, together with the painter Vasa Pomorišac,
- 20-dinar banknote as of 6.9.1936,
- 1.000-dinar banknote as of 6.9.1935, together with the Vasa Pomorišac, which was not released into circulation.

Veljko Andrejević Kun (1877- 1948) was the engraver of all banknotes created at the Institute for Manufacturing Banknotes and Coins after its construction, except for the 1000-dinar banknote with the image of Queen Marija, which was made by the painter Paja Jovanović, and engraved by E. Deloche. Kun was one of the most famous draftsmen and woodcuts in Europe at that time. He dedicated himself to this craft after graduating from high school in Belgrade. He first got a job at the State Printing House to study woodcarving. He then went to Budapest, and later to Vienna and Wroclaw. In Berlin, he makes woodcuts for illustrated catalogues, scientific books and other multicolour printing. Upon his return to Belgrade, he opened a printing house in Balkanska Street. During the First World War, he worked as a graphic artist in the Command of the Serbian Army. He was an engraver at the Institute for Manufacturing Banknotes and Coins until the end of the Second World War.

Kun was born and died in Belgrade. He had five children, and two of his sons continued to work in graphics and art: Đorđe Andrejević Kun, a painter and engraver of many banknotes after the Second World War, and Andreja Andrejević Kun, also a painter and graphic artist.

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Legitimni interes kao pravni osnov obrade osobnih podataka

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Rezime: U članku je elaborirana pravna osnova obrade podataka predviđena člankom 12 točkom 6 Zakona o zaštiti podataka o ličnosti, Službeni glasnik Republike Srbije br. 87 od 13.11.2018. Članak se bavi komparativnim prednostima primjene upravo ove pravne osnove u odnosu na ostale, te pruža i praktički osvrt u pogledu legitimnog interesa kao jednakovrijedne pravne osnove ostalim pravnim osnovama obrade podataka.

Predočuju se primjeri dobre prakse britanskog nadzornog tijela za zaštitu osobnih podataka, kao i praksa Agencije za zaštitu osobnih podataka – hrvatskog nadzornog tijela za zaštitu podataka, te se u dobrom dijelu osvrće na itekako relevantno Mišljenje br. 06/2014 Radne skupine iz članka 29 Direktive 95/46 (sada Europski odbor za zaštitu podataka). Posebna pažnja dana je tzv. LIA (*Legitimate Interest Assessment*), dokumentu procjene legitimnog interesa i testu ravnoteže između legitimnog interesa, te prava i sloboda pojedinaca u pogledu obrade osobnih podataka. Zaključno, prikazani su i zaštitni mehanizmi koji se moraju omogućiti pojedincima čiji se osobni podaci obrađuju – kao i potreba transparentnosti – u smislu informiranja pojedinaca o postojanju legitimnog interesa, te svim ostalim potrebnim informacijama koje se trebaju pružiti u cilju poštene i zakonite obrade osobnih podataka.

Ključne reči: Obrada osobnih podataka, osnov obrade, legitimni interes, procena legitimnog interesa, LIA, GDPR, zaštita podataka, pretežnost interesa

JEL: L50, K20, D82, M15

I Uvod

Cilj ovog članka je prezentirati i elaborirati legitimni interes kao adekvatnu pravnu osnovu za obradu osobnih podataka. Nastoji se utvrditi primjerenost legitimnog interesa kao pravne osnove, te uočiti komparativnu prednost upravo ove pravne osnove u odnosu na ostale u odgovarajućim slučajevima, te zaključiti da se u određenim situacijama legitimni interes nameće kao najadekvatnija osnova za obradu osobnih podataka pojedinaca.

Svakako je nužno napomenuti da legitimni interes nije nipošto nova pravna osnova koju je donio novi europski propis iz područja zaštite osobnih podataka. Naime, već Direktiva 95/46[1] u članku 7 točci (f) pod mjerila za zakonitost obrade podataka navodi legitimni, odnosno zakoniti, interes –

Države članice osiguravaju da se osobni podaci mogu obrađivati jedino ako:

„....je obrada potrebna u svrhe zakonitog interesa kojeg ima nadzornik ili treća stranka ili stranke kojima se podaci otkrivaju, osim kada su ti podaci podređeni interesu za temeljna prava i slobode osobe čiji se podaci obrađuju koja zahtijeva zaštitu na temelju članka 1. stavka 1. ove Direktive.“

[2]Zakon o zaštiti osobnih podataka koji je u Republici Hrvatskoj vrijedio do stupanja na snagu [3]Opće uredbe o zaštiti podataka, do 25.05.2018, člankom 7 je predviđao zakoniti interes – te je propisivao da se osobni podaci mogu prikupljati i dalje obrađivati isključivo:

„– ako je obrada podataka nužna u svrhu zakonitog interesa voditelja zbirke osobnih podataka ili treće strane kojoj se podaci otkrivaju, osim kada prevladavaju interesi zaštite temeljnih prava i sloboda ispitanika iz članka 1. stavka 2. ovoga Zakona, ...“

Ranije važeći hrvatski Zakon o zaštiti osobnih podataka nije, za razliku od Direktive 95/46, pojašnjavao zakoniti interes, odnosno, iz samog Zakona nije bilo dovoljno parametara za detekciju zakonitog interesa kao odgovarajuće pravne osnove. Naime, a kao što je naprijed navedeno, Zakon je predviđao zakoniti interes kao pravnu osnovu za obradu podataka, pod uvjetom da ne prevladavaju interesi zaštite temeljnih prava i sloboda ispitanika. S obzirom na ovu relativnu nedorečenost ranije važećeg Zakona o zaštiti osobnih podataka u definiranju i elaboriranju zakonitog interesa pravne ili fizičke osobe, navedeni pravni osnov moguće da i nije bio toliko, ili uopće, zastupljen u obradi osobnih podataka pojedinaca u Hrvatskoj. Naime, hrvatsko nadzorno tijelo nadležno za obradu osobnih podataka - Agencija za zaštitu osobnih podataka - tijekom svojih nadzornih aktivnosti od početka rada, od 2004. do 2018. godine, nije utvrdila da se itko od pravnih subjekata poslužio nave-

1 Direktiva 95/46/EC Europskog parlamenta i Vijeća od 24.10.1995. o zaštiti pojedinaca u pogledu obrade osobnih podataka i o slobodnom kretanju takvih podataka, dostupna na: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31995L0046

2 Zakon o zaštiti osobnih podataka, NN: 106/12 – pročišćeni tekst, dostupan na linku: https://narodne-novine.nn.hr/clanci/sluzbeni/2012_09_106_2300.html

3 Uredba (EU) 2016/679 Europskog parlamenta i Vijeća od 27. travnja 2016. o zaštiti pojedinaca u vezi s obradom osobnih podataka i o slobodnom kretanju takvih podataka te o stavljanju izvan snage Direktive 95/46/EZ (Opća uredba o zaštiti podataka / GDPR)SL EU L119, dostupna na linku: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32016R0679

denom pravnom osnovom u obradi osobnih podataka fizičkih osoba, što ne znači da navedena pravna osnova nije, kao takva, uopće bila primjenjivana kao osnova za obradu osobnih podataka. Međutim, a prema službenom odgovoru hrvatskog nadzornog tijela za zaštitu osobnih podataka – Agencije za zaštitu osobnih podataka – „primjena privole je bila nešto fleksibilnije postavljena i tumačena (posebice u smislu valjanosti i ograničenja moguće primjene), te pojam legitimnog interesa voditelja obrade ili treće strane tj. zakonitog interesa voditelja zbirke osobnih podataka ili treće strane, nije bio često istican kao primjenjeni pravni temelj za obradu osobnih podataka, već su to u pravilu bili drugi pravni termelji tj. najčešće privola, slučajevi određeni zakonom, izvršavanje zakonskih obveza voditelja zbirke osobnih podataka ili sklapanje i izvršenje ugovora u kojem je ispitanik stranka, ali i ostali."

Ipak, ranije važeći hrvatski Zakon o zaštiti osobnih podataka je člankom 21 propisivao sljedeće:

...„Ispitanik se iz zakonitih razloga ima pravo usprotiviti obradi osobnih podataka koji se na njega odnose, u slučajevima iz članka 7. stavka 1. podstavka 6. i 7.

U slučaju kada je protivljenje ispitanika iz stavka 3. ovoga članka opravdano, osobni podaci ne smiju se dalje obrađivati."

Dakle, citirani Zakon je predviđao pravo pojedinca da se, iz zakonitih razloga, usprotivi obradi svojih osobnih podataka u slučajevima, inter alia, i ako se podaci obrađuju u svrhu zakonitog interesa voditelja zbirke osobnih podataka ili treće strane.

Valja spomenuti da je podstavak 7 članka 7 odnosan na zakoniti interes, dodan odredbom članka 5 Zakona o izmjenama i dopunama Zakona o zaštiti osobnih podataka (»Narodne novine«, br. 130/11) stupio na snagu 24.11.2011.

Naime, hrvatski Zakon za zaštitu osobnih podataka je unaprijeđen 2011. godine, odnosno u okviru IPA 2007 projekta „Jačanje kapaciteta Agencije za zaštitu osobnih podataka", (HR/2007/IB/JH/02), između ostalog, revidiran je i Zakon o zaštiti osobnih podataka u skladu sa pravnom stečevinom Europske unije iz područja zaštite osobnih podataka. U tom smislu, dodana je i još jedna pravna osnova, dakle spomenuti zakoniti interes, a koji je predviđala i Direktiva 95/46.

Već navedena Direktiva 95/46 daje više pojašnjenja za zakoniti interes te u uvodnim odredbama pojašnjava pobliže smisao navedenog. Tako točkom 30. Direktiva 95/46 navodi –

...

„(30)

budući da, kako bi bila zakonita, se obrada osobnih podataka mora izvršiti uz suglasnost osobe čiji se podaci obrađuju ....., <u>ili u zakonitom interesu fizičke ili pravne osobe</u>, pod <u>uvjetom da interesi ili prava i slobode osobe čiji se podaci obrađuju nisu prekršeni</u>; <u>budući da, posebno, kako bi se održala ravnoteža između interesa koji uključuju jamstvo učinkovitog natjecanja</u>, <u>države članice mogu utvrditi okolnosti u kojima se osobni podaci mogu koristiti ili otkriti trećoj stranci u smislu zakonitih uobičajenih poslovnih aktivnosti poduzetnika</u> ili drugih tijela...;"

Dakle Direktiva 95/46 za obradu podataka u zakonitom interesu navodi, uz uvjet da prava i interesi i slobode osobe nisu prekršeni, potrebu ravnoteže između interesa koji uključuju jamstvo učinkovitog natjecanja, te mogućnost da države članice utvrde okolnosti u kojima se osobni podaci mogu koristiti ili otkriti trećoj stranci, u smislu zakonitih uobičajenih poslovnih aktivnosti poduzetnika. Test ravnoteže i elaboriranje legitimnog interesa pojasnila je Radna skupina[4] iz članka 29 Direktive 95/46, no to je tema koja će posebno biti obrađena u narednom poglavlju – Primjerenost legitimnog interesa – test ravnoteže.

II Primjerenost legitimnog interesa – test ravnoteže

Legitimni interes kao pravna osnova nije sam po sebi odgovarajući pravni osnov za obradu podataka, odnosno nije dovoljno pozvati se na legitimni interes voditelja obrade ili treće strane za obradu osobnih podataka pojedinaca. Naime, u tumačenju Direktive 95/46, Radna skupina iz članka 29 citirane Direktive – navodi u svom Mišljenju[5] 06/2014 o pojmu zakonitih interesa nadzornika podataka, u skladu s člankom 7 Direktive 95/46/EZ, potrebu za provođenjem tzv. „testa ravnoteže“ – *„Članak 7. točka (f) naveden je kao posljednja mogućnost od šest osnova na temelju kojih je dopuštena zakonita obrada osobnih podataka. U njemu se poziva na test ravnoteže: potrebno je uspostaviti ravnotežu između onoga što je nužno za zakonite interese voditelja obrade (ili trećih stranaka) i interesa ili temeljnih prava i sloboda osobe čiji se podaci obrađuju. Na temelju ishoda ovog testa ravnoteže utvrdit će se je li se moguće oslanjati na članak 7. točku (f) kao na pravnu osnovu za obradu.“* Kako je navedeno u cit. Mišljenju 06/2014 - *„potrebno je uspostaviti ravnotežu između zakonitih interesa voditelja obrade (ili trećih stranaka) i interesa ili temeljnih prava i sloboda osobe čiji se podaci obrađuju. Na temelju ishoda ovog testa ravnoteže utvrdit će se je li se moguće oslanjati na članak 7. točku (f) kao na pravnu osnovu za obradu.“*

Vrijedi spomenuti da se ne radi o jednostavnom testu ravnoteže koji bi se jednostavno sastojao o usporedbi dvaju lako mjerljivih i lako usporedivih „težina“. Provođenje testa ravnoteže moglo bi podrazumijevati složenu ocjenu kojom se uzima u obzir niz čimbenika.”

U navedenom Mišljenju se, dakle, prvo elaborira što čini zakoniti interes voditelja obrade ili treće stranke, potom se ispituje i druga strana ravnoteže – što čini interese ili temeljna prava i slobode osoba čiji se podaci obrađuju. Mišljenje pruža i smjernice o načinu provedbe testa ravnoteže, te najvažnija

4 Radna skupina iz članka 29 Direktive 95/46 bila je sastavljena je od predstavnika svih neovisnih tijela za zaštitu osobnih podataka u državama članicama, predstavnika Europskog nadzornika za zaštitu podataka o ličnosti i predstavnika Europske komisije. Radna skupina iz člana 29 Direktive 95/46 definirana je sada člankom 68 GDPR-a kao Europski odbor za zaštitu podataka (Odbor) i ima pravnu osobnost. Odbor (prije njega Radna skupina iz člana 29 Direktive 95/46) prati i osigurava pravilnu primenu ove Uredbe (član 70.GDPR-a), te inter alia – ispituje na vlastitu inicijativu, na zahtjev jednog od svojih članova ili na zahtjev Komisije sva pitanja koja obuhvaćaju primjenu Uredbe i izdaje smjernice, preporuke i primjere najbolje prakse kako bi poticao dosljednu primjenu ove Uredbe. (članak 70 st. 1 toč. e) GDPR-a)

5 Opinion 06/2014 on the notion of legitimate interests of the data controller under Article 7 of Directive 95/46/EC, dostupno na linku: https://ec.europa.eu/justice/article-29/documentation/opinionrecommendation/files/2014/wp217_en.pdf

pitanja koja treba uzeti u obzir prilikom provedbe testa ravnoteže, uključujući zaštitne i ostale mjere koje pruža nadzornik podataka. Razmatraju se i posebni mehanizmi kao što su odgovornost, transparentnost i prava na prigovor, kojima se može pomoći, osigurati – i dalje jačati – odgovarajuća ravnoteža različitih interesa koji bi mogli biti ugroženi.

Ukratko – provedba LIA-e (legitimate interest assesment) podrazumijevala bi primarno opis same operacije obrade osobnih podataka – koji podaci se prikupljaju, od koga, u koju svrhu, kome se prosljeđuju itd, potom je nužno identificirati/detektirati legitimni interes voditelja obrade ili treće strane, te elaborirati nužnost obrade podataka – zbog čega je ta obrada nužna za voditelja obrade ili treću stranu, odnosno da li se svrha/cilj obrade osobnih podataka može ostvariti na neki drugi način od opisanog. U tom smislu, kao protuteža navedenoj obradi, stavljaju se u odnos prava i interesi pojedinaca čiji osobni podaci se obrađuju, dakle provodi se test ravnoteže, radi se procjena – kako navedena obrada utječe na prava i slobode pojedinaca, te postoji li alternativa navedenoj obradi ili je upravo ta obrada nužna za postizanje svrhe koja se tom obradom nastoji postići.

[6]ICO, nadzorno tijelo za zaštitu osobnih podataka Velike Britanije predlaže test ravnoteže u tri dijela, te navodi tri bitna pitanja na koje treba pružiti odgovor:

*“ – **Svrha testa**: da li provodite obradu temeljem legitimnog interesa? Naime, širok je raspon interesa koji se mogu svrstati pod legitimni interes. To može biti interes voditelja obrade ili treće strane, komercijalni interes ili šire socijalne benefiti.*

*-**Test nužnosti:** da li je obrada podataka nužna za tu svrhu? Naime, nužnost podrazumijeva da obrada mora biti označena kao nužna za postizanje upravo te svrhe, jer ako se svrha moža postići nekom drugom, manje invazivnom obradom, a kojom se postiže isti rezultat tada ne možemo govoriti o legitimnom interesu.*

*- **Test ravnoteže:** da li prava pojedinaca nadvladavaju/pretežu nad legitimnim interesom? Ako, primjerice, pojedinci razumno ne očekuju obradu podataka, ili im ta obrada prouzrokuje neopravdanu štetu, njihovi interesi prevladavaju nad legitimnim interesom.”*

Međutim, legitimni interes, te interesi i prava pojedinaca, ne mogu baš uvijek biti usklađeni. Smatram da oni i ne mogu biti uvijek u „savršenoj ravnoteži“ niti se testom ravnoteže to želi ostvariti. *Ako postoji konflikt legitimnog interesa i temeljnih prava i sloboda pojedinaca, legitimni interes može i unatoč tome nadvladati temeljna prava i slobode – sve dok god postoji jasno opravdavanje navedenog legitimnog interesa koji u datom slučaju nosi prevagu nad tim pravima i interesima*, navodi ICO.

Vješto elaborirana LIA (procjena legitimnog interesa) nameće se kao ključ uspjeha u primjeni legitimnog interesa kao odgovarajuće pravne osnove. Međutim, opreza radi, ističem nužnost pravilne i temeljite procjene svih okolnosti, primjene odgovarajućih kriterija prilikom odabira legitimnog interesa, jer i dobro elaborirani prigovor pojedinca može „srušiti“ legitimni interes koji

6 Information Commissioner’s Office - https://ico.org.uk/

ne počiva na odgovarajućim osnovama i koji nije uvažio, na odgovarajući način, prava i slobode pojedinaca, te nije predvidio način ostvarenja njihovih prava, odnosno predividio odgovarajuće zaštitne mjere i kompenzacijske kontrole.

Konačno, apropos posebnih mehanizama koje navodi i citirano Mišljenje 06/2014 – potrebno je predvidjeti zaštitne mehanizme u obradi osobnih podataka – tzv. zaštitne mjere i kompenzacijske kontrole kojima se ostvaruju transparentnost, odgovornost, zaštita podataka i pravo na prigovor.

Pojam odgovornosti, a kako se navodi u Mišljenju 06/2014, usko je povezan s pojmom transparentnosti. *"Kako bi se osobama čiji se podaci obrađuju omogućilo ostvarivanje prava te kako bi se dionicima omogućio opsežniji javni nadzor, Radna skupina preporučuje voditeljima obrade da osobama čiji se podaci obrađuju objasne na jasan i jednostavan način zašto vjeruju da njihovi interesi nisu podređeni interesima ili temeljnim pravima i slobodama osoba čiji se podaci obrađuju te da im objasne zaštitne mjere koje su poduzeli za zaštitu osobnih podataka, uključujući, ako je primjenjivo, pravo izuzeća iz obrade. Ako voditelj obrade prikrije važne informacije o neočekivanom daljnjem korištenju podacima u pravnom jeziku u sitnim slovima ugovora, time se krše prava o zaštiti potrošača koja se odnose na nepoštene ugovorne uvjete (uključujući zabranu protiv „iznenađujućih uvjeta") i neće biti ispunjeni zahtjevi članka 7. točke (a) u vezi s valjanom i informiranom suglasnošću ili zahtjevi iz članka 7. točke (f) u smislu razumnih očekivanja osobe čiji se podaci obrađuju i općenito prihvatljive ravnoteže interesa.*

Dakle, članak 7. točka (f) Direktive 95/46 temelji se na načelu odgovornosti. Voditelj obrade mora unaprijed izvršiti pažljiv i učinkovit test na temelju posebnih činjenica slučaja, a neapstraktno, uzimajući u obzir i razumna očekivanja osoba čiji se podaci obrađuju. Dobra je praksa da se, ako je primjenjivo, provođenje tog testa dokumentira na dovoljno detaljan itransparentan način kako bi relevantni dionici, uključujući osobe čiji se podaci obrađuju i nadležna tijela za zaštitu podataka, i, konačno, sudovi mogli provjeriti primjenjuje li se test potpuno i točno – kad je to potrebno.

Voditelj obrade će prvo definirati zakoniti interes i provesti test ravnoteže, ali to nije nužno konačna i definitivna ocjena: ako u stvarnosti interes koji se ostvaruje nije nužno onaj koji je naveo voditelj obrade ili ako voditelj obrade nije definirao interes s dovoljno pojedinosti, potrebno je ponovno ocijeniti ravnotežu na temelju stvarnog interesa koji će utvrditi nadležno tijelo za zaštitu podataka ili Sud. Kao i u slučaju drugih ključnih aspekata obrade podataka, kao što je identifikacija voditelja obrade podataka ili specifikacija svrhe, važna je stvarnost koja je u pozadini bilo koje tvrdnje voditelja obrade."

Mišljenje 06/2014 – navodi potrebu *"omogućavanja prigovora pojedinaca na obradu osobnih podataka zbog jakih i zakonitih razloga u vezi njihove određene situacije na obradu podataka koji se odnose na njih a koji je predviđen člankom 14. te ako je prigovor osnovan, mora se prestati s obradom podataka. To ne bi trebalo smatrati protivnim testu ravnoteže iz članka 7. točke (f) koji se provodi „a priori": njime se nadopunjuje ravnoteža u smislu da, kad je obrada dopuštena u skladu s razumnom i objektivnom ocjenom različitih prava i interesa, osoba čiji se podaci obrađuju još uvijek ima dodatnu mogućnost prigovoriti na osnovi koja se odnosi na njezinu posebnu situaciju. Nakon toga bit će potrebno novo ocjenjivanje uzi-*

majući u obzir posebne argumente koje je dostavila osoba čiji se podaci obrađuju. Ta je nova ocjena, u načelu, opet podložna provjeri tijela za zaštitu podataka ili sudova."

Zaključno – kod odabira legitimnog interesa kao pravne osnove za obradu podataka – uputno je napraviti sljedeću listu provjere koju je odlično postavio ICO -

- *Identificirali smo legitimni interes kao najprimjereniju pravnu osnovu;*
- *Razumijemo našu odgovornost u zaštiti prava pojedinaca;*
- *Proveli smo Procjenu legitimnog interesa (LIA), te vodimo o tome izvještaj kako bismo osigurali osnovanost/opravdanost naše odluke u odabiru navedene pravne osnove;*
- *Identificirali smo relevantne legitimne interese;*
- *Provjerili smo i ustanovili da je obrada* ***nužna*** *za ostvarenje svrhe te ne postoji manje invanzivna obrada kojom se može ostvariti isti rezultat;*
- *Proveli smo i test ravnoteže, te smo uvjereni da interesi pojedinaca ne prevladavaju nad legitimnim interesom;*
- *Upotrebljavamo samo podatke pojedinaca na način kad to oni razumno očekuju, osim ako imamo naročito dobar razlog za drukčije postupanje;*
- *Ne koristimo podatke pojedinaca na način koji bi bio invazivan ili bi im mogao prouzročiti štetu, osim u slučaju postojanja naročito dobrog razloga ;*
- *Ako obrađujemo podatke djece, poduzimamo naročitu pažnju da zaštitimo njihove interese;*
- *Poduzimamo zaštitne mjere kako bi reducirali utjecaj navedene obrade- kad god je to moguće;*
- *Razmotrili smo mogućnost izbora – tzv. opt out opcije;*
- *Ako naša LIA utvrđuje značajan utjecaj na privatnost pojedinca, također razmatramo nužnost provedbe tzv. DPIA-a, (Procjene učinka na zaštitu podataka);*
- *LIA je predmet periodičnih provjera, te je ponavljamo ako se okolnosti izmijene;*
- *Uključujemo informacije o legitimnom interesu u informacijama o obradi osobnih podataka.*

Legitimni interes kao pravna osnova sukladno GDPR-u

Legitimni interes kao pravna osnova za obradu osobnih podataka pojedinaca propisan je člankom 6, stavkom 1, točkom f) GDPR-a. Navedenim člankom propisano je da je obrada zakonita, ako je, inter alia – *"obrada nužna za potrebe legitimnih interesa voditelja obrade ili treće strane, osim kada su od tih interesa jači interesi ili temeljna prava i slobode ispitanika koji zahtijevaju zaštitu osobnih podataka, osobito ako je ispitanik dijete."*

GDPR, u uvodnim odredbama – preambulom 47 pojašnjava smisao legitimnog interesa – "*Legitimni interesi voditelja obrade, među ostalim onih interesa voditelja obrade kojem se osobni podaci mogu otkriti ili treće strane, mogu predstavljati pravnu osnovu za obradu pod uvjetom da interesi ili temeljna prava i slobode ispitanika nemaju prednost, uzimajući u obzir razumna očekivanja ispitanika koja se temelje na njihovom odnosu s voditeljem obrade. Takav legitiman interes mogao bi, na primjer, postojati u slučaju relevantnog i odgovarajućeg odnosa ispitanika i voditelja obrade u situacijama poput one kada je ispitanik klijent voditelja obrade ili u njegovoj službi. U svakom slučaju, postojanje legitimnog interesa zahtijevalo bi pažljivu procjenu, među ostalim, i toga može li ispitanik u vrijeme i u kontekstu prikupljanja osobnih podataka razumno očekivati obradu u dotičnu svrhu. Interesi i temeljna prava ispitanika posebno bi mogli nadvladati interes voditelja obrade ako se osobni podaci obrađuju u okolnostima u kojima ispitanici razumno ne očekuju daljnju obradu. Budući da je zakonodavac dužan zakonski odrediti pravnu osnovu za obradu osobnih podataka koju provode tijela javne vlasti, ta pravna osnova ne bi se smjela primjenjivati na obradu koju provode tijela javne vlasti pri izvršavanju svojih zadaća. Obrada osobnih podataka koja je nužna u svrhe sprečavanja prijevara također predstavlja legitiman interes dotičnog voditelja obrade podataka. Može se smatrati da postoji legitiman interes kod obrade osobnih podataka provedene za potrebe izravnog marketinga.*"

Legitimni interes, kako je razvidno iz navedene preambule, može poslužiti kao primjerena pravna osnova u slučajevima u kojima pojedinci razumno očekuju obradu svojih osobnih podataka, naročito na temelju posebnog odnosa sa voditeljem obrade – jer su npr. klijenti voditelja obrade (npr. klijenti banke i/ili su u službi s voditeljem obrade – npr. zaposlenici). Ako je npr. klijent banke korisnik kredita u toj banci, te ujedno koristi i još neke usluge, legitimni interes banke je da mu ponudi i druge odgovarajuće proizvode koje bi dotičnog klijenta mogle interesirati. Klijent razumno može očekivati da mu banka navedene proizvode ponudi. U tim slučajevima, smatram – privola ne bi bila odgovarajući pravni temelj – jer, a kako predviđa GDPR – "može se smatrati da postoji legitimni interes kod obrade osobnih podataka provedene za potrebe izravnog marketinga". U krajnjoj liniji, može biti u interesu i samog klijenta – informiranje o odgovarajućim bankovnim proizvodima, te se u tom slučaju ne bi radilo o obradi koja bi ugrožavala njegova prava i interese, budući banka već ionako obrađuje njegove podatke, klijent može razumno očekivati da bude informiran o navedenom, a osim toga klijent u svako doba može prigovoriti takvoj obradi, što mu omogućava članak 21, stavak 2 GDPR-a, nakon čega Banka treba odmah prestati sa takvom obradom osobnih podataka, dakle pojedinac ima potpunu kontrolu u pogledu obrade svojih osobnih podataka, te ima i mehanizme zaštite. Navedena odredba propisuje – „*Ako se osobni podaci obrađuju za potrebe izravnog marketinga, ispitanik u svakom trenutku ima pravo uložiti prigovor na obradu osobnih podataka koji se odnose na njega za potrebe takvog marketinga, što uključuje izradu profila u mjeri koja je povezana s takvim izravnim marketingom.*

Ako se ispitanik protivi obradi za potrebe izravnog marketinga, osobni podaci više se ne smiju obrađivati u takve svrhe."

Međutim, svakako je nužno istaći i poseban propis koji se primjenjuje u konkretnom slučaju u Republici Hrvatskoj, a to je Zakon o elektroničkim komunikacijama[7], koji u slučajevima direktnog marketinga putem elektroničke pošte, člankom 107, st. 2 – predviđa tzv. opt-out opciju, uz uvjet postojanja odgovarajućeg odnosa voditelja obrade i klijenta. Citirani članak 107, st. 2 propisuje sljedeće – *"(2) Fizička ili pravna osoba trgovca može upotrebljavati podatke o adresama elektroničke pošte, koje je pribavila od svojih potrošača u svrhu prodaje proizvoda i usluga, za izravnu promidžbu i prodaju isključivo vlastitih sličnih proizvoda ili usluga, uz uvjet da ti potrošači imaju jasnu i nedvojbenu mogućnost besplatnog i jednostavnog prigovora na takvu uporabu podataka o adresama elektroničke pošte prigodom njihova prikupljanja i prigodom zaprimanja svake elektroničke poruke, u slučaju da potrošač nije unaprijed odbio takvu uporabu podataka."*

Dakle, citiranim člankom ne zahtijeva se privola klijenta ili potrošača, već je moguće upotrebljavati njihovu elektroničku poštu za svrhe direktnog marketinga, ali uz uvjet da se oni unaprijed nisu usprotivili obradi svojih osobnih podataka u tu svrhu, što podrazumijeva da su isti o navedenoj obradi informirani.

Legitimni interes kao odgovarajuća pravna osnova za obradu osobnih podataka postoji i u slučaju obrade podataka između grupe poduzetnika – npr. obrada podataka između društva kćeri i majke za unutarnje administrativne potrebe - a kako jasno navodi uvodna odredba 48 GDPR-a.

„Voditelji obrade koji su dio grupe poduzetnika ili institucija povezanih sa središnjim tijelom mogu imati legitimni interes za prijenos osobnih podataka unutar grupe poduzetnika za unutarnje administrativne potrebe, među ostalim za obradu osobnih podataka klijenata ili zaposlenika. Opća načela za prijenos osobnih podataka unutar grupe poduzetnika određenom poduzetniku koje se nalazi u trećoj zemlji ostaju nepromijenjena."

U konkretnom slučaju moglo bi se raditi o obradi osobnih podataka zaposlenika – npr. uvid u osobni dosije zaposlenika od strane društva majke i/ili sustav za obračun plaće koje isplaćuje društvo kćer svojim zaposlenicima, a koji se nalazi u središnjici društva – društvu majci. GDPR jasno propisuje da se, u tom slučaju, i unatoč postojanju legitimnog interesa, moraju poštivati opća načela za prijenos osobnih podataka ako se neko od navedenih društava nalazi u trećoj zemlji.

Uvodna odredba 69 nadalje pojašnjava kako, u slučajevima obrade podataka na temelju legitimnog interesa, svaki pojedinac ima pravo prigovora na obradu bilo kojih osobnih podataka povezanih s njegovom posebnom situacijom. Da li će u datom momentu prevagu odnijeti prava i interesi pojedinca ili legitimni interes voditelja obrade – ovisi o tome čiji interesi su jači. Naime, teret dokaza zakonite i poštene obrade je na voditelju obrade, te u tom smislu – a i kako nedvojbeno proizlazi iz citirane preambule 69 – *"Voditelj obrade trebao bi pokazati da njegovi uvjerljivi legitimni interesi imaju prednost pred interesima temeljnih prava i sloboda ispitanika."*

Navedena odredba ne vrijedi, međutim, kad se osobni podaci obrađuju u svrhe izravnog marketinga, uključujući i izradu profila. U tom slučaju, ako ispitanik prigovori takvoj obradi – voditelj obrade mora odmah prestati sa

7 Zakon o elektroničkim komunikacijama, NN 73/08, 90/11, 133/12, 80/13, 71/14, 72/17

daljnjom obradom njegovih osobnih podataka. Pravo prigovora vezano uz takvu obradu trebalo bi se izričito dati na znanje pojedincima i predstaviti im se jasno i odvojeno od svih drugih informacija - a kako bi oni mogli uspješno koristiti svoja prava.

Zaključak

Legitimni interes jedna je od pravnih osnova za obradu osobnih podataka pojedinaca. Zbog nedostatka predvidivosti i egzaktnosti, kao i određene fleksibilnosti, mnogi mu pripisuju mogućnost pravne nesigurnosti i manipulacije. Međutim, legitimni interes jedankovrijedna je pravna osnova u odnosu na ostale pravne osnove predviđene člankom 6 GDPR-a – pod uvjetom da njegov cilj nije zlouporaba prava, već da se uistinu primjenjuju pravi kriteriji u njegovu određivanju, te uz ispunjenje svih ostalih pretpostavki koje predviđa GDPR, uz odgovarajuće poštivanje i smjernica iz Mišljenja 06/2014.

Praksa nažalost pokazuje da legitimni interes često biva pogrešno i potpuno promašeno zamijenjen privolom kao pravnom osnovom u obradi osobnih podataka. To se čini zbog možebitnog nerazumijevanja njegove prirode ili potrage za, na prvi pogled „jednostavnijim" i bržim rješenjima. Valja, međutim, naglasiti da je privola u odnosu na legitimni interes slabija pravna osnova. Prvo – ako je određena obrada podataka doista nužna za postizanje odgovarajuće svrhe – tada, ako se koristi privola kao pravni osnov – nedostaje njen najbitniji element – sloboda volje, dobrovoljnost, te ako pojedinci i daju privolu, zbog podređenog/neravnopravnog odnosa u odnosu na voditelja obrade (npr. radni odnos) ili npr. neki drugi odgovarajući odnos gdje postoji znatna neravnoteža između voditelja obrade i pojedinca – ta privola je, de facto, uvjetovana i nije sukladna uvjetima privole iz članka 7 GDPR-a. Nadalje, ako u konkretnom slučaju i nema neravnoteže u navedenom odnosu, ali je obrada podataka nužna – u slučaju korištenja privole kao pravne osnove – prijeti rizik od uskrate suglasnosti, odnosno naknadnog povlačenja suglasnosti – uslijed čega se osobni podaci ne mogu obrađivati. U tom smislu je onda legitimni interes svakako primjerenija i jača pravna osnova, jer, u slučaju korištenja legitimnog interesa, voditelj obrade ima kontrolu nad obradom osobnih podataka pa tako i u slučaju prigovora pojedinaca na obradu podataka temeljem legitimnog interesa, on će moći i dalje te podatke obrađivati, ako dokaže da je njegov legitimni interes uvjerljivo jači od interesa pojedinaca, njihovih sloboda i prava. To će dokazati odgovarajućim dokumentom – LIA (Procjenom legitimnog interesa) gdje će jasno razložiti postojanje svog legitimnog interesa.

Kod korištenja legitimnog interesa vrlo je bitna transparentnost i odgovornost voditelja obrade te njegov informirani odnos prema pojedincima. Naime – praksa pokazuje da je velik broj slučajeva prigovora odnosno konflikta između pojedinaca i voditelja obrade leži u neinformiranosti pojedinaca, netransparentnog postupanja voditelja obrade iz kojeg se vrlo često stvara možebitno pogrešni zaključak da voditelji obrade čine neke nedozvoljene radnje vezano uz obradu podataka pojedinaca, da prikrivaju stvarne namjere i sl. Transparentan odnos voditelja obrade podrazumijeva potpunu informiranost i fair pristup prema pojedincima što znači – davanje odgovarajućih informacija o konkretno korištenju legitimnog interesa, kao pravne osnove za obradu podataka, a koja obaveza postupanja je i predviđena člankom 14. st. 2. GDPR-a, uz upotrebu jednostavnog jezika koji pojedinci mogu razumjeti. Nadalje, transparentnost i odgovorno postupanje podrazumijeva i davanje kontrole pojedincima nad obradom njihovih osobnih podataka te predviđanje i informiranje o tim mehanizmima kontrole – mogućnosti prigovora koje pojedinci mogu istaknuti vezano uz obradu njihovih osobnih podataka te informiranje o pravima – mogućnosti da se obrate nadležnom nadzornom tijelu – ako smatraju da je obrada podataka nezakonita – u kojem slučaju će kontrolu zakonitosti nad obradom osobnih podataka procjenjivati i preispitivati nadzorno nadležno tijelo i finalno možda i sud.

Konačno, legitimni interes će „pasti" na testu zakonitosti obrade podataka kao pravna osnova ako se određena obrada osobnih podataka ne nameće kao nužna, već postoji nedvojbeno manje invazivna obrada podataka kojom se može postići isti rezultat. Primjerice – ako je voditelj obrade npr. uveo video nadzor i/ili potrebu uzimanja otiska prsta u cilju kontrole ulaza i izlaza – kontrole radnog vremena – navedeno će teško moći opravdati svojim legitimnim interesom – budući da se svrha obrade podataka može postići zacijelo manje invazivnom metodom od navedene. Međutim, prilikom korištenja legitimnog interesa – i kad su ispunjeni svi uvjeti (nužnost, provedba LIA-e i ostali kriteriji) svakako je vrlo bitno voditi računa o opsegu osobnih podataka – jer ako je određena obrada osobnih podataka i opravdana – može se pokazati neopravdanim i neosnovanim korištenje šireg opsega osobnih podataka od nužno potrebnih za ostvarenje svrhe. U tom smislu dat je i stav[8] hrvatskog nadzornog tijela o korištenju legitimnog interesa za obradu osobnih podataka izraženog u mišljenju – *„Glede Vašeg pitanja vezanog uz fotografiranje te javnu objavu osobnih fotografija i/ili video snimaka osoba koji prisustvuju nekom događaju koje organizira Vaše društvo, Agencija ističe kako bi se navedena obrada mogla smatrati legitimnim interesom voditelja obrade, osim kada su od tih interesa jači interesi ili temeljna prava i slobode ispitanika koji zahtijevaju zaštitu osobnih podataka, osobito ako je ispitanik dijete. To znači da bi voditelj obrade, prije početka obrade, trebao provesti test razmjernosti. Navodimo da je ispitanike koji prisustvuju određenom događanju potrebno prethodno obavijestiti o tome da će biti fotografirani i/ili snimani te da će njihovi osobni podaci biti javno objavljeni (fotografije, video snimci), a dodatno je potrebno poduzeti i sve ostale radnje kako bi se zaštitila privatnost sudionika.*

S tim u vezi ističemo kako je za fotografiranje posjetitelja moguće pronaći pravni temelj u članku 6. stavku 1. točki f. Opće uredbe, i to samo ukoliko je obrada nužna odnosno neophodna za legitimnu svrhu te je ista u skladu s načelima proporcionalnosti i supsidijarnosti.

Slijedom iznesenog, a nastavno na Vaš upit o fotografiranju sudionika (uzvanika i pratnje) ističemo kako je navedeno moguće, uz uvjet da su isti prethodno obavješteni o samom fotografiranju kao i namjeri objave fotografija na društvenim mrežama. Međutim, legitimni interes nije primjenjiv za fotografiranje slučajnih prolaznika na javnim površinama."

8 Legitimni interes - https://azop.hr/misljenja-agencije/detaljnije/legitimni-interes

Analogno navedenom, legitimni interes fizičke osobe je, primjerice, postavljanje kamere ispred vlastitih ulaznih vrata u stan, u cilju sprečavanja provale. Međutim, ako je kamera postavljena tako da pri tom snima/špijunira i ulaz u okolne stanove – riječ je o prekoračenju opsega za koji više ne postoji legitimni interes niti nužnost.

Legitimni interes je valjana pravna osnova pod pretpostavkama relevantnosti (ispravna detekcija legitimnog interesa), transparentnosti i odgovornosti, te nužnosti i proporcionalnosti.

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Legitimate Interest as Legal Grounds for Processing Personal Data

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Summary: The article elaborates the legal basis for data processing provided in Article 12, item 6 of the Law on Personal Data Protection, Official Gazette of the Republic of Serbia no. 87 as of 13 November 2018. The article deals with the comparative advantages of implementing this legal basis in relation to others and provides a practical overview in terms of legitimate interest as an equivalent legal basis to other legal bases of data processing.

Examples of good practice of the British Supervisory Authority for Personal Data Protection, as well as the practice of the Agency for Personal Data Protection - the Croatian supervisory authority for data protection - are presented, as well as a significant part of the exceedingly relevant Opinion no. 06/2014 of the Working Party referred to in Article 29 of the cited Directive 95/46 (now the European Data Protection Board). Special attention is given to the so-called LIA, a legitimate interest assessment document and a test of the balance between legitimate interest and the rights and freedoms of individuals, with regard to the processing of personal data. Finally, the article presents the safeguards that must be provided to individuals whose personal data are processed - as well as the need for transparency - in terms of informing individuals of the existence of a legitimate interest, as well as all other necessary information that must be provided to ensure the fair and lawful processing of personal data.

Keywords: Processing of personal data, basis of processing, legitimate interest, assessment of legitimate interest, LIA, GDPR, data protection, predominance of interest

JEL: L50, K20, D82, M15

I Introduction

The aim of this article is to present and elaborate legitimate interest as an adequate legal basis for the processing of personal data. The aim is to determine the adequacy of legitimate interest as a legal basis and to notice the comparative advantage of this legal basis over others, in appropriate cases, and to conclude that, in certain situations, legitimate interest is imposed as the most adequate basis for processing the personal data of individuals.

It is certainly necessary to note that legitimate interest is by no means a new legal basis adopted by the new European regulation in the field of personal data protection. Namely, Directive 95/46[1], in Article 7(f), under the criteria for the lawfulness of data processing, defines legitimate or legal interest in the following way –

Member States shall provide that personal data may be processed only if:

....“ processing is necessary for the purposes of the legitimate interests pursued by the controller or by the third party or parties to whom the data are disclosed , except where such interests are overridden by the interests for fundamental rights and freedoms of the data subject which require protection under Article 1 (1).”

The Law on Personal Data Protection[2], which was in force in the Republic of Croatia until the entry into force of the General Data Protection Regulation[3], until 25 May 2018, provided for legitimate interest in Article 7 - and prescribed that personal data may be collected and further processed only:

“- if the processing of data is necessary for the legitimate interest of the head of the personal data collection or a third party to whom the data is disclosed, except when the interests of protection of fundamental rights and freedoms of respondents referred to in Article 1, paragraph 2 of this Act prevail,...”

Unlike the Directive 95/46, the previously valid Croatian Law on Personal Data Protection did not clarify legitimate interest, i.e. there were not enough parameters from the Act itself to detect legitimate interest as an appropriate legal basis. Namely, and as stated above, the cited law provided for legitimate interest as a legal basis for data processing, provided that the interests of the protection of fundamental rights and freedoms of respondents does not prevail. Given this relative vagueness of the previously valid Law on Personal Data Protection in defining and elaborating the legitimate interest of a legal or natural person, the stated legal basis may not have been so common, or it may not have even been present, in the processing of personal data of individuals in Croatia. Namely, the Croatian supervisory body responsible for the processing of personal data - the Agency for Personal Data Protection, during

1 Directive 95/46/EC of the European Parliament and of the Council, as of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31995L0046

2 Law on Personal Data Protection, NN: 106/12 – Croatian text available at: https://narodne-novine.nn.hr/clanci/sluzbeni/2012_09_106_2300.html

3 Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EZ (General Data Protection Regulation/GDPR)SL EU L119, available at link: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32016R0679

its supervisory activities since the beginning of their operations, 2004-2018, did not find that any of the legal entities used this legal basis when processing personal data of natural persons, which does not mean that the stated legal basis was not, as such, applied at all as a basis for the processing of personal data. However, according to the official response of the Croatian supervisory authority for personal data protection - the Agency for Personal Data Protection – "the application of consent was somewhat more flexibly defined and interpreted (especially in terms of validity and limitations of possible application), the notion of legitimate interest of the controller or third party, i.e. the legitimate interest of the personal data controller or a third party, was not often pointed out as the implemented legal basis for the processing of personal data, but, as a rule, other legal grounds were cited, i.e. mostly consent, cases determined by law, execution of legal obligations of the personal data controller or concluding and executing a contract in which the respondent is a party, etc."

However, the previously valid Croatian Law on Personal Data Protection, Article 21 prescribed the following:

..."For legal reasons, the respondent has the right to object to the processing of personal data relating to them, in the cases referred to in Article 7, paragraph 1, subparagraphs 6 and 7.

In the event that the objection of the respondent referred to in paragraph 3 of this Article is justified, personal data may not be further processed."

Thus, the cited Law provided for the right of an individual to oppose, for legal reasons, the processing of their personal data in cases, inter alia, if the data are processed for the legitimate interest of the personal data controller or a third party.

It should be mentioned that subparagraph 7 of Article 7, relating to the legitimate interest added by the provision of Article 5 of the Act Amending the Personal Data Protection Act (Official Gazette 130/11), entered into force on 24 November 2011.

Namely, the Croatian Personal Data Protection Act was improved in 2011, i.e. within the IPA 2007 project "Strengthening the Capacity of the Personal Data Protection Agency" (HR/2007/IB/JH/02), among other things, the Law on Personal Data Protection was revised, in accordance with the acquis in the field of personal data protection. In that sense, another legal basis was added, i.e. the mentioned legitimate interest, which was also provided for in Directive 95/46.

The mentioned Directive 95/46 provides more clarification of legitimate interest and clarifies the meaning of that in more detail in the introductory provisions. Thus, paragraph 30 of Directive 95/46 states –

...

"(30)

Whereas, in order to be lawful, the processing of personal data must in addition be carried out with the consent of the data subject....., <u>or in the legitimate interests of a natural or legal person,</u> provided <u>that the interests or the rights and freedoms</u>

of the data subject are not overriding; ; whereas, in particular, in order to maintain a balance between the interests involved while guaranteeing effective competition, Member States may determine the circumstances in which personal data may be used or disclosed to a third party in the context of the legitimate ordinary business activities of companies and other bodies...;"

Thus, the Directive 95/46 for the processing of data in the legitimate interest states, provided that the rights, interests and freedoms of the person are not infringed, the need to balance interests that guarantee effective competition, and the possibility for Member States to determine the circumstances in which personal data may be used or disclosed to a third party, in terms of the ordinary lawful business activities of the entrepreneur. The balancing test and the elaboration of a legitimate interest have been clarified by the Working Party[4] referred to in Article 29 of Directive 95/46, but this is a topic which will be dealt with separately in the next chapter - Appropriateness of a Legitimate Interest - Balancing Test.

II Appropriateness of a Legitimate Interest – Balancing Test

Legitimate interest as a legal basis is not in itself an appropriate legal basis for data processing, i.e. it is not enough to refer to the legitimate interest of the controller or a third party for the processing of personal data of individuals. Namely, in the interpretation of Directive 95/46, the Working Party, referred to in Article 29 of the cited Directive, states in its Opinion 06/2014[5] on the notion of legitimate interests of data controllers in accordance with Article 7 of Directive 95/46/EC the need to implement the so-called "Balancing test" - *"Article 7(f) is the last of six grounds for the lawful processing of personal data. In effect it requires a balancing of the legitimate interests of the controller, or any third parties to whom the data are disclosed, against the interests or fundamental rights of the data subject. The outcome of this balancing test will determine whether Article 7(f) may be relied upon as a legal ground for processing."* As stated in the cited Opinion 06/2014 - *"Article 7(f)47 calls for a balancing test: the legitimate interests of the controller (or third parties) must be balanced against the interests or fundamental rights and freedoms of the data subject. The outcome of the balancing test largely determines whether Article 7(f) may be relied upon as a legal ground for processing. It is worth mentioning already at this stage that this is not a straightforward balancing test which would simply consist of weighing two easily quantifiable and easily comparable 'weights' against each other. Rather, as will*

4 The Working Party referred to in Article 29 of Directive 95/46 was composed of representatives of all independent data protection authorities in the Member States, representatives of the European Data Protection Supervisor and representatives of the European Commission. The Working Party from Article 29 of the Directive 95/46 is now defined in Article 68 of the GDPR as the European Data Protection Board (Committee) and has legal standing. The Committee (formerly the Working Party referred to in Article 29 of Directive 95/46) monitors and ensures the proper application of this Regulation (Article 70 of the GDPR), and inter alia – examines, on its own initiative, at the request of one of its members or at the request of the Commission, all issues involving the application of the Regulation and issue guidelines, recommendations and examples of best practice to encourage consistent application of this Regulation. (Article 70, p. 1, it. e) of the GDPR)

5 Opinion 06/2014 on the notion of legitimate interests of the data controller under Article 7 of Directive 95/46/EC, dostupno na linku: https://ec.europa.eu/justice/article-29/documentation/opinionrecommendation/files/2014/wp217_en.pdf

be described below in more detail, carrying out the balancing test may require a complex assessment taking into account a number of factors."

The Opinion therefore elaborates first on what constitutes the legitimate interest of the controller or a third party, and then examines the other side of the balance - what constitutes the interests or fundamental rights and freedoms of the data subjects. The Opinion also provides guidance on how to perform the balancing test and covers the most important issues to consider when performing the balancing test, including safeguards and other measures provided by the data controller. Special mechanisms such as accountability, transparency and the right to object are also considered, which can help ensure and further strengthen an appropriate balance of different interests that could be compromised.

In short - the implementation of LIA (legitimate interest assessment) would primarily involve a description of the personal data processing operation itself - what data is collected, from whom, for what purpose, to whom it is passed, etc., then it is necessary to identify/detect the legitimate interest of the controller or third parties, and elaborate the necessity of data processing - why this processing is necessary for the controller or a third party, i.e. whether the purpose/goal of personal data processing can be achieved in some other way than the one described. In that sense, as a counterbalance to the stated processing, the rights and interests of individuals whose personal data are processed are observed, so a balancing test is performed, and an assessment is made on how the said processing affects the rights and freedoms of individuals and whether there is an alternative to the processing, or whether the processing is necessary to achieve the purpose that the processing sought to achieve.

[6]The ICO, the UK's Data Protection Supervisor, proposes a three-part balancing test and lists three important questions to be answered:

" – ***Purpose test:*** *are you pursuing a legitimate interest? Namely, there is a wide range of interests that can be classified as a legitimate interest. This may be the interest of the processing manager or a third party, a commercial interest or wider social benefits.*

- ***Necessity test:*** *is the processing necessary for that purpose? Namely, necessity implies that processing must be marked as necessary to achieve exactly that purpose, because if the purpose can be achieved by another, less invasive processing, and which achieves the same result, then we cannot talk about a legitimate interest.*

- ***Balancing test:*** *do the individual's interests override the legitimate interest? If, for example, individuals do not reasonably expect the processing of data, or if processing causes them undue harm, their interests take precedence over the legitimate interest."*

However, the legitimate interest and the interests and rights of individuals cannot always be reconciled. I believe that they cannot always be in "perfect balance", nor does the balancing test seek to achieve this. *If there is a conflict of legitimate interest and fundamental rights and freedoms of individuals, the legiti-*

6 Information Commissioner's Office - https://ico.org.uk/

mate interest may, nevertheless, prevail over fundamental rights and freedoms - as long as there is a clear justification for that legitimate interest that prevails over those rights and interests, according to the ICO.

A skillfully elaborated LIA (assessment of legitimate interest) imposes itself as the key to success in applying legitimate interest as an appropriate legal basis. However, as a precaution, I emphasize the need for a proper and thorough assessment of all circumstances, the implementation of appropriate criteria when choosing a legitimate interest, because even a well-elaborated objection of an individual can "destroy" a legitimate interest that does not rest on proper grounds, and, hence, did not anticipate their manner of exercising their rights, i.e. did not provide for appropriate protective measures and compensatory controls.

Finally, with regards to the special mechanisms cited in the Opinion 06/2014 - it is necessary to provide for protective mechanisms in the processing of personal data - the so-called safeguards and compensatory controls that achieve transparency, accountability, data protection and the right to object.

The notion of accountability, as stated in Opinion 06/2014, is closely linked to the notion of transparency. "*In order to enable data subjects to exercise their rights, and to allow public scrutiny by stakeholders more broadly, the Working Party recommends that controllers explain to data subjects in a clear and user-friendly manner, the reasons for believing that their interests are not overridden by the interests or fundamental rights and freedoms of the data subjects, and also explain to them the safeguards they have taken to protect personal data, including, where appropriate, the right to opt out of the processing. If a controller hides important information regarding unexpected further use of the data in legalistic terms buried in the small print of a contract, this may infringe consumer protection rules concerning unfair contractual terms (including the prohibition against 'surprising terms'), and it will also not fulfil the requirements of Article 7(a) for a valid and informed consent, or the requirements of Article 7(f) in terms of reasonable expectations of the data subject and an overall acceptable balance of interests.*

In that sense, Article 7(f) is based on the accountability principle. The controller must perform a careful and effective test in advance, based on the specific facts of the case rather than in an abstract manner, taking also into account the reasonable expectations of data subjects. As a matter of good practice, where appropriate, carrying out this test should be documented in a sufficiently detailed and transparent way so that the complete and correct application of the test could be verified - when necessary - by relevant stakeholders including the data subjects and data protection authorities, and ultimately, by the courts. The controller will first define the legitimate interest and make the balancing test, but this is not necessarily the final and definitive assessment: if, in reality, the interest pursued is not the one that was specified by the controller or if the controller only defined the interest in insufficient detail, the balance has to be re-assessed, based on the actual interest, to be determined either by a data protection authority or by a Court. As is the case for other key aspects of data protection, such as the identification of the data controller or the specification of purpose, what matters is the reality behind any assertion made by the controller."

Opinion 06/2014 – states *"Article 14 of the Directive provides the data subject 'can object at any time on compelling legitimate grounds relating to his particular situation to the processing of data relating to him'. It adds that if the objection is justified the processing of their data must cease. This should not be seen as contradicting the balancing test of Article 7(f), which is made 'a priori': it rather complements the balance, in the sense that, where the processing is allowed further to a reasonable and objective assessment of the different rights and interests at stake, the data subject still has an additional possibility to object on grounds relating to his/her particular situation. This will then have to lead to a new assessment taking into account the particular arguments submitted by the data subject. This new assessment is in principle again subject to verification by a data protection authority or the courts."*

In conclusion - when choosing legitimate interest as a legal basis for data processing - it is advisable to make the following checklist, which was excellently compiled by the ICO -

- *We have identified legitimate interest as the most appropriate legal basis;*
- *We understand our responsibility to protect the rights of individuals;*
- *We have conducted a Legitimate Interest Assessment (LIA) and are keeping a record of this to ensure that our decision in choosing the stated legal basis is well-founded/justified;*
- *We have identified relevant legitimate interests;*
- *We checked and found that the processing is* ***necessary*** *to achieve the sought purpose and there are no less invasive processing options that can achieve the same result;*
- *We have also conducted a balancing test and are convinced that the interests of individuals do not prevail over the legitimate interest;*
- *We only use data from individuals in a way that they can reasonably expect, unless we have a particularly good reason to act differently;*
- *We are not using the data of individuals in a way that would be invasive or could cause harm to them, unless there is a particularly good reason;*
- *If we process children's data, we take special care to protect their interests;*
- *We take protective measures to reduce the impact of this treatment - whenever possible;*
- *We have considered the possibility of choice - the so-called. opt out options.*
- *If our LIA determines a significant impact on the privacy of an individual, we also consider the need to implement the so-called DPIA, (Data Protection Impact Assessments);*
- *The LIA is subject to periodic inspections and is repeated if circumstances change;*
- *We include information on legitimate interest in information about the processing of personal data.*

Legitimate Interest as a Legal Basis in Accordance with the GDPR

Legitimate interest as a legal basis for the processing of personal data of individuals is prescribed by Article 6, paragraph 1, item (f) of the GDPR. This article stipulates that processing is lawful if, inter alia – *"processing is necessary for the legitimate interests of the controller or a third party, unless those interests are stronger than the interests or fundamental rights and freedoms of respondents requiring the protection of personal data, especially if the respondent is a child."*

The GDPR, in the introductory provisions - preamble 47, clarifies the meaning of a legitimate interest – "*The legitimate interests of a controller, including those of a controller to which the personal data may be disclosed, or of a third party, may provide a legal basis for processing, provided that the interests or the fundamental rights and freedoms of the data subject are not overriding, taking into consideration the reasonable expectations of data subjects based on their relationship with the controller. Such legitimate interest could exist for example where there is a relevant and appropriate relationship between the data subject and the controller in situations such as where the data subject is a client or in the service of the controller. At any rate the existence of a legitimate interest would need careful assessment including whether a data subject can reasonably expect at the time and in the context of the collection of the personal data that processing for that purpose may take place. The interests and fundamental rights of the data subject could in particular override the interest of the data controller where personal data are processed in circumstances where data subjects do not reasonably expect further processing. Given that it is for the legislator to provide by law for the legal basis for public authorities to process personal data, that legal basis should not apply to the processing by public authorities in the performance of their tasks. The processing of personal data strictly necessary for the purposes of preventing fraud also constitutes a legitimate interest of the data controller concerned. The processing of personal data for direct marketing purposes may be regarded as carried out for a legitimate interest.*"

A legitimate interest, as shown in the preamble, can serve as an appropriate legal basis in cases where individuals reasonably expect the processing of their personal data, especially on the basis of a special relationship with the controller - because they are, for example, the controller's clients (e.g. bank clients and/or are in the service of the processing manager - e.g. employees). If, for example, a bank client is a borrower in that bank, and also uses some other services, the bank's legitimate interest is to offer them other suitable products that could be of interest to the client in question. The customer can reasonably expect the bank to offer these products. In these cases, I believe - consent would not be an appropriate legal basis - because, as the GDPR provides - "*there may be a legitimate interest in the processing of personal data carried out for direct marketing purposes*". Ultimately, it may be in the interest of the client - informing about the appropriate banking products, and in that case processing would not jeopardize their rights and interests, since the bank already processes their data, the client can reasonably expect to be informed of the above, and in addition, the client may, at any time, object to such processing, in accordance with Article 21, paragraph 2 of the GDPR, after which the Bank should immediately stop such processing of personal data, so the individual has full control over the processing of personal data, and has protection mechanisms. The said provision prescribes – *"Where personal data are processed for direct marketing purposes, the data subject shall have the right to object at any time to processing of personal data concerning him or her for such marketing, which includes profiling to the extent that it is related to such direct marketing.*

Where the data subject objects to processing for direct marketing purposes, the personal data shall no longer be processed for such purposes."

However, it is certainly necessary to point out a special regulation that applies in this case in the Republic of Croatia, and that is the Law on Electronic Communications[7], which in cases of direct marketing via e-mail, in Article 107, paragraph 2 - provides for the so-called opt-out option, provided that there is an appropriate relationship between the processing manager and the client. Article 107, paragraph 2 provides as follows – *"(2) A natural or legal person of a trader may use the data of e-mail addresses, which he has obtained from his consumers for the purpose of selling products and services, for direct promotion and sale of his own similar products or services, provided that these consumers have a clear and unequivocal possibility of free a simple objection to such use of data on e-mail addresses on the occasion of their collection and on receipt of each electronic message, in the event that the consumer has not previously refused such use of the data."*

Thus, the cited article does not require the consent of the client or consumer, but it is possible to use their e-mail, for direct marketing purposes, but provided that they have not objected in advance to the processing of their personal data for this purpose, which implies that they were informed about the processing.

A legitimate interest as an appropriate legal basis for the processing of personal data also exists in the case of data processing between a group of entrepreneurs - e.g. data processing between a subsidiary and a parent company for internal administrative purposes - as clearly stated in section (48) of the GDPR introduction.

"Controllers that are part of a group of undertakings or institutions affiliated to a central body may have a legitimate interest in transmitting personal data within the group of undertakings for internal administrative purposes, including the processing of clients' or employees' personal data. The general principles for the transfer of personal data, within a group of undertakings, to an undertaking located in a third country remain unaffected."

In this particular case, it could be the processing of personal data of employees - e.g. insight into the personal files of employees by the parent company and/or the system for calculating salaries paid by the subsidiary to its employees can be located at the company's headquarters - the parent company. The GDPR clearly stipulates that, in this case, and despite the existence of a legitimate interest, the general principles for the transfer of personal data must be followed if one of the companies listed is located in a third country.

7 Law on Electronic Communications, NN 73/08, 90/11, 133/12, 80/13, 71/14, 72/17

Preamble 69 further clarifies that, in cases of processing of data on the basis of a legitimate interest, each individual has the right to object to the processing of any personal data related to their particular situation. Whether the rights and interests of the individual or the legitimate interest of the controller will take precedence at a given moment - depends on whose interests are stronger. Namely, the burden of proof of lawful and fair processing is on the controller and, in that sense - and as it undoubtedly follows from the cited preamble 69 – "*It should be for the controller to demonstrate that its compelling legitimate interest overrides the interests or the fundamental rights and freedoms of the data subject*."

This provision does not apply, however, when personal data are processed for direct marketing purposes, including the creation of profiles. In that case, if the respondent objects to such processing - the controller must immediately stop further processing of their personal data. The right to object to such processing should be explicitly made known to individuals and presented to them clearly and separately from all other information - so that they can successfully exercise their rights.

Conclusion

A legitimate interest is one of the legal bases for the processing of personal data of individuals. Due to the lack of predictability and exactness, as well as a certain flexibility, many attribute to it the possibility of legal uncertainty and manipulation. However, legitimate interest is an equal legal basis in relation to other legal bases provided for in Article 6 of the GDPR - provided that its aim is not the abuse of rights, but that the right criteria are truly applied in determining it and that all other preconditions provided by the GDPR are met, with due regard and guidance from Opinion 06/2014.

Practice unfortunately shows that a legitimate interest is often mistakenly and completely erroneously replaced by consent as a legal basis in the processing of personal data. This seems to be due to a possible misunderstanding of its nature or the search for, at first glance, "simpler" and faster solutions. It should be emphasized, however, that consent is a weaker legal basis than legitimate interest. Firstly, if certain data processing is really necessary to achieve the appropriate purpose, then, if consent is used as a legal basis - its most important element is missing - freedom of will, voluntariness, and if individuals give consent, due to subordinate/unequal treatment by the controller (e.g. employment relationship) or e.g. some other simmilar relationship where there is a significant imbalance between the controller and the individual - this consent is, de facto, conditional and does not comply with the conditions of consent defined in Article 7 of the GDPR. Furthermore, even if there is no imbalance in the relationship in a particular case, but data processing is still necessary - in case of using consent as a legal basis - there is a risk of denial of consent or subsequent withdrawal of consent - as a result of which personal data cannot be processed. In this sense, there is a legitimate interest - certainly a more appropriate and stronger legal basis – because, in case of falling back on legitimate interest, the controller has control over the processing of personal data and thus in case of objections of individuals to data processing based on legitimate interest, they will still be able to process data, if they prove that the legitimate interest is demonstrably stronger than the interest of individuals, their freedoms and rights. They will prove this with an appropriate document - LIA (Assessment of Legitimate Interest) where they will clearly explain the existence of their legitimate interest.

When using the grounds of legitimate interest, the transparency and responsibility of the processing manager and their informed attitude towards individuals are very important. Namely - practice shows that a large number of cases of complaints or conflicts between individuals and controllers stem from the lack of information the individuals receive, or the non-transparent conduct of the controller, which can very often lead to a potentially wrong conclusion that controllers commit some illegal actions related to data processing, conceal real intentions, etc. A transparent attitude of the controller implies full disclosure of information and fair access to individuals, which means providing appropriate information on the specific use of legitimate interest, as a legal basis for data processing, as defined by Article 14, paragraph 2 of the GDPR, all the while using a simple language that individuals can understand. Furthermore, transparency and accountability include giving individuals control over the processing of their personal data and anticipating and informing about these control mechanisms: opportunities for complaints that individuals may raise regarding the processing of their personal data, informing them about their rights and opportunities to contact the competent supervisory authority, if they believe that the processing of data is illegal, in which case the control of the legality of the processing of personal data will be assessed and reviewed by the supervisory authority and finally, perhaps, the court.

Finally, the legitimate interest will "fail" the test of legality of data processing as a legal basis, if the processing of personal data is not imposed as necessary, and if there is undoubtedly less invasive data processing options that can achieve the same result. For example - if the controller has introduced video surveillance and/or fingerprint scanning to monitor entering and leaving a building – to control of working hours - it will be difficult to justify this with legitimate interest - since the purpose of data processing can be achieved by a less invasive method. However, when using a legitimate interest - and when all the conditions are met (necessity, implementation of LIA and other criteria) it is certainly very important to take into account the scope of personal data - because if the processing of personal data is justified - it may prove unjustified and unfounded to use a wider range of personal data than is necessary to achieve the purpose. In that sense, here is the stance[8] of the Croatian supervisory body on the use of legitimate interest in the processing of personal data expressed in the opinion – "*Regarding your question related to photographs and public disclosure of personal photos and/or videos of persons attending an event organized by your company, the Agency points out that such processing could be considered a legitimate interest of the controller, unless the interests or fundamental rights and freedoms of the respondent requiring the protection of personal data prevail, especially if the respondent is a child. This means*

8 Legitimate interest - https://azop.hr/misljenja-agencije/detaljnije/legitimni-interes

that the processing manager should perform a proportionality test before starting processing. We point out that the respondents who attend a certain event need to be informed in advance that they will be photographed and/or recorded and that their personal data will be made public (photos, videos), and in addition it is necessary to take all other actions to protect the privacy of participants.

In this regard, we point out that it is possible to find a legal basis for photographing visitors in Article 6, paragraph 1, item f of the General Regulation, and only if the processing is necessary for a legitimate purpose and is in accordance with the principles of proportionality and subsidiarity.

Following the above, and following your inquiry about photographing the participants (guests and escorts), we point out that this is possible, provided that they have been previously informed about the photographing itself and the intention to publish the photos on social networks. However, a legitimate interest is not applicable to photographing passers-by in public areas."

Analogously, the legitimate interest of a natural person is, for example, to place a camera in front of their own front door, in order to prevent burglary. However, if the camera is set up in such a way that it also records/spies on the entrance to the surrounding apartments – that is exceeding the limits of legitimate interest or necessity.

A legitimate interest is a valid legal basis under the assumptions of relevance (correct detection of a legitimate interest), transparency and accountability, and necessity and proportionality.

References

1. Directive (EU) 2016/679 of the European Parliament and of the Council as of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation/GDPR) SL EU L119, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32016R0679
2. Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31995L0046
3. Law on Electronic Communications, NN 73/08, 90/11, 133/12, 80/13, 71/14, 72/17
4. Law on Personal Data Protection, NN: 106/12 – refined version, available at: https://narodne-novine.nn.hr/clanci/sluzbeni/2012_09_106_2300.html
5. Official pages of AZOP, the Croatian supervisory body for data protection, Legitimate interest - https://azop.hr/misljenja-agencije/detaljnije/legitimni-interes
6. Official pages of ICO, the supervisory body for data protection, Great Britain - Information Commissioner's Office - https://ico.org.uk/
7. Opinion 06/2014 on the notion of legitimate interests of the data controller under Article 7 of Directive 95/46/EC, available at: https://ec.europa.eu/justice/article-29/documentation/opinionrecommendation/files/2014/wp217_en.pdf

BEOGRADSKA BERZA
BELGRADE STOCK EXCHANGE

Barometar / Barometer

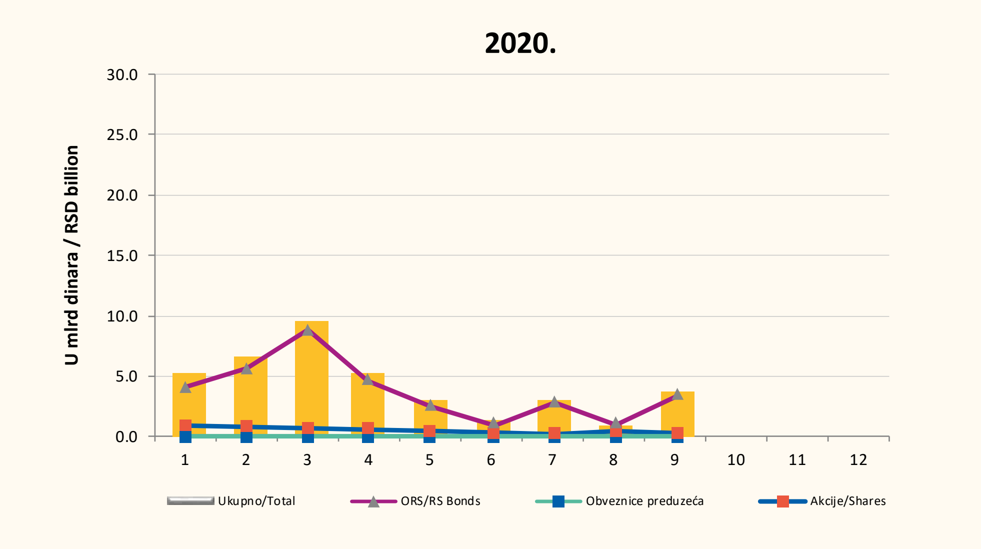
JANUAR 2020 – SEPTEMBAR 2020. / JANUARY 2020 – SEPTEMBER 2020

1. PROMET / TURNOVER

Mesec/Month	Listing	Open Market	Regulisano tržište/ Regulated market	MTP/MTF	Ukupno/Total	Broj transakcija/ Number of transactions
Septembar 2020	3.451.939.927	10.300.290,00	3.462.240.217	41.511.949,00	3.503.752.166	1.009,00
Avgust 2020	769.981.610	25.293.837,00	795.275.447	23.454.407,00	818.729.854	1.167,00
Jul 2020	2.732.815.873	33.352.111,00	2.766.167.984	29.191.898,00	2.795.359.882	1.238,00
Jun 2020	1.284.277.059	61.939.404,00	1.346.216.463	18.295.881,00	1.364.512.344	1.862,00
Maj 2020	3.095.888.499	54.226.931,00	3.150.115.430	3.021.914,00	3.153.137.344	1.384,00
April 2020	5.307.696.037	103.385.875,00	5.411.081.912	11.449.781,00	5.422.531.693	1.039,00
Mart 2020	9.030.036.635	131.788.131,00	9.161.824.766	267.102.814,00	9.428.927.580	2.180,00
Februar 2020	5.854.541.955	538.203.366,00	6.392.745.321	80.558.729,00	6.473.304.050	1.718,00
Januar 2020	4.298.544.657	66.229.693,00	4.364.774.350	687.189.262,00	5.051.963.612	1.826,00
Decembar 2019	9.839.474.538	23.568.588,00	9.863.043.126	43.301.493,00	9.906.344.619	2.222,00
Novembar 2019	26.582.250.140	2.803.970.842,00	29.386.220.982	298.387.620,00	29.684.608.602	2.506,00
Oktobar 2019	1.402.760.533	194.835.647,00	1.597.596.180	341.111.753,00	1.938.707.933	3.532,00
Ukupno 12 meseci / 12-Month Total*	73.650.207.462	4.047.094.715,00	77.697.302.177	1.844.577.501,00	79.541.879.678	21.683,00

*RSD

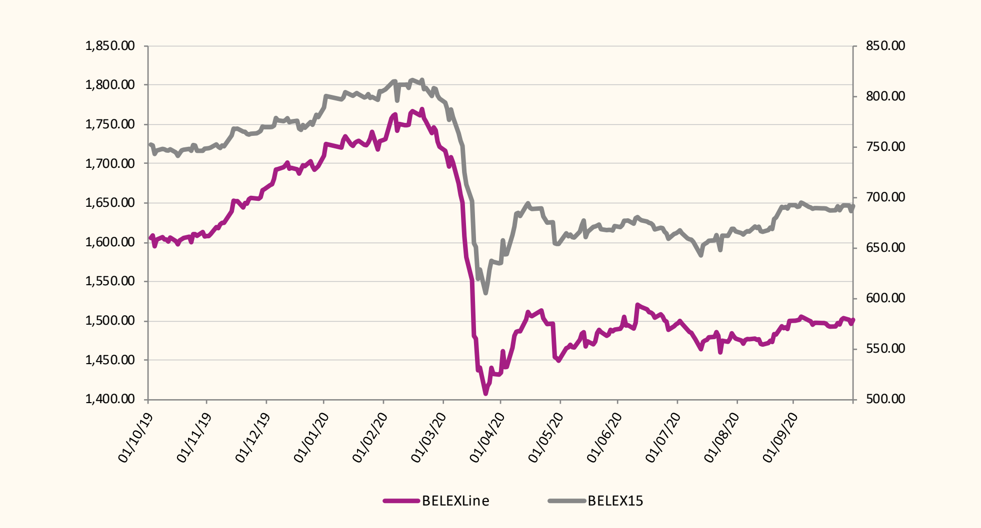
Grafikon / Graph 1: Promet / Turnover



2. *INDEKSI / INDICES*

		BELEX15	BELEXline
Januar/Septembar 2020. January/September 2020	Poslednja vrednost / Last value	692,93	1.503,29
	Promena (abs) / Change (abs)	-108,76	-223,53
	Promena (%) / Change (%)	-13,57%	-12,94%
	Najviša vrednost / Maximum value	818,75	1.771,27
	Najniža vrednost / Minimum value	605,30	1.409,41
	Istorijski max / History maximum value	3.335,2	5.007,34
	Istorijski min / History minimum value	347,46	841,99
	Vrednost prometa / Value of turnover	2.071.369.312	2.267.946.171

Grafikon / Graph 2: Indeksi / Indices



3. TRŽIŠNA KAPITALIZACIJA / MARKET CAPITALISATION

	Jul / July	Avgust / August	Septembar / September
Ukupna tržišna kapitalizacija/ Total market capitalisation	479.709.073	488.381.790	488.297.264
Regulisano tržište/Regulated Market	257.031.457	267.177.243	267.313.151
Listing	187.669.682	197.753.182	197.587.649
Prime Listing – akcije/ Prime Listing – shares	141.530.583	147.506.674	147.340.863
Standard Listing – akcije/ Standard Listing - shares	46.139.099	50.246.508	50.246.785
Open Market	69.361.775	69.424.061	69.725.502
MTP/MTF	222.677.616	221.204.548	220.984.113
BELEX15	198.701.617	209.135.530	208.581.777
BELEXline	236.494.676	246.113.101	246.185.234

**u hiljadama RSD / in RSD thousands*

4. UČEŠĆE STRANIH INVESTITORA / FOREIGN INVESTORS PARTICIPATION

	Učešće stranih investitora / Foreign Investors Participation		
Januar/Septembar 2020. January/September 2020	FIS	total	34,84%
		b-FIS	20,20%
		s-FIS	49,49%
	FIB		14,76%
	FIT		16,48%

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