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## DIGITALIZACIJA BANKARSKOG SEKTORA I ULOGA UDRUŽENJA BANAKA SRBIJE

**Srđan Zec**

Specijalista za informatiku i digitalno bankarstvo Udruženje banaka Srbije

Porast onlajn trgovine, povećanje broja kredita koji se odobravaju „na daljinu“, i uvođenje novih servisa poput video onboardinga, prenosa računa i prenosa sredstava putem mobilnih telefona, pokazuju spremnost banaka i regulatora da finansijsko tržište Srbije učine savremenim i usklade ga sa najnovijim trendovima u Evropi.

Udruženje banaka Srbije, pored aktivnog učešća u pomenutim projektima digitalizacije ali i nekim drugim, kao što su IPS, razmena podataka sa državnim institucijama i unapređenje portala eUprave, predstavlja zajednički glas svih banaka i svoju ulogu, između ostalog, pokazuje zauzimajući se za jačanje saradnje banaka i države sa fintek industrijom.

Smatram da time predstavljamo pokretačku energiju koja neminovno donosi promene, kako u poslovnom i tehnološkom pogledu, tako i načinu razmišljanja i promenama starih navika.

U tom smislu, Udruženje među svojim članicama konstanto sprovodi konsultacije, ankete i inicijative, kako bi iz prve ruke došlo do jasnog sagledavanja potreba banaka u procesu unapređenja poslovanja, ali i poboljšanja samog korisničkog iskustva, kao imperativa.

Nastavljajući dosadašnju praksu, stručni odbori za informatiku i digitalno bankarstvo Udruženja banaka Srbije i u ovoj godini planiraju da otvore nekoliko razvojnih projekata, kojima bi se nastavila praksa zajedničkog uvođenja digitalnih usluga između bankarskog sektora i države.

U tom svetlu moram pomenuti upravo završen projekat „Moji podaci za moju banku“, koji su banke razvile zajedno sa eUpravom i Kancelarijom za implementaciju strateških projekata pri Vladi RS. Radi se o projektu digitalne razmene podataka o građanima, klijentima banaka koji apliciraju za keš kredite, sa ciljem da se klijentima pojednostavi čitav proces i smanji vreme prikupljanja neophodne dokumentacije.

Pored konstantnog rada na razvoju novih i unapređenju postojećih servisa, Udruženje banaka Srbije veliki značaj polaže na obrazovanje, kako šire populacije koja ulazi u svet digitalnog bankarstva, tako i naših kolega sa prve linije podrške, koji su u neposrednom kontaktu sa klijentima. Naravno, nikako ne smemo zaboraviti i razmenu znanja i ekspertize koja se konstanto odvija između banaka na našim stručnim savetovanjima, gde su pokrivene teme od veštačke inteligencije i blokčejn tehnologije, do Big Data i PSD2.

Namerno ne pominjem okolnosti pod kojima živimo poslednjih godinu dana. Ne potcenjujem uticaj koji pandemija svakodnevno ima na sve nas, ali razvoj digitalizacije i novih tehnologija, konstantno učenje i prihvatanje novog načina razmišljanja, su procesi ipak malo stariji od ove pošasti. Vreme koje je pred nama pokazaće koliko smo bili vredni i intuitivni i koliko će nam se predviđanja poklopiti sa našim stvarnim potrebama ili nepredviđenim okolnostima.





## DIGITALISATION OF THE BANKING SECTOR AND THE ROLE OF THE ASSOCIATION OF SERBIAN BANKS

**Srđan Zec**

Information Technologies and Digital Banking Specialist

The increase in online commerce, the increase in the number of loans granted “remotely”, and the introduction of new services such as video onboarding, account transfers, and transfers of funds via mobile phones, show the readiness of banks and regulators to make the financial market of Serbia modern and more in line with the latest European trends.

The Association of Serbian Banks, in addition to its active participation in the mentioned digitalisation projects, as well as some others, such as IPS, data exchange with state institutions and the improvement of the eGovernment portal, represents the common voice of all banks and fulfils its role, among other things, by strengthening the cooperation of banks and the state with the fintech industry.

I believe that we are, thus, the driving energy that inevitably brings forward change, both in terms of business and technology, as well as in terms of changing our conceptualisation and old habits.

In that sense, the Association constantly conducts consultations, surveys, and initiatives among its members, in order to get a clear overview of the banks’ needs in the process of improving business, as well as to improve the user experience, as an imperative.

Continuing their current practice, the expert committees for information technologies and digital banking of the Association of Serbian Banks plan to open several development projects this year as well, which would continue the practice of joint introduction of digital services between the banking sector and the state.

In that light, I must mention the recently completed project “My Data for My Bank”, which the banks developed together with the eGovernment portal and the Strategic Project Implementation Unit within the RS Government. It is a project of digital exchange of data on citizens, bank clients who apply for cash loans, with the aim of simplifying the entire process for the clients and reducing the time frame necessary for collecting the needed documentation.

In addition to its continuous work on the development of new services, and the improvement of existing ones, the Association of Serbian Banks lends great significance to education, both when it comes to the wider population entering the world of digital banking, and when it comes to our colleagues from the first line of support, who are in direct contact with clients. Of course, we must not forget the exchange of knowledge and expertise that is constantly taking place between banks at our expert conferences, where we cover topics from artificial intelligence and blockchain technology, to Big Data and PSD2.

I intentionally refused to mention the circumstances under which we have been living for the past year. I do not underestimate the impact that the pandemic has on all of us, on a daily basis, but the development of digitalisation and new technologies, the constant learning and acceptance of a new way of thinking, are processes which are still older than this pandemic. Time will tell how diligent and intuitive we have been, and how much our predictions will match our real needs or unforeseen circumstances.



# MOGUĆNOST PRIMENE I PREDNOSTI BANKOOSIGURANJA: EVIDENCIJA TRŽIŠTA BANAKA I OSIGURANJA U BOSNI I HERCEGOVINI

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## Rezime

*Bankoosiguranje je termin koji se koristi za opis partnerstva ili odnosa između banke i osiguravajuće kompanije, pri čemu osiguravajuće društvo koristi bankarski kanal prodaje za prodaju proizvoda osiguranja. Sprovođenje aktivnosti bankarskog osiguranja u finansijskom sistemu doprinosi jačanju konkurentnog okruženja, razvoj novih proizvoda u osiguranju i većem zadovoljenju potrebe klijenata. Osnovni cilj ovog istraživanja je da se ukaže na važnost i značaj primene bankoosiguranja za obe finansijske institucije kroz analizu finansijskih indikatora poslovanja, kako banaka, tako i osiguravajućih kompanija kroz prizmu prihoda i troškova. Takođe, kroz ovo istraživanje je predstavljena ekonometrijska analiza putem koje se testira uticaj ostalih prihoda, stope rasta profita/gubitka, kao i odnosa troškova i prihoda kao nezavisnih varijabli i njihov uticaj na zavisnu varijablu, odnosno povrat na aktivu banaka u Bosni i Hercegovinu. Rezultati ekonometrijske analize su pokazali da ostali prihodi imaju najveći uticaj na profitabilnost banaka u BiH. Najslabiji uticaj na profitabilnost banaka ima odnos troškova i zarade.*

**Ključne reči:** banka, osiguranje, bankoosiguranje, performanse, ekonometrijska analiza.

**JEL klasifikacija:** G21, G22.

## Uvod

Jedna od najvažnijih odlika savremenih finansijskih tržišta jeste sinergija ili sjedinavanje koje nastaje između finansijskih institucija koje vrše različite funkcije. Saradnja između banaka i osiguravajućih društava predstavlja jedan od važnijih primjera ove konvergencije. Banke su sve više postale supermarketi finansijskih proizvoda i usluga. Širenje asortimana proizvoda učinilo je banke konkurentnijim i dovelo je do njihovog napora u pravcu zadovoljstva klijenata. Pružanje usluga osiguranja donosi značajne koristi u inicijativama za izgradnju lojalnosti kupaca (Boyer ve Nyce, 2002). Termin bankoosiguranje prvi put je upotrebljen 90-ih godina prošlog veka u Francuskoj, gde je saradnja između banaka i osiguravajućih društava počela ranije nego u drugim evropskim zemljama. U to vreme bankoosiguranje je služilo kao kanal jednostavne distribucije proizvoda osiguranja po filijalama banaka. Vremenom se ovaj koncept razvijao sa sve većom popularnošću saradnje između osiguravajućih društava i banaka i počeo je da se koristi za opisivanje svih vrsta odnosa između bankarskog i sektora osiguranja (Hoschka, 1994). Bankarsko osiguranje se razvija najvećom brzinom u zemljama Evropske unije, Australije i SAD-u. Postojeće bankarske infrastrukture omogućavaju smanjenje troškova od 30 do 50% u odnosu na klasična osiguranja. Preko bankarskog osiguranja može se prodati od 3 do 5 puta više polisa osiguranja nego putem standardne prakse prodaje polisa osiguranja (Kočović, i ostali, 2010).

Uopšteno, pojam bankarskog osiguranja definiše se kao distribucija proizvoda i usluga od strane banaka. Brojni akteri bankarskog osiguranja širom svijeta izvršavaju različite operacije sa različitim strukturama. Bankoosiguranje je važan kanal za distribuciju poznatih proizvoda i usluga osiguranja privatnim i komercijalnim kupcima, te izuzetno uspešna distribucija u poljima komercijalnog osiguranja, osiguranja investitora ili osiguranja partnera.

Mnogi stručnjaci su mišljenja da će model bankoosiguranja biti uspješniji u lokalnom okruženju kada bude prilagođen. Banke i osiguravajuća društva imaju komparativne prednosti i slabosti od novog koncepta bankoosiguranja. Takođe, navodi se da ako se transakcijama bankarskog osiguranja ne upravlja pažljivo, te ako se ne odabere adekvatni model, u konačnici mogu nastati ozbiljni sporovi između odabranih strana. S tim u vezi, jasno je da se moraju donjeti novi propisi između banaka i osiguravajućih društava u oblastima proizvodnje, distribucije i korporativne strategije za sigurnost finansijskog sistema, te celokupni uspeh. Uspeh prakse bankarskog osiguranja na kraju je problem koji zavisi od same primene. Međutim, zajednički interesi i banaka i osiguravajućih društava mogu se elaborirati kao najosnovnija dinamika koja je sine qua non buduće primene. Ideja bankarskog osiguranja zasniva se na sličnostima između bankarskih i osiguravajućih aktivnosti, jer se banke i osiguravajuće kompanije oslanjaju na koristi od ekonomije obima, imaju iskustva u upravljanju novcem i stvaranju potrebnih rezervi. Obe vrste institucija stvaraju finansijsku likvidnost i preuzimaju funkciju raspodele rizika putem reosiguranja ili refinansiranja (Genety & Molyneux, 1998).

Jedno od opšte prihvaćenih pitanja u vezi sa bankoosiguranjem, a koje će se sprovesti kroz ekonometrijsku analizu odnosi se na to: *Da li ovaj oblik saradnje poboljšava finansijske performanse poslovanja banaka zasnovane na profitabilnosti?* Takođe, često se postavlja pitanje zbog čega su proizvodi životnog osiguranja zastupljeniji u bankoosiguranju u odnosu na neživotna osiguranja? Jedan od esencijalnih razloga odnosi se na to da su životna osiguranja i bankarske usluge skupa usmerene ka akumulaciji sredstava i daljem njihovom upravljanju. Sledeći razlog je dobro razumevanje finansijske situacije klijenta i njihovih potreba, od strane banaka. Isto tako, sledeći razlog bi mogao biti i prodaja stambenih kredita, kod kojih je jedan od glavnih uslova za zaključivanje datog ugovora i zaključivanje ugovora o životnom osiguranju (Čolović, 2020).

Rad je dizajniran iz pet delova. Prvi deo odnosi se na uvodna razmatranja sa fokusom na važnost bankoosiguranja, kako za banke, tako i za osiguravajuća društva. Drugi deo opisuje modalitete bankoosiguranja, te na mogućnost primene nekog od predstavljenih. Treći deo se odnosi na primenu komparativne analize kroz analizu odabranih indikatora sektora osiguranja i banaka u Bosni i Hercegovini. Kroz četvrti deo je predstavljeno stanje i karakteristike bankoosiguranja u Bosni i Hercegovini, te pravni okvir koncepta bankoosiguranja. Peti deo elaborira ekonometrijsku analizu i rezultate istraživanja, i daje određena zapažanja i preporuke.

## Modaliteti bankarskog osiguranja

I pored toga što se bankosiguranje razlikuje od zemlje do zemlje, obično se transakcije izvršavaju u okviru tri osnovna modela. Kao prvi model navodi se ugovor o distribuciji (engl. *distribution agreement*), kao drugi model javlja kao zajedničko ulaganje ili potpuna integracija (engl. *joint venture*), i kao treći model mogu se javiti modeli poput: unakrsnog udela, sticanja, osnivanja nove kompanije (Vlolaris, 2001). U nastavku teksta će biti ukratko pojašnjena ova tri modela.

- **Ugovori o distribuciji.** Kod ovog modaliteta bankoosiguranja, banke se javljaju u ulozi kanala distribucije jedne ili više osiguravajućih kompanija. Ovaj model ima široku primenu u zemljama kao što su SAD, Nemačka, Engleska, Japan i Južna Koreja.
- **Zajedničko ulaganje.** Ovo ulaganje može se sažeti kao oblik partnerstva između jedne ili više osiguravajućih kompanija ili društava i banaka po različitim osnovama. Uprkos važnoj prednosti saradnje između institucija, vrlo je teško upravljati dugoročno. Ova praksa nailazi na primenu u Italiji, Španiji, Portugaliji i Južnoj Koreji.
- **Potpuna integracija** je koncept stvaranja nove dilerske mreže. Prednost se ogleda u usvajanju iste korporativne kulture. Ovakav koncept zahteva veliku količinu ulaganja i napora. Široko se primenjuje u Francuskoj, Španiji, Belgiji, Velikoj Britaniji i Irskoj.
- **Međusobni prenos akcija.** Ovakav koncept zasniva se na sporazumu između banaka i osiguravajućih društava o razmeni akcija, tako da banke i osiguravajuće kuće imaju predstavnike ili članove u upravnom odboru.
- **Akvizicija ili spajanje** je slično modelu potpune integracije, te se odnosi na potpuno ili delimično vlasništvo banaka nad osiguravajućim kućama.
- **Nova kompanija ili preduzeće.** Ovaj koncept se odnosi na stvaranje nove osiguravajuće kuće od strane banke. Ovakav način inicijative zahteva značajnu alokaciju kapitala i drugu logističku podršku. Isto tako, ima značajan komercijalni rizik.
- **Vlasništvo** se klasifikuje kao grupacija kompanija ili holding. Dakle, holding posjeduje i banku i osiguravajuće kuće, koristeći ih u svojoj prijavi za bankarsko poslovanje. Ovakav primer nailazi sa mnoštvo primera primene u svetu, što bi eventualno mogao biti dobar koncept i u Bosni i Hercegovini.

Tabela 1 - Pogodnosti za banke i osiguravajuća društva od alternativnih bankarsko-osiguravajućih struktura

| Pogodnosti za banke                                                                                                                          | Ugovor o distribuciji | Zajednička ulaganje | Potpuna integracija |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------|---------------------|
| Osiguranje dodatnog i stabilnijeg toka prihoda kroz diversifikaciju u osiguranje, te smanjenje oslanjanja na kamate kao glavni izvor prihoda | ✓                     | ✓                   | ✓                   |
| Iskoristiti njihovu široku bazu klijenata te povećanje zadržavanja kupaca                                                                    | ✓                     | ✓                   | ✓                   |
| Prodaja čitavog niza finansijskih usluga klijentima                                                                                          |                       | ✓                   | ✓                   |
| Smanjivanje kapitalnog zahtjeva zasnovanog na riziku za isti nivo prihoda                                                                    | ✓                     |                     |                     |
| Radi se na pružanju integrisanih finansijskih usluga prilagođenih životnom ciklusu kupca                                                     |                       | ✓                   | ✓                   |
| Pristupiti fondovima koji se inače bave životnim osiguranjem i koji ponekad imaju koristi od poreskih olakšica                               |                       | ✓                   | ✓                   |
| Koristi za osiguravajuća društva                                                                                                             | Ugovor o distribuciji | Zajednička ulaganje | Potpuna integracija |
| Iskorišćenje ogromne baze klijenata banke                                                                                                    | ✓                     | ✓                   | ✓                   |
| Smanjivanje oslanjanja na tradicionalne agente korišćenjem različitih kanala u vlasništvu banaka                                             | ✓                     | ✓                   | ✓                   |
| Podela usluga sa bankama                                                                                                                     |                       | ✓                   | ✓                   |
| Efikasnije razvijanje novih finansijskih proizvoda u saradnji sa svojim bankarskim partnerima                                                | ✓                     |                     |                     |
| Brzo uspostavljanje prisustva na tržištu bez potrebe za izgradnjom mreže agenata                                                             |                       | ✓                   | ✓                   |
| Dobiti dodatni kapital od banke kako bi poboljšali svoju solventnost i proširili poslovanje                                                  |                       | ✓                   | ✓                   |

Izvor: Swiss Re

Veliki broj faktora pokreće izbor odgovarajuće strukture. Za početak svako nacionalno tržište ima svoj profil – primera radi relativnu veličinu i strukturu bankarskog i sektora osiguranja, kao i različita regulatorna i poreska okruženja. Takođe, važna je i strategija menadžmenta, odnosno da li je jedinica za osiguranje banke sastavni deo maloprodajne strategije i odnosa sa klijentom, ili je osiguranje još jedan proizvod koji se prodaje kao deo celokupnog niza. Odluka da se kapital uloži u određeni posao je pre svega funkcija relativnog prinosa banaka i osiguravajućih društava. Na većini tržišta prinos na kapital osiguranja proračunat je korišćenjem bankarske računovodstvene prakse i bio je niži od bankarskog poslovanja, što je mnoge banke natjeralo da se usredsrede na distribuciju, a ne na maržu poslovanja. Konačno, različiti stavovi se mogu zauzeti u različitim periodima o vrednostima operativne integracije. Tako su na tržištima Beneluksa nekoliko današnjih glavnih igrača u bankarskom osiguranju započeli život kao čisti finansijski konglomerati, ali su kasnije integrisali svoje operativne jedinice.

## Komparativna analiza izabranih indikatora sektora osiguranja i banaka u Bosni i Hercegovini

Dva jako bitna indikatora koja prate razvoj tržišta životnog osiguranja su svakako: tržišna penetracija i gustina tržišta. Tržišna penetracija proračunava se kao odnos premije osiguranja i bruto domaćeg proizvoda posmatrane zemlje.

Tabela 2 - Analiza indikatora razvijenosti sektora tržišta osiguranja u zemljama u razvoju, zemljama članicama EU i razvijenim zemljama za period: 2013 – 2018

| Penetracija tržišta osiguranja (u % BDP) |       |       |       |       |       |       |        |
|------------------------------------------|-------|-------|-------|-------|-------|-------|--------|
|                                          | 2013. | 2014. | 2015. | 2016. | 2017. | 2018. | Prosek |
| Srbija                                   | 1,83  | 1,80  | 2,0   | 2,0   | 2,1   | 2,0   | 1,95   |
| Bosna i Hercegovina                      | 1,86  | 1,99  | 2,0   | 2,0   | 2,2   | 2,1   | 2,02   |
| Hrvatska                                 | 3,0   | 3,0   | 3,0   | 2,0   | 2,0   | 3,0   | 2,67   |
| Slovenija                                | 5,0   | 5,0   | 5,0   | 5,0   | 5,0   | 5,0   | 5,0    |
| Bugarska                                 | 2,0   | 2,0   | 2,0   | 2,0   | 2,0   | 2,0   | 2,0    |
| Turska                                   | 1,0   | 1,0   | 1,0   | 1,0   | 1,0   | 1,0   | 1,0    |
| Bugarska                                 | 2,0   | 2,0   | 2,0   | 2,0   | 2,0   | 2,0   | 2,0    |
| Rumunija                                 | 1,0   | 1,0   | 1,0   | 1,0   | 1,0   | 1,0   | 1,0    |
| Slovačka                                 | 3,0   | 3,0   | 3,0   | 2,0   | 3,0   | 2,0   | 2,67   |
| Mađarska                                 | 3,0   | 3,0   | 2,0   | 3,0   | 2,0   | 2,0   | 2,5    |
| Republika Češka                          | 3,0   | 4,0   | 3,0   | 3,0   | 3,0   | 3,0   | 3,17   |
| Nemačka                                  | 7,0   | 7,0   | 6,0   | 6,0   | 6,0   | 6,0   | 6,33   |
| Austrija                                 | 5     | 5     | 5     | 5     | 5     | 4     | 4,83   |
| Švajcarska                               | 9     | 9     | 9     | 9     | 8     | 9     | 8,83   |
| Francuska                                | 9     | 9     | 9     | 9     | 9     | 9     | 9,0    |
| Italija                                  | 7     | 9     | 9     | 8     | 8     | 8     | 8,17   |
| Velika Britanija                         | 11    | 10    | 10    | 10    | 13    | 14    | 11,33  |

|                                                 |             |             |             |             |             |             |               |
|-------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|
| Španija                                         | 5,0         | 5,0         | 5,0         | 5,0         | 5,0         | 5,0         | <b>5,0</b>    |
| <b>Gustina na tržištu osiguranja (u evrima)</b> |             |             |             |             |             |             |               |
|                                                 | <b>2013</b> | <b>2014</b> | <b>2015</b> | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>Prosek</b> |
| Srbija                                          | 75          | 75          | 93          | 94          | 102         | 112         | <b>92</b>     |
| Bosna i Hercegovina                             | 52          | 54          | 86          | 92          | 99          | 103         | <b>81</b>     |
| Hrvatska                                        | 287         | 272         | 279         | 282         | 294         | 324         | <b>290</b>    |
| Slovenija                                       | 941         | 920         | 936         | 962         | 1,027       | 1,104       | <b>982</b>    |
| Bugarska                                        | 121         | 126         | 139         | 143         | 157         | 180         | <b>144</b>    |
| Turska                                          | 53          | 56          | 65          | 85          | 96          | 111         | <b>78</b>     |
| Bugarska                                        | 121         | 126         | 139         | 143         | 157         | 180         | <b>144</b>    |
| Rumunija                                        | 73          | 87          | 95          | 102         | 106         | 111         | <b>96</b>     |
| Slovačka                                        | 401         | 403         | 365         | 369         | 393         | 404         | <b>389</b>    |
| Mađarska                                        | 254         | 268         | 275         | 293         | 304         | 326         | <b>287</b>    |
| Republika Češka                                 | 558         | 562         | 538         | 521         | 531         | 545         | <b>542</b>    |
| Nemačka                                         | 2,328       | 2,384       | 2,388       | 2,365       | 2,400       | 2,452       | <b>2,386</b>  |
| Austrija                                        | 2,049       | 2,015       | 2,027       | 1,958       | 1,950       | 1,969       | <b>1,995</b>  |
| Švajcarska                                      | 6,497       | 6,415       | 6,373       | 6,153       | 6,031       | 6,051       | <b>6,253</b>  |
| Francuska                                       | 2,833       | 2,992       | 3,092       | 3,077       | 3,110       | 3,206       | <b>3,052</b>  |
| Italija                                         | 1,990       | 2,358       | 2,417       | 2,212       | 2,161       | 2,234       | <b>2,229</b>  |
| Velika Britanija                                | 3,295       | 3,223       | 3,416       | 3,676       | 4,479       | 5,154       | <b>3,874</b>  |
| Španija                                         | 1,182       | 1,170       | 1,187       | 1,345       | 1,337       | 1,357       | <b>1,263</b>  |

Izvor: <http://www.insuranceeurope.eu> (Prilagođeno od strane autora)

Razvijene tržišne ekonomije imaju preko 8% udela premije osiguranja u GDP. Suprotno tržišnoj penetraciji, gustina osiguranja je zasigurno značajniji indikator razvoja tržišta osiguranja jedne zemlje, i proračunava se kao odnos premije osiguranja i broja stanovnika koji godišnje koriste ili troše usluge osiguranja. Sektor osiguranja u Bosni i Hercegovini po stepenu razvijenosti nalazi se znatno ispod proseka zemalja članica EU. U prilog tome govore indikatori o kojima je već bilo reči, tj. tržišna penetracija i gustina tržišta. Tokom posmatranog perioda indikator tržišne penetracije u Bosni i Hercegovini je zabeležio prosečnu vrednost od 2,02, zatim sledi Republika Srbija koja je zabeležila prosečnu vrednost tržišne penetracije od 1,95 što je znatno niže od proseka zemalja članica EU. Nižu prosečnu vrednost indikatora tržišne penetracije u odnosu na BiH i Srbiju su ostvarile jedino Turska (1,0) i Rumunija (1,0). Ilustracije radi, članice EU koje se nalaze u bližem regionu poput Hrvatske i Slovenije imale su prosečnu vrednost indikatora penetracije - Hrvatska (2,67) i Slovenija (5,0). Najveću prosečnu vrednost indikatora penetracije za posmatrani period ostvarile su: Velika Britanija (11,33), Francuska (9,0), Švajcarska (8,83), Italija (8,17) i Nemačka (6,33). Osim tržišne penetracije, indikator koji ima veću analitičku snagu i bolji uvid u razvijenost tržišta osiguranja je svakako gustina na tržištu osiguranja. Od 18 analiziranih zemalja (zemalja u razvoju, zemalja članica EU i razvijenih zemalja) najniža prosečna vrednost gustine osiguranja je zabeležena kod Turske sa 78 evra premije po stanovniku, zatim kod Bosne i Hercegovine sa 81 evrom. Srbija je zabeležila prosečnu vrednost gustine osiguranja od 92 evra, što predstavlja zadovoljavajuću poziciju u odnosu na susede u regionu. Komparacije radi, premija po stanovniku u BiH je u odnosu na Sloveniju oko 12 puta manja, a u odnosu na Švajcarsku za oko 77 puta.

Grafik u nastavku teksta ilustruje trend kretanja premije životnog osiguranja (odnosno učešće premije životnog osiguranja u ukupnoj premiji) za period: 2009 – 2019.

**Grafik 1 - Kretanje premije životnog osiguranja u ukupnoj premiji u BiH za period: 2009 – 2019. (u%)**



*Izvor: Proračun autora na osnovu podataka Agencije za osiguranje BiH*

Kao što se da primetiti učešće premije životnog osiguranja u ukupnoj premiji osiguranja u BiH za posmatrani period je zabeležilo neznatan linearni trend rasta, ali opet na niskom nivou u odnosu na zemlje članice EU, kao i u odnosu na premiju neživotnog osiguranja u BiH. Najviše procentualno učešće premije životnog osiguranja je zabeleženo u 2019. godini (20,77%), najniže učešće premije životnog osiguranja je ostvareno u 2009 (15,14%) te prosečno učešće od 18,73%. Kao esencijalni faktori ovako niskog učešća premije životnog osiguranja u ukupnoj premiji osiguranja u BiH mogu se navesti sledeći: niska platežna sposobnost stanovništva, nizak dohodak per capita, visoka stopa nezaposlenosti, niska svest stanovništva o važnosti životnog osiguranja, izraženo nepoverenje stanovništva u dugoročne vidove štednje, itd.

**Grafik 2 - Kretanje premije neživotnog osiguranja u ukupnoj premiji u BiH za period: 2009 – 2019. (u%)**



*Izvor: Proračun autora na osnovu podataka Agencije za osiguranje BiH*

Iz prethodnog grafika se može primetiti da je učešće premije neživotnog osiguranja u ukupnoj premiji osiguranja u BiH za posmatrani period zabeležilo neznatan relativni trend pada, ali opet na značajnom visokom nivou u odnosu na premiju životnog osiguranja u BiH. Najviše procentualno učešće premije neživotnog osiguranja je zabeleženo u 2009. godini (84,86%), najniže učešće premije neživotnog osiguranja je ostvareno u 2019 (79,23%), te prosečno učešće od 81,77%.

**Tabela 3 - Linearni trend rasta prihoda od kamata i operativnih troškova banaka u BiH za period: 2010 – 2019. (u%)**

| Pokazatelji                                     | 2010.  | 2011.  | 2012.  | 2013.  | 2014.  | 2015.  | 2016.  | 2017.  | 2018.  | 2019.  |
|-------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Linearni trend rasta prihoda od kamata (u %)    | -6,29% | 2,12%  | -2,92% | -2,62% | -2,15% | -0,65% | -2,86% | -0,43% | -1,60% | -1,31% |
| Linearni trend rasta operativnih troškova (u %) | -3,15% | -9,54% | 17,01% | 9,22%  | -5,57% | 5,41%  | 6,98%  | -8,27% | 1,40%  | 0,30   |

Izvor: Agencija za bankarstvo Federacije BiH i Republike Srpske (Prilagođeno od strane autora)

Prethodna tabela ilustrativno prikazuje linearni trend kretanja pokazatelja ekonomičnosti poslovanja banaka u Bosni i Hercegovini za period: 2010 – 2019. Kao što se da primetiti, prihodi od kamata su imali jako izražen fluktuirajući i volatilan trend u kretanju i to posebno u 2010. godini, gde je zabeležen pad od oko 6,29% u odnosu na prethodnu godinu. Takođe, i u ostalim posmatranim godinama su ostvarene vrednosti sa negativnim predznakom u odnosu na prethodne godine, izuzev u 2011. godini kada je zabeležen blagi porast prihoda od kamata poslovnih banaka u BiH u odnosu na 2010. godinu. Posmatrano sa troškovne strane i to dela troškova koji imaju operativni karakter onda je slika neznatno bolja u odnosu na prihode od kamata. Najveće smanjenje operativnih troškova zabeleženo je u 2011. godini (od oko 9,54%) i u 2017. godini (od oko 8,27%). S druge strane najveće povećanje operativnih troškova poslovanja banaka u BiH ostvareno je u 2012. godini od oko 17%, zatim u 2013. godini (od oko 9%) i u 2016. godini (6,98%). Imajući u vidu činjenicu da banke posluju u ambijentu gde je sve veći broj loših dužnika, povećani kreditni rizik, averzija prema riziku, suzdržavanje ili neodobravanje kredita u onoj meri koliko to rezerve dozvoljavaju, logični sled je i dalji pad prihoda od kamata kao esencijalnog faktora za poslovanje banaka. Ovo bi trebalo da utiče na to da banke izvrše određeni zaokret u svom poslovanju i donošenju strateški novih odluka i boljem planiranju. Tabela u nastavku teksta ilustruje tendenciju kretanja prosečnih kamatnih stopa na kredite i depozite sektoru stanovništva za period: 2015 - 2019.

**Tabela 4 - Tendencija kretanja prosečnih kamatnih stopa na kredite i na depozite sektoru stanovništva za period: 2015 – 2019. (u %)**

|                                                               | 2015. | 2016. | 2017. | 2018. | 2019. |
|---------------------------------------------------------------|-------|-------|-------|-------|-------|
| Prosečne kamatne stope na kredite sektoru stanovništva (u %)  | 6,66  | 6,85  | 5,45  | 5,06  | 4,68  |
| Prosečne kamatne stope na depozite sektoru stanovništva (u %) | 1,86  | 1,45  | 1,01  | 1,02  | 0,89  |

Izvor: <https://www.cbbh.ba/Content/Archive/36> (Prilagođeno od strane autora)

Iz prethodne tabele je evidentno da je došlo do tendencije pada, kako aktivnih, tako i pasivnih kamatnih stopa sektora stanovništva. Kao esencijalni razlog pada prosečnih, kako aktivnih, tako i pasivnih kamatnih stopa je pre svega intervencija Evropske Centralne Banke (ECB) i primena ekspanzivne monetarne politike i jačanja potrošnje, zatim ponuda i potražnja za kreditima, itd. Ono što je interesantno je da i pored pada pasivnih kamatnih stopa sektora stanovništva, depoziti banaka nastavljaju rasti iz godine u godinu zato što ne postoje alternativni i povoljniji vidovi štednje i investiranja. U cilju da zadrže stare deponente i da privuku nove depozite banke će morati u budućnosti da razviju nove usluge putem aranžmana o franšizi, koji obuhvata sledeće usluge:

- Brokerske usluge vezane za hartije od vrednosti, gde klijenti mogu kupovati akcije, obveznice, akcije u fondovima novčanog tržišta, zadržavajući svoj račun kod banke.
- Šaltere za kupovinu životnog osiguranja, *zdravstvenog osiguranja i osiguranja imovine*, odnosno na osnovu ugovora o zajedničkom ulaganju sa odgovarajućim nebankarskim institucijama.
- Sporazumi o stvaranju bankarske mreže sa drugim bankama (engl. *Institutional banking*), tako da, ako neko putuje u zemlji ili po svetu, može i u drugim bankama raspolagati sa svojim depozitnim računom.
- Usluge preseljavanja i posredovanja kod nalaženja stanova, kuća i druge imovine za klijente koji mijenjaju mjesto stanovanja.
- Finansijsko i poresko savjetovanje klijenata koji donose bitne lične i poslovne odluke.
- Usluge *merchant* bankarstva, tj. tehnička i finansijska pomoć pri fuzioniranju preduzeća, preuzimanju –kupovini firmi i svim drugim poslovima vezanim za restruktuiranje preduzeća.

Tabela 5 prikazuje linearni trend kretanja, odnosno strukturu kretanja prihoda po osnovu kamata i lizinga i ostalih prihoda za period: 2010 – 2019.

**Tabela 5 - Linearni trend kretanja prihoda po osnovu kamata i lizinga i ostalih prihoda banaka u Bosni i Hercegovini za period: 2010 – 2019. (u %)**

|                                    | 2010.  | 2011.  | 2012.  | 2013.  | 2014.  | 2015.  | 2016.  | 2017.  | 2018.  | 2019.  | Prosek        |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|
| Prihodi po osnovu kamata i lizinga | 92,69% | 90,80% | 95,76% | 95,68% | 96,25% | 96,17% | 94,96% | 94,45% | 92,83% | 95,71% | <b>94,87%</b> |
| Ostali prihodi                     | 7,31%  | 9,20%  | 4,24%  | 4,31%  | 3,75%  | 3,82%  | 5,03%  | 5,54%  | 7,17%  | 4,29%  | <b>5,81%</b>  |

Izvor: Agencija za bankarstvo u Federaciji BiH (<https://www.fba.ba/>), Agencija za bankarstvo Republike Srpske (<https://abrs.ba>) (Prilagođeno od strane autora)

Kao što se da primetiti najveće strukturalno učešće čine prihodi po osnovu kamata i lizinga čiji je relativni iznos bio najveći u 2014. godini (96,25%), najniži u 2011. godini (90,80%), te prosečni iznos od 94,87%. Ova kretanja su tipična i očigledna u svim zemljama Zapadnog Balkana gde se banke uglavnom bave kreditno-depozitnim poslovima. Za razliku od prihoda po osnovu kamata i lizinga, ostali prihodi su imali volatilniji trend u kretanju čiji je relativni iznos u strukturi ukupnih prihoda bio najveći u 2011. godini (9,20%), najniži u 2014. godini (3,75%) te prosečni iznos od 5,81%. U okviru ekonometrijske analize i rezultata istraživanja testiraće se ostali prihodi u kontekstu da li mogu da budu dobar prediktor zavisne varijable, odnosno povrata na aktivu banaka.

## Osnovne karakteristike bankoosiguranja u Bosni i Hercegovini

Prodaja osiguranja je generalno težak posao, posebno u Bosni i Hercegovini koja je suočena sa niskim životnim standardom, te nedovoljnom kulturom osiguranja. Osiguravajuće kompanije prodaju nematerijalni proizvod čija se korisnost ne može meriti odmah, ali se ipak pozitivne karakteristike mogu osetiti u budućnosti. Osnovne karakteristike tržišta osiguranja u Bosni i Hercegovini ogledaju se u relativno visokom učešću premije neživotnog osiguranja u ukupnoj premiji osiguranja s jedne strane, i niskom učešću premije životnog osiguranja u ukupnoj premiji osiguranja sa druge strane.

Bankoosiguranje kao kanal prodaje osiguranja u Bosni i Hercegovini nalazi se u ranoj fazi razvoja i nije u potpunoj meri implementiran. Prema Zakonu o posredovanju u osiguranju postoje razlike na nivou BiH sa tačke gledišta banaka. Dakle, prema Zakonu o posredovanju u osiguranju, banke sa sedištem u Republici Srpskoj mogu da se bave poslovima posredovanja u osiguranju, dok Zakon o posredovanju u osiguranju u Federaciji Bosne i Hercegovine još uvek ne dozvoljava da se banke sa sedištem u FBiH mogu baviti i posredovanjem u osiguranju. U Republici Srpskoj prodaja osiguranja je moguća posredstvom pošte, mikrokreditne organizacije i banke. U Federaciji BiH sklopljen je ugovor sa BH Poštom i postoji određena saradnja između pojedinih osiguravatelja i banaka (Šain i Selimović, 2013).

Preduslovi za dalji razvoj bankoosiguranja u Bosni i Hercegovini su mnogostruki. Jedan od značajnijih je dugoročno partnerstvo između banaka i osiguravajućih društava, zatim razumevanje projekata bankoosiguranja od strane uprave banke i osiguravajućeg društva. U procesu saradnje treba jasno definisati i razviti različite modele strategije prodaje, zatim kanala distribucije, ponude, metoda oglašavanja, zatim definisati sistem unakrsne prodaje bankarskih proizvoda i proizvoda osiguranja. U većem broju evropskih zemalja bankarsko osiguranje pokazalo se najproduktivnijim kanalom za prodaju životnih osiguranja, pre svega zbog sličnosti sa tradicionalnim bankarsko depozitnim poslovima (Burić i ostali, 2015). S obzirom na nisku penetraciju tržišta i stepen razvijenosti životnog osiguranja, kao i rast štednje iz godine u godinu moguće je razmišljati o uslovima i potencijalu za razvoj bankoosiguranja u Bosni i Hercegovini. Najvažnija prednost koju banke imaju iz bankarskog osiguranja je ta što dobijaju alternativni izvor prihoda koji diversifikuje njihove trenutne komercijalne aktivnosti. Ova prednost je bila toliko visoka početkom 90-ih da je prouzrokovala konkurenciju između banaka, gde je nadalje profit u ovoj oblasti aktivnosti opadao (Chevalier i ostali, 2005). Uprkos svim prednostima bankoosiguranje može imati i određeni nedostatak za banke. Za razliku od agenta osiguranja, kultura prodaje u bankama možda nije dovoljna. Budući da se principi prodaje proizvoda osiguranja prilično razlikuju od prodaje proizvoda banke, osoblje banke odgovorno za prodaju možda neće postići željeni nivo uspeha (Kirui, 2012).

U cilju značajnog povećanja premije životnog osiguranja, te ukupnih prihoda od naknada i provizija potrebno je jednostavno preneti depozite stanovništva u premije životnog osiguranja. Ilustrativan primer prakse bankoosiguranja na tržištima u regionu započela je UniCredit banka gde je potpisala dva ekskluzivna ugovora o strateškom partnerstvu sa osiguravačima Allianz i Generali za prodaju proizvoda osiguranja fizičkim licima i malim preduzećima u Bosni i Hercegovini, Hrvatskoj, Češkoj, Mađarskoj, Rumuniji, Srbiji, Slovačkoj i Sloveniji. Prema zakonskim propisima svake zemlje države će sprovoditi ovu vrstu osiguranja, a konkretno će biti fokusirana na životna i neživotna osiguranja, takođe kada je u pitanju Generali i osiguranje kredita (Čolović, 2020).

## Ekonometrijska analiza podataka

Osnovni razlozi prihvatanja koncepta bankoosiguranja ogledaju se pre svega u povećanju premijske proizvodnje i performansi osiguravajućih društava koje se odnose na profitabilnost poslovanja. Kao kriterijumi učinka i kod banaka kao i kod osiguravajućih kuća se koriste povrat na vlasničku glavnica (ROE) kao i povrat na aktivu (ROA). Povrat na vlasničku glavnica u suštini ukazuje na isplativost investicija sa stanovišta investitora, jer meri stope profitabilnosti akcionara preduzeća u pogledu uloženog kapitala. S druge strane, ROA traži odgovor na pitanje koliko je ukupna imovina profitabilna, i obično se koristi za merenje operativnog uspeha ili učinka iz perspektive menadžera. Prihodi koji banke ostvaruju od aktivnosti osiguranja prate se pod stavkom „ostali poslovni prihodi“ u izveštajima o prihodima i rashodima, odnosno u bilansu uspeha. Stoga se efekti bankarskog osiguranja na profitabilnost banaka mogu posmatrati kroz odnos ostalih poslovnih prihoda i ukupnih poslovnih prihoda i ukupne aktive. Ako se koriste opštije mere poput indikatora ROA i ROE, tok stavki sa relativno malim udelom u ukupnim prihodima, poput bankarskog osiguranja, možda se neće tačno i u potpunosti posmatrati. Uzorak ovog istraživanja čini 30 komercijalnih banaka (15 banaka u Federaciji Bosne i Hercegovine i 15 banaka u Republici Srpskoj). Podaci o bankama prikupljeni su iz pojedinačnih finansijskih izveštaja banaka kao i Agencija za bankarstvo Federacije Bosne i Hercegovine i Agencije za bankarstvo Republike Srpske.

Ova empirijska studija koristi kvartalne podatke za čitav bankarski sistem Bosne i Hercegovine. Period istraživanja obuhvata period od prvog kvartala 2007. godine, do četvrtog kvartala 2019. godine. Kao zavisna promenljiva korišćena je stopa povrata na aktivu (ROA). Tri nezavisne promenljive kao što su stopa rasta profita/gubitka (GRPL), odnos troškova i prihoda (pre svega se misli na odnos operativnih troškova - COINC) te stopa rasta ostalih prihoda (GROI) su korišćene kao nezavisne promenljive. U tabeli 6 data su objašnjenja promenljivih, te očekivani efekti zavisne i nezavisnih promenljivih.

**Tabela 6 - Kratak opis zavisne i nezavisnih varijabli u modelu**

| PROMENLJIVA | DEFINICIJA VARIJABLE                 | OČEKIVANI EFEKAT |
|-------------|--------------------------------------|------------------|
| ROA         | Odnos između profita i ukupne aktive | -                |
| GRPL        | Stopa rasta profita/gubitka          | Pozitivan (+)    |
| COINC       | Odnos između troškova i prihoda      | Negativan (-)    |
| GROI        | Stopa rasta ostalih prihoda          | Pozitivan (+)    |

Izvor: *Proračun autora*

**Povrat na aktivu (ROA)** - smatra se najprikladnijom merom za procenu efikasnosti poslovanja banke. ROA se dobija deljenjem neto dobiti banke sa njenom imovinom. Dakle, ROA meri efikasnost menadžmenta u korišćenju resursa banke za ostvarivanje dobiti. Takođe, procenjuje efikasnost banke u korišćenju njenih finansijskih i stvarnih investicija za zaradu od kamata i drugih naknada. Ova mera profitabilnosti banaka je posebno značajna kada se upoređuje operativna efikasnost banaka (Sinkey, 1988).

**Stopa rasta profita/gubitka (GRPL)** - za banke čije akcije ne kotiraju na berzi, što je tipično za zemlje u kojima je tržište kapitala nerazvijeno, upotreba pokazatelja profitabilnosti jedini je način merenja poslovnih performansi. Banka posluje profitabilno kada su prihodi od kamata veći od troškova kamata i ostalih troškova kreditnog gubitka. Suprotno tome, banka ima operativni gubitak kada su prihodi od kamata manji od rashoda po osnovu kamata i ostalih troškova kreditnog gubitka (Đukić, 2011). U ovom istraživanju se očekuje pozitivan odnos između varijabli ROA i GRPL.

**Odnos troškova i prihoda (COINC)** - obično se koristi kao mera efikasnosti bankarskih operacija u kontekstu efikasnosti troškova. Ovaj odnos se dobija deljenjem opštih troškova sa zbirom neto prihoda od kamata i ostalih poslovnih prihoda. Kako tvrde Kosak i Cok (2008) postoji obrnuta uzročnost između odnosa troškova i prihoda i pokazatelja profitabilnosti.

**Stopa rasta ostalih prihoda (GROI)** - ovaj odnos dobija se kada se ostali prihodi poslovanja banaka podele sa ukupnim prihodima i dobijeni iznos pomnoži sa 100 (Agencija za bankarstvo FBiH i Agencija za bankarstvo Republike Srpske, 2019). Jako je korisna mera u praćenju razvoja novih proizvoda i konkurencije banaka. U ovom istraživanju se očekuje pozitivan odnos između varijabli ROA i GROI.

## Rezultati ekonometrijske analize

Ekonometrijska analiza je realizovana korišćenjem metode najmanjih kvadrata (engl. *Ordinary Least Squares* – OLS). U ekonometrijskom delu rada biće ispitana stacionarnost predstavljenih serija podataka pomoću proširenog Diki-Fulerovog (ADF) testa jediničnog korena.

**Tabela 7 - Diki-Fulerov test jediničnog korena**

|                          | Nivo                     |                     | Prva diferencija         |                     |
|--------------------------|--------------------------|---------------------|--------------------------|---------------------|
| Skraćeni naziv varijable | Probability (P) vrednost | Vrednost statistike | Probability (P) vrednost | Vrednost statistike |
| ROA                      | 0,6580                   | -1,2203             |                          |                     |
| GRPL                     | 0,0363                   | -3,0578             | 0,000                    | -6,9930             |
| COINC                    | 0,6499                   | -1,23912            | 0,000                    | -6,6028             |
| GROI                     | 0.2101                   | -2.19681            |                          |                     |

Izvor: Proračun autora (Eviews 10.0)

Rezultati iz prethodne tabele pokazuju da je većina serija stacionirana i nultog reda integrisanosti. Stacioniranost se pre svega odnosi na serije podataka čije su statističke karakteristike (kao što su aritmetička sredina, varijansa i druge) konstantne tokom vremena. Vrlo je bitno da se pri oceni modela koriste stacionirane serije jer je olakšana prognoza na osnovu modela. Dakle, prema rezultatima istraživanja (tabela 7) kao nestacionirane su se pokazale serije: GRPL i COINC. Diferencijom se dovode na nivo stacionarnosti.

**Tabela 8: Osnovni regresioni model između zavisne i nezavisnih promenljivih za period: 2007:Q1 – 2019:Q4**

| Zavisna varijabla: ROA      |             |            |              |        |
|-----------------------------|-------------|------------|--------------|--------|
| Metoda: Jedinični koreni    |             |            |              |        |
| Datum: 25/1/21 Vreme: 14:32 |             |            |              |        |
| Uzorak: 2007:Q1 – 2019:Q4   |             |            |              |        |
| Uključene opservacije: 52   |             |            |              |        |
| Varijabla                   | Koeficijent | St. greška | t-statistika | Ver.   |
| GRPL                        | 0,003885    | 0,000458   | 8,479108     | 0,0000 |
| COINC                       | -0,005709   | 0,001895   | -3,013447    | 0,0041 |

|                             |          |                                 |          |          |
|-----------------------------|----------|---------------------------------|----------|----------|
| GROI                        | 1,16E-06 | 1,48E-06                        | 0,783340 | 0,4373   |
| C                           | 0,696564 | 0,241384                        | 2,885706 | 0,0058   |
| R-kvadrat                   | 0,750939 | Srednja vred. zavis. var        |          | 0,560192 |
| Prilagođeni R-kvadrat       | 0,735373 | Stan. dev. var.                 |          | 0,485845 |
| Standardna devij. regresije | 0,249928 | Akaikin informacioni kriterijum |          | 0,138513 |
| Zbir kvadrata reziduala     | 2,998265 | Schwarz kriterijum              |          | 0,288609 |
| Log. najveće verovatnoće    | 0,398653 | Hannan-Quinn kriterijum.        |          | 0,196056 |
| F-statistika                | 48,24141 | Durbin- Watson stat.            |          | 1,309095 |
| Ver. (F-statistike)         | 0,0000   |                                 |          |          |

Izvor: Proračun autora (Eviews 10.0)

Iz prethodne tabele se da primetiti da koeficijent determinacije kao i prilagođeni koeficijent determinacije imaju visoku vrednost. Prilagođeni koeficijent determinacije iznosi 73,54%, što objašnjava da nezavisne varijable odstupaju od zavisne za oko 26,46%. U kontekstu korelativne veze vrednost Durbin Watson statistike je zabeležila iznos od 1,31 što znači da se radi o srednje jakoj korelativnoj povezanosti. Takođe, visoka je i vrednost empirijskog F-testa od 48,24 što upućuje na zaključak da nezavisne promenljive imaju dobru predikciju na zavisnu promenljivu, odnosno ROA. Najjaču pozitivnu korelativnu vezu sa zavisnom varijablom (ROA) su ostvarile sledeće nezavisne varijable: stopa rasta ostalih prihoda kao i stopa rasta profita/gubitka u poslovanju banaka. Povećanjem stope rasta ostalih prihoda za jednu jedinicu, ceteris paribus, dovodi do povećanja povrata na aktivu za oko 1,16E-06. U okviru ostalih prihoda uključuju se ostali operativni prihodi kao i prihodi po osnovu prodaje polica životnog ili neživotnog osiguranja pojedinih banaka putem banko kanala.

Posmatrano sa druge strane, najjača negativna korelacija je zabeležena između odnosa troškova i prihoda i povrata na aktivu (-0,006). Rezultati mnogih studija pokazali su da postoji obrnuta veza između odnosa troškova i prihoda i povrata na aktivu. Veoma visoka vrednost odnosa troškova i prihoda pokazuje da profitabilnost banaka u velikoj meri zavisi od upravljanja operativnim troškovima, pre svega troškovima radnog osoblja. Da bi menadžeri banaka zadržali veću profit, oni moraju smanjiti operativne troškove ili preuzeti veći kreditni rizik. S obzirom na to da postoji sve veća konkurencija na kreditnim tržištima (zasićenost ekonomije kreditima) što utiče na smanjenje neto kamatnih margina, kao i povećan udeo loše aktive, upravljanje bankama u BiH, pored smanjenja operativnih troškova trebalo bi uvesti nove proizvode poput prodaje paketa životnog osiguranja koje se bazira na nekamatnom prihodu. Dakle, banke u Bosni i Hercegovini u budućnosti će morati da nađu određeni kompromis između povećanja ostalih prihoda i smanjenja ili održavanja operativnih troškova. Prodajom paketa životnog osiguranja u bankama bi se jednim delom uticalo na smanjenje troškova otpuštanja radnika koji su zaposleni na šalterima banaka. Svedoci smo da veliki broj radnika gubi posao zbog razvoja informacionih tehnologija, gde data otpuštanja nose sa sobom velike troškove. Sa proširenjem bankoosiguranja lica zaposlena na šalterima banaka bi zadržala svoj posao, gde bi se sa druge strane povećali troškovi obuke zaposlenih u bankama (Krunić, 2014).

## Zaključak

Osnovne karakteristike tržišta osiguranja u Bosni i Hercegovini ogledaju se u relativno visokom učešću premije neživotnog osiguranja u ukupnoj premiji osiguranja, s jedne strane, i niskom učešću premije životnog osiguranja u ukupnoj premiji osiguranja, sa druge strane. Neki od značajnih faktora niskog učešća premije životnog osiguranja u ukupnoj premiji osiguranja u BiH su sledeći: niska platežna sposobnost stanovništva, nizak dohodak per capita, visoka stopa nezaposlenosti, niska svest stanovništva o važnosti životnog osiguranja, izraženo nepoverenje stanovništva u dugoročne vidove štednje, itd.

Bankoosiguranje je postalo jedan od glavnih modela u konvergenciji uočenoj među finansijskim institucijama sa sve većim obimom poslovanja u svetu. Opšte je prihvaćena stvarnost da pruža ozbiljne prednosti svim učesnicima u izdavanju, od banaka do osiguravajućih društava, od kupaca do pravne vlasti. Jedno od opšte prihvaćenih pitanja u vezi sa bankoosiguranjem, a koje se tiče i rezultata ekonometrijske analize odnosi se na to: *Da li ovaj oblik saradnje poboljšava finansijske performanse poslovanja banaka zasnovane na profitabilnosti?*

Rezultati istraživanja su pokazali da ostali prihodi, kao i stopa rasta profita/gubitka kao nezavisne varijable, imaju značajni uticaj na profitabilnost banaka. Posebno visoka pozitivna korelativna veza je zabeležena između stope povrata na imovinu banaka kao zavisne varijable i ostalih prihoda. Sa povećanjem ostalih prihoda u čijoj strukturi se uključuju i prihodi po osnovu usluga bankoosiguranja kroz bankokanale dolazi konsekvantno i do povećanja profitabilnosti banaka. Kamatne marže kod banaka u BiH su i dalje na visokom nivou gde preovladava mišljenje da je bankarsko osiguranje nisko profitabilan posao.

Međutim, usled povećanih operativnih troškova, banke će se u narednim godinama morati sve više okretati na razvoj nekamatonskih prihoda i usluga kako bi povećale prihode od naknada i provizija, te smanjile zavisnost od prihoda po osnovu kamata.

Na razvijenim tržištima banke i osiguravajuća društva su predvodnici digitalizacije poslovanja. U svetu digitalizacije polako prestaje uloga zastupnika kao savetnika što može uticati na smanjenje troškova i povećanje prihoda. Takođe, savremeni trendovi na finansijskom tržištu poput digitalizacije poslovanja banaka svakako će u narednom periodu uticati na veće zadovoljavanje očekivanja klijenata, te povećanje poslovnih prihoda sa jedne strane, kao i smanjenje operativnih troškova, sa druge strane. Dakle, implementacijom koncepta bankarskog osiguranja u svetlu digitalizacije bankarskog sektora mogu se u dovoljnoj meri zadovoljiti potrebe sve zahtevnijih klijenata kroz mogućnost kupovine različitih finansijskih proizvoda i usluga.

Izbor modela bankoosiguranja je od vitalne važnosti za uspešno funkcionisanje celokupnog koncepta, te dugoročnu održivost u celokupnom poslovnom okruženju. Za banke se može reći da razvoj prakse bankoosiguranja ima snažan potencijal kao siguran i stabilan izvor prihoda, a protiv negativnih efekata kolebanja kamatnih stopa.

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# POSSIBILITY OF IMPLEMENTATION AND ADVANTAGES OF BANCASSURANCE: BANK MARKET AND INSURANCE RECORDS IN BOSNIA AND HERZEGOVINA

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## Summary

*Bancassurance is a term used to describe a partnership or relationship between a bank and an insurance company, where the insurance company uses a banking sales channel to sell insurance products. The implementation of banking insurance activities in the financial system contributes to the strengthening of the competitive environment, the development of new insurance products, and greater satisfaction of customer needs. The main goal of this research is to point out the importance and significance of the application of bank insurance for both financial institutions, through the analysis of financial performance indicators of both banks and insurance companies, through the aspect of income and expenses. Also, this research presents an econometric analysis that tests the impact of other income, profit/loss growth rate, as well as the cost-income ratio as independent variables and their impact on the dependent variable, i.e., return on assets of banks in Bosnia and Herzegovina. The results of the econometric analysis showed that other revenues have the greatest impact on the profitability of banks in B&H. The weakest impact on bank profitability has a cost-to-earnings ratio.*

**Keywords:** bank, insurance, bancassurance, performance, econometric analysis.

**JEL classification:** G21, G22.

## Introduction

One of the most important features of modern financial markets is the synergy or unification that arises between financial institutions that perform different functions. Cooperation between banks and insurance companies is one of the most important examples of this convergence. Banks have increasingly become supermarkets of financial products and services. Expanding the product range has made banks more competitive and led to their efforts towards customer satisfaction. Providing insurance services leads to significant benefits in customer loyalty-building initiatives (Boyer ve Nyce, 2002). The term banking insurance was first used in the 1990s in France, where cooperation between banks and insurance companies began earlier than in other European countries. At that time, bank insurance served as a channel for the simple distribution of insurance products by bank branches. Over time, this concept has evolved with the growing popularity of cooperation between insurance companies and banks and has been used to describe all kinds of relationships between the banking and insurance sectors (Hoschka, 1994). Banking insurance is developing at the fastest pace in the countries of the European Union, Australia, and the USA. Existing banking infrastructures enable cost reductions of 30 to 50% compared to traditional insurance. Bank insurance can sell 3 to 5 times more insurance policies than the standard practice of selling insurance policies (Kočović, et al., 2010).

In general, the term bank insurance is defined as the distribution of products and services by banks. Numerous banking insurance actors around the world perform different operations with different structures. Bancassurance is an important channel for the distribution of well-known insurance products and services to private and commercial customers, and extremely successful distribution in the fields of commercial insurance, investor insurance, or partner insurance.

The opinion of many experts is that the bank insurance model will be more successful in the local environment when it is adjusted. Banks and insurance companies have comparative advantages and weaknesses from the new concept of bank insurance. It is also stated that, if bank insurance transactions are not managed carefully, and if an adequate model is not selected, serious disputes may eventually arise between the selected parties. In this regard, it is clear that new regulations must be enacted between banks and insurance companies in the areas of production, distribution, and corporate strategy for the security of the financial system and overall success. The success of banking insurance practices is ultimately a problem that depends on the application.

However, the common interests of both banks and insurance companies can be elaborated as the most basic dynamic that is the sine qua non of future application. The idea of bank insurance is based on the similarities between banking and insurance activities, as banks and insurance companies rely on the benefits of economies of scale, and have experience in managing money and creating the necessary reserves. Both types of institutions create financial liquidity and take on the function of risk allocation through reinsurance or refinancing (Genety & Molyneux, 1998).

One of the generally accepted questions related to banking insurance, which will be implemented through econometric analysis, is: *Does this form of cooperation improve the financial performance of banks based on profitability?* Also, is it often questioned why life insurance products are more represented in bank insurance compared to non-life insurance? One of the essential reasons is that life insurance and banking services together are focused on the accumulation of funds and their further management. The next reason is the bank's good understanding of the client's financial situation and their needs. Also, the next reason could be the sale of housing loans, where one of the main condi-

tions for concluding a given contract and concluding a life insurance contract (Čolović, 2020).

The paper is designed in five parts. The first part refers to introductory considerations with a focus on the importance of bank insurance for both banks and insurance companies. The second part describes the modalities of bank insurance, and the possibility of applying one of the presented. The third part refers to the application of comparative analysis through the analysis of selected indicators of the insurance sector and banks in Bosnia and Herzegovina. The fourth part presents the situation and characteristics of bancassurance in Bosnia and Herzegovina, and the legal framework of the concept of bancassurance. The fifth part elaborates the econometric analysis and research results and gives certain observations and recommendations.

## Bancassurance Modalities

Although bank insurance varies from country to country, transactions are usually executed within three basic models. The first model is a distribution agreement, the second model is a joint venture, and the third model can be models such as cross-share, acquisition, founding a new company. (Vlolaris, 2001). These three models will be briefly explained below.

- **Distribution agreements.** Under this bancassurance modality, banks act as distribution channels for one or more insurance companies. This model is widely used in countries such as the United States, Germany, England, Japan, and South Korea.
- **Joint venture.** This investment can be summarized as a form of partnership between one or more insurance companies, or companies and banks, on different bases. Despite the important advantage of cooperation between institutions, it is very difficult to manage in the long run. This practice is used in Italy, Spain, Portugal, and South Korea.
- **Full integration** is the concept of creating a new dealer network. The advantage is reflected in the adoption of the same corporate culture. This concept requires a large amount of investment and effort. It is widely used in France, Spain, Belgium, Great Britain, and Ireland.
- **Mutual transfer of shares.** This concept is based on an agreement between banks and insurance companies on the exchange of shares so that banks and insurance companies have representatives or members on the board of directors.
- **Acquisition or merger** is similar to the full integration model and refers to the full or partial ownership of insurance companies by banks.
- **New company or enterprise.** This concept refers to the creation of a new insurance company by a bank. This type of initiative requires significant capital allocation and other logistical support. It also has significant commercial risk.
- **Ownership** is classified as a group of companies or a holding company. Thus, the holding owns both the bank and the insurance companies, using them in its banking application. Such an example can be found worldwide, which could potentially be a good concept for Bosnia and Herzegovina as well.

**Table 1 - Benefits of Alternative Banking and Insurance Structures for Banks and Insurance Companies**

| Benefits to banks                                                                                                                                                         | Distribution agreements | Joint ventures | Integrated operations |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------|-----------------------|
| Secure an additional and more stable stream of income through diversification into insurance, and reduce their reliance on interest spreads as the major source of income | ✓                       | ✓              | ✓                     |
| Leverage on their extensive customer bases and increase customer retention                                                                                                | ✓                       | ✓              | ✓                     |
| Sell a whole range of financial services to clients                                                                                                                       |                         | ✓              | ✓                     |
| Reduce risk-based capital requirement for the same level of revenue                                                                                                       | ✓                       |                |                       |
| Work towards the provision of integrated financial services tailored to the life cycle of customers                                                                       |                         | ✓              | ✓                     |
| Access funds that are otherwise kept with life insurers who sometimes benefit from tax advantages                                                                         |                         | ✓              | ✓                     |
| Benefits to insurers                                                                                                                                                      | Distribution agreements | Joint ventures | Integrated operations |
| Tap into the huge customer base of banks                                                                                                                                  | ✓                       | ✓              | ✓                     |
| Reduce their reliance on traditional agents by making use of various channels owned by banks                                                                              | ✓                       | ✓              | ✓                     |
| Share services with banks                                                                                                                                                 |                         | ✓              | ✓                     |
| Develop new financial products more efficiently, in collaboration with bank partners                                                                                      | ✓                       |                |                       |
| Establish market presence rapidly without the need to build up a network of agents                                                                                        |                         | ✓              | ✓                     |
| Obtain additional capital from banks to improve their solvency and expand business                                                                                        |                         | ✓              | ✓                     |

Source: *Swiss Re*

A large number of factors trigger the selection of the appropriate structure. To begin with, each national market has its profile - for example, the relative size and the structure of the banking and insurance sectors, as well as the different regulatory and tax environments. Also important is the management strategy, i.e., whether the bank insurance unit is an integral part of the retail strategy and the relationship with the client, or whether the insurance is another product that is sold as part of the entire series. The decision to invest capital in a particular business is primarily a function of the relative returns of banks and insurance companies. In most markets, the return on insurance capital was calculated using banking accounting practices and was lower than banking operations, forcing many banks to focus on distribution rather than operating margin. Finally, different views can be taken at different times about the values of operational integration. Therefore, in the Benelux markets, several of today's major players in banking insurance began life as pure financial conglomerates but later integrated their operating units.

## Comparative Analysis of Selected Indicators of the Insurance Sector and Banks in Bosnia and Herzegovina

Two very important indicators that monitor the development of the life insurance market are certainly: market penetration and market density. Market penetration is calculated as the ratio of insurance premiums and gross domestic product of the observed country.

**Table 2 - Analysis of indicators of the development of the insurance market sector in developing countries, EU member states and developed countries for the period: 2013 - 2018**

| Insurance market penetration (in % of GDP) |      |      |      |      |      |      |         |
|--------------------------------------------|------|------|------|------|------|------|---------|
|                                            | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | Average |
| Serbia                                     | 1.83 | 1.80 | 2.0  | 2.0  | 2.1  | 2.0  | 1.95    |
| Bosnia and Herzegovina                     | 1.86 | 1.99 | 2.0  | 2.0  | 2.2  | 2.1  | 2.02    |
| Croatia                                    | 3.0  | 3.0  | 3.0  | 2.0  | 2.0  | 3.0  | 2.67    |
| Slovenia                                   | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0     |
| Bulgaria                                   | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0     |
| Turkey                                     | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0     |
| Bulgaria                                   | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0     |
| Romania                                    | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0     |
| Slovakia                                   | 3.0  | 3.0  | 3.0  | 2.0  | 3.0  | 2.0  | 2.67    |
| Hungary                                    | 3.0  | 3.0  | 2.0  | 3.0  | 2.0  | 2.0  | 2.5     |
| Czech Republic                             | 3.0  | 4.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.17    |
| Germany                                    | 7.0  | 7.0  | 6.0  | 6.0  | 6.0  | 6.0  | 6.33    |
| Austria                                    | 5    | 5    | 5    | 5    | 5    | 4    | 4.83    |

|                                            |             |             |             |             |             |             |                |
|--------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|
| Switzerland                                | 9           | 9           | 9           | 9           | 8           | 9           | <b>8.83</b>    |
| France                                     | 9           | 9           | 9           | 9           | 9           | 9           | <b>9.0</b>     |
| Italy                                      | 7           | 9           | 9           | 8           | 8           | 8           | <b>8.17</b>    |
| United Kingdom                             | 11          | 10          | 10          | 10          | 13          | 14          | <b>11.33</b>   |
| Spain                                      | 5.0         | 5.0         | 5.0         | 5.0         | 5.0         | 5.0         | <b>5.0</b>     |
| <b>Insurance market density (in euros)</b> |             |             |             |             |             |             |                |
|                                            | <b>2013</b> | <b>2014</b> | <b>2015</b> | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>Average</b> |
| Serbia                                     | 75          | 75          | 93          | 94          | 102         | 112         | <b>92</b>      |
| Bosnia and Herzegovina                     | 52          | 54          | 86          | 92          | 99          | 103         | <b>81</b>      |
| Croatia                                    | 287         | 272         | 279         | 282         | 294         | 324         | <b>290</b>     |
| Slovenia                                   | 941         | 920         | 936         | 962         | 1.027       | 1.104       | <b>982</b>     |
| Bulgaria                                   | 121         | 126         | 139         | 143         | 157         | 180         | <b>144</b>     |
| Turkey                                     | 53          | 56          | 65          | 85          | 96          | 111         | <b>78</b>      |
| Bulgaria                                   | 121         | 126         | 139         | 143         | 157         | 180         | <b>144</b>     |
| Romania                                    | 73          | 87          | 95          | 102         | 106         | 111         | <b>96</b>      |
| Slovakia                                   | 401         | 403         | 365         | 369         | 393         | 404         | <b>389</b>     |
| Hungary                                    | 254         | 268         | 275         | 293         | 304         | 326         | <b>287</b>     |
| Czech Republic                             | 558         | 562         | 538         | 521         | 531         | 545         | <b>542</b>     |
| Germany                                    | 2.328       | 2.384       | 2.388       | 2.365       | 2.400       | 2.452       | <b>2.386</b>   |
| Austria                                    | 2.049       | 2.015       | 2.027       | 1.958       | 1.950       | 1.969       | <b>1.995</b>   |
| Switzerland                                | 6.497       | 6.415       | 6.373       | 6.153       | 6.031       | 6.051       | <b>6.253</b>   |
| France                                     | 2.833       | 2.992       | 3.092       | 3.077       | 3.110       | 3.206       | <b>3.052</b>   |
| Italy                                      | 1.990       | 2.358       | 2.417       | 2.212       | 2.161       | 2.234       | <b>2.229</b>   |
| United Kingdom                             | 3.295       | 3.223       | 3.416       | 3.676       | 4.479       | 5.154       | <b>3.874</b>   |
| Spain                                      | 1.182       | 1.170       | 1.187       | 1.345       | 1.337       | 1.357       | <b>1.263</b>   |

Source: <http://www.insuranceeurope.eu> (Adapted by the author)

Developed market economies have over 8% share of insurance premiums in GDP. Contrary to market penetration, insurance density is certainly a more significant indicator of a country's insurance market development and is calculated as the ratio of insurance premiums to the number of residents who use or consume insurance services annually. The insurance sector in Bosnia and Herzegovina is significantly below the average of EU member states in terms of the level of development. This is supported by the indicators that have already been discussed, i.e., market penetration and market density. During the observed period, the market penetration indicator in Bosnia and Herzegovina recorded an average value of 2.02, followed by the Republic of Serbia, which recorded an average market penetration value of 1.95, which is significantly lower than the average of EU member states. Only Turkey (1.0) and Romania (1.0) achieved lower average values of market penetration indicators compared to B&H and Serbia. To illustrate, EU members located in a closer region such as Croatia and Slovenia had an av-

average value of penetration indicators - Croatia (2.67) and Slovenia (5.0). The highest average value of penetration indicators for the observed period was achieved by Great Britain (11.33), France (9.0), Switzerland (8.83), Italy (8.17), and Germany (6.33). In addition to market penetration, the indicator that has greater analytical power and provides better insight into the development of the insurance market is certainly the density of the insurance market. Of the 18 countries analyzed (developing countries, EU member states, and developed countries), the lowest average value of insurance density was recorded in Turkey at 78 euros per capita, followed by Bosnia and Herzegovina at 81 euros. Serbia recorded an average value of insurance density of 92 euros, which is a satisfactory position concerning its neighbors in the region. For comparison, the premium per capita in B&H is about 12 times lower than in Slovenia, and about 77 times lower than in Switzerland. The graph below illustrates the trend in life insurance premiums (i.e., the share of life insurance premiums in total premiums) for the period: 2009 - 2019.

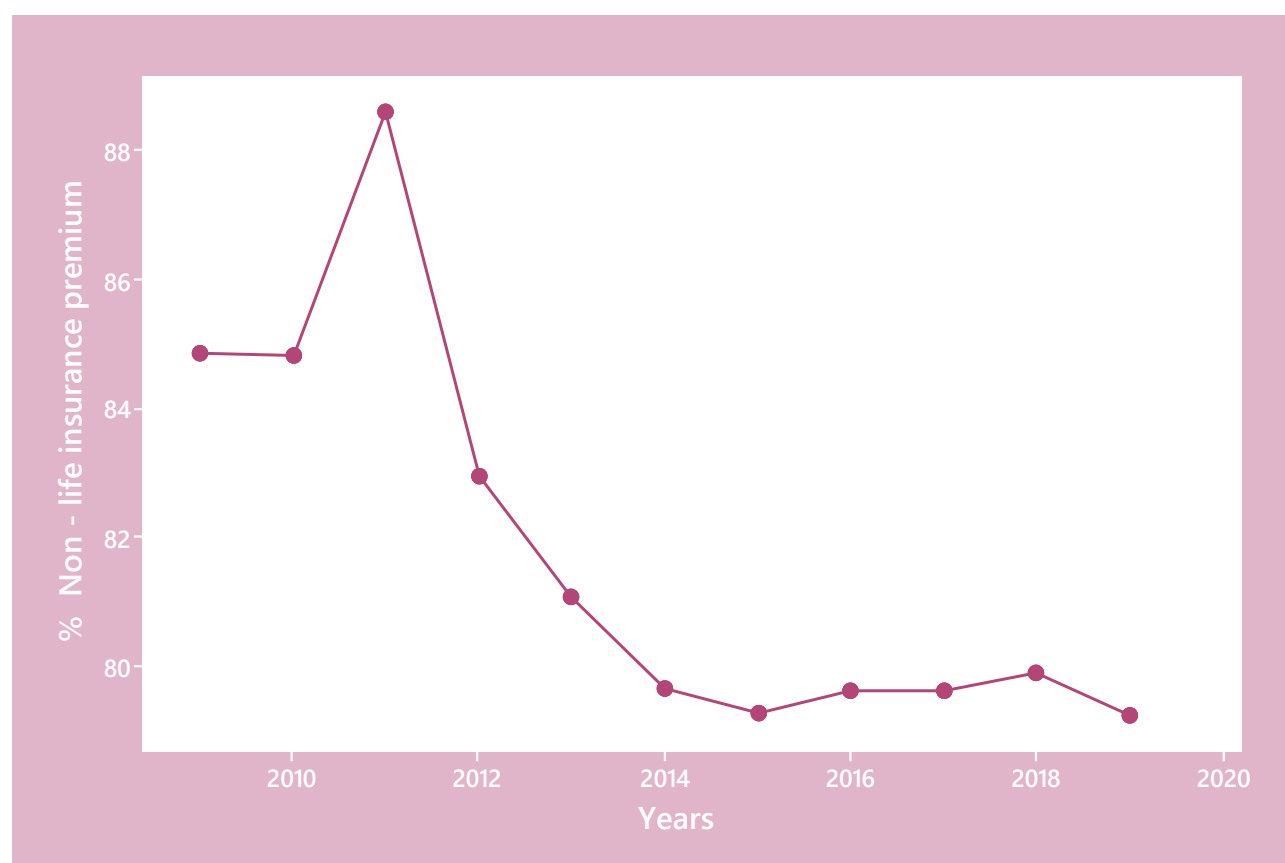
**Figure 1 - Movement of Life Insurance Premiums in Total Premiums in B&H for the Period: 2009 - 2019 (in %)**



*Source: Calculation by the author based on data from the Insurance Agency of B&H*

As can be seen, the share of life insurance premiums in the total insurance premiums in B&H for the observed period recorded a slight linear growth trend, but again at a low level compared to EU member states, as well as compared to non-life insurance premiums in B&H. The highest percentage share of life insurance premium was recorded in 2019 (20.77%), the lowest share of life insurance premium was realized in 2009 (15.14%), and the average share of 18.73%. The essential factors of such a low share of life insurance premiums in the total insurance premium in B&H are the following: low solvency of the population, low per capita income, high unemployment rate, low awareness of the population about the importance of life insurance, pronounced distrust of the population in long-term savings, etc.

**Figure 2 - Movement of Non-Life Insurance Premium in Total Premium in B&H for the Period: 2009 - 2019 (in %)**



*Source: Calculation by the author based on data from the Insurance Agency of B&H*

From the previous figure it can be noticed that the share of non-life insurance premium in the total insurance premium in B&H for the observed period was recorded a slight relative downward trend, but again at a significantly high level compared to life insurance premium in B&H. The highest percentage share of non-life insurance premium was recorded in 2009 (84.86%), the lowest share of non-life insurance premium was realized in 2019 (79.23%), and the average share of 81.77%.

**Table 3 - Linear Growth Trend of Interest Income and Operating Expenses of Banks in B&H for the Period: 2010 - 2019 (in %)**

| Indicators                                    | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   |
|-----------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Linear growth trend of interest income (in %) | -6.29% | 2.12%  | -2.92% | -2.62% | -2.15% | -0.65% | -2.86% | -0.43% | -1.60% | -1.31% |
| Linear growth trend of operating cost (in %)  | -3.15% | -9.54% | 17.01% | 9.22%  | -5.57% | 5.41%  | 6.98%  | -8.27% | 1.40%  | 0.30   |

Source: Banking Agency of the Federation of B&H and Republika Srpska (Adapted by the author)

The previous table illustrates the linear trend of the economy of banks in Bosnia and Herzegovina for the period: 2010 - 2019. As can be seen, interest income had a very pronounced fluctuating and volatile trend, especially in 2010, where a decrease of about 6.29% was recorded, compared to the previous year. Also, in other observed years, values with a negative sign were realized concerning previous years, except in 2011 when there was a slight increase in interest income of commercial banks in B&H compared to 2010. In terms of costs, specifically the costs that have an operational nature, the outcome is slightly better in relation to interest income. The largest decrease in operating expenses was recorded in 2011 (of about 9.54%) and 2017 (of about 8.27%). On the other hand, the largest increase in operating costs of banks in B&H was realized in 2012 at about 17%, then in 2013 (of about 9%) and 2016 (6.98%). Given the fact that banks operate in an environment where with an increasing number of bad debtors, increased credit risk, risk aversion, withholding or disapproval of loans to the extent that reserves allow, the logical consequence is a further decline in interest income as an essential factor in banking operations. This should influence banks to make a certain turnaround in their operations and make strategic new decisions and better planning. The table below illustrates the trend of average interest rates on loans and deposits to the retail sector for the period: 2015 - 2019.

**Table 4 - Trend in Average Interest Rates on Loans and Deposits to the Retail Sector for the Period: 2015 - 2019 (in %)**

|                                                              | 2015 | 2016 | 2017 | 2018 | 2019 |
|--------------------------------------------------------------|------|------|------|------|------|
| Average interest rate on loans to household sector (in %)    | 6.66 | 6.85 | 5.45 | 5.06 | 4.68 |
| Average interest rate on deposits to household sector (in %) | 1.86 | 1.45 | 1.01 | 1.02 | 0.89 |

Source: <https://www.cbbh.ba/Content/Archive/36> (Adapted by the author)

From the previous table, it is evident that there has been a downward trend in both lending and deposit interest rates in the household sector. An essential reason for the fall in average both lending and deposit interest rates is primarily the intervention of the European Central Bank (ECB) and the

implementation of expansionary monetary policy and strengthening spending, supply and demand for loans, etc. What is interesting is that, despite the fall in deposit interest rates in the retail sector, bank deposits continue to grow from year to year because there are no alternative and more favorable forms of savings and investment. In order to retain old depositors and attract new deposits, banks will need to develop new services in the future through a franchise arrangement, which includes the following services:

- Brokerage services related to securities, where clients can buy shares, bonds, shares in money market funds, while keeping their bank account.
- Counters for the purchase of *life insurance, health insurance, and property insurance*, i.e., based on a joint investment agreement with appropriate non-banking institutions.
- Agreements for the creation of a banking network with other banks (Institutional banking) so that, if someone travels in the country or around the world, they can also access their deposit account in other banks.
- Relocation and placement services for apartments, houses, and other property for clients who change their place of residence.
- Financial and tax consulting for clients who make important personal and business decisions.
- Merchant banking services, i.e., technical and financial assistance in merging companies, taking over-purchase of companies, and all other activities related to company restructuring.

Table 5 shows the linear trend, i.e., the structure of income based on interest and leasing and other income for the period: 2010 - 2019.

**Table 5 - Linear Trend of Interest and Leasing Income and Other Income of Banks in Bosnia and Herzegovina for the Period: 2010 - 2019 (in %)**

|                             | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | Prosek        |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|
| Interest and leasing income | 92.69% | 90.80% | 95.76% | 95.68% | 96.25% | 96.17% | 94.96% | 94.45% | 92.83% | 95.71% | <b>94.87%</b> |
| Other income                | 7.31%  | 9.20%  | 4.24%  | 4.31%  | 3.75%  | 3.82%  | 5.03%  | 5.54%  | 7.17%  | 4.29%  | <b>5.81%</b>  |

Source: Banking Agency of the Federation of Bosnia and Herzegovina (<https://www.fba.ba/>), Banking Agency of Republika Srpska (<https://abrs.ba>) (Adapted by the author)

As can be seen, the largest structural share consists of income from interest and leasing, where the relative amount was the highest in 2014 (96.25%), the lowest in 2011 (90.80%), with the average amount being 94.87%. These trends are typical and obvious in all Western Balkan countries where banks are mainly engaged in credit and deposit operations. Unlike interest and leasing income, other income had a more volatile trend, in which the relative amount in the structure of total income was the highest

in 2011 (9.20%), the lowest in 2014 (3.75%), with the average amount being 5.81%. Within the econometric analysis and research results, other revenues will be tested in terms of whether they can be a good predictor of the dependent variable, i.e., the return on bank assets.

## Basic Characteristics of Bancassurance in Bosnia and Herzegovina

Generally, selling insurance is a difficult job, especially in Bosnia and Herzegovina, which is facing a low standard of living and an insufficient insurance culture. Insurance companies sell an intangible product whose usefulness cannot be measured immediately, but the positive characteristics can still be felt in the future. The basic characteristics of the insurance market in Bosnia and Herzegovina are reflected in the relatively high share of non-life insurance premiums in the total insurance premium on the one hand, and the low share of life insurance premiums in the total insurance premium, on the other hand. Bancassurance as a channel for the sale of insurance in Bosnia and Herzegovina is at an early stage of development and has not been fully implemented. According to the Law on Insurance Mediation, there are differences at the level of B&H from the point of view of banks. Therefore, according to the Law on Insurance Mediation, banks based in Republika Srpska may engage in insurance intermediation, while the Law on Insurance Mediation in the Federation of Bosnia and Herzegovina still does not allow banks based in the FB&H to engage in insurance intermediation. In Republika Srpska, the sale of insurance is possible through the post office, microcredit organizations, and banks. In the Federation of B&H, a contract has been concluded with BH Post and there is some cooperation between certain insurers and banks (Šain and Selimović, 2013).

Preconditions for further development of bancassurance in Bosnia and Herzegovina are manifold. One of the most important is the long-term partnership between banks and insurance companies, followed by the understanding of banking, insurance projects of the bank's management, and the insurance company. In the process of cooperation, different models of sales strategy should be clearly defined and developed, then distribution channels, offers, advertising methods, then the system of cross-selling of banking products and insurance products should be defined. In several European countries, bancassurance has proven to be the most productive channel for the sale of life insurance, primarily due to its similarity to traditional banking and deposit operations (Burić et al., 2015). Given the low market penetration and the level of development of life insurance, as well as the growth of savings from year to year, it is possible to think about the conditions and potential for the development of bancassurance in Bosnia and Herzegovina. The most important advantage that banks have from bancassurance is that they receive an alternative source of income that diversifies their current commercial activities.

This advantage was so high in the early 1990s that it caused competition between banks, where profits further declined in this area of activity (Chevalier et al., 2005). Despite all the advantages, bancassurance can have a certain disadvantage for banks. Unlike an insurance agent, a culture of selling in banks may not be enough. Because the principles of selling insurance products are quite different from selling the bank's products, the banks' staff responsible for the sale may not achieve the desired level of success (Kirui, 2012).

In order to significantly increase life insurance premiums, and total income from fees and commissions, it is necessary to simply transfer household deposits to life insurance premiums. An illustrative example of banking insurance practice in the markets in the region was started by UniCredit Bank, when it signed two exclusive strategic partnership agreements with Allianz and Generali insurers for

the sale of insurance products to individuals and small businesses in Bosnia and Herzegovina, Croatia, Czech Republic, Hungary, Romania, Serbia, Slovakia and Slovenia. According to the legal regulations of each country, the state will implement this type of insurance and will specifically focus on life and non-life insurance, also when it comes to Generali and credit insurance (Čolović, 2020).

## Econometric Data Analysis

The main reasons for accepting the concept of bank insurance are primarily reflected in the increase in premium production and performance of insurance companies related to business profitability. Return on equity (ROE) and return on assets (ROA) are used as performance criteria for both banks and insurance companies. Return on equity essentially indicates the profitability of investments from the point of view of investors, because it measures the profitability rates of the company shareholders in terms of investing capital. On the other hand, ROA seeks an answer to the question of how profitable total assets are, and is usually used to measure operational success or performance from a manager's perspective. Revenues generated by banks from insurance activities are monitored under the item "other operating income" in the income and expenditure statements, i.e., in the income statement. Therefore, the effects of bancassurance on the profitability of banks can be observed through the ratio of other operating income and total operating income, and total assets. If more general measures such as ROA indicators and ROE are used, flow items with a relatively small share of total revenues, such as bank insurance may not be observed accurately and fully. The sample of this research consists of 30 commercial banks (15 banks in the Federation of Bosnia and Herzegovina and 15 banks in the Republika Srpska). Data on banks were collected from individual financial reports of banks as well as the Banking Agency of the Federation of Bosnia and Herzegovina and the Banking Agency of the Republika Srpska. This empirical study uses quarterly data for the entire banking system of Bosnia and Herzegovina. The research period covers the period from the first quarter of 2007 to the fourth quarter of 2019. The rate of return on assets (ROA) was used as a dependent variable. Three independent variables such as the growth rate of profit/loss (GRPL), the cost/income ratio (primarily the operating cost ratio - COINC), and the growth rate of other income (GROI) were used as independent variables. In Table 6, explanations of variables are given, as well as the expected effects of dependent and independent variables.

**Table 6 - Brief Description of Dependent and Independent Variables in the Model**

| VARIABLE | Definition of a variable                         | Expected effect |
|----------|--------------------------------------------------|-----------------|
| ROA      | The relationship between profit and total assets | -               |
| GRPL     | Growth rate of profit/loss                       | Positive (+)    |
| COINC    | The relationship between costs and revenues      | Negative (-)    |
| GROI     | Growth rate of other income                      | Positive (+)    |

Source: *Calculation by the author*

**Return on assets (ROA)** - is considered to be the most appropriate measure to evaluate the performance of a bank's business. The ROA is obtained by dividing the bank's income before the interest payable on its assets. Thus, ROA measures the effectiveness of management in using the resources of a bank to make a profit. It also evaluates the efficiency of the bank in using its financial and real investments to earn interest and other fees. This measure of bank profitability is particularly significant when comparing operational efficiency between banks (Sinkey, 1988).

**The growth rate of profit/loss (GRPL)** - for banks whose shares are not listed on stock exchanges, which is typical for countries where the capital market is underdeveloped, the use of profitability indicators is the only way to measure business performance. The bank operates profitably when interest income is greater than interest expense and other credit loss expenses. Conversely, a bank incurs an operating loss when interest income is less than interest expense and other credit loss expenses (Đukić, 2011). In this study a positive relationship between the ROA and GRPL is expected.

**Cost to income ratio (COINC)** is usually used as a measure of the efficiency of bank operations in terms of cost efficiency. This ratio is obtained by dividing the overhead costs with a sum of net interest income and other operating income. According to Kosak & Cok (2008), there is an inverse causality between the cost to income ratio and profitability indicators.

**The growth rate of other income (GROI)** - this ratio is obtained when other operating income of banks is divided by total income and the amount obtained is multiplied by 100 (Banking Agency of the Federation of Bosnia and Herzegovina and Banking Agency of Republika Srpska, 2019). It is a very useful measure in monitoring the development of new products and competition of banks. In this study a positive relationship between the variables ROA and GROI is expected.

## Results of Econometric Analysis

The econometric analysis was performed using the method of least squares (Ordinary Least Squares - OLS). In the econometric part of the paper, the stationarity of the presented data series will be examined using the extended Dicky-Fuller (ADF) unit root test.

**Table 7: Dickie-Fuller Unit Root Test**

| Abbreviated name of the variable | Level                 |                         | The first difference  |                         |
|----------------------------------|-----------------------|-------------------------|-----------------------|-------------------------|
|                                  | Probability (P) value | The value of statistics | Probability (P) value | The value of statistics |
| ROA                              | 0.6580                | -1.2203                 |                       |                         |
| GRPL                             | 0.0363                | -3.0578                 | 0.000                 | -6.9930                 |
| COINC                            | 0.6499                | -1.23912                | 0.000                 | -6.6028                 |
| GROI                             | 0.2101                | -2.19681                |                       |                         |

*Source: Calculation by the author (Eviews 10.0)*

The results from the previous table show that most series are stationary and in zero-order of integration. Stationarity primarily refers to data series whose statistical characteristics (such as arithmetic mean, variance, etc.) are constant over time. It is very important to use stationary series when evaluating the model because the forecast based on the model is facilitated. Therefore, according to the results of the research (Table 7), the series: GRPL and COINC proved to be unsteady. Differentiation brings them to the stationary level.

**Table 8 - Basic Regression Model Between Dependent and Independent Variables for the Period: 2007: Q1 - 2019: Q4**

| Dependent Variable: ROA    |             |                       |             |          |
|----------------------------|-------------|-----------------------|-------------|----------|
| Method: Least Squares      |             |                       |             |          |
| Date: 01/25/21 Time: 14:32 |             |                       |             |          |
| Sample: 2007:Q1 - 2019:Q4  |             |                       |             |          |
| Included observations: 52  |             |                       |             |          |
| Variable                   | Coefficient | Std.Error             | t-Statistic | Prob.    |
| GRPL                       | 0.003885    | 0.000458              | 8.479108    | 0.0000   |
| COINC                      | -0.005709   | 0.001895              | -3.013447   | 0.0041   |
| GROI                       | 1.16E-06    | 1.48E-06              | 0.783340    | 0.4373   |
| C                          | 0.696564    | 0.241384              | 2.885706    | 0.0058   |
|                            |             |                       |             |          |
| R squared                  | 0.750939    | Mean dependent var    |             | 0.560192 |
| Adjusted Rsquared          | 0.735373    | S.D. dependent var    |             | 0.485845 |
| S.E. of regression         | 0.249928    | Akaike info criterion |             | 0.138513 |
| Sum squared resid.         | 2.998265    | Schwarz criterion     |             | 0.288609 |
| Log likelihood             | 0.398653    | Hannan-Quinn criter.  |             | 0.196056 |
| F-statistic                | 48.24141    | Durbin- Watson stat   |             | 1.309095 |
| Prob(F statistic)          | 0.0000      |                       |             |          |

Source: Calculation by the author (Eviews 10.0)

From the previous table, it can be noticed that the coefficient of determination, as well as the adjusted coefficient of determination, has a high value. The adjusted coefficient of determination is 73.54%, which explains that the independent variables deviate from the dependent by about 26.46%. In terms of the correlative relationship, the value of Durbin Watson statistics recorded an amount of 1.31, which means that it is a medium-strong correlation. Also, the value of the empirical F-test of 48.24 is high, which suggests that independent variables have a good prediction of the dependent variable, i.e., ROA. The strongest positive correlation with the dependent variable (ROA) was achieved by the following independent variables: the growth rate of other income, as well as the growth rate of profit/loss in banking operations. Increasing the growth rate of other income by one unit, *ceteris paribus*, leads to an increase in return on assets by about  $1.16 \times 10^{-6}$ . Other revenues include other operating revenues, as well as revenues from the sale of life or non-life insurance policies of individual banks through bank channels.

On the other hand, the strongest negative correlation was recorded between the cost-income ratio and return on assets (-0.006). The results of many studies have shown that there is an inverse relationship between the cost-income ratio and return on assets. The very high value of the cost-income ratio shows that the profitability of banks largely depends on the management of operating costs, primarily labor costs. In order to maintain higher profits, bank managers must reduce operating costs or assume higher credit risk. Given that there is increasing competition in credit markets (saturation of the economy with loans) which affects the reduction of net interest margins, as well as an increased share of bad assets, bank management in B&H, in addition to reducing operating costs should introduce new products such as life packages. insurance based on non-interest income. Therefore, banks in Bosnia and Herzegovina in the future will need to find some trade-off between increasing other revenues and reducing or maintaining operating costs. The sale of life insurance packages in banks would partly reduce the cost of laying off workers employed at bank counters. We are witnessing that a large number of workers are losing their jobs due to the development of information technologies, where these layoffs bring with them high costs. With the expansion of bank insurance, persons employed at bank counters would keep their jobs, where, on the other hand, the costs of training employees in banks would increase (Krunic, 2014).

## Conclusion

The basic characteristics of the insurance market in Bosnia and Herzegovina are reflected in the relatively high share of non-life insurance premiums in the total insurance premium on the one hand, and the low share of life insurance premiums in the total insurance premium, on the other hand. Some of the significant factors of low share of life insurance premium in the total insurance premium in B&H are the following: low solvency of the population, low per capita income, high unemployment rate, low awareness of the population about the importance of life insurance, pronounced distrust of the population in long-term savings, etc.

Bancassurance has become one of the main models in the convergence observed among financial institutions with an increasing volume of business in the world. It is a widely accepted reality that it provides serious benefits to all issuers, from banks to insurance companies, from customers to the legal authorities. One of the generally accepted questions regarding bancassurance, which also concerns the results of econometric analysis, is: *Does this form of cooperation improve the financial performance of banks based on profitability?*

The results of the research showed that other income, as well as the growth rate of profit/loss as independent variables, has a significant impact on the profitability of banks. A particularly high positive correlation was observed between the rate of return on bank assets as a dependent variable and other income. With the increase in other revenues, the structure of which also includes revenues from bancassurance services through bank channels, there is a consequent increase in the profitability of banks. Interest margins with banks in B&H are still at a high level where the prevailing opinion is that bank insurance is a low-profit business.

However, due to increased operating costs, banks will have to focus more on the development of non-interest income and services in the coming years in order to increase fees and commission income and reduce interest income dependence.

In developed markets, banks and insurance companies are at the forefront of business digitalization. In the world of digitalization, the role of advocates as advisors is slowly ending, which can have the effect of reducing costs and increasing revenues. Also, modern trends in the financial market, such as the digitalization of banks operations, will certainly in the coming period affect the greater satisfaction of customer expectations, and increase operating income on the one hand, as well as reduce operating costs on the other hand. Therefore, by implementing the concept of bancassurance in the light of the digitalization of the banking sector, the needs of increasingly demanding clients can be sufficiently met through the possibility of purchasing various financial products and services.

The choice of the bank insurance model is vital for the successful functioning of the entire concept, as well as long-term sustainability in the entire business environment. For banks, it can be said that the development of bancassurance practices has a strong potential as a safe and stable source of income, and against the negative effects of interest rate fluctuations.

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# UTICAJ KRIZE IZAZVANE KORONAVIRUSOM NA POSLOVNE ODLUKE KOMPA NIJA ČIJE SU AKCIJE UVRŠTENE NA BANJALUČKU BERZU – PRIMJER ODLUKE O ISPLATI DIVIDENDE

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## Rezime

*Predmet ovog rada je analiza uticaja krize izazvane koronavirusom na poslovne odluke emitenata čije su akcije uvrštene na Banjalučku berzu, kroz primjer odluke o isplati dividende. Za potrebe utvrđivanja činjeničnog stanja posmatrani su javno dostupni finansijski izvještaji svih kompanija koje su isplaćivale dividendu iz dobiti za 2018. i 2019. godinu, te je izvršeno poređenje stopa zadržavanja dobiti u dva posmatrana perioda, kao i analiza drugih dostupnih podataka o poslovanju pomenutih emitenata. Rezultati istraživanja pokazuju da je u 10 od 16 slučajeva u kojima je vršena isplata dividende iz dobiti za 2019. godinu povećana stopa zadržavanja dobiti u odnosu na 2018. godinu. Pored pomenutih 16 slučajeva isplate dividende iz dobiti za prethodnu godinu, zabilježena su i dva slučaja u kojima je izvršena isplata dividende, ali iz akumulirane dobiti ranijih godina, tako da za te emitente nije vršena kalkulacija stope zadržavanja dobiti. Ukoliko se uzme u obzir činjenica da je u skoro svim slučajevima odluka o (ne)isplaćivanju dividende donesena u trenutku kada su neizvjesnosti u vezi sa koronavirusom već bile prisutne i u Republici Srpskoj, može se zaključiti da je nastupajuća kriza imala uticaj na odluke o raspodjeli neto rezultata za 2019. godinu.*

**Ključne riječi:** covid19, korona virus, pandemija, dividenda, stopa zadržavanja dobiti, menadžment, korporativne finansije, Banjalučka berza

**JEL klasifikacija:** G01, G35.

## Uvod

Ekonomске posljedice krize izazvane pandemijom koronavirusa još uvijek se ne mogu u potpunosti sagledati. Za razliku od drugih ekonomskih kriza čije se rješenje moglo tražiti u povećanju ekonomske aktivnosti, u ovom slučaju smo se suočili sa potpuno novom i neuobičajenom situacijom: zbog prioriteta zaštite zdravlja ljudi djelimično je (ili potpuno) ograničeno njihovo kretanje i došlo je do pada ukupne ekonomske aktivnosti. Veliki broj zaposlenih lica upućen je na rad od kuće, a u sektorima u kojima je neophodno fizičko prisustvo radnika, poput industrijske proizvodnje i pružanja različitih usluga, došlo je do privremenog obustavljanja djelatnosti. Sve navedeno je imalo za posljedicu promjenu u odlukama menadžmenta privrednih subjekata koje se odnose na organizaciju rada, izvore i načine finansiranja, te raspolaganje ostvarenim rezultatom poslovanja.

Kompanije sa sjedištem u Republici Srpskoj nisu bile pošteđene negativnih efekata krize izazvane pandemijom koronavirusa. U našem istraživanju bavili smo se otvorenim akcionarskim društvima – kompanijama čije su akcije uvrštene na Banjalučku berzu. Identifikovali smo one kompanije koje su vršile isplatu dividende iz dobiti ostvarene u 2018. i 2019. godini, te smo analizirali njihove finansijske izvještaje u cilju utvrđivanja visine ostvarenog neto rezultata i računanja stope zadržavanja dobiti. Nadalje, pregledali smo zapisnike sa skupština akcionara na kojima su donesene odluke o isplati dividende kako bismo utvrdili da li su iste isplaćene iz dobiti ostvarene u referentnim obračunskim periodima ili iz akumulirane dobiti ranijih godina, te da li postoje dodatne kvalitativne informacije u vezi sa predmetnim isplatama. Poređenjem stopa zadržavanja dobiti koje se odnose na posmatrana dva uzastopna obračunska perioda (2018. i 2019. godinu) došli smo do zaključaka koji su prezentovani u posljednjem dijelu rada.

S obzirom na to da nije izvjesno kada se može očekivati kraj pandemije koronavirusa, u narednom periodu će biti prostora za nova istraživanja na temu poslovnih odluka upravljačkih organa privrednih društava. Pored toga, skrećemo pažnju na činjenicu da su u ovom radu analizirani podaci objavljeni do novembra 2020. godine, te da postoji mogućnost da će do kraja godine biti donesene nove odluke o isplati dividende kompanija čije su akcije uvrštene na Banjalučku berzu.

Istraživanje započinjemo sljedećom hipotezom: Kriza izazvana pandemijom koronavirusa je uticala na to da kompanije čije su akcije uvrštene na Banjalučku berzu povećaju stopu zadržavanja dobiti ostvarene u 2019. godini.

## Pregled literature

Jedna od najvažnijih odluka koju menadžment neke kompanije mora donijeti jeste odluka o raspodjeli neto dobiti. Pravilna procjena toga koji dio neto dobiti treba da se isplati akcionarima u vidu dividende, a koji dio treba da ostane u preduzeću kao zadržana dobit, zahtijeva razmatranje niza faktora koji mogu imati presudan značaj na buduće poslovanje preduzeća.

Lintner (1956) je definisao 15 varijabli koje bi mogle utjecati na politiku isplate dividendi, među kojima su: veličina kompanije, stabilnost zarada, vlasništvo, troškovi kompanije i sl. U studiji zasnovanoj na intervjuima sa rukovodiocima američkih korporacija sredinom 1950-ih, Lintner je pokazao da, iako mnoge kompanije redovno isplaćuju dividendu, privremena povećanja ili smanjenja zarade nemaju veliki uticaj na visinu dividende. Drugim riječima, otkrio je da kompanije nerado povećavaju divi-

dende do neodrživih nivoa iz straha da će kasnije morati da smanje dividende, s obzirom da akcionari žele stabilne dividende i njihov konstantan rast i da izrazito negativno reaguju na smanjenja dividendi.

Kao rezultat ovih intervju, Lintner je predložio model koji povezuje promjene u visini dividendi sa prošlim dividendama koje je kompanija isplaćivala i sa trenutnim dobitkom. Lintnerov model i njegove varijacije empirijski su testirani tokom godina od strane brojnih istraživača. Na razvijenim tržištima u SAD primijenili su ga Fama i Babiak (1968), Watts (1973), te Roy i Cheung (1985), u Kanadi Chateau (1979), u Velikoj Britaniji Ryan (1974), a u Irskoj Barrett i Cotter (1990). Rezultati ovih studija su u načelu bili u skladu sa Lintnerovim nalazima o djelimičnom prilagođavanju koeficijenta isplate dividende ciljanom koeficijentu.

Menadžeri pažljivo razmatraju uticaj svojih odluka na cijenu akcija, jer upravo njihova cijena predstavlja ključnu determinantu vrijednosti preduzeća i bogatstva akcionara. Zadržana dobit se najčešće reinvestira u samu kompaniju, radi postizanja rasta i generisanja dobiti u budućnosti. Stoga, politika dividendi čini sastavni dio odluke o finansiranju preduzeća. Svaka isplata dividendi smanjuje novčana sredstva preduzeća koja mogu biti iskorištena u ostale svrhe, poput investiranja, smanjenja zaduženosti i sl. Isto tako, zadržavanje većeg iznosa dobiti znači ujedno i manje sredstava za tekuću isplatu dividendi u promatranom razdoblju (Buljan, 2018).

Kada se govori o analizi politike dividendi, polazi se od koeficijenta isplate dividendi, koji se računa na sljedeći način:

$$\text{koeficijent isplate dividendi} = \frac{\text{dividenda}}{(\text{neto dobit})}$$

Vrijednost ovog koeficijenta kreće se u intervalu od 0 do 1. Koeficijent vrijednosti 0 znači da nije bilo isplate dividende i da je cjelokupna dobit zadržana u preduzeću, dok koeficijent vrijednosti 1 znači da je cjelokupna dobit isplaćena akcionarima kao dividenda i da nijedan dio dobiti nije zadržan u preduzeću.

Suprotno koeficijentu isplate dividendi, koeficijent zadržavanja dobiti se računa tako što se u odnos stave zadržana dobit i neto dobit:

$$\text{koeficijent zadržavanja dobiti} = \frac{(\text{neto dobit} - \text{dividenda})}{(\text{neto dobit})}$$

odnosno tako što se koeficijent isplate dividendi oduzme od 1:

$$\text{koeficijent zadržavanja dobiti} = 1 - \text{koeficijent isplate dividendi}$$

Vrijednost ovog koeficijenta takođe se kreće u intervalu od 0 do 1.

Uticaj politike dividendi na cijenu akcija predstavlja predmet brojnih rasprava u oblasti politike dividendi neke kompanije. Tradicionalisti vjeruju da akcionari preferiraju dividende u odnosu na kapitalne dobitke koji bi se mogli ostvariti ukoliko bi došlo do reinvestiranja zarade od strane kompanije.

Bilo kakvo smanjenje dividendi proizašlo iz poslovne politike preduzeća, ceteris paribus, vjerovatno bi rezultiralo smanjenjem cijene akcija. Rani zagovornici ove takozvane „teorije ptice u ruci“, Gordon (1959) i Lintner (1962) tvrdili su da su dividende manje rizične od kapitalnih dobitaka. Kapitalni dobitci zavise ne samo od profitabilnosti ponovnog ulaganja zarade od strane kompanije, nego i od kretanja na ukupnom tržištu kapitala. Budući da se dividende smatraju manje rizičnim od kapitalnih dobitaka,

akcionari će više cijiniti akcije kompanija sa visokim koeficijentima isplate dividendi u odnosu na akcije kompanija sa niskim koeficijentima isplate.

Alternativni stav je da je politika dividendi irelevantna. Nobelovci Miller i Modigliani (1961) pokazali su da je politika dividendi nebitna u svijetu savršenih i efikasnih tržišta kapitala. Ova pozicija, koju su proširili Black i Scholes (1974), te Miller i Scholes (1978), tvrdi da se akcionari brinu samo o prihodu kompanije, a ne o odnosima zadržane dobiti i isplate dividende. Akcionarima nije od presudnog značaja da li se dividende isplaćuju ili ne i shodno tome bili bi ravnodušni prema neredovnim dividendama koje bi nastale uslijed politike povećanja zadržane dobiti. Slično tome, Radivojac (2008) tvrdi da se vrijednost kompanije u većoj mjeri zasniva na kvalitetu upravljanja i investicionim politikama nego na politici dividendi.

Uprkos debati koja se nastavlja među academicima, ponašanje prisutno u praksi govori u prilog tezi da je politika dividendi bitna. Ovo ponašanje može, ali ne mora biti racionalno i teorijski opravdano.

Odluke o isplati dividende jednim dijelom se objašnjavaju i tzv. agencijskom teorijom. Osnovna pretpostavka agencijske teorije je da se kompanije ne ponašaju u skladu sa načelom maksimizacije bogatstva, zbog sukoba interesa koji postoji između ključnih upravljačkih subjekata, a što nastaje kao posljedica razdvojenosti vlasništva i menadžmenta. Problem nastaje kada vlasnik ne može savršeno i bez troškova da kontroliše aktivnosti menadžmenta koje bi u principu trebale biti usmjerene na ciljeve koje je postavio vlasnik prilikom pokretanja poslovnog poduhvata.

Agencijska teorija pretpostavlja da bogatstvo ne može biti maksimizovano zbog različitih interesa akcionara i menadžmenta, različitog pristupa informacijama i različite sklonosti ka riziku. S obzirom na to da akcionari ne učestvuju direktno u aktivnostima koje bi trebalo da rezultiraju maksimizacijom njihove koristi, postoji opasnost da menadžment koristi sredstva neracionalno i da su akcionari slabije informirani, što rezultira agencijskim troškovima. Dio rješenja može se pronaći u isplati dividendi za koje se tvrdi da će prisiliti menadžment na učestalije prikupljanje sredstava za finansiranje investicija na finansijskom tržištu. Zbog eksternog finansiranja i isplate dividendi, menadžment će biti pod učestalijim nadzorom i postoje manje šanse da će se ponašati isključivo u skladu s vlastitim interesima (Buljan, 2018).

Pored navedenog, postoji i teorija koja povezuje isplate dividende sa životnim ciklusom kompanije. Osnovna pretpostavka ove teorije je da, sazrijevanjem kompanije, ona ima sve veće gotovinske tokove i premalo profitabilnih investicionih mogućnosti. Zbog viška finansijskih sredstava, kompanije u zrelijoj životnoj fazi češće isplaćuju dividendu svojim akcionarima. Sa druge strane, nove kompanije se susreću sa velikim investicionim mogućnostima i obično imaju manjak finansijskih sredstava da bi iskoristile sve prilike koje im se pružaju na tržištu (Mueller, 1972). U početnoj fazi poslovanja, kompanije koriste sva raspoloživa sredstva za razvoj inovacija, pozicioniranje na tržištu i povećanje profitabilnosti, a značajan dio sredstava odlazi na troškove finansiranja zbog velikog rizika koji postoji kod mladih kompanija. U ovoj fazi životnog ciklusa agencijski problem nije izražen zbog postojanja kontrole menadžmenta. Vremenom i druga preduzeća ulaze na tržište, konkurencija postaje sve jača i tržište postaje zasićeno. Organizaciona struktura kompanije u ovoj fazi postaje komplikovanija, pa se odluke donose teže i preuzima se manje rizika. Zbog svega navedenog, kompanija uskoro dolazi u fazu kada ima višak gotovine u odnosu na dostupne investicione mogućnosti. U zreloj životnoj fazi počinje značajnija distribucija zarada akcionarima kroz dividende. Dakle, prema teoriji životnog ciklusa, kompanije u zreloj životnoj fazi počinju isplaćivati dividende uz manji rast i pad profitabilnosti.

Svi navedeni pogledi na odluke o isplati dividende zasnovani su na pretpostavci da kompanija posluje pod uobičajenim okolnostima, odnosno da nije suočena sa neočekivanim finansijskim poteškoćama. Međutim, šta se dešava upravo u takvim uslovima? Hauser (2013) i Floyd et al. (2015) su analizirali odluke o isplati dividende prije i u toku globalne finansijske krize 2008. godine, te došli do konzistentnih zaključaka o tome da se u uslovima finansijske nestabilnosti dividenda smanjuje ili zadržava u cilju povećanja likvidnosti kompanije.

Krieger et al. (2020) istraživali su uticaj pandemije koronavirusa na isplatu dividende kompanija sa sjedištem u SAD, čijim se akcijama trguje na organizovanom tržištu. Istraživanjem je obuhvaćeno 1.400 kompanija koje redovno isplaćuju dividendu, te je posmatrana dinamika isplate dividende po kvartalima u periodu 2015 – 2020. godine. Rezultati istraživanja pokazuju da je od 1.400 posmatranih kompanija njih 213 smanjilo isplatu dividende, dok 93 kompanije nisu ni vršile isplatu tokom drugog kvartala 2020. godine. Ove cifre su tri do pet puta veće u odnosu na sve prethodne kvartale počev od 2015. godine. Drugim riječima, u posljednjih pet godina nije bilo manje isplate dividende nego u vrijeme pandemije koronavirusa. Drugi zanimljiv zaključak ovih autora zasnovan je na povlačenju paralele sa globalnom finansijskom krizom 2008. godine. Naime, pad isplate dividende se tokom prethodne finansijske krize vezivao za kompanije iz finansijskog sektora, dok je u ovoj krizi vidljivo da dividendu smanjuju (ili uopšte ne isplaćuju) i kompanije iz drugih sektora, poput industrije i komunalnih usluga.

Mazur et al. (2020) vršili su slično istraživanje na uzorku kompanija čije akcije ulaze u sastav indeksa S&P1500, ali su došli do drugačijih zaključaka. Rezultati njihovog istraživanja pokazuju da je preko 80% posmatranih kompanija zadržalo, ili čak povećalo, isplatu dividende uprkos lošim finansijskim rezultatima i smanjenju vrijednosti kapitala. U nekoliko slučajeva utvrđeno je da su kompanije koje su vršile isplatu dividende ostvarile lošije rezultate poslovanja i imale nepovoljnije projekcije budućih novčanih tokova u odnosu na kompanije koje nisu isplaćivale dividendu. Nesklad između ostvarenog rezultata i isplate dividende se djelimično objašnjava nesklonošću menadžmenta da mijenja obrazac isplate dividende čak i u kriznim situacijama, s obzirom na to da bi to moglo imati negativan efekat na procjenu kvaliteta kompanije od strane sadašnjih i potencijalnih investitora. Ovi nalazi su u saglasnosti sa rezultatima istraživanja koje su proveli Sami i Abdallah (2021), a koje se odnosi na ispitivanje odluka o isplati dividende najboljih kompanija se Njujorške berze u periodu 2000-2017. Pomenuti autori su utvrdili da je konzistentna politika dividendi u periodu negativnog finansijskog rezultata pokazatelj stabilnosti i održivosti kompanije, te da kao takva šalje pozitivne signale učesnicima na tržištu.

Prema istraživanju Dimensional Fund Advisors LP, zasnovanom na podacima sa veb portala Bloomberg, 38% kompanija sa različitih tržišta širom svijeta (2.584 kompanija) od kojih se očekivalo da će isplatiti dividende u skladu sa njihovom istorijom isplate, umjesto toga je smanjilo, izostavilo ili eliminisalo svoje isplate dividendi u drugom kvartalu 2020. godine. Ovaj broj kompanija je dva puta veći u odnosu na prvi kvartal 2020. godine, kada je redukcija isplate dividende zabilježena kod 1.248 kompanija.

## **Analiza isplate dividende iz dobiti ostvarene u 2018. i 2019. godini kompanija čije su akcije uvrštene na banjalučku berzu**

Uvidom u javno dostupne podatke objavljene na internet stranici Banjalučke berze utvrđeno je da je dividendu za 2018. godinu isplatilo ukupno 16 preduzeća, dok je dividendu za 2019. godinu isplatilo ukupno 11 preduzeća. Riječ je o sljedećim kompanijama:

**Tabela 1 - Kompanije koje su isplaćivale dividendu iz dobiti za 2018. i 2019. godinu**

| Naziv kompanije                         | Oznaka HOV | Godina    |           |
|-----------------------------------------|------------|-----------|-----------|
|                                         |            | 2018      | 2019      |
| Banjalučka pivara a.d. Banja Luka       | BLPV-P-B   | +         | +         |
| Bosnamontaža a.d. Prijedor              | BMNT-R-A   | +         |           |
| Boksit a.d. Milići                      | BOKS-R-A   | +         |           |
| Mikroelektronika a.d. Banja Luka        | CMEL-R-A   | +         | +         |
| Fratello Trade a.d. Banja Luka          | FRTL-R-D   |           | +         |
| Gas promet a.d. Istočno Sarajevo - Pale | GPIS-R-A   | +         | +         |
| Grawe osiguranje a.d. Banja Luka        | GRAW-R-A   | +         |           |
| Graditelj a.d. Teslić                   | GRDT-R-A   |           | +         |
| Hidroelektrane na Drini a.d. Višegrad   | HEDR-R-A   | +         |           |
| Krajina GP a.d. Banja Luka              | KRJN-R-A   | +         |           |
| Mira a.d. Prijedor                      | MIRA-R-A   | +         |           |
| Meridian a.d. Banja Luka                | MRDN-R-A   | +         | +         |
| UniCredit Bank a.d. Banja Luka          | NBLB-R-B   | +         | +         |
| Napredak a.d. Bijeljina                 | NPDK-R-A   | +         | +         |
| Romanijaputevi a.d. Sokolac             | ROPT-R-A   | +         | +         |
| Tehnogas - Trn a.d. Laktaši             | TGTN-R-A   | +         | +         |
| Telekom Srpske a.d. Banja Luka          | TLKM-R-A   | +         | +         |
| NLB banka a.d. Banja Luka               | VBBB-R-A   | +         |           |
| Ukupno                                  |            | <b>16</b> | <b>11</b> |

Struktura kompanija koje su isplaćivale dividendu je sljedeća: 15 preduzeća, dvije banke i jedno osiguravajuće društvo.

Iz tabele 1 je vidljivo da je devet preduzeća isplatilo dividendu za oba posmatrana perioda. Radi se o sljedećim kompanijama: Banjalučka pivara a.d. Banja Luka, Mikroelektronika a.d. Banja Luka, Gas promet a.d. Istočno Sarajevo – Pale, Meridian a.d. Banja Luka, UniCredit Bank a.d. Banja Luka, Napredak a.d. Bijeljina, Romanijaputevi a.d. Sokolac, Tehnogas - Trn a.d. Laktaši i Telekom Srpske a.d. Banja Luka. Pritom je važno napomenuti da je emitent Telekom Srpske a.d. Banja Luka isplatio dividendu po dva puta u toku svake godine.

Ukupno sedam kompanija je vršilo isplatu dividende samo za 2018. godinu, dok su dvije kompanije vršile isplatu dividende samo za 2019. godinu.

Detalji o isplatama dividende gorepomenutih preduzeća predstavljeni su u narednoj tabeli:

**Tabela 2 - Iznos dividende po pojedinačnim preduzećima koja su vršila isplatu iz  
dobiti za 2018. i 2019. godinu**

| Oznaka | Godina | Datum održavanja<br>skupštine | Iznos dividendi u<br>novcu (KM) | Dividenda u novcu<br>po jednoj akciji (KM) |
|--------|--------|-------------------------------|---------------------------------|--------------------------------------------|
| BLPV   | 2019   | 22.9.2020.                    | 45.744                          | 0,03                                       |
| CMEL   | 2019   | 12.3.2020.                    | 100.000                         | 0,286                                      |
| FRTL   | 2019   | 29.6.2020.                    | 49.113                          | 0,0175                                     |
| GPIS   | 2019   | 30.6.2020.                    | 133.523                         | 0,0583                                     |
| GRDT   | 2019   | 6.6.2020.                     | 56.532                          | 0,052                                      |
| MRDN   | 2019   | 3.6.2020.                     | 650.000                         | 0,0829                                     |
| NBLB   | 2019   | 7.4.2020.                     | 14.780.090                      | 106,6                                      |
| NPDK   | 2019   | 29.6.2020.                    | 120.917                         | 0,0483                                     |
| ROPT   | 2019   | 21.8.2020.                    | 94.220                          | 0,012                                      |
| TGTN   | 2019   | 28.4.2020.                    | 970.081                         | 1                                          |
| TLKM   | 2019   | 25.6.2020.                    | 43.575.758                      | 0,0887                                     |
| TLKM   | 2019   | 5.12.2019.                    | 17.449.948                      | 0,0355                                     |
| BLPV   | 2018   | 28.6.2019.                    | 45.744                          | 0,03                                       |
| BMNT   | 2018   | 25.6.2019.                    | 2.569.785                       | 0,9                                        |
| BOKS   | 2018   | 8.5.2019.                     | 100.000                         | 0,0058                                     |
| CMEL   | 2018   | 4.6.2019.                     | 100.000                         | 0,0286                                     |
| GPIS   | 2018   | 26.6.2019.                    | 248.546                         | 0,053                                      |
| GRAW   | 2018   | 12.3.2019.                    | 607.000                         | 100                                        |
| HEDR   | 2018   | 13.12.2019.                   | 7.549.517                       | 0,0171                                     |
| KRJN   | 2018   | 27.6.2019.                    | 3.048.085                       | 0,27                                       |
| MIRA   | 2018   | 14.5.2019.                    | 184.736                         | 0,01                                       |
| MRDN   | 2018   | 30.4.2019.                    | 650.000                         | 0,088                                      |
| NBLB   | 2018   | 9.4.2019.                     | 5.552.933                       | 40,05                                      |
| NPDK   | 2018   | 17.6.2019.                    | 173.260                         | 0,0693                                     |
| ROPT   | 2018   | 23.8.2019.                    | 90.291                          | 0,0115                                     |
| TGTN   | 2018   | 3.5.2019.                     | 970.081                         | 1                                          |
| TLKM   | 2018   | 3.6.2019.                     | 38.445.821                      | 0,0782                                     |
| TLKM   | 2018   | 7.12.2018.                    | 22.571.691                      | 0,0459                                     |
| VBBB   | 2018   | 29.5.2019.                    | 36.369.720                      | 586,58                                     |

Iz tabele 2. je vidljivo da su skupštine akcionara na kojima su donesene odluke o isplati dividende za 2019. godinu održane u periodu od marta do septembra 2020. godine, kada je kriza izazvana koronavirusom već bila prisutna u Republici Srpskoj. Naime, u martu 2020. godine su donesene odluke o zabrani javnih okupljanja i zatvaranju škola, a ubrzo je uslijedila i odluka o zabrani kretanja u određenim vremenskim intervalima i na određenim teritorijama. U medijima se svakodnevno izvještavalo o promjeni u broju oboljelih i novim mjerama za suzbijanje epidemije, tako da je u vrijeme održavanja gore pomenutih skupština akcionara već bilo poznato da se cijeli svijet, pa tako i Republika Srpska, suočava sa brojnim neizvjesnostima koje zahtijevaju prilagođavanje ukupnih poslovnih aktivnosti. Jedna od promjena koje su se dogodile u posmatranom periodu odnosi se na stopu zadržavanja dobiti kompanija čije su akcije uvrštene na Banjačku berzu.

**Tabela 3 - Stopa zadržavanja dobiti kompanija koje su isplaćivale dividendu iz dobiti za 2018. i 2019. godinu**

| Oznaka | 2018. godina  |            |                          | 2019. godina  |            |                          |
|--------|---------------|------------|--------------------------|---------------|------------|--------------------------|
|        | Neto rezultat | Dividenda  | Stopa zadržavanja dobiti | Neto rezultat | Dividenda  | Stopa zadržavanja dobiti |
| BLPV   | 1.822.983     | 45.744     | 97%                      | -1.250.716    | 45.744     | -                        |
| BMNT   | 1.623.200     | 2.569.785  | -58%                     | 2.542.186     |            | 100%                     |
| BOKS   | 987.151       | 100.000    | 90%                      | 611.676       |            | 100%                     |
| CMEL   | 213.614       | 100.000    |                          | 711.125       | 100.000    |                          |
| FRTL   | 31.852        |            | 100%                     | 240.958       | 49.113     | 80%                      |
| GPIŠ   | 276.162       | 248.546    | 10%                      | 337.248       | 133.523    | 60%                      |
| GRAV   | 1.677.568     | 607.000    | 64%                      | 846.193       |            | 100%                     |
| GRDT   | 51.405        |            | 100%                     | 59.507        | 56.532     | 5%                       |
| HEDR   | 8.205.997     | 7.549.517  | 8%                       | 29.722        |            | 100%                     |
| KRJN   | 3.055.018     | 3.048.085  | 0%                       | 2.925.378     |            | 100%                     |
| MIRA   | 1.352.847     | 184.736    | 86%                      | 1.353.256     |            | 100%                     |
| MRDN   | 693.422       | 650.000    | 6%                       | 754.885       | 650.000    | 14%                      |
| NBLB   | 27.770.781    | 5.552.933  | 80%                      | 29.580.790    | 14.780.090 | 50%                      |
| NPKD   | 129.018       | 173.260    | -34%                     | 120.917       | 120.917    | 0%                       |
| ROPT   | 97.986        | 90.291     | 8%                       | 101.992       | 94.220     | 8%                       |
| TGTN   | 1.400.988     | 970.081    | 31%                      | 1.425.336     | 970.081    | 32%                      |
| TLKM   | 61.017.512    | 38.445.821 | 37%                      | 61.025.706    | 43.575.758 | 29%                      |
| VBBB   | 36.370.139    | 36.369.720 | 0%                       | 32.775.115    |            | 100%                     |

Iz podataka prikazanih u prethodnoj tabeli može se izvesti nekoliko zaključaka. Prije svega, stopa zadržavanja dobiti se 2019. godine povećala u odnosu na 2018. godinu u 10 posmatranih slučajeva (Bosnamontaža a.d. Prijedor, Boksit a.d. Milići, Gas promet a.d. Istočno Sarajevo – Pale, Grawe osiguranje a.d. Banja Luka, Hidroelektrane na Drini a.d. Višegrad, Krajina GP a.d. Banja Luka, Mira a.d. Prijedor, Meridian a.d. Banja Luka, Tehnogas a.d. Laktaši i NLB banka a.d. Banja Luka), što znači da je isplaćeno procentualno manje dividende u odnosu na 2018. godinu, ili dividenda nije ni isplaćivana.

U četiri slučaja došlo je do smanjenja stope zadržavanja dobiti (Fratello Trade a.d. Banja Luka, Graditelj a.d. Teslić, UniCredit Bank a.d. Banja Luka i Telekom Srpske a.d. Banja Luka), što znači da je isplaćeno procentualno više dividende u odnosu na 2018. godinu.

U jednom slučaju je pomenuta stopa ostala na istom nivou (Romanijaputevi a.d. Sokolac, relativno niska stopa zadržavanja dobiti od 8%).

U jednom slučaju stopa zadržavanja dobiti 2019. godine je iznosila 0, odnosno cjelokupna neto dobit je isplaćena, ali je u prethodnoj godini isplaćeno više od ostvarenog dobitka te godine (iz akumuliranog dobitka prethodnih godina), tako da se i na ovom mjestu uslovno može reći da je stopa zadržavanja dobiti povećana. Radi se o preduzeću Napredak a.d. Bijeljina.

Konačno, u tri slučaja je vršena isplata dividende iz akumuliranog dobitka ranijih godina uz različite polazne osnove. Naime, emitent Banjalučka pivara a.d. Banja Luka je 2019. godine ostvario gubitak od -1.250.716 KM, ali je isplatio dividendu u iznosu od 45.744 KM, koja je jednaka dividendi iz prethodne godine, budući da se radi o kumulativnim prioritetnim akcijama koje obezbjeđuju fiksni iznos dividende. Emitent Bosnamontaža a.d. Prijedor je 2018. godine imao negativnu stopu zadržavanja dobiti (-58%, neto dobit je iznosila 1.623.200 KM, a isplaćena dividenda 2.569.785 KM), dakle dividenda je isplaćena iz akumuliranog dobitka ranijih godina. Nasuprot tome, 2019. godine nije bilo isplate dividende ovog preduzeća i cjelokupna neto dobit od 2.542.186 KM je ostala neraspoređena. Treći emitent koji je vršio isplatu dividende iz akumulirane dobiti je Mikroelektronika a.d. Banja Luka, iako je i 2018. i 2019. godine ostvarena neto dobit iz poslovanja (213.614 KM i 711.125 KM, respektivno). Za emitente Banjalučka pivara a.d. Banja Luka i Mikroelektronika a.d. Banja Luka nije vršeno računanje stope zadržavanja dobiti jer bi to, imajući u vidu sve prethodno navedeno, bilo nesvrishodno.

Kada je riječ o kompanijama koje su smanjile isplatu dividende 2019. godine, postoje razlike u stepenu povećanja stope zadržavanja dobiti među njima. Emitent Boksit a.d. Milići je povećao stopu zadržavanja dobiti sa 90% na 100%, emitent Gas promet a.d. Istočno Sarajevo – Pale sa 10% na 60%, emitent Grawe osiguranje a.d. Banja Luka sa 64% na 100%, emitent Hidroelektrane na Drini a.d. Višegrad sa 8% na 100%, emitent Krajina GP a.d. Banja Luka sa 0% na 100%, emitent Mira a.d. Prijedor sa 86% na 100%, emitent Meridian a.d. Banja Luka sa 6% na 14%, emitent Tehnogas a.d. Laktaši sa 31% na 32% i emitent NLB banka a.d. Banja Luka sa 0% na 100%.

Sa druge strane, kod emitenata koji su povećali isplatu dividende za 2019. godinu potrebno je imati u vidu činjenicu da su dva od četiri emitenta finansijske institucije – banke koje imaju veoma koncentrisanu vlasničku strukturu. Akcionari UniCredit banke a.d. Banja Luka i NLB banke a.d. Banja Luka su strane banke koje svake godine donose odluke o isplati dividende. Većinski vlasnik UniCredit banke a.d. Banja Luka je UniCredit S.p.A.- Holding, Italija koji posjeduje 99,43% akcija, dok je većinski vlasnik NLB banke a.d. Banja Luka Nova Ljubljanska banka a.d. Ljubljana koja posjeduje 99,85% akcija.

## Zaključak

Sva preduzeća se u toku svog redovnog poslovanja suočavaju sa potrebom donošenja važnih poslovnih odluka koje mogu uticati na njihovu budućnost. Jedna od takvih odluka je raspodjela neto dobiti određenog obračunskog perioda.

Osnovni način raspodjele neto dobiti odnosi se na isplatu dividende i zadržavanje dijela dobiti u samoj kompaniji. Na donošenje konačne odluke o raspodjeli neto dobiti utiče niz faktora, kao što su veličina kompanije, stabilnost zarada, vlasništvo, troškovi kompanije i sl. U uslovima opšte neizvjesnosti izazvane pandemijom koronavirusa gotovo nijedan faktor nije stabilan i predvidiv, tako da je logično očekivati da će preduzeća biti opreznija prilikom upravljanja novčanim tokovima i donošenja drugih upravljačkih odluka.

U ovom radu posmatran je uticaj pandemije koronavirusa na poslovne odluke kompanija čije su akcije uvrštene na Banjalučku berzu, na primjeru odluka o isplati dividende. Posmatrane su sve kompanije koje su isplaćivale dividendu za 2018. i 2019. godinu, te su poređene stope zadržavanja dobiti u ovim periodima. Analizom je utvrđeno da je dividendu za 2018. godinu isplatilo ukupno 16 preduzeća, dok je dividendu za 2019. godinu isplatilo ukupno 11 preduzeća. Stopa zadržavanja dobiti se 2019. godine povećala u odnosu na 2018. godinu u 10 posmatranih slučajeva, u četiri slučaja došlo je do smanjenja stope zadržavanja dobiti, u jednom slučaju je pomenuta stopa ostala na istom nivou, dok je u tri slučaja isplata dividende vršena iz akumulirane dobiti ranijih godina, tako da za te emitente nije vršena kalkulacija stope zadržavanja dobiti tekućeg perioda. S obzirom da su skupštine akcionara na kojima su donesene odluke o raspodjeli neto dobiti za 2019. godinu održane u periodu od marta do septembra 2020. godine, kada su u Republici Srpskoj već bile na snazi brojne mjere za suzbijanje ovog virusa, preduzeća su u svoje odluke ugradila i neizvjesnosti u pogledu budućeg poslovnog okruženja.

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# THE IMPACT OF THE CRISIS CAUSED BY CORONAVIRUS ON BUSINESS DECISIONS OF THE COMPANIES WHOSE SHARES ARE LISTED ON THE BANJA LUKA STOCK EXCHANGE - EXAMPLE OF THE DIVIDEND PAYMENT DECISION

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## Summary

*The subject of this paper is an analysis of the impact of the crisis caused by coronavirus on business decisions of issuers whose shares are listed on the Banja Luka Stock Exchange, through the example of dividend payment decisions. For the purpose of determining the factual situation, we observed publicly available financial reports of all companies that paid dividends from profits for 2018 and 2019 and made a comparison of profit retention rates in the two observed periods. We also analyzed other available information on the operations of these issuers. The research results show that in 10 out of 16 cases in which there was dividend payment from profits for 2019, the rate of profit retention increased compared to 2018. In addition to the mentioned 16 cases of dividend payment from the profit for the previous year, two cases were recorded in which dividend payment was made, but from the accumulated profit of previous years, so that the retention rate was not calculated for these issuers. If we take into account the fact that, in almost all cases, the decision on the (non-)payment of dividends was made at a time when uncertainties regarding coronavirus were already present in Republika Srpska, it can be concluded that the impending crisis had an impact on 2019 net results distribution decisions.*

**Keywords:** covid19, coronavirus, pandemic, dividend, profit retention rate, management, corporate finance, Banja Luka Stock Exchange

**JEL classification:** G01, G35.

## Introduction

The economic consequences of the crisis caused by the coronavirus pandemic are still not fully understood. Unlike other economic crises whose solution could be sought in increasing economic activity, in this case we faced a completely new and unusual situation: due to the priority of human health protection, people's movement was partially (or completely) restricted, which led to an overall economic decline. A large number of workers were sent to work from home, and in sectors where their physical presence is necessary, such as industrial production and provision of various services, there was a temporary suspension of activities. All of the above resulted in a change of economic entities' management decisions related to the organization of work, sources and methods of financing, and the distribution of achieved business results.

Companies based in Republika Srpska have not been spared the negative effects of the crisis caused by the coronavirus pandemic. In our research, we dealt with joint stock companies - those whose shares are listed on the Banja Luka Stock Exchange. We identified companies that paid dividends from the profit realized in 2018 and 2019, and we analyzed their financial statements in order to determine the amount of the realized net result and calculate the retention rate. Furthermore, we reviewed minutes of the shareholders' meetings at which the decisions on dividend payment were made, in order to determine whether they were paid from the profit realized in the reference accounting periods or from the accumulated profit from the previous years, and whether there were additional qualitative information regarding the payments. By comparing the profit retention rates that refer to the observed two consecutive accounting periods (2018 and 2019), we came to the conclusions presented in the last part of the paper.

As it is not certain when the end of the coronavirus pandemic can be expected, there will be room for new research on the management business decisions in the coming period. In addition, we draw attention to the fact that this paper analyzes the data published before November 2020, hence it is possible that new decisions will have been made before the end of the year, with regards to the payment of dividends in companies listed on the Banja Luka Stock Exchange.

We start the research with the following hypothesis: The crisis caused by the coronavirus pandemic has influenced the companies whose shares are listed on the Banja Luka Stock Exchange to increase the retention rate of profit realized in 2019.

## Literature Review

One of the most important decisions that a company's management must make is the decision on net profit distribution. A proper assessment of which portion of the net profit should be paid to shareholders in the form of dividends, and which portion should remain in the company as retained earnings, requires the consideration of numerous factors that may be critical for the company's future operations.

Lintner (1956) defined 15 variables that could influence the dividend payment policy, including company size, salary stability, ownership, company costs, etc. In a study based on interviews with execu-

tives of American corporations in the mid-1950s, Lintner showed that, although many companies pay dividends regularly, temporary increases or decreases in earnings do not have a large impact on the amount of dividends. In other words, he found that companies are reluctant to increase dividends to unsustainable levels for fear that they will later have to reduce them, given that shareholders want stable dividends and their constant growth, while reacting extremely negatively to dividend reductions.

As a result of these interviews, Lintner proposed a model that links changes in the amount of dividends with past dividends paid by the company and with current profits. The Lintner model and its variations have been empirically tested over the years by numerous researchers. It was used in developed markets in the USA by Fama and Babiak (1968), Watts (1973), and Roy and Cheung (1985), in Canada by Chateau (1979), in Great Britain by Ryan (1974), and in Ireland by Barrett and Cotter (1990). The results of these studies were basically consistent with Lintner's findings on the partial adjustment of the dividend payout ratio to the target ratio.

Managers consider carefully the impact of their decisions on the share price because price is a key determinant of the value of the company and the wealth of shareholders. Retained earnings are most often reinvested in the company itself in order to achieve growth and generate profit in the future. Therefore, the dividend policy is an integral part of the company financing decision. Each dividend payment reduces the company's funds that can be used for other purposes, such as investing, reducing indebtedness, etc. Also, retaining a larger amount of profit also means less funds for the current payment of dividends in the observed period (Buljan, 2018).

When it comes to the analysis of dividend policy, we start from the dividend payout ratio, which is calculated as follows:

$$\text{Dividend Payout Ratio} = \text{Dividend} / \text{Net Profit}$$

The value of this ratio ranges from 0 to 1. A value of 0 means that there was no dividend payment and that all profits were retained in the company, while a value of 1 means that all profits were paid to shareholders as dividends and no part of profits was retained in the company.

Contrary to the dividend payout ratio, the profit retention ratio is calculated by relating retained earnings to net profit:

$$\text{Profit Retention Ratio} = (\text{Net Profit} - \text{Dividend}) / \text{Net Profit}$$

that is, by subtracting the dividend payout ratio from 1:

$$\text{Profit Retention Coefficient} = 1 - \text{Dividend Payment Coefficient}$$

The value of this coefficient also ranges from 0 to 1.

The impact of dividend policy on the share price is the subject of numerous discussions when it comes to a company's dividend policy. Traditionalists believe that shareholders prefer dividends over capital gains that could be realized if profits were reinvested by the company.

Any reduction in dividends resulting from a company's business policy, *ceteris paribus*, would likely result in a reduction in the share price. Early proponents of this so-called "bird-in-hand theory", Gordon (1959) and Lintner (1962), argued that dividends were less risky than capital gains. Capital gains depend not only on the profitability of a company's reinvestment of earnings, but also on develop-

ments in the overall capital market. Given that dividends are considered less risky than capital gains, shareholders will value the shares of companies with high dividend payout ratios more than the shares of companies with low payout ratios.

An alternative point of view is that dividend policy is irrelevant. Nobel laureates Miller and Modigliani (1961) have shown that dividend policy is irrelevant in a world of perfect and efficient capital markets. This position, which was expanded by Black and Scholes (1974) and Miller and Scholes (1978), argues that shareholders only care about a company's income, not the retained earnings-dividend ratio. Shareholders are not critical about whether dividends are paid and would therefore be indifferent to irregular dividends that would result from a policy of increasing retained earnings. Similarly, Radivojac (2008) argues that a company's value is based more on management quality and investment policies than on dividend policy.

Despite the debate that continues among academics, the behavior present in practice speaks in favor of the thesis that dividend policy is important. This behavior may or may not be rationally and theoretically justified.

Decisions on dividend payment are partly explained by the so-called agency theory. The basic premise of agency theory is that companies do not act in accordance with the principle of wealth maximization, due to the conflict of interest that exists between key management entities, which arises as a result of the separation of ownership and management. The problem occurs when the owner cannot - perfectly and without cost - control the management activities that should be focused on the goals set by the owner when starting a business venture.

Agency theory assumes that wealth cannot be maximized due to different interests of shareholders and management, different access to information, and different risk appetites. Since shareholders do not participate directly in activities that should result in maximizing their benefits, there is a danger that management uses funds irrationally and that shareholders are less informed, resulting in agency costs. Part of the solution can be found in the payment of dividends, which is claimed to force management to raise funds to finance investments in the financial market more frequently. Due to external financing and the payment of dividends, the management will be under more frequent supervision and there will be fewer chances to act exclusively in accordance with their own interests (Buljan, 2018).

In addition to the above, there is a theory that links dividend payments to the company's life cycle. The basic assumption of this theory is that, as the company matures, it has increasing cash flows and insufficiently profitable investment opportunities. Due to the surplus of financial resources, companies in a more mature phase of life pay dividends to their shareholders more often. On the other hand, new companies face great investment opportunities and usually lack financial resources to take advantage of all the opportunities offered to them in the market (Mueller, 1972). In the initial phase of business, companies use all available funds to develop innovation, market positioning and increase profitability, and a significant part of the funds goes to financing costs due to the high risk related to young companies. At this stage of the life cycle, the agency problem is not expressed because of the management control. Over time, other companies enter the market, competition becomes stronger, and the market becomes saturated. The organizational structure of the company at this stage becomes more complicated, so decisions are made with more difficulty and fewer risks are taken. Due to all

the above, the company will soon come to the stage where it has a surplus of cash in relation to the available investment opportunities. A significant distribution of earnings to shareholders through dividends begins in the mature phase of life. Thus, according to life cycle theory, companies in the mature life stage begin to pay dividends with less growth and a decline in profitability.

All of the mentioned views on dividend payment decisions are based on the assumption that the company operates under normal circumstances, i.e. that it is not facing unexpected financial difficulties. However, what happens if such conditions occur? Hauser (2013) and Floyd et al. (2015) analyzed decisions on dividend payment before and during the 2008 global financial crisis, and came to consistent conclusions that, in conditions of financial instability, dividends are either reduced or omitted in order to increase the company's liquidity.

Krieger et al. (2020) investigated the impact of the coronavirus pandemic on the dividend payment of U.S.-based companies whose shares are traded on an organized market. The survey covered 1,400 companies that regularly pay dividends, and observed the dynamics of dividend payments by quarters in the period 2015-2020. The results of the research show that, out of 1,400 observed companies, 213 reduced the payment of dividends, while 93 companies made no payment during the second quarter of 2020. These figures are three to five times higher than in all previous quarters since 2015. In other words, there has been no decrease in dividend payment in the last five years compared to the period of the coronavirus pandemic. Another interesting conclusion of these authors is based on drawing a parallel with the 2008 global financial crisis. Namely, the decline in dividend payments during the previous financial crisis was related to companies from the financial sector, while in this crisis it is evident that dividends were reduced (or not paid at all) by companies from financial and other sectors, such as industry and utilities.

Mazur et al. (2020) conducted a similar survey on a sample of companies whose shares are part of the S&P1500 index, but came to different conclusions. The results of their research show that over 80% of the observed companies kept or even increased the payment of dividends, despite poor financial results and a decrease in the value of capital. In several cases, it was found that companies that paid dividends had poorer business results and unfavorable projections of future cash flows compared to companies that did not pay dividends. The discrepancy between the achieved result and dividend payment is partly explained by the reluctance of management to change the pattern of dividend payment even in crisis situations, given that it could have a negative effect on the assessment of the company's quality by current and potential investors. These findings are in line with the results of a survey conducted by Sami and Abdallah (2021), which examined dividend payment decisions of the best companies from the New York Stock Exchange in the period 2000-2017. The mentioned authors concluded that a consistent dividend policy in the period of negative financial result is an indicator of a company's stability and sustainability, and as such it sends positive signals to market participants.

According to the Dimensions Fund Advisors LP survey, based on data from the Bloomberg web portal, 38% of companies from different markets around the world (2,584 companies) that were expected to pay dividends according to their payment history have instead reduced, omitted or eliminated dividend payment in the second quarter of 2020. This number of companies is twice as high as in the first quarter of 2020, when a decrease in dividend payments was recorded in 1,248 companies.

## Analysis of Payment of Dividend from Profit Achieved in 2018 and 2019 in Companies Whose Shares are Listed on the Banja Luka Stock Exchange

Examining the publicly available data from the Banja Luka Stock Exchange website, it was determined that the dividend for 2018 was paid by a total of 16 companies, while the dividend for 2019 was paid by a total of 11 companies. These are the following companies:

**Table 1 - Companies that Paid Dividends from Profits for 2018 and 2019**

| Company                                 | Sec. code | Year      |           |
|-----------------------------------------|-----------|-----------|-----------|
|                                         |           | 2018      | 2019      |
| Banjalučka pivara a.d. Banja Luka       | BLPV-P-B  | +         | +         |
| Bosnamontaža a.d. Prijedor              | BMNT-R-A  | +         |           |
| Boksit a.d. Milići                      | BOKS-R-A  | +         |           |
| Mikroelektronika a.d. Banja Luka        | CMEL-R-A  | +         | +         |
| Fratello Trade a.d. Banja Luka          | FRTL-R-D  |           | +         |
| Gas promet a.d. Istočno Sarajevo - Pale | GPIS-R-A  | +         | +         |
| Grawe osiguranje a.d. Banja Luka        | GRAW-R-A  | +         |           |
| Graditelj a.d. Teslić                   | GRDT-R-A  |           | +         |
| Hidroelektrane na Drini a.d. Višegrad   | HEDR-R-A  | +         |           |
| Krajina GP a.d. Banja Luka              | KRJN-R-A  | +         |           |
| Mira a.d. Prijedor                      | MIRA-R-A  | +         |           |
| Meridian a.d. Banja Luka                | MRDN-R-A  | +         | +         |
| UniCredit Bank a.d. Banja Luka          | NBLB-R-B  | +         | +         |
| Napredak a.d. Bijeljina                 | NPKD-R-A  | +         | +         |
| Romanijaputevi a.d. Sokolac             | ROPT-R-A  | +         | +         |
| Tehnogas - Trn a.d. Laktaši             | TGTN-R-A  | +         | +         |
| Telekom Srpske a.d. Banja Luka          | TLKM-R-A  | +         | +         |
| NLB banka a.d. Banja Luka               | VBBB-R-A  | +         |           |
| Total                                   |           | <b>16</b> | <b>11</b> |

The structure of companies that paid dividends is as follows: 15 enterprises, two banks and one insurance company.

It can be seen from Table 1 that nine companies paid dividends for both observed periods. These are the following companies: Banjalučka pivara a.d. Banja Luka, Mikroelektronika a.d. Banja Luka, Gas promet a.d. Istočno Sarajevo - Pale, Meridian a.d. Banja Luka, UniCredit Bank a.d. Banja Luka, Napredak a.d. Bijeljina, Romanijaputevi a.d. Sokolac, Tehnogas - Trn a.d. Laktaši and Telekom Srpske a.d. Banja Luka. It is important to note that the issuer Telekom Srpske a.d. Banja Luka paid dividend twice during each year.

A total of seven companies paid dividends only for 2018, while two companies paid dividends only for 2019.

Details on dividend payments of the above-mentioned companies are presented in the following table:

**Table 2 - Amount of Dividend by Individual Companies that Made Payments from Profits for 2018 and 2019**

| Code | Year | Date of Shareholders' Assembly | Amount of dividend (KM) | Dividend per share (KM) |
|------|------|--------------------------------|-------------------------|-------------------------|
| BLPV | 2019 | 22.9.2020                      | 45,744                  | 0.03                    |
| CMEL | 2019 | 12.3.2020                      | 100,000                 | 0.286                   |
| FRTL | 2019 | 29.6.2020                      | 49,113                  | 0.0175                  |
| GPIS | 2019 | 30.6.2020                      | 133,523                 | 0.0583                  |
| GRDT | 2019 | 6.6.2020                       | 56,532                  | 0.052                   |
| MRDN | 2019 | 3.6.2020                       | 650,000                 | 0.0829                  |
| NBLB | 2019 | 7.4.2020                       | 14,780,090              | 106.6                   |
| NPDK | 2019 | 29.6.2020                      | 120,917                 | 0.0483                  |
| ROPT | 2019 | 21.8.2020                      | 94,220                  | 0.012                   |
| TGTN | 2019 | 28.4.2020                      | 970,081                 | 1                       |
| TLKM | 2019 | 25.6.2020                      | 43,575,758              | 0.0887                  |
| TLKM | 2019 | 5.12.2019                      | 17,449,948              | 0.0355                  |
| BLPV | 2018 | 28.6.2019                      | 45,744                  | 0.03                    |
| BMNT | 2018 | 25.6.2019                      | 2,569,785               | 0.9                     |
| BOKS | 2018 | 8.5.2019                       | 100,000                 | 0.0058                  |
| CMEL | 2018 | 4.6.2019                       | 100,000                 | 0.0286                  |
| GPIS | 2018 | 26.6.2019                      | 248,546                 | 0.053                   |
| GRAW | 2018 | 12.3.2019                      | 607,000                 | 100                     |
| HEDR | 2018 | 13.12.2019                     | 7,549,517               | 0.0171                  |
| KRJN | 2018 | 27.6.2019                      | 3,048,085               | 0.27                    |
| MIRA | 2018 | 14.5.2019                      | 184,736                 | 0.01                    |
| MRDN | 2018 | 30.4.2019                      | 650,000                 | 0.088                   |
| NBLB | 2018 | 9.4.2019                       | 5,552,933               | 40.05                   |
| NPDK | 2018 | 17.6.2019                      | 173,260                 | 0.0693                  |
| ROPT | 2018 | 23.8.2019                      | 90,291                  | 0.0115                  |
| TGTN | 2018 | 3.5.2019                       | 970,081                 | 1                       |
| TLKM | 2018 | 3.6.2019                       | 38,445,821              | 0.0782                  |
| TLKM | 2018 | 7.12.2018                      | 22,571,691              | 0.0459                  |
| VBBB | 2018 | 29.5.2019                      | 36,369,720              | 586.58                  |

It can be seen from Table 2 that the shareholders' assemblies at which decisions on the payment of dividends for 2019 were made were held in the period from March to September 2020, when the crisis caused by the coronavirus was already present in Republika Srpska. Namely, in March 2020, decisions were made to forbid public gatherings and close schools, and a decision to ban movement at certain time intervals and in certain territories soon followed. The media reported daily on the change in the number of patients and new measures to fight the epidemic, so that at the time of the above-mentioned shareholders' meetings it was already known that the whole world, including Republic of Srpska, is facing numerous uncertainties that require adjustment of overall business activities. One of the changes that occurred in the observed period refers to the retention rate of companies whose shares are listed on the Banja Luka Stock Exchange.

**Table 3 - Profit Retention Rate of Companies That Paid Dividends From Profits for 2018 and 2019**

| Code | 2018       |            |                | 2019       |            |                |
|------|------------|------------|----------------|------------|------------|----------------|
|      | Net Result | Dividend   | Retention Rate | Net Result | Dividend   | Retention Rate |
| BLPV | 1,822,983  | 45,744     | 97%            | -1,250,716 | 45,744     | -              |
| BMNT | 1,623,200  | 2,569,785  | -58%           | 2,542,186  |            | 100%           |
| BOKS | 987,151    | 100,000    | 90%            | 611,676    |            | 100%           |
| CMEL | 213,614    | 100,000    |                | 711,125    | 100,000    |                |
| FRTL | 31,852     |            | 100%           | 240,958    | 49,113     | 80%            |
| GPIS | 276,162    | 248,546    | 10%            | 337,248    | 133,523    | 60%            |
| GRAW | 1,677,568  | 607,000    | 64%            | 846,193    |            | 100%           |
| GRDT | 51,405     |            | 100%           | 59,507     | 56,532     | 5%             |
| HEDR | 8,205,997  | 7,549,517  | 8%             | 29,722     |            | 100%           |
| KRJN | 3,055,018  | 3,048,085  | 0%             | 2,925,378  |            | 100%           |
| MIRA | 1,352,847  | 184,736    | 86%            | 1,353,256  |            | 100%           |
| MRDN | 693,422    | 650,000    | 6%             | 754,885    | 650,000    | 14%            |
| NBLB | 27,770,781 | 5,552,933  | 80%            | 29,580,790 | 14,780,090 | 50%            |
| NPDK | 129,018    | 173,260    | -34%           | 120,917    | 120,917    | 0%             |
| ROPT | 97,986     | 90,291     | 8%             | 101,992    | 94,220     | 8%             |
| TGTN | 1,400,988  | 970,081    | 31%            | 1,425,336  | 970,081    | 32%            |
| TLKM | 61,017,512 | 38,445,821 | 37%            | 61,025,706 | 43,575,758 | 29%            |
| VBBB | 36,370,139 | 36,369,720 | 0%             | 32,775,115 |            | 100%           |

Several conclusions can be drawn from the data shown in the previous table. First of all, the profit retention rate in 2019 increased compared to 2018 in 10 observed cases (Bosnamontaža a.d. Prijedor,

Boksit a.d. Milići, Gas promet a.d. Istočno Sarajevo - Pale, Grawe osiguranje a.d. Banja Luka, Hidroelektrane na Drini a.d. Višegrad, Krajina GP a.d. Banja Luka, Mira a.d. Prijedor, Meridian a.d. Banja Luka, Tehnogas a.d. Laktaši and NLB banka a.d. Banja Luka), which means that percentagewise lower dividends were paid compared to 2018, or no dividend was paid.

In four cases, there was a reduction in profit retention rate (Fratello Trade a.d. Banja Luka, Graditelj a.d. Teslić, UniCredit Bank a.d. Banja Luka and Telekom Srpske a.d. Banja Luka), which means that dividend was paid in a higher percentage compared to 2018.

In one case, the mentioned rate remained at the same level (Romanijaputevi a.d. Sokolac, relatively low profit retention rate of 8%).

In one case, the 2019 retention rate was 0, implying that the total net profit was paid. However, in the previous year there was a larger dividend payment than the realized profit of that year (payment from the accumulated profit of previous years), so we can conditionally say that the retention rate has increased. The mentioned company is Napredak a.d. Bijeljina.

Finally, in three cases, dividend payments were made from the accumulated profit of previous years, but on different grounds. Namely, the issuer Banjalučka pivara a.d. Banja Luka made a loss of -1,250,716 KM in 2019, but paid a dividend in the amount of 45,744 KM, which is equal to the dividend from the previous year, since these are cumulative preferred stocks providing a fixed amount of dividend. Issuer Bosnamontaža a.d. Prijedor had a negative retention rate in 2018 (-58%, net profit amounted to 1,623,200 KM, and dividend payment was 2,569,785 KM). The dividend was paid from the accumulated profit of previous years. In contrast, in 2019 there was no dividend payment of this company and the total net profit of 2,542,186 KM remained undistributed. The third issuer that paid the dividend from the accumulated profit is Mikroelektronika a.d. Banja Luka, although net operating profit had been realized in 2018 and 2019 (213,614 KM and 711,125 KM, respectively). We did not calculate the retention rate for the issuers Banjalučka pivara a.d. Banja Luka and Mikroelektronika a.d. Banja Luka because, having in mind all the above, it would have been pointless.

When it comes to companies that reduced dividend payments in 2019, there are differences in the degree of increase in the retention rate among them. Issuer Boksit a.d. Milići increased the retention rate from 90% to 100%, the issuer Gas promet a.d. Istočno Sarajevo - Pale from 10% to 60%, the issuer Grawe osiguranje a.d. Banja Luka from 64% to 100%, the issuer Hidroelektrane na Drini a.d. Višegrad from 8% to 100%, the issuer Krajina GP a.d. Banja Luka from 0% to 100%, issuer Mira a.d. Prijedor from 86% to 100%, the issuer Meridian a.d. Banja Luka from 6% to 14%, the issuer Tehnogas a.d. Laktaši from 31% to 32% and the issuer NLB banka a.d. Banja Luka from 0% to 100%.

On the other hand, for issuers that have increased dividend payments in 2019, it is necessary to keep in mind the fact that two out of four issuers are financial institutions - banks that have a very concentrated ownership structure. Shareholders of UniCredit Bank a.d. Banja Luka and NLB banka a.d. Banja Luka are foreign banks that make decisions on dividend payment every year. The majority owner of UniCredit Bank a.d. Banja Luka is UniCredit S.p.A.- Holding, Italy, which owns 99.43% of the shares, while the majority owner is NLB banka a.d. Banja Luka Nova Ljubljanska banka a.d. Ljubljana, which owns 99.85% of shares.

## Conclusion

As part of their regular operations, all companies face the need of making important business decisions that can affect their future. One such decision is the distribution of the net profit from a particular accounting period.

The basic net profit distribution method refers to the payment of dividends and retention of a part of the profit in the company itself. The final decision on the distribution of net profit is influenced by a number of factors, such as company size, salary stability, ownership, company costs, etc. In the conditions of general uncertainty caused by the coronavirus pandemic, almost no factor is stable and predictable, so it is logical to expect that companies will be more careful when managing cash flows and making other management decisions.

In this paper, we analyzed the impact of the coronavirus pandemic on the business decisions of companies whose shares are listed on the Banja Luka Stock Exchange, through the example of dividend payment decision. We observed all companies that paid dividends for 2018 and 2019, and compared their profit retention rates in these periods. The analysis showed that the dividend for 2018 was paid by a total of 16 companies, while the dividend for 2019 was paid by a total of 11 companies. The profit retention rate increased in 2019 compared to 2018 in 10 observed cases, in four cases there was a decrease in the profit retention rate, in one case the mentioned rate remained at the same level, while in three cases the dividend payment was made from accumulated profits of previous years, so that the retention rate of the current period profit was not calculated for these issuers. Considering that the shareholders' assembly meetings, at which decisions on the distribution of net profit for 2019 were made, were held in the period from March to September 2020, when numerous measures to combat the coronavirus were already in force in the Republic of Srpska, the observed decisions incorporated the companies' uncertainties regarding the overall future business environment.

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# ULOGA I ZNAČAJ INTERNE KONTROLE I INTERNE REVIZIJE U SPREČAVANJU I IDENTIFIKOVANJU PREVARNIH RADNJI U BANKAMA

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## Rezime

*Savremene banke imaju ulogu i niz funkcija od primordijalnog značaja, kao finansijske institucije namenjene odobravanju zajmova, stvaranju kredita, mobilizaciji štednje i ekonomskog razvoja. U finansijskom sektoru raste broj lica koja koriste sve inovativnije i kreativnije načine ciljanja uočenih slabosti u bankama i sistemima odobravanja kredita. Lica koja čine prevare postala su sve sofisticiranija, što znači da mere za sprečavanje prevara moraju stalno da se razvijaju, kako bi se osigurala njihova sposobnost da se nose sa pretnjom. Borba protiv prevara je od presudnog značaja za institucije finansijskih usluga. Ovaj članak ima za cilj ne samo da ukratko opiše ulogu interne kontrole i interne revizije u otkrivanju mogućih prevara u bankama, kao profitno orijentisanim organizacijama u današnjem kompleksnom i veoma promenljivom poslovnom okruženju, već i da ukaže na prednosti koje one imaju u efikasnijem upravljanju aktivnostima banke.*

**Ključne reči:** banka, prevarna radnja, interna kontrola, interna revizija, efikasnost.

**JEL klasifikacija:** M42, G21.

## Uvod

Prevara je globalno prepoznata kao značajan problem i ona negativno utiče na ekonomiju u celini, time što dovodi do ogromnih finansijskih gubitaka i do gubitka poverenja u ekonomski sistem. Prema Ghazali et. al. (2014, 437), glavni uzroci prevara su loša praksa upravljanja i ekonomski pritisak. Mohameda & Handley-Schachelorb (2014, 323) ističu da je upravni odbor verovatno najefikasniji mehanizam interne kontrole za praćenje aktivnosti top menadžmenta. Isti autori (2014, 321), skreću pažnju da, s druge strane gledajući, integritet menadžmenta i razvoj internih sistema za sprečavanje prevarnog izveštavanja mogu pomoći u smanjenju verovatnoće prevara sa finansijskim izveštajima.

Nezavisno od toga što su tehnologije koje su preventivne posebno efikasne u redukciji prevarnih radnji, lica koja se bave prevarama često uspevaju da pronađu način kako bi zaobišli takve mere, te se u tom kontekstu ističe da su metodologije za otkrivanje prevara ključni činilac u efikasnom upravljanju rizikom od prevara u okolnostima kada prevencija prevare ne uspe (Bolton & Hand, 2002, 235). Oni ističu značaj koji imaju statistika i mašinsko učenje zbog toga što pružaju efikasne tehnologije za otkrivanje prevara i efikasni su u identifikovanju aktivnosti kao što su pranje novca, prevara sa kreditnom karticom u e-trgovini, prevara u telekomunikacijama i upad u računar.

Primetno je da je u akademskoj literaturi prisutan mali broj istraživanja kada su u pitanju prevare u bankama iz perspektive forenzičkih računovođa. S jedne strane, softverska zaštita podataka smatra se efikasnijom u sprečavanju i detektovanju prevara, što se moglo zaključiti i po interesovanju i izlaganjima eksperata iz prakse na onlajn savetovanju BankInfo2020 pod nazivom „Transformacija u službi klijenta“ koju je organizovalo Udruženje banaka Srbije. S druge strane, poznato je da postoji tzv. „neprozirnost“ bankarskih aktivnosti, koja zapravo odražava „neprozirnost“ industrije kojoj pripada. „Bankarska industrija je relativno manje transparentna industrija, ali bez obzira na to što se ovo objašnjenje čini validnim, ovaj argument se kritikuje i izaziva ozbiljnu zabrinutost zbog doprinosa forenzičkog računovodstva (i prevara) istraživanju bankarske prakse, te je plodno polazište identifikovati i razgovarati o nekoliko faktora koji doprinose teškoćama prakse forenzičkog računovodstva među bankama i finansijskim institucijama“ (Ozli, 2020, 98-99).

Interna kontrola je proces koji sprovode upravni odbor, menadžment i drugo osoblje entiteta, osmišljen da pruži razumno uverenje u pogledu postizanja ciljeva koji se odnose na aktivnosti, izveštavanje i usaglašavanje (PwC/COSO, 2012, 1). Definicija COSO-a i model koji pokriva sve komponente sistema interne kontrole, smernica je za ostale propise širom sveta. Interna kontrola je važan deo upravljanja svakom profitno orijentisanom organizacijom, te tako i bankom, i kao takva, ona uključuje planove, metode i postupke koji se koriste za postizanje postavljenih ciljeva, čime se podržava upravljanje zasnovano na učinku. Ono što je posebno važno istaći jeste da je interna kontrola zapravo „sigurnosni ventil“ za zaštitu imovine i sprečavanje grešaka i falsifikovanja, i u tom kontekstu se ističe da se aktivnosti tima zaposlenih realizuju kroz sledeće principe (Al-Wardat, 2006, 143):

- a) Budući postupci zavise od finansijskih izveštaja.
- b) Postoji posvećenost primeni zakona i odredbi.
- c) Postoji efektivnost i efikasnost poslovnih postupaka.

Veoma koncizan pogled na internu kontrolu daje Alharbi (2017, 232), koji ističe da se interna kontrola smatra upravljačkim alatom za očuvanje imovine organizacija i da njen kontinuitet doprinosi postiza-

nju opštih ciljeva (najbolje moguće profitabilnosti i zaštite prava akcionara), tako što će biti primenjen sistem baziran na postupcima efikasne kontrole primenjene na administrativnim i finansijskim funkcijama radi verifikacije legitimiteta i zakonitosti. Prema Hevesi (2005, 33), dok je ukupna svrha interne kontrole da pomogne organizaciji da ostvari svoju misiju, ona takođe pomaže organizaciji da:

- a) Promoviše uredno, ekonomično, efektivno i efikasno poslovanje i kvalitetne proizvode i usluge u skladu s misijom organizacije.
- b) Zaštiti resurse od gubitka zbog rasipanja, zloupotrebe, lošeg upravljanja, grešaka i prevara.
- c) Promoviše poštovanje zakona, propisa, ugovora i direktiva o upravljanju, razvija i održava pouzdane finansijske i upravljačke podatke i tačno ih prikazuje u pravovremenim izveštajima.

AlSharif & Al-Slehat (2019, 91) u radu navode da internu kontrolu u bankama treba posmatrati kroz dinamiku promena u okruženju. Naime, oni naglašavaju da je bankarski sektor zabeležio veliki razvoj poslednjih decenija, posebno u obimu, kvalitetu i brzini pruženih usluga, što je dovelo do intenziviranja konkurencije, te su stoga banke morale uspostaviti zdravu internu kontrolu u skladu sa politikama i u skladu sa nekoliko međunarodnih standarda u oblasti sistema interne kontrole.

Istraživanje u ovom radu usredsredili smo na sistematizaciju literature napisane u ovoj oblasti, kao i na pravilima koja regulišu aktivnosti interne kontrole i interne revizije od posebnog značaja. Radi sprovođenja našeg istraživanja, primenjena je metoda analize sadržaja, kao i komparativni metod, kako bi se identifikovala analogija između interne kontrole i interne revizije (ponaosob) i prevarnih radnji u bankama. Cilj istraživanja je pružanje šireg pogleda na efikasno upravljanje rizikom od nastanka prevarnih radnji u bankama. Prvi deo rada posvećen je specifičnostima prevarnih radnji u bankama, sa fokusom na uzorke i vrste. Uloga i značaj interne kontrole kao instrumenta sprečavanja prevarnih radnji u bankama predmet su izlaganja u drugom delu rada. Treći deo rada se odnosi na odgovornosti interne revizije u sprečavanju prevara. Nakon toga slede zaključna razmatranja.

## Specifičnosti prevarnih radnji u bankama: uzroci i vrste

Uzroci prevara su propusti ili nedostaci koji se manifestuju na različite načine. Nedostatak adekvatnog nadzora prevarantski nastrojeni zaposleni vidi kao priliku za korist. S jedne strane, razvoj novih tehnologija olakšao je tempo prevarantskih aktivnosti (izraženijih u računarskoj i informacionoj tehnologiji), a s druge, srebroljublje, nezasićen apetit za masovnim bogatstvom i društveno-ekonomsko stanje društva utiču na pojedince da se bave prevarama (Ojo, 2008, 103). Isti autor ističe da se uzroci prevara i falsifikovanja u bankarskim transakcijama mogu klasifikovati pod dva generička faktora: institucionalni ili endogeni faktori i sredinski ili egzogeni (socijalni) faktori. Institucionalni faktori, ili uzroci, jesu oni koji se mogu pratiti u internom okruženju banaka. Iako je lista institucionalnih faktora neiscrpna, po svom značaju se ističu sledeći: (1) slab sistem računovodstva i interne kontrole, (2) neadekvatan nadzor nad podređenima, (3) loše upravljanje informacionom tehnologijom i bazom podataka, (4) loše kadrovske politike, (5) loše plate i uslovi vezani za usluge, (6) opšte frustracije izazvane neispunjenim obećanjima uprave, (7) odbijanje zaposlenih da se pridržavaju propisanih procedura bez ikakvih kazni ili sankcija, (8) nevoljnost banaka da prijave prevare zbog opaženog negativnog publiciteta ili imidža (ovo može stvoriti još više uslova pogodnih za nastanak prevara), (9) bankarsko iskustvo osoblja: prevara u bankama se dešava sa većom stopom ponavljanja među osobljem sa malo iskustva i

znanja u finansijskoj praksi, (10) neadekvatna infrastruktura: loši komunikacijski sistemi rezultiraju nagomilavanjem neuravnoteženih knjiženja, prenatrpanog kancelarijskog prostora itd, podstiču činjenje prevara u bankama, (11) neadekvatna obuka i prekvalifikacija, (12) loše vođenje knjiga i (13) genetske osobine: to su transgeneracijski (ili nasleđeni) atributi koje poseduje pojedinac, a koji ga dovode u stanje da učestvuje u prevarama. Na primer, kleptomani koji patološki krade iz zabave, prirodno ne bi bio dobar kao profesionalni bankar.

Prema Idowu (2009, 632), kao faktori okruženja identifikuju se oni za koje je moguće vršiti monitoring do neposrednog i udaljenog okruženja banke. Posebno indikativnu listu aktivnosti, koje su vezane za faktore ili uzroke nastanka prevarnih radnji u bankama, daje Ogbunka (2002, 188), a to su: sklonost ka brzom bogaćenju, spor i krivudav pravni postupak, siromaštvo i sve veći jaz između bogatih i siromašnih, nesigurnost posla, pritisak grupe sličnih pojedinaca, društvena očekivanja, povećan finansijski teret za pojedince, jaka konkurencija u bankarskoj industriji zbog koje su se mnoge banke upuštale u prevare kako bi se zadovoljile u pogledu likvidnosti i profitabilnosti.

Ogunleye (2010, 111) polazi od klasifikacije tri vrste uzroka nastanka bankarskih prevara, i detaljno ih opisuje kao: institucionalni, društveni i individualni uzroci. Za institucionalne faktore ističe se da su uslovi koje nesvesno stvaraju institucije i koji omogućavaju procvat prevare, te je u takvim institucijama dozvoljeno da postoji puno rupa koje prevaranti lako identifikuju i iskoriste za vršenje svojih dela. U tom kontekstu, Olatunji & Adekola (2014, 92) i Olaoye, Dada and Adebayo (2014), napominju sledeće objedinjene (opšte) institucionalne uzroke prevara: neadekvatna interna kontrola, neiskustvo osoblja/neadekvatna obuka osoblja, nezadovoljstvo zaposlenjem, loše upravljanje, nespremnost banaka da prijave prevaru zbog uočenog negativnog publiciteta, neadekvatna obuka i prekvalifikacija, neuspeh u redovnom pozivu, odbijanje zaposlenih da se pridržavaju propisanih procedura bez ikakvih kazni ili sankcija, automatizacija i informatizacija, te zanemarivanje poznavanja pravila kupaca. Društveni faktori, kao druga grupa faktora, inkorporiraju negativne društvene vrednosti, promociju nepotizma, lošu ekonomiju i spor pravni proces, te svi oni mogu podsticati činjenje prevarnih radnji (Akindele, 2011; Adewumi, 1996). Najzad, treća grupa uzroka bi obuhvatila faktore koji su svojstveni pojedinim osobama, koji mogu da je podstaknu na činjenje prevara, kao što su, primera radi, biološka osnova (npr. loše moralno vaspitanje, kriminalno poreklo, nezasićen apetit za avanturama), pogrešan izbor prijatelja ili mentora itd.

„Prevare postoje u različitim vrstama i u različitom stepenu: od zanemarljivih do ogromnih i katastrofalnih; od onih koje su počinili članovi organizacija (čak i oni od kojih se očekuje da to otkriju i spreče), do onih koje su počinili pojedinci izvan organizacije; od skoro svakodnevnih i lako otkrivenih prevara do sofisticiranih prevara gotovo nemogućih za otkrivanje. Ali, nezavisno od prirode prevare, od banaka se očekuje da prevarom upravljaju tako da spreče njenu pojavu i upravljaju njenim ishodom tamo gde se već dogodila“ (Nzenwata, 2). Još jednu vrstu podele prevara u bankama ističe Atherton (2010): (1) falsifikovane informacije ili dokument koji pokazuje neistine ili lažne informacije, (2) manipulacija kolateralom (kompanije za procenu koje procenjuju kolateral obično se uključuju u ovu vrstu prevare), (3) krađa finansijske imovine, odnosno krađa novčanih sredstava koja pripadaju banci, poput gotovine, depozita, obveznica itd., (4) krađa nefinansijske imovine, tj. krađa nemonetarne imovine banke (osnovnih sredstava, npr. automobila itd.), (5) elektronska prevara, tj. neovlašćeni pristup, manipulacija ili poremećaj sistema, infrastrukture ili podataka, (6) prevara putem plastike (prevare karticom) uključuje: sve izgubljene i ukradene, falsifikovane, neprimljene poruke, prevare sa aplikacijama trećih lica, nevažeće kartice itd.

Prevare u bankarstvu se veoma razlikuju po prirodi, karakteru i načinu sprovođenja, a Olaoye, Dada & Adebayo (2014) počinioce svrstavaju u tri grupe: članovi upravljačkih odbora banaka (upravljačka prevara), insajderi (zaposleni banke), autsajderi (klijenti i ne-klijenti). „Upravljačku prevaru čine osobe na poverljivim položajima koje imaju ovlašćenje da nadjačaju interne kontrole“ (Ahmed et. al., 2014, 157). Isti autori naglašavaju i to da su kategorije žrtava upravljačkih prevara investitori i poverioci, a medijum za izvršenje prevare su finansijski izveštaji. Ukoliko je reč o prevarama koje vrše zaposleni u banci, one su poznate pod nazivom ne-upravljačke prevare i vrše se na štetu organizacije, i to uglavnom uz direktnu ili indirektnu korist zaposlenog (Olaoye, 2009). Boniface (1991) je izvršio identifikaciju prevarnih radnji koje su karakteristične za zaposlene u bankama, i u tom kontekstu je kao ključne prevare naveo sledeće: krađa novca sa šaltera od strane osoblja banke, falsifikovanje potpisa klijenata sa namerom da se nezakonito podigne novac sa računa u banci, upotreba falsifikovanih čekova za podizanje novca sa računa klijenata, otvaranje i upravljanje fiktivnim računom na koji se mogu vršiti nelegalni transferi i pripisati lažni saldo, pozajmljivanje fiktivnim zajmoprimcima izvršeno putem fiktivnog računa otvorenog u filijali, polaganje prava na prekovremeni rad satima, suzbijanje gotovine/čekova; preusmeravanje sredstava i IT prevare. Definisana je još jedna vrsta prevare poznata pod nazivom „prevara autsajdera“, a koja se odnosi na prevare koje vrše klijenti i ne-klijenti na štetu banaka.

Crosse & Hempel (1973) i Cahil et. al. (2002) načelno su identifikovali pet glavnih vrsta prevara koje nastaju u bankarskoj industriji, a oni uključuju: (1) pozajmljivanje od blagajne (uz vraćanje u nekoliko navrata), (2) prekovremeni rad, (3) falsifikovanje potpisa kupaca za povlačenje sa njegovog/njenog naloga, (4) prenos sa računa klijenata na račune saradnika, (5) davanje zajmova fiktivnim zajmoprimcima, (6) davanje kredita bez adekvatnih informacija i osiguranja od zajmoprimca. Ako se prevara gleda prema počinioциma, onda je reč o eksternoј prevari koju je izvršio kupac ili neko treće lice, ili internoј koju je počinilo osoblje ili uprava (a to je i saradnja internih i eksternih strana). Posmatrajući cilj i nameru, prevara se može posmatrati kao kreditna prevara (cilj je pribavljanje finansija; namera nije plaćanje) ili kao krađa (cilj je krađa; namera nikada nije plaćanje). Ako se kao kriterijum posmatra broj slučajeva prevare počinioца ili grupe počinilaca, onda se prevara posmatra kao pojedinačna (jedan počinilac prevare; nema veze sa ostalim prevarama) ili višestruka (organizovani napad; nekoliko prevara povezanih sa jednim počiniocem).

Posmatrajući iz vizure menadžera i profesionalaca u borbi protiv prevara, ističe se da je ključ za smanjenje rizika i gubitaka od prevare razvijanje i primena odgovarajućeg plana upravljanja rizikom. Prema ISA 240 (171) „menadžment prihvata odgovornost za internu kontrolu entiteta i za pripremu finansijskih izveštaja entiteta, tako da se čini prikladnim da revizor postavi upite menadžmentu u vezi sa procenom rizika od prevare i postojeće kontrole kako bi se to sprečilo i otkrilo“. Ukoliko se pođe od pretpostavke da će postojeće interne kontrole otkriti i odvratiti prevaru, to može da dovede do povećanih gubitaka, što potvrđuje gubitak *Société Générale* od 4,9 milijardi evra u trgovinskoј prevari (Peltier-Rivest & Lanoue, 2015, 295). Bergant (2020, 116) ističe da je „komplajans funkcija jedna od ključnih funkcija za interno upravljanje, pošto predstavlja deo sistema interne kontrole i drugu liniju odbrane od rizika, a potrebno je imati u vidu i mnoge druge oblasti komplajans rizika (kao što su sprečavanje pranja novca, prevare itd.)“.

## Interna kontrola kao instrument sprečavanja prevarnih radnji u bankama

Bologna (1993) daje pregled opštih faktora okruženja koji u značajnoj meri mogu da dovedu do povećanja verovatnoće da će se prevara dogoditi, a taj set faktora je sledeći: neadekvatne nagrade, neadekvatne interne kontrole, nedostatak razdvajanja dužnosti ili tragova revizije, nejasnoće u ulogama na poslu, dužnostima, odgovornostima i oblastima odgovornosti, neuspeh u savetovanju i preduzimanju administrativnih mera kada nivo učinka ili lično ponašanje padnu ispod prihvatljivog nivoa, neadekvatan operativni pregled, nedostatak pravovremenih ili periodičnih pregleda, inspekcija i praćenja kako bi se osigurala usklađenost sa ciljevima kompanije, prioritetima, politikama, procedurama i vladinim propisima i propust da se nadgledaju i sprovode politike o poštenju i lojalnosti.

Posebno važno pitanje koje treba razmotriti je pitanje nastanka prevara u filijalama banaka. Ukoliko su interne kontrole u filijalama neefikasne, to svakako dovodi do rasta verovatnoće da prevara može nastati. Te neefikasne ili, drugim rečima, loše interne kontrole u filijalama banaka uobičajeno karakteriše izuzetno loše kontrolno okruženje, nedostatak podele dužnosti – nejasna podela dužnosti, nedostatak fizičkih zaštitnih mera, nedostatak nezavisnih provera, nedostatak odgovarajućih ovlašćenja, nedostatak odgovarajućih dokumenata i evidencija, i neadekvatni računovodstveni sistemi.

Za poslovne banke posmatrano u celini, tako i po profitnim centrima, važno je da postoji usklađenost internih kontrola sa korporativnim politikama i procedurama, kako bi se efikasno upravljalo rizikom od nastanka prevara, kao i da se svi zaposleni u banci pridržavaju svih procedura i politika koje se odnose na njihove dužnosti, bilo administrativnih, finansijskih ili operativnih. Da bi se sprečile prevarne radnje, a i moguće greške iz nehata, posebno važno pitanje je obavljanje redovne obuke koja se odnosi na etiku, sa fokusom na prevenciju prevara, a koja bi obuhvatila sve zaposlene i menadžere banke. Ovo bi doprinelo sprečavanju jednog broja prevarnih radnji u bankama, čime bi došlo i do smanjenja gubitaka za banku, kao i smanjenja rizika od pojave reputacionog rizika banke. Interna saznanja menadžera su izvor evaluacije i distorzije računovodstvenih podataka, dok je eksternim korisnicima finansijskih izveštaja teško da razlikuju prave od lažnih informacija (Knežević et. al., 2009, 31), a za njih je od primordijalnog značaja da imaju uvid u ekonomsku realnost posmatranog bankarskog subjekta. Da bi se donele kvalitetne finansijske odluke, neophodno je da se ima dobar uvid u finansijske performanse, a jedna od tehnika koja se često koristi je finansijska analiza pomoću racio brojeva (Knežević & Živković, 2019, 411), a koja je istovremeno i koristan alat u identifikovanju mogućih prevarnih radnji u finansijskim izveštajima. Obuka zaposlenih u bankama u okviru odeljenja interne kontrole i interne revizije bi, pored ostalog, trebalo i da se kreće u pravcu mogućnosti primene određenih alata za pravovremeno identifikovanje prevarnih radnji koje bi dovele do gubitaka za banku, te do narušavanja njene poslovne reputacije. Na osnovu uvida u obavljanje praktičnih obuka iz oblasti prevencije i detekcije prevarnih radnji za profitno orijentisane organizacije, trenutno se u tome ističe Fakultet organizacionih nauka u Beogradu, koji je inače šire prepoznat po svojoj interdisciplinarnosti, a koja je i te kako poželjna u upravljanju rizikom od prevarnih radnji u svim profitno orijentisanim organizacijama, pa i u bankama. Obuke realizuju eminentni profesori ovog i drugih fakulteta, uz saradnju eksperata iz prakse (posebno iz Ministarstva unutrašnjih poslova, tužioca, kao i eksperata iz Republičkog zavoda za sudsko veštačenje u Novom Sadu). Ističe se da je potrebna veća pažnja u obrazovanju studenata preduzeća o prevarnom finansijskom izveštavanju, posebno onih koji će biti usmereni na finansije i računovodstvo. Warrick & Riner (2004, 1) nude predložene sugestije za pomoć studentima biznisa da identifikuju prevarno izveštavanje, uključivanjem nalaza drugih. Ovi autori naglašavaju da ako

studenti saznaju više o lažnom izveštavanju tokom njihove fakultetske karijere, postupak finansijskog izveštavanja ponovo će steći poverenje javnosti i izbeći buduće vladine regulative. Posebno je važno implementirati studije slučaja u nastavne materijale čiji bi primarni cilj bio da se pomogne studentima iz oblasti korporativnih finansija i računovodstva da razumeju anatomiju i motivacije za manipulaciju zaradom (podvukao: Milojević, S.).

Istraživanje koje su sprovedi AlSharif & Al-Slehat (2019) dovelo je do zaključka da je došlo do statistički značajnog pozitivnog efekta interne kontrole na konkurentsku prednost banke, što znači da je procenat promene konkurentске prednosti banke objašnjen promenom dimenzija interne kontrole (administrativne, finansijske i operativne). U radu koji se odnosi na procenu efikasnosti na proces prevencije prevarnih radnji u bankarskom sistemu, Yakubu et. al., (2017) su uočili da je sistem interne kontrole u ispitivanim bankama bio efikasan u procesu kontrole nastanka prevarnih radnji. U drugim akademskim radovima, koji se odnose na internu kontrolu u bankama, autori su se detaljno bavili svim komponentama interne kontrole, analizirano je kontrolno okruženje prema stepenu kvaliteta, adekvatnost strategija dizajniranih za upravljanje rizicima od nastanka prevarnih radnji, kao i kvalitet informacionih i komunikacionih sistema poslovnih banaka.

## Odgovornosti interne revizije u sprečavanju prevara

Institut internih revizora (*The Institute of Internal Auditors*) definiše internu reviziju kao „nezavisnu, objektivnu aktivnost obezbeđenja i konsultantske usluge dizajnirane da doda vrednost i poboljša poslovanje organizacije, i ona pomaže organizaciji da postigne svoje ciljeve donošenjem sistematskog, disciplinovanog pristupa za procenu i poboljšanje efikasnosti procesa upravljanja rizikom, kontrole i upravljanja“. Ako se posmatraju uloga i položaj interne revizije u bankama kao finansijskim institucijama od posebne važnosti za funkcionisanje ekonomskog sistema, ističe se da su one veoma kompleksne ukoliko se sagledavaju iz vizure raznih interesnih grupa.

Potrebno je imati u vidu da su odgovornosti u vezi sa sprečavanjem prevara unutar profitno orijentisane organizacije podeljene između izvršnog odbora, odbora za reviziju i interne revizije. U tom smislu, prvo se ističe važna uloga koju ima izvršni odbor, a to je konačna odgovornost za rano sprovođenje mehanizama otkrivanja i sprečavanja prevara. Poznato je da je (a i u skladu je sa ISA 240) izvršni odbor taj koji je odgovoran za sprečavanje i otkrivanje prevara i grešaka primenom i održavanjem odgovarajućih sistema računovodstva i interne kontrole, a koji takođe mogu doprineti smanjenju mogućnosti pojave prevara i grešaka, ali ne i njihovom potpunom eliminisanju. Druga važna uloga pripada komisiji za reviziju u smislu nadzora nad upravljanjem rizicima od nastanka prevara, s jedne strane, kao i aktivnom nadgledanju napora izvršnog odbora protiv vršenja prevara. Kako ističe Stefanović (2013, 58), „komisija za reviziju je pomoćno telo nadzornog odbora i ima važnu ulogu u definisanju odgovornosti u postupku finansijskog izveštavanja, interne kontrole i upravljanja rizicima“. Najzad, još jedna značajna uloga pripada internoj reviziji koja se smatra efikasnom linijom odbrane od prevara koja ima ulogu kako u nadgledanju rizika, tako i u sprečavanju i otkrivanju prevara. Važno je istaći da interna revizija predstavlja sredstvo kojim raspolaže odbor za reviziju, od koga se očekuje da samostalno proceni rizike od nastanka prevara i preduzme adekvatne mere protiv prevara koje sprovodi izvršni odbor. Prema Članu 79, Zakona o bankama (*Sl. glasnik RS*, br. 107/2005, 91/2010 i 14/2015) „banka je dužna da obrazuje odbor za praćenje poslovanja banke (odbor za reviziju), a prema Članu 80, istog zakona, „kad oceni da banka posluje suprotno zakonu, drugom propisu, statutu ili drugom aktu banke, ili se

to može zaključiti na osnovu izveštaja o reviziji, odnosno kad utvrdi druge nepravilnosti u poslovanju banke, odbor za praćenje poslovanja banke obavezno predlaže upravnom odboru banke da otkloni uočene nepravilnosti, kao i da zakaže vanredno zasjedanje skupštine banke u slučaju da ustanovljene nepravilnosti mogu imati teže posledice na poslovanje banke". Primera rada, tri linije odbrane od rizika u banci u praktičnom ambijentu su: sistem interne kontrole kao prva linija odbrane (kontrola zaposlenih [*back-up* prodaje] u smislu da li je ispoštovana procedura u radu sa klijentima u prodaji) – pridržavanje politike rukovodstva, održavanje integriteta sredstava i dr; druga linija odbrane je služba/odeljenje komplajansa uključujući i službu/odeljenje za sprečavanje pranja novca i finansiranja terorizma (na odabranom uzorku se prati izloženost riziku u domenu rada sa zaposlenima i vrši kontrola mogućih prevarnih transakcija i u vezi sa pranjem novca) i, najzad, treća linije odbrane – interna revizija koja za svoj rad odgovara upravnom odboru (preporuke u vezi sa rizikom) i ona ocenjuje efikasnost sistema internih kontrola. Postupci sistema internih kontrola treba da se organizuju na način koji će obezbediti praćenje i merenje rizika koji mogu negativno uticati na ostvarivanje utvrđenih poslovnih ciljeva banke (kreditni rizik, rizik zemlje dužnika, devizni rizik, rizik tržišta, kamatni rizik, rizik likvidnosti, operativni i dr), (Ljubisavljević, 2013, 50).

U razmatranju istraživane problematike, potrebno je istaći i razliku koja postoji između internih revizora u bankama i eksperata za istragu prevara (prevarnih radnji) koji mogu da budu deo zaposlenih u banci ili povremeno eksterno angažovani (prema potrebi), kako sa stanovišta njihovih uloga i odgovornosti, tako i u slučaju njihove profesionalne obuke i specijalnosti. Uloga internog revizora u bankama zavisi, naravno, i od njegove profesionalne obuke i praktičnih sposobnosti. Potrebno je, pored ostalog, da interni revizor u dovoljnoj meri poznaje „finansijski krvotok banke“. U praksi, uloga interne revizije može uključivati različite skupove odgovornosti: pružanje podrške upravi u uspostavljanju mehanizama za borbu protiv prevara koji se mogu revidirati; olakšavanje procene rizika od prevare i reputacije na nivou organizacije i njenog poslovnog procesa; procena veza između rizika od prevara i internih kontrola; revizija prevara; pružanje podrške specijalistima u istrazi prevare; podržavanje napora na otklanjanju nedostataka; i izveštavanje komisije za reviziju o problemima u vezi sa mehanizmima za borbu protiv prevara, procenom rizika od prevare i reputacije ili slučajevima sumnji u prevaru (Petraske, 2012). Pored navedenog, od internog revizora se očekuje da efikasno upravlja programom interne revizije banke, da u dovoljnoj meri poznaje primenu metodologije za objektivno merenje različitih oblika inherentnog rizika na kvantitativnoj i kvalitativnoj osnovi (i primenjuje je), kao i da pruža adekvatnu podršku radu eksterne revizije. Kako naglašava Knežević (2019, 379), „interna revizija je ključna u pružanju podrške za upravljanje rizikom“.

Na osnovu nalaza studije, koju su na uzorku banaka u Nigeriji 2017. godine sprovedi Olatunji & Adekola (2017, 3034), zaključeno je da uloge revizora u teoriji i praksi u kontroli prevara koje su integrisani skup aktivnosti za sprečavanje, otkrivanje, reagovanje na prevare i nadgledanje prevara u finansijskom svetu ne mogu biti prenaplašene čak i sa sveprisutnošću slučajeva prevara u savremenom dobu. Procena rizika, revizija sistema i verifikacija finansijskih izveštaja sprovode se kako bi se utvrdili efikasnost i uticaj revizora na kontrolu prevara, što otkriva da uloge revizora treba i dalje poboljšati kako bi se poboljšala kontrola prevara u bankarskoj industriji. Studija je preporučila revizorima da povećaju obim svojih aktivnosti na efikasnosti sistema interne kontrole banaka, procenu rizika i reviziju sistema, jer će to poboljšati otkrivanje prevara. Takođe, uprave banaka treba da obezbede striktno poštovanje svog sistema interne kontrole i efikasno funkcionisanje banke u celosti (Lukić et al., 2018).

## Zaključak

Prevara je danas prepoznata kao značajna pretnja sa kojom se suočavaju preduzeća i pojedinci širom sveta, i mnoštvo je izveštaja o prevarama počinjenih u biznisu i prema pojedincima. Imajući u vidu činjenicu da lica koja čine prevare postaju sve sofisticiranija, neophodno je u kontinuitetu razvijati mehanizme za zaštitu od prevara, kako bi banke i ostale finansijske institucije mogle da se nose sa ovom vrstom pretnje. Interna revizija ne može u potpunosti sprečiti prevaru, ali može prilagoditi način rada i postupke tako da poveća šanse za prepoznavanje i pravilno tumačenje znakova prevare. Interni revizori moraju imati vrhunski nivo teorijskog znanja i praktičnog iskustva kako bi uspešno ostvarili svoju ulogu. Moraju da znaju moguće šeme prevara i scenarije koji su specifični za područje rada organizacije (na primer, osiguranje banke, maloprodaja, telekomunikacije itd.) i da budu u stanju da prepoznaju znakove moguće šeme prevara. Logično je zaključiti da što zaposleni u banci imaju više iskustva i znanja, manja je verovatnoća da će prevare proći neopaženo, a takvo osoblje proći neotkriveno. Za primenu svega navedenog, postoji velika potreba za ulaganjem u specijalizaciju internih revizora finansiranjem kurseva za određene oblasti u poslovnim bankama. Druge organizacije kontaktiraju eksterne eksperte (na osnovu ugovora o uslugama) kako bi izvršile zadatak revizije, misleći da na taj način dobijaju eksperte visokog nivoa po relativno umerenoj ceni. Ključni element snažnog sistema interne kontrole je shvatanje svakog zaposlenog o neophodnosti efikasnog ispunjavanja njegovih odgovornosti i prenošenju podataka menadžmentu o bilo kom problemu koji se mogao pojaviti tokom poslovanja, internim normama ili uočenih nezakonitih radnji.

Da bi se u kontinuitetu efikasno upravljalo prevarama u poslovnim bankama, bitno je da menadžment implementira snažan sistem interne kontrole, da se uspostavi odeljenje interne revizije sa opremljenim i kvalifikovanim osobljem, da se utvrde mehanizmi podsticajnih paketa radi sprečavanja zaposlenih da se uključe u prevarne aktivnosti, kao i da postoji adekvatan odnos između menadžmenta i personala banke na nižem nivou. Pored podrške eksperata iz prakse, neophodna je i snažna podrška akademske zajednice, a koji bi zajedničkim naporima radili na podizanju svesti, edukaciji i sticanju veština iz praktičnih obuka da se na prevarne radnje deluje preventivno u okviru sistema interne kontrole, ali i da se prevare, koje se već dogode, otkriju i spreči njihov dalji nastanak.

Kritičnu komponentu efikasnog upravljanja bankom čini efektivan i efikasan sistem internih kontrola, koji je od posebnog značaja u realizaciji ciljeva poslovne banke – profitabilnosti, solventnosti i likvidnosti. Sistem interne kontrole ima veliku ulogu u smanjenju rizika s kojima se suočava banka. Kada je ovaj sistem dobro uspostavljen u banci, onda on doprinosi povećanju kvaliteta pruženih usluga i održavanju imovine banke, a najzad i rastu profita. Pored toga, efikasan sistem interne kontrole i interne revizije doprinosi u širokoj meri održavanju pouzdanog finansijskog i menadžerskog izveštavanja. Takođe, takav sistem može da obezbedi da se banka pridržava zakona i propisa, politika, planova, internih pravila i procedura, kao i da smanji rizik od neočekivanih gubitaka ili smanjenja ugleda banke, te preventivno deluje na pojavu prevarnih radnji.

Nezavisno od toga što se rezultati istraživanja vezani za nebankarske institucije ne mogu generalizovati i za banke, ne sme se dozvoliti akademsko i stručno zanemarivanje banaka, samo zbog njihove jedinstvenosti u poslovnim transakcijama. Imajući u vidu značaj koji banke imaju u privrednom sistemu svake nacionalne ekonomije, treba da podstakne trend snažnog ohrabrivanja istraživanja koja se tiču forenzičkog računovodstva u segmentu prevarnih radnji za banke, jer bi to svakako moglo da predstavlja značajan doprinos bankarskoj literaturi i praksi.

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# THE ROLE AND IMPORTANCE OF INTERNAL CONTROL AND INTERNAL AUDIT IN THE PREVENTION AND IDENTIFICATION OF FRAUDULENT ACTIONS IN BANKS

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## Summary

*Modern banks have a specific role and a whole range of functions of paramount importance, as financial institutions for granting loans, creating loans, mobilizing savings and economic development. In the financial sector, there is a growing number of people who are using increasingly innovative and creative ways of targeting all perceived weaknesses in banks and credit approval systems. The persons committing fraud have become increasingly sophisticated, which means that measures to prevent fraud must be constantly developed to ensure that they are able to deal with the threat. The fight against fraud is crucial for financial services institutions. This article aims not only to briefly describe the role of internal control and internal audit in detecting possible fraud in banks, as profit-oriented organizations in today's complex and highly changing business environment, but also to point out the advantages they have in the more efficient management of bank activities.*

**Keywords:** bank, fraudulent action, internal control, internal audit, efficiency

**JEL Classification:** M42, G21.

## Introduction

Fraud is globally recognized as a significant problem, as it negatively affects the economy as a whole, leading to huge financial losses and a loss of confidence in the economic system. According to Ghazali et al. (2014, 437), the main causes of fraud are poor management practices and economic pressure. Mohameda & Handley-Schachelorb (2014, 323) point out that the board of directors is probably the most efficient internal control mechanism for monitoring the activities of top management. The same authors (2014, 321) point out that, on the other hand, the integrity of management and the development of internal systems to prevent fraudulent reporting can help reduce the likelihood of fraud with financial statements.

Regardless of the fact that preventive technologies are particularly effective in reducing fraud, fraudsters often find a way to circumvent such measures, and in this context, it is emphasized that fraud detection methodologies are a key factor in effective fraud risk management under circumstances when fraud prevention fails (Bolton & Hand, 2002, 235). They emphasize the importance of statistics and machine learning because they provide effective fraud detection technologies and are effective in identifying activities such as money laundering, e-commerce credit card fraud, telecommunications fraud, and computer intrusion.

It is noticeable that there is a small number of research in academic literature when it comes to fraud in banks from the perspective of forensic accountants. On the one hand, software data protection is considered more efficient in preventing and detecting fraud, which could be concluded from the interest and presentations of experts from practice at the online conference BankInfo2020 entitled "Transformation at the Service of the Client" organized by the Association of Serbian Banks (2020), and on the other hand, it is known that there is a so-called "opacity" of banking activities, which actually reflects the "opacity" of the industry to which it belongs. "The banking industry is a relatively less transparent industry, but although this explanation seems valid, this argument is criticized and raises serious concerns about the contribution of forensic accounting (and frauds) to banking practice research, and a fruitful starting point is to identify and discuss several factors that contribute to the difficulties of forensic accounting practice among banks and financial institutions" (Ozli, 2020, 98-99).

Internal control is a process conducted by the board of directors, management, and other personnel of the entity, designed to provide reasonable assurance as to the achievement of objectives related to activities, reporting and compliance (PwC/COSO, 2012, 1). The definition of COSO and the model covering all components of the internal control system is a guideline for other regulations around the world. Internal control is an important part of managing any profit-oriented organization, including the bank, and as such, it includes plans, methods and procedures used to achieve the set goals, thus supporting performance-based management. What is particularly important to point out is that internal control is actually a "safety valve" for protecting assets and preventing errors and falsifications, and in this context, it is emphasized that the activities of the personnel team are realized through the following principles (Al-Wardat, 2006, 143):

- a) Future procedures depend on the financial statements.
- b) There is a commitment to the application of laws and regulations.

c) There are the effectiveness and efficiency of business procedures.

A very concise view of internal control is given by Alharbi (2017, 232), who points out that internal control is considered a management tool for preserving the assets of organizations and that its continuity contributes to achieving general goals (best possible profitability and protection of shareholders' rights) by implementing a system based on effective control procedures applied to administrative and financial functions to verify legitimacy and legality. According to Hevesi (2005, 33), while the overall purpose of internal control is to help an organization accomplish its mission, it also helps an organization to:

- a) promote orderly, economical, effective, and efficient business and quality products and services in accordance with the mission of the organization.
- b) protect resources from loss due to waste, abuse, mismanagement, errors, and fraud.
- c) promote compliance with laws, regulations, contracts, and management directives, develop and maintain reliable financial and management data, and accurately present them in timely reports.

AlSharif & Al-Slehat (2019, 91) in their paper state that internal control in banks should be observed through the dynamics of changes in the environment. Namely, they emphasize that the banking sector has seen great development in recent decades, especially in the size, quality and speed of services provided, which has led to intensified competition, and therefore banks had to establish sound internal control in accordance with policies and to comply with several international standards in the field of internal control systems.

The research in this paper was focused on the systematization of the literature written in this area, as well as on the rules governing the activities of internal control and internal audit of special importance. In order to conduct our research, a method of content analysis was applied, as well as a comparative method to identify the analogy between internal control and internal audit (individually) and fraudulent actions in banks. The aim of the research is to broaden the view on the effective management of the risk of fraud in banks. The first part of the paper is dedicated to the specifics of fraudulent activities in banks with a focus on samples and types. The role and importance of internal control as an instrument for preventing fraudulent actions in banks are the subject of the second part of the paper. The third part of the paper deals with the responsibilities of internal audit in fraud prevention. Then follow the concluding observations.

## **Specifics of Fraudulent Actions in Banks: Causes and Types**

The causes of fraud are omissions or shortcomings that manifest in different ways. The fraud-oriented employee sees the lack of adequate supervision as an opportunity and uses it. On the one hand, the development of new technologies has facilitated the pace of fraudulent activities (more pronounced in computer and information technology), and on the other hand, avarice, insatiable appetite for mass wealth and socio-economic status of society influence individuals to engage in fraud (Ojo, 2008, 103). The same author points out that the causes of fraud and forgery in banking transactions can be classified under two generic factors: institutional or endogenous factors and environmental or exogenous

(social) factors. The institutional factors or causes are those that can be monitored in the internal environment of banks. Although the list of institutional factors is inexhaustible, the following stand out in terms of importance: (1) weak accounting and internal control system, (2) inadequate supervision of subordinates, (3) poor management of information technology and database, (4) poor personnel policy, (5) poor wages and service conditions, (6) general frustrations caused by unfulfilled promises of management, (7) refusal of employees to adhere to prescribed procedures without any penalties or sanctions, (8) reluctance of banks to report fraud due to perceived negative publicity or image (this can create even more conditions conducive to fraud), (9) the banking experience of personnel: fraud in banks occurs with a higher repetition rate among personnel with little experience and knowledge in financial practice, (10) inadequate infrastructure: poor communication systems result in the accumulation of unbalanced postings, overcrowded office space, etc., encourage committing bank fraud, (11) inadequate training and retraining, (12) poor bookkeeping, and (13) genetic traits: these are transgenerational (or inherited) attributes possessed by the individual, which bring them into a position to participate in fraud. For example, a kleptomaniac who pathologically steals for their own entertainment would not naturally be as good as a professional banker.

According to Idow (2009, 632), environmental factors are those for which it is actually possible to monitor the immediate and remote environment of the bank. Ogbunka (2002, 188) gives a particularly indicative list of activities related to the factors or causes of fraud in banks, which are - the tendency to get rich quickly, slow and crooked legal processes, poverty and the growing gap between the rich and the poor, job insecurity, pressure from a group of similar individuals, social expectations, the increased financial burden for individuals, strong competition in the banking industry that has led many banks to engage in fraud to meet their own needs in terms of liquidity and profitability.

Ogunleye (2010, 111) starts from the classification of three types of causes of banking fraud, and describes them in detail - institutional, social, and individual causes. For institutional factors, they point out the conditions unconsciously created by institutions and allow fraud to flourish, and in fact, such institutions are allowed to have a lot of gaps that fraudsters easily identify and use to perform their acts. In this context, Olatunji & Adekola (2014, 92) and Olaoye, Dada and Adebayo (2014), note the following unified (general) institutional causes of fraud: inadequate internal control, the inexperience of personnel/inadequate personnel training, dissatisfaction with employment, poor management, the unwillingness of banks to report fraud due to perceived negative publicity, inadequate training and retraining, failure in regular operations, refusal of employees to adhere to prescribed procedures without any penalties or sanctions, automation and informatization and neglect of knowledge of customer rules. The social factors, as the second group of factors, incorporate negative social values, promotion of nepotism, bad economy, and slow legal processes, and all of them can encourage fraudulent actions (Akindele, 2011, Adewumi, 1996). Finally, the third group of causes would include factors that are specific to individuals, and that may encourage them to commit fraud, such as, for example, biological basis (e.g., poor moral upbringing, criminal origin, insatiable appetite for adventure), wrong choosing a friend or mentor, etc.

"Frauds exist in different types and to different degrees: from negligible to huge and catastrophic; from those committed by members of organizations (even those expected to detect and prevent it), to those committed by individuals outside the organization; from almost every day and easily detected frauds to sophisticated and almost impossible to detect frauds, but regardless of the nature of the fraud, banks are expected to manage the fraud so as to prevent its occurrence and manage its outcome where it has already occurred" (Nzenwata, p. 2). Another type of fraud division in banks is high-

lighted by Atherton (2010): (1) falsified information or a document showing untrue or false information, (2) collateral manipulation (collateral valuation companies are usually involved in this type of fraud), (3) theft of financial assets, i.e. theft of funds belonging to the bank, such as cash, deposits, bonds, etc., (4) theft of non-financial assets, i.e. theft of non-monetary assets of a bank (fixed assets, e.g. cars, etc.), (5) electronic fraud, i.e. unauthorized access, manipulation or disruption of the system, infrastructure or data, (6), fraud through plastic (card fraud) includes: all lost and stolen, forged, unreceived messages, fraud with third-party applications, invalid cards, etc.

Banking frauds vary greatly in nature, character, and enforcement, and Olaoye, Dada, and Adebayo (2014) classify perpetrators into three groups: members of bank management boards (management fraud), insiders (bank employees), outsiders (clients and non-clients). "Management fraud is committed by persons in confidential positions who have the authority to override internal controls" (Ahmed et al., 2104, 157). The same authors emphasize that the categories of management fraud victims are investors and creditors, and the medium for committing fraud are financial reports. In the case of fraud committed by bank employees, they are known as non-management fraud, and they are committed to the detriment of the organization, mainly with the direct or indirect benefit of the employee (Olaoye, 2009). Boniface (1991) identified fraudulent activities that are characteristic of bank employees, and in this context, he listed the following as key frauds: theft of money from counters by bank personnel, forgery of clients' signatures with the intention of illegally withdrawing money from bank accounts, use of counterfeit checks to withdraw money from clients' accounts, opening and managing a fictitious account to which illegal transfers can be made and a false balance credited, lending to fictitious borrowers through a fictitious account opened in the branch, claiming the right to work overtime for hours, suppression of cash/checks; diversion of funds and IT fraud. Another type of fraud known as "outsider fraud" has been defined, which refers to fraud committed by clients and non-clients to the detriment of banks.

Crosse & Hempel (1973) and Cahil et al. (2002) identified in principle the five main types of fraud that occur in the banking industry, and they include: (1) "borrowing" from the cash register (with return on several occasions), (2) overtime work, (3) forgery of customer signatures for withdrawal from their account, (4) transfer from clients' accounts to associates' accounts, (5) giving loans to fictitious borrowers, (6) granting loans without adequate information and insurance from the borrower. If the fraud is viewed in terms of the perpetrators, then it can be an external one committed by the customer or a third party, or an internal one committed by the personnel or management (including also the cooperation of internal and external parties). Looking at the goal and intention, fraud can be classified as credit fraud (the goal is to obtain finance; there is no intention to make payments) or as theft (the goal is to steal; the intention is never to make payments). When considering the number of frauds a perpetrator commits, or the existence of a group of perpetrators, then fraud can be considered as either single (one perpetrator of fraud; has nothing to do with other frauds) or multiple (organized attack; several frauds related to one perpetrator).

From the point of view of managers and professionals in the fight against fraud, it is emphasized that the key to reducing the risk and losses from fraud is to develop and implement an appropriate risk management plan. According to ISA 240 (171), "management accepts responsibility for the entity's internal control and for the preparation of entity's financial statements, so it seems appropriate for the auditor to make inquiries to management regarding fraud risk assessment and existing controls to prevent and detect this". Assuming that existing internal controls will detect and deter fraud, this can lead to increased losses, confirming Société Générale's 4.9-billion-euro loss in trade fraud (Peltier-Rivest &

Lanoue, 2015, 295). Bergant (2020, 116) points out that “compliance function is one of the key functions for internal management, as it is part of the internal control system and the second line of risk protection, and many other areas of compliance risk need to be considered (such as prevention of money laundering, fraud, etc.).

## **Internal Control as an Instrument to Prevent Fraudulent Actions in Banks**

Bologna (1993) provides an overview of general environmental factors that can significantly increase the likelihood that fraud will occur, and this set of factors is as follows: inadequate rewards, inadequate internal controls, lack of segregation of duties or traces of audit, ambiguities in job roles, duties, responsibilities and areas of responsibility, failure to advise and take administrative action when performance levels or personal conduct fall below acceptable levels, inadequate operational review, lack of timely or periodic reviews, inspections and monitoring to ensure compliance with company objectives, priorities, policies, procedures and government regulations and failure to monitor and enforce honesty and loyalty policies.

A particularly important issue to consider is the issue of fraud occurrence in bank branches. If the internal controls in the branches are ineffective, it certainly leads to an increase in the probability that fraud can occur. These inefficient or in other words, poor internal controls in bank branches are usually characterized by an extremely poorly controlled environment, lack of segregation of duties - unclear segregation of duties, lack of physical safeguards, lack of independent checks, lack of proper authority, lack of proper documents and records, and inadequate accounting systems.

For commercial banks as a whole, as well as in profit centers, it is important to have the the compliance of internal controls with corporate policies and procedures, in order to effectively manage the risk of fraud occurrence, and that all bank personnel adhere to all procedures and policies relating to their duties, whether administrative, financial or operational. In order to prevent fraudulent actions, as well as possible mistakes due to negligence, a particularly important issue is the conduct of regular training related to ethics, with a focus on fraud prevention, which would include all employees and managers of the bank. This would contribute to preventing the number of fraudulent actions in banks, which would reduce losses for the bank, as well as reduce possibility of reputational risk for the bank. Managers' internal knowledge is a source of evaluation and distortion of accounting data, while external users of financial statements find it difficult to distinguish true from false information (Knežević et al., 2009, 31), and for them, it is of paramount importance to have insight into the economic reality of the observed banking entity. In order to make quality financial decisions, it is necessary to have a good insight into financial performance, and one of the techniques that is often used is a financial analysis using ratio numbers (Knežević & Živković, 2019, 411), which is also a useful tool in identifying possible fraud in financial statements. The training of a bank's personnel within the internal control and internal audit department should, among other things, move towards the possibility of applying certain tools for timely identification of fraudulent actions that would lead to losses for the bank and damage its business reputation. Based on the insight into conducting practical training in the field of prevention and detection of fraud for profit-oriented organizations, the Faculty of Organizational Sciences in Belgrade currently stands out, as it is also otherwise widely recognized for its interdisciplinarity, something very desirable for managing the risk of fraudulent actions in all profit-oriented organizations, including banks. The training courses are led by eminent professors of this and other faculties with

the cooperation of experts from practice (especially from the Ministry of Internal Affairs, prosecutors, as well as experts from the Republic Institute for Forensic Expertise in Novi Sad). It is emphasized that greater attention is needed in educating students of companies on fraudulent financial reporting, especially those that will be focused on finance and accounting. Warrick & Riner (2004, 1), offer proposed suggestions to help business students identify fraudulent reporting and include the findings of others. These authors emphasize that, if students learn more about false reporting during their college career, the financial reporting process will regain the trust of the investing public and avoid future government regulations. It is especially important to implement case studies in teaching materials whose primary goal would be to help students in the field of corporate finance and accounting to understand the anatomy and motivations for manipulating earnings (underlined by Milojević, S.).

A survey conducted by AlSharif & Al-Slehat (2019) concluded that there was a statistically significant positive effect of internal control on the bank's competitive advantage, which means that the percentage change in the bank's competitive advantage was explained by changes in internal control dimensions (administrative, financial, and operational). In a paper related to the assessment of efficiency in the process of fraud prevention in the banking system, Yakubu et al. (2017) observed that the internal control system in the surveyed banks was effective in the process of controlling the occurrence of fraudulent actions. In other academic papers related to internal control in banks, the authors dealt in detail with all components of internal control, analyzed the control environment according to the degree of quality, adequacy of strategies designed to manage the risks of fraudulent actions occurrence and the quality of information and communication systems of commercial banks.

## **The Responsibilities of the Internal Audit in Fraud Prevention**

The Institute of Internal Auditors defines an internal audit as "an independent, objective assurance activity and consulting service designed to add value and improve an organization's operations, and it helps an organization achieve its goals by adopting a systematic disciplined approach to assessing and improving process efficiency of risk management, control and management". If we look at the role and position of internal audit in banks as financial institutions of special importance for the functioning of the economic system, it is pointed out that they are very complex if viewed from the perspective of various interest groups.

It should be borne in mind that responsibilities related to fraud prevention within a profit-oriented organization are divided among the executive board, the audit committee, and the internal audit. In this regard, the important role played by the executive board is emphasized first, and that is the ultimate responsibility for the early implementation of fraud detection and prevention mechanisms. It is known that (and in accordance with ISA 240) the executive board is responsible for preventing and detecting fraud and error by implementing and maintaining appropriate accounting and internal control systems, which can also contribute to reducing the possibility of fraud and error, but not for their complete elimination. Another important role belongs to the audit committee in terms of overseeing the risk management of fraud occurrence, on the one hand, as well as actively monitoring the efforts of the executive board against committing fraud. As Stefanović (2013, 58) points out, "the audit committee is an auxiliary body of the supervisory board and has an important role in defining responsibilities in the

process of financial reporting, internal control and risks management.” Finally, another important role belongs to an internal audit, which is considered an effective line of defense against fraud, which has a role both in monitoring risk and in preventing and detecting fraud. It is important to point out that an internal audit is a tool available to the audit committee, which is expected to independently assess the risks of fraud occurrence and take adequate measures against fraud carried out by the executive board. According to Article 79 of the Law on Banks (“Official Gazette of RS”, No. 107/2005, 91/2010 and 14/2015), “a bank is obliged to form a committee for monitoring the bank’s operations (audit committee), and according to Article 80 of the same law, “when it assesses that the bank operates contrary to the law, other regulation, statute or other act of the bank or it can be concluded on the basis of an audit report, or when it finds other irregularities in the bank’s operations, the bank’s monitoring committee must propose to eliminate the observed irregularities, as well as to schedule an extraordinary session of the bank’s assembly in case the established irregularities may have more serious consequences on the bank’s operations”. For example, the three lines of risk protection in the bank in a practical environment are the internal control system as the first line of defense (control of employees [back-up of sales] in terms of whether the procedure is followed in working with customers in sales) - adherence to management policy, maintaining the integrity of assets, etc.; the second line of defense is the compliance service/department including the anti-money laundering and terrorist financing service/department (a sample is selected and monitored for risk in respect of working with employees, and it is controlled for possible fraudulent transactions related to money laundering) and finally, the third line of defense - an internal audit that is accountable to the management board for its work (risk recommendations) and it assesses the effectiveness of the internal control system. The procedures of the internal control system should be organized in a way that will ensure monitoring and measurement of risks that may adversely affect the achievement of the bank’s established business objectives (credit risk, debtor country risk, foreign exchange risk, market risk, interest rate risk, liquidity risk, operational, etc.); (Ljubisavljević, 2013, 50).

In considering the researched issues, it seems necessary to point out the difference that exists between internal auditors in banks and experts for fraud (fraudulent actions) investigation who can be part of the bank’s personnel or occasionally externally engaged (as needed), both from the point of view of their roles and responsibilities, as well as in terms of their professional training and specialty. The role of the internal auditor in banks depends, of course, on their professional training and practical skills. It is necessary, among other things, that the internal auditor has sufficient knowledge of the “financial blood flow of the bank”. In practice, the role of internal audit may involve different sets of responsibilities: providing support to management in establishing auditable anti-fraud mechanisms; facilitating fraud and reputation risk assessment at the level of the organization and its business process; assessment of the links between fraud risk and internal controls; fraud audit; providing support to specialists in fraud investigation, supporting efforts to eliminate deficiencies; and reporting to the audit committee on problems related to anti-fraud mechanisms, fraud risk and reputation assessments, or suspected fraud cases (Petrascu, 2012). In addition, the internal auditor is expected to effectively manage the bank’s internal audit program, to sufficiently know the application of the methodology for objective measurement of various forms of inherent risk on a quantitative and qualitative basis (and applies it), and to provide adequate support to external audit. As Knežević emphasizes (2019, 379), “internal audit is key in providing support for risk management.”

Based on the findings of a study conducted on a sample of banks in Nigeria in 2017 by Olatunji, &

Adekola (2017, 3034) it was concluded that the roles of auditors in theory and practice in fraud control are an integrated set of activities to prevent, detect, respond to and monitor fraud in the financial world cannot be overemphasized even with the ubiquity of cases of fraud in the modern age. Risk assessment, system audits and verification of financial statements are conducted to determine the effectiveness and impact of auditors on fraud control, which reveals that auditors' roles need to be further improved to improve fraud control in the banking industry. The study recommended that auditors increase the scope of their activities on the efficiency of banks' internal control systems, risk assessment and system audits, as this will improve fraud detection. Also, bank managements need to ensure strict compliance with their internal control system and the efficient functioning of the bank as a whole (Lukić et al., 2018).

## Conclusion

Fraud is recognized today as a significant threat faced by businesses and individuals around the world, and there are numerous reports of fraud committed in business and against individuals. Having this in mind, as well as the fact that fraud perpetrators have become increasingly sophisticated, it is necessary to continuously develop fraud protection mechanisms so that banks and other financial institutions can deal with this type of threat. Internal audit cannot completely prevent fraud, but it can adjust the manner of its work and procedures so as to increase the chances of recognizing and correctly interpreting the signs of fraud. Internal auditors must have a top level of theoretical knowledge and practical experience in order to successfully accomplish their role. They need to know possible fraud schemes and scenarios that are specific to the area of work of the organization (for example, insurance, banks, retail, telecommunications, etc.) and be able to recognize the signs of a possible fraud scheme. It is logical to conclude that the more experienced and knowledgeable the bank's personnel is, the less likely it is that fraud will go unnoticed and such personnel will go undetected. To implement all of the above, there is a great need to invest in the specialization of internal auditors by financing courses in certain areas in commercial banks. Other organizations contact external experts (based on service contracts) to perform the audit task, thinking that in this way they get high-level experts at a relatively reasonable price. The key element of a strong internal control system is each employee's understanding of the need to effectively fulfill their responsibilities and communicate data to management about any problem that may have arisen during business, internal standards, or detected illegal actions.

In order to continue effectively managing fraud in commercial banks, it is important that the management implements a strong internal control system, to establish an internal audit department with equipped and qualified personnel, to establish incentive mechanisms to prevent employees from engaging in fraudulent activities, as well as that there is an adequate relationship between the management and personnel of the bank at a lower level. In addition to the support of experts from practice, strong support from the academic community is needed, who would work together to raise awareness, educate, and acquire skills from practical training to act preventively to fraudulent actions within the internal control system, but also to discover ongoing frauds and prevent their further occurrence.

The critical component of efficient bank management is an effective and efficient system of internal controls, which is of special importance in the realization of the goals of a commercial bank - profitability, solvency, and liquidity. The internal control system plays a major role in reducing the risks faced by the bank. When this system is well established in the bank, then it contributes to increasing the quality of services provided and maintaining the bank's assets, and ultimately to the growth of profits.

In addition, an effective system of internal control and internal audit contributes extensively to the maintenance of reliable financial and managerial reporting. In addition, such a system can also ensure that the bank complies with laws and regulations, policies, plans, internal rules and procedures, reduces the risk of unexpected losses or damage to the bank's reputation, and acts preventively to the occurrence of fraudulent actions.

Regardless of the fact that the results of research related to non-banking institutions cannot be generalized for banks, we must not allow academic and professional neglect of banks, just because of their uniqueness in business transactions. Given the importance that banks have in the economic system of any national economy, the trend of strongly encouraging research should be encouraged related to forensic accounting in the segment of fraudulent actions for banks, because it could certainly be a significant contribution to the banking literature and practice.

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# INTELEKTUALNI KAPITAL KAO STRATEŠKA PERFORMANSA BANKE SA OSVRTOM NA BANKE

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## Rezime

*Intelektualni kapital predstavlja veliku vrednost za profitno orijentisane organizacije u današnje vreme. U savremenom okruženju pitanje strateške prednosti neodvojivo je od razmatranja problematike intelektualnog kapitala, imajući u vidu da je intelektualni kapital generator ekonomske vrednosti. Da bi banke, kao savremene profitno orijentisane organizacije ostvarile ciljne performanse, potrebno je da znaju šta je njihova konkurentska prednost i da identifikuju potrebne kapacitete i resurse za održivo poslovanje.*

*Uloga intelektualnog kapitala od presudnog je značaja kada je reč o performansama savremenih banaka, imajući u vidu dinamično konkurentsko okruženje u kome one danas posluju. Međutim, nezavisno od toga, literatura koja se fokusira upravo na postavke ovih finansijskih organizacija, je nedovoljno zastupljena i fragmentisana. Ovo istraživanje zasnovano na primeni metode analize sadržaja, pruža strukturisani pregled literature o specifičnostima upravljanja intelektualnim kapitalom u bankama. Dalja istraživanja bi mogla da analiziraju uticaj intelektualnog kapitala na performanse banaka koje posluju u Republici Srbiji.*

**Ključne reči:** intelektualni kapital; banka; izveštavanje; merenje; konkurentska prednost

**JEL klasifikacija:** G21, M10.

## Uvod

Poznata je činjenica da su nove tehnologije u značajnoj meri uticale na redizajniranje strukture kompanija koje su pomerile fokus generisanja vrednosti sa materijalnih resursa na nematerijalne. Konkurentska prednost se sve više vezuje za kapacitet specifičnih nematerijalnih sredstava kao što su znanje, iskustvo, komunikacijske veštine koji se smatraju ključnim izvorom konkurentске prednosti. Ako se posmatra nematerijalna imovina bazirana na znanju, u tom slučaju je intelektualni kapital visoko rangiran (Baldini et al, 2017). Organizacije zainteresovane za upravljanje intelektualnim kapitalom imaju tendenciju stvaranja inovativnog okruženja za podsticanje članova osoblja da razviju nove ideje, a važno je da se obezbedi da menadžerski kanali podstaknu zaposlene da razvijaju proizvode koji će povećati profitabilnost preduzeća i njegov tržišni udeo (Aimukhanbetova et. al., 2019:1). Savremene tendencije u oblasti bankarstva dovode do toga da tradicionalno bankarstvo sve više gubi na značaju, povećan je rizik poslovanja, dolazi do globalizacije privrednih tokova i stalnih inovacija u oblasti finansijskih usluga, što sve zajedno inicira potrebu kvalitetnog upravljanja bankarskim preduzećem (Knežević et al., 2012:1). U tom kontekstu se ističe da prioritet treba dati upravljanju intelektualnim kapitalom banke. Antosova et al. (2011) naglašavaju da, nezavisno od toga što je sadašnja tržišna ekonomija u većem delu orijentisana na ostvarivanje direktnih finansijskih prihoda, sve je prisutnija intencija ka iskazivanju nematerijalnog kapitala, a za koji je poznato da i on predstavlja deo tržišne vrednosti privrednog subjekta.

Razvoj ekonomije zasnovane na znanju iznedrio je tendenciju da se mnoga preduzeća u većoj meri fokusiraju na upotrebu resursa zasnovanih na znanju, a ne na održivost fizičke imovine i konkurentnost (Muda et al., 2020:79). Ovi autori veruju da se proces stvaranja vrednosti mora percipirati kroz intelektualni kapital, i u radu su izložili model za generisanje vrednosti koji se uglavnom sastoji iz tri komponente, ljudskog, strukturnog i relacionog kapitala. Trenutno, bankarski sektor igra važnu ulogu u razvoju i rastu nacionalne ekonomije olakšavanjem finansijskih transakcija, a pored toga, ističe se da su u tom procesu konkurentsko okruženje i globalizacija primorali da sve više koriste intelektualnog kapitala (Buallay & Madbouly, 2020:384).

Rad je strukturisan na način da prati sledeći redosled: prvo se pošlo od ukazivanja na značaj, vrste i činioce intelektualnog kapitala, da bi se nakon toga prešlo na izlaganje ključnih aspekata vezanih za izveštavanje o intelektualnom kapitalu i merenju nematerijalne imovine/intelektualnog kapitala kao posebno kompleksnom pitanju. Najzad, treći deo rada posvećen je specifičnostima upravljanja intelektualnim kapitalom u bankama, nakon čega slede zaključna razmatranja i korišćena literatura.

## Upravljanje intelektualnim kapitalom u savremenom okruženju

Upravljanje intelektualnim kapitalom dobilo je na aktuelnosti u formi naučnih rasprava krajem 1990-ih (Lynn, 1999; Wiig, 1997). Danas, upravljanje intelektualnim kapitalom predstavlja jedan od posebno važnih procesa u organizacijama, što je od presudne važnosti za velike organizacije koje su bazirane na znanju. Prema Radiću (2016), ne postoji jedna opšteprihvaćena definicija, kao ni jedna klasifikacija intelektualnih resursa, ali je veći deo definicija usaglašen po pitanju njihovih ključnih karakteristika, a to su: generisanje verovatnih budućih ekonomskih koristi, odsustvo fizičke supstance i, u nekoj meri, mogućnost kontrole (zadržavanja i upotrebe od strane entiteta). Ako se posmatraju banke u kontekstu upravljanja intelektualnom kapitalom, sposobnost bankarskog preduzeća da efikasno upravlja intelektualnim kapitalom, može da bude presudan činilac za njegovu uspešnost.

Jedno od objašnjenja intelektualnog kapitala moglo bi da bude da on predstavlja portfolio znanja o sredstvima koja se pripisuju organizaciji i najznačajnije doprinose poboljšanju konkurentske pozicije preduzeća, time što generišu vrednost za ključne stejkholdere. „Znanje je današnji pokretač života preduzeća“ (Bontis et al., 1999). „Intelektualni kapital može da se poistoveti sa kapacitetom kompanije za stvaranje bogatstva na osnovu znanja i sposobnosti svojih ljudi“ (Savage, 1990). Nekoliko autora (Savage, 1990; Drucker, 1994; Edvinsson & Malone, 1997; Bontis et al, 1999) ističe da se pojam „intelektualni kapital“ vezuje za organizacione resurse u funkciji dostizanja konkurentske prednosti. Najbliža definicija koja bi mogla da se posmatra u kontekstu savremenog poslovanja banaka, je da je intelektualni kapital prepoznat kao ključni organizacioni resurs kojim se stiče konkurentska prednost u poslovanju, i da je integrisan u sve organizacione nivoe, od bazičnih poslovnih procesa, pa sve do najvišeg nivoa organizacije (Stanojković et al., 2017). Pored toga što preduzeća generišu vrednost iz znanja kao što su ljudski kapital i inovacije, ona koriste u velikoj meri i fizički kapital, što svakako primarno zavisi od vrste delatnosti. „Merenje intelektualnog kapitala je u agendi većine organizacija 21. veka“ (Marr, B. et al., 2004).

Pod intelektualnim kapitalom se ne podrazumeva se samo znanje s kojim organizacija raspolaže, već i kompetencije zaposlenih, kao i organizaciona struktura, poslovni procesi, intelektualna svojina, korporativna kultura, i on uključuje sve činioce koji nisu obuhvaćeni u zvaničnim finansijskim izveštajima, ali su od važnosti za stvaranje vrednosti organizacije (Knežević, 2019:22) i sticanje konkurentske prednosti (podvukao Kovjanić, M.), kao i da ne postoji jasno razgraničenje između intelektualnog kapitala i nematerijalnih resursa preduzeća, tako da ih pojedini autori koriste kao sinonime. Poslovne transakcije i finansijski događaji poslovnog subjekta ogledaju se u finansijskim izveštajima (Milojević et al., 2020:256) i odražavaju efikasnost menadžera u upravljanju resursima kompanije. Vrednost koja može biti generisana od nematerijalne imovine ne odražava se uvek u finansijskom izveštaju, a tradicionalno gledajući, jedina nematerijalna imovina priznata kao finansijska stavka u tradicionalnom korporativnom finansijskom izveštavanju je intelektualna svojina (patenti, žigovi, autorska prava i sl.), kao i finansijska stavka pod nazivom gudvil.

U istraživanjima o merenju komponenata intelektualnog kapitala putem izveštaja o aktivnostima u slučaju privatnih banaka, Yıldız et al. (2014:617) koriste sledeću klasifikaciju intelektualnog kapitala:

**Tabela: Komponente intelektualnog kapitala**

| Strukturni kapital                   | Relacioni kapital       | Ljudski kapital       |
|--------------------------------------|-------------------------|-----------------------|
| Intelektualna svojina                | Finansijske povezanosti | Zaposleni             |
| Korporativna kultura                 | Brend                   | Trening i razvoj      |
| Filozofija menadžmenta               | Kupci                   | Edukacija             |
| Menadžment i tehnološki procesi      | Kanali distribucije     | Rad u vezi sa znanjem |
| Informacije i sistemi za umrežavanje | Poslovna partnerstva    | Inovacije             |
| Infrastruktura                       | Korporativna reputacija |                       |

Izvor: Yıldız, S., Meydan, C., & Güner, M. (2014). Measurement of Intellectual Capital Components through Activity Reports of Companies. *Procedia - Social and Behavioral Sciences*, 109: 614–621 (p. 617).

## Merenje intelektualnog kapitala i izveštavanje

Imajući u vidu razne definicije intelektualnog kapitala, jedna od njih koja se izdvaja po tome što ističe ključne elemente intelektualnog kapitala, jeste ona koju su dali Brooking i dr. (1997) u smislu da je intelektualni kapital nematerijalna imovina koja nije iskazana u bilansu stanja, a koju čine:

- a) imovina koja organizaciji daje snagu na tržištu (brend, lojalnost kupaca, ekskluzivni ugovori i dr.),
- b) intelektualna svojina (patenti, trgovačke marke, autorska prava i sl.),
- c) imovina koja organizaciji daje internu snagu (korporativna kultura, upravljački i poslovni procesi, informacijski sistemi i sl.) i
- d) imovina sadržana u karakteristikama ljudskih resursa (znanje, kompetentnosti, veštine, iskustvo, sposobnosti povezivanja i saradnje).

Jedan od prisutnih računovodstvenih problema predstavlja nedostatak računovodstvenih standarda kojima bi bila obuhvaćena stvarne vrednosti kompanije u novoj ekonomiji zasnovanoj na znanju, što inicira da jaz između tržišne i knjigovodstvene vrednosti kompanije nastavlja da raste (Özera & Çam, 2016). Nematerijalna imovina, iako se ne može knjižiti, može se meriti, na primer, u vreme prodaje akcija, a tu slučaju „vrednost nematerijalne imovine jednaka je izračunatoj razlici između neto materijalne vrednosti i vrednosti akcija preduzeća na tržištu“ (Osinski et al., 2017: 473). U vezi sa tim, navodi se da je izveštaj o intelektualnom kapitalu posebno važan menadžerski alat koji će biti u funkciji efikasnog generisanja vrednosti za stakeholdere, a njegova velika uloga je primećena u kotiranim preduzećima, što je veoma zanimljiva konstatacija, ako se ima u vidu da intelektualni kapital determiniše tržišnu vrednost akcija, s jedne strane, kao i to da su tradicionalni sistemi računovodstvenog informisanja bez rezultata po pitanju interno generisane nematerijalne imovine, s druge strane. Važno je istaći da intelektualna imovina nije u potpunosti prikazana u korporativnim izveštajima, a dovesti do njene vidljivosti znači ostvariti pozitivne uticaje, kao što su povećanje vrednosti akcija, pružanje intelektualne imovine kao garancije, i određivanje slabosti i postojanja snaga kao pogodnih elementa u procesu stvaranja merđera i u suočavanju sa rivalima (Acar i Daglar, 2005:33).

Kada se posmatra praksa izveštavanja o intelektualnom kapitalu u Sjedinjenim Državama, ali i drugim razvijenim ekonomijama, jasno se može identifikovati da su pojedini tipovi intelektualnog kapitala inkorporirani u finansijske izveštaje. U ovom kontekstu se navode kao najvidljiviji oblici intelektualne svojine, koji se još nazivaju i vredna imovina, vredni resursi kompanije, i to, intelektualna svojina ili strukturni kapital, na koje se ovaj skok i odnosi (Al-Ali, 2003). Feng et al. (2017) ističu i to, da je Okvir Međunarodnog veća za integrisano izveštavanje (International Integrated Reporting Council's - IIRC's), u značajnoj meri privukao akademsku pažnju u dva segmenta koja se odnose na izveštavanje: (a) korporativno izveštavanje i (b) istraživanje intelektualnog kapitala. Još jedna od intencija je da se u akademskoj zajednici, kao i u praktičnom ambijentu, sve više ističe da integrisano izveštavanje predstavlja jedan od pristupa unapređenja izveštavanja o intelektualnom kapitalu, a koje zahteva obelodanjivanje tri ključne vrste intelektualnog kapitala: ljudski, relacionalni i strukturni kapital.

Hosseini et al. (2016) ističu prednosti koje ima izveštavanje o intelektualnom kapitalu ne stvara samo interne koristi u pogledu upravljanja nematerijalnim resursima, već i eksterne koristi. Posmatrajući godišnje izveštaje o aktivnostima banaka u Turskoj, Yıldız et al. (2014:617), došli su do zaključka da su banke prvenstveno obelodanile kapital kupaca, nakon čega sledi strukturni kapital i zatim ljudski kapi-

tal. Ortiz (2019:477) ističe da je lokacija još jedan faktor koji se mora razmatrati u vrednovanju komponenti intelektualnog kapitala, jer se rezultati mogu razlikovati u zavisnosti od regiona koji se posmatra. Cabrita et. al. (2017:486), nalaze da su ljudski i strukturni kapital su kategorija u kojoj se najviše izveštava u godišnjim izveštajima banaka u Portugaliji i, obrnuto, otkrivanje relacionog kapitala veće je na veb stranicama, kao i da zbog zaštite poverljivosti, banke ne žele da prijave informacije osetljive prirode.

Jianu i Dumitru (2011:1,3), su primenile uporednu analizu nekoliko modela intelektualnog kapitala - Market-to-Book Value, Tobin's Q Ratio, Balanced Scorecard, Sveiby's Intangible Asset Monitor i Skandia Navigator modela, prema 4 kriterijuma: (a) ključni pojmovi i klasifikacije na kojima su modeli bazirani, (2) analiza funkcionalnih karakteristika, (3) analiza operativnih performansi, (4) ograničenja. Ona ističe da se broj modela intelektualnog kapitala kontinuirano povećava, zbog pažnje koju ovoj oblasti daje sve više poslovnih ljudi i akademika, kao i poteškoća u pronalaženju odgovarajuće metode.

U savremenim uslovima ekonomije znanja, a u funkciji uspešnog funkcionisanja na tržištu, potrebno je da organizacije (racionalno posmatrajući), formiraju i povećavaju sopstveni intelektualni kapital. U tom kontekstu, ističe se da proces merenja intelektualnog kapitala igra jednako važnu ulogu. Nije moguće kontrolisati i upravljati nemerljivim stvarima, te se u tom smislu naglašava da povećanje metoda koje pokušavaju da izmere intelektualni kapital percipira značaj intelektualnog kapitala (Yıldız et al., 2014:615). U primeni su razni modeli koji su predloženi za merenje, identifikaciju i procenu intelektualnog kapitala još od 1990-ih godina, a za njih se može načelno reći da se zasnivaju na istim principima sa različitom terminologijom ili malo praktičnih dodataka.

## Ključne odrednice u upravljanju intelektualnim kapitalom u bankama

El-Bannany (2008: 496) je istražujući determinante intelektualnog kapitala u bankama Velike Britanije došao do veoma važnih zaključaka, a mi ćemo ukazati na kretanje nekoliko indikatora koje smatramo posebno relevantnim. Rezultati istraživanja u ovom radu sugerisu da je ulaganje u IT sisteme značajno sa očekivanim negativnim predznakom, što ukazuje na to se ulaganje u IT sisteme može smatrati pretnjom jer bi to moglo odražavati nameru menadžmenta da otpusti jedan deo osoblja, a što ima negativne implikacije na učinak osoblja (ljudski kapital). Pored toga, posmatrajući efikasnost banke, uočeno je da je ona značajna sa očekivanim pozitivnim predznakom, tako da, što je banka efikasnija, to je bolji učinak osoblja (ljudski kapital), a kada je u pitanju profitabilnost, ona je takođe značajna sa očekivanim pozitivnim predznakom, a što upućuje na to da dobre finansijske performanse, predstavljene profitom, motivišu banke da ohrabruju osoblje da radi bolje, što će dovesti do povećanja finansijskog prinosa.

U savremenom, dinamičnom i veoma turbulentnom okruženju u kome današnje banke posluju, od primordijalnog značaja je sastavljanje izveštaja o strateškim resursima banke, koji može i drugačije da se nazove, ali je bitno da se objavi; jer danas, više nego ikad ranije, nematerijalni resursi predstavljaju važan izvor konkurentске prednosti, što nikako ne sme da se zanemari.

Bontis et al. (2013:142) analizirali su uticaj intelektualnog kapitala na performanse banaka u Srbiji. Neki od rezultata njihovih istraživanja pokazali su da fizički kapital dominira profitabilnošću i povraćajem ulaganja, dok je ljudski kapital potcenjen i ne koristi se na pravi način u bankama. Rezultati istraživanja Zakiaha et al. (2018, p. 1199) koji se odnose na utvrđivanje efekata intelektualnog kapitala na obelodanjivanje društvene odgovornosti u islamskim bankama, ukazuju na to da kapacitet nematerijalne

imovine može podržati otkrivanje društvene obelodanjivanje odgovornosti preduzeća u islamskom bankarstvu, s jedne strane, ali i da ovaj odnos nije podržan sposobnošću ljudskog kapitala u unapređenju društvene odgovornosti korporacije, s druge strane.

U upravljanju ljudskim kapitalom banke, može i da se pode od sledećih odabranih pitanja koje su razvili autori za potrebe izrade upitnika, koji čine promenljive povezane sa ljudskim kapitalom (Vidotto et al., 2017:323), u smislu da li:

- se zaposleni neprestano trude,
- zaposleni imaju liderske veštine,
- zaposleni procenjuju svoje postupke,
- zaposleni uglavnom obavljaju zadatke sa puno energije,
- zaposleni uče jedni od drugih,
- su kompetencije naših zaposlenih na odgovarajućem nivou,
- kada zaposleni napusti banku, ona ima program obuke za naslednika,
- banka podržava zaposlene u unapređivanju njihovih veština i kvalifikacija gde je potrebno,
- se zaposleni banke smatraju najboljim u čitavom bankarskom sektoru,
- banka kontinuirano generiše nove ideje,
- su zaposleni zadovoljni organizacijom.

Iako su finansijske institucije poslednjih godina uključile otkrivanje nematerijalne imovine, njena relevantnost i nedostatak znanja opravdavaju svaki pristup u vezi sa njima (Ruíz-Rodríguez & Castilla-Polo, 2019:188). Međutim, s druge strane gledajući, svaka banka koja želi da ostane konkurenta u dugom roku bi trebalo da kreira adekvatnu strategiju za upravljanje svim komponentama intelektualnog kapitala, kako bi se poboljšao menadžment banke u upravljanju intelektualnim kapitalom i pronalaženju održivih konkurentskih prednosti.

## Zaključak

Da bi se proces stvaranja vrednosti u preduzeću pravilno razumeo, neophodno je efikasno upravljati intelektualnim kapitalom, nezavisno od toga što on još uvek nije pronašao pravi put do finansijske kvantifikacije. Razmatranje problematike intelektualnog kapitala neodvojivo je od pitanja strateške prednosti. Da bi sprovele uspešnu strategiju, savremene bankarske organizacije treba da znaju šta je njihova konkurentska prednost i da identifikuju potrebne sposobnosti kako bi mogle da rastu, kao i da ovu prednost bude održiva. Uspešni menadžeri (i vlasnici) u bankama svakog trenutka treba da imaju u vidu da su upravljanje intelektualnim kapitalom i upravljanje znanjem od vitalnog značaja za neprekidnu održivost. Drugim rečima, od najveće je važnosti za menadžere i one koji su zaduženi da generišu i upravljaju vrednostima i bogatstvom organizacije, da budu svesni važnosti ovih resursa, a najbolji mogući način upravljanja nematerijalnom imovinom je svesnost o njenim komponentama i doprinosu generisanju vrednosti u bankama.

Postoje razne klasifikacije za modele intelektualnog u akademskoj literaturi, i oni (modeli) pružaju bankama i drugim profitno orijentisanim organizacijama nove perspektive, ali uz određene slabosti koje ih prate. Mere intelektualnog kapitala moraju biti relevantne za profitno orijentisanu organizaciju na koju se odnose, a relevantnost se dobija tako što se na adekvatan način izvrši povezivanje mera intelektualnog kapitala sa strategijom. Pored svega što je rečeno, neophodno je istaći da postoji široka potreba za povećanjem broja istraživanja u oblasti upravljanja intelektualnim kapitalom banaka, a posebno ako se imaju u vidu domaće banke.

Bez sumnje se može reći da intelektualni kapital predstavlja najveću vrednost društva i da, u krajnjoj liniji, obezbeđuje njegov opstanak, te je krajnji zaključak da je intelektualni kapital strateški resurs kako banaka i drugih privrednih subjekata, tako i društva, od primordijalnog značaja. U današnje vreme, iskazivanje vrednosti banaka mora biti više fokusirano na održavanje ključnih zaposlenih i korišćenje njihovog znanja i inovativnih sposobnosti u funkciji održavanja zadovoljavajuće reputacije banke i za rast kapitala banke. Banke koje razvijaju ljudski kapital na adekvatan način, imaće bolji položaj kada se posmatra njihova konkurentna prednost.

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# INTELLECTUAL CAPITAL AS A STRATEGIC PERFORMANCE WITH A FOCUS ON BANKS

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## Summary

*Intellectual capital is of great value to profit-oriented organizations today. In the modern environment, the issue of strategic advantage is inseparable from the consideration of the issue of intellectual capital, bearing in mind that intellectual capital is a generator of economic value. In order for banks, as modern profit-oriented organizations, to achieve target performance, they need to know what their competitive advantage is, and to identify the necessary capacities and resources for sustainable business.*

*The role of intellectual capital is crucial when it comes to the performances of modern banks, given the dynamic competitive environment in which they operate today. However, regardless of that, the literature that focuses precisely on the settings of these financial organizations is insufficiently represented and fragmented. This research, based on the application of the content analysis method, provides a structured review of the literature on the specifics of managing intellectual capital in banks. Further research could analyse the impact of intellectual capital on the performances of banks operating in the Republic of Serbia.*

**Keywords:** intellectual capital; bank; reporting; measurement; competitive advantage

**JEL Classification:** G21, M10.

## Introduction

It is a known fact that new technologies have significantly influenced the redesign of the structure of companies that have shifted the focus of generating values from tangible resources to intangible ones. Competitive advantage is increasingly tied to the capacity of specific intangible assets such as knowledge, experience, communication skills that are considered a key source of competitive advantage. If knowledge-based intangible assets are observed, then intellectual capital is highly ranked (Baldini et al, 2017). Organizations interested in intellectual capital management tend to create an innovative environment to encourage personnel members to develop new ideas, and it is important to ensure that management channels encourage employees to develop products that will increase company profitability and its market share (Aimukhanbetova et al., 2019:1). Modern tendencies in the field of banking lead to the fact that traditional banking is increasingly losing importance, business risk is increasing, there is a globalization of economic flows and constant innovation in the field of financial services, which altogether initiates the need for quality management of banking (Knežević et al., 2012:1). In this context, it is emphasized that priority should be given to the management of the bank's intellectual capital. Antosova et al. (2011) emphasize that, regardless of the fact that the current market economy is largely oriented towards the realization of direct financial income, there is an increasing intention to express intangible capital, which is known to be part of the market value of a business entity.

The development of the knowledge-based economy has given rise to a tendency for many companies to focus more on the use of knowledge-based resources rather than on the sustainability of physical assets and competitiveness (Muda et al., 2020:79). These authors believe that the process of value creation must be perceived through intellectual capital, and in this paper, they presented a model for generating value.

The paper is structured in the following order: first starting from pointing out the importance, types and factors of intellectual capital, followed by presenting the key aspects related to reporting on intellectual capital and measuring intangible assets/intellectual capital as a particularly complex question. Finally, the third part of the paper is dedicated to the specifics of intellectual capital management in banks, followed by concluding remarks and used literature.

## Intellectual Capital Management in the Modern Environment

Intellectual capital management gained momentum in the form of scientific discussions in the late 1990s (Lynn, 1999; Wiig, 1997). Today, intellectual capital management is one of the most important processes in organizations, which is crucial for large knowledge-based organizations. According to Radić (2016), there is no generally accepted definition, as well as no classification of intellectual resources, but most of the definitions are harmonized in terms of their key characteristics, namely: generating probable future economic benefits, absence of physical substance and, to some extent, possibility of control (retention and use by the entity). If banks are viewed in the context of intellectual capital management, the ability of a banking company to effectively manage intellectual capital can be a crucial factor for its successfulness.

One explanation for intellectual capital could be that it represents a portfolio of knowledge about the assets attributed to the organization and most significantly contributes to the improved competitive

position of the company, by generating value for key stakeholders. "Knowledge is today's driver of a company's life" (Bontis et al., 1999). "Intellectual capital can be equated with a company's capacity to create wealth based on the knowledge and abilities of its people" (Savage, 1990). Several authors (Savage, 1990; Drucker, 1994; Edvinsson & Malone, 1997; Bontis et al., 1999) point out that the term "intellectual capital" is associated with organizational resources in the function of achieving competitive advantage. The closest definition that could be viewed in the context of modern banking operations is that intellectual capital is recognized as a key organizational resource that gains a competitive advantage in business, and is integrated into all organizational levels, from basic operating processes to the highest levels of organization (Stanojković et al., 2017). In addition to the fact that companies generate value from knowledge such as human capital and innovation, they also use physical capital to a large extent, which certainly primarily depends on the type of activity. "Measuring intellectual capital is on the agenda of most organizations in the 21<sup>st</sup> century" (Marr, B. et al., 2004).

Intellectual capital implies not only the knowledge available to the organization, but also the competencies of employees, as well as organizational structure, business processes, intellectual property, corporate culture, and it includes all factors that are not covered in official financial statements, but are important for creating the value of the organization (Knežević, 2019:22) and gaining a competitive advantage (underlined Kovjanić, M.), as well as that there is no clear distinction between intellectual capital and intangible resources of the company, so that some authors use them as synonyms. Business transactions and financial events of a business entity are reflected in the financial statements (Milojević et al., 2020:256) and reflect the manager's efficiency in managing the company's resources. "The value that can be generated from intangible assets is not always reflected in the financial statement, and traditionally viewed, the only intangible asset recognized as a financial item in traditional corporate financial reporting is intellectual property (patents, trademarks, copyrights, etc.), as well as a financial item called "goodwill".

In research related to the measurement of intellectual capital components through report activities for private banks, Yıldız et al. (2014:617) use the following classification of intellectual capital:

**Table: Intellectual Capital Components**

| Structural capital                     | Relational capital        | Human capital            |
|----------------------------------------|---------------------------|--------------------------|
| Intellectual to their own              | Intellectual to their own | Employees                |
| Corporate culture                      | Brand                     | Training and development |
| Philosophy of management               | Customer                  | Education                |
| Management and technological processes | Distribution channels     | Knowledge related work   |
| Information and networking systems     | Business partnerships     | Innovation               |
| Infrastructure                         | Corporate reputation      |                          |

Source: Yıldız, S., Meydan, C., & Güner, M. (2014). Measurement of Intellectual Capital Components through Activity Reports of Companies. *Procedia - Social and Behavioral Sciences*, 109:614–621 (p. 617).

## Intellectual Capital Measurement and Reporting

Having in mind various definitions of intellectual capital, one of them that stands out by emphasizing the key elements of intellectual capital, is the one given by Brooking et al. (1997) in the sense that intellectual capital is an intangible asset that is not shown in the balance sheet, consisting of:

- a) the asset that gives the organization strength in the market (the brand, customer loyalty, exclusive contracts, etc.),
- b) the intellectual property (patents, trademarks, copyrights, etc.),
- c) the asset that gives the organization internal strength (the corporate culture, management and business processes, information systems, etc.), and
- d) the assets contained in the characteristics of human resources (the knowledge, competence, skills, experience, ability to connect and cooperate).

One of the present accounting problems is the lack of accounting standards that would cover the real value of the company in the new knowledge-based economy, which initiates that the gap between market and book value of the company continues to grow (Özera & Çam, 2016). Intangible assets, although they cannot be booked, can be measured, for example, at the time of sale of shares, in which case “the value of intangible assets is equal to the calculated difference between the net tangible value and the value of company shares in the market” (Osinski et al., 2017:473). In this regard, it is stated that the report on intellectual capital is a particularly important management tool that will be in the function of efficient value generation for stakeholders, and its great role has been observed in listed companies, which is a very interesting statement given that intellectual capital determines the market value of shares, on the one hand, and that traditional accounting information systems have no results in terms of internally generated intangible assets, on the other hand. It is important to point out that intellectual property is not fully disclosed in corporate reports, and bringing it to the forefront means making positive impacts, such as increasing the value of shares, providing intellectual property as collateral, and identifying weaknesses and strengths as suitable elements in merger creation and in dealing with rivals (Acar and Daglar, 2005:33).

When looking at the practice of reporting on intellectual capital in the United States, but also in other developed economies, it can be clearly identified that certain types of intellectual capital are incorporated in the financial statements. In this context, they are listed as the most visible forms of intellectual property, which are also called valuable assets, valuable resources of the company, namely, intellectual property or structural capital, to which this leap refers (Al-Ali, 2003). Feng et al. (2017) further point out that the International Integrated Reporting Council's (IIRC's) Framework has significantly attracted academic attention in two segments related to reporting: (a) corporate reporting and (b) intellectual capital research. Another intention is that in the academic community, as well as in the practical environment, it is increasingly emphasized that integrated reporting is one of the approaches to improving the reporting of intellectual capital, which requires disclosure of three key types of intellectual capital: human, relational and structural capital.

Hosseini et al. (2016) point out the advantages that intellectual capital reporting has not only creates internal benefits in terms of intangible resource management, but also external benefits. Observing the annual reports on the activities of banks in Turkey, Yıldız et al. (2014: 617), came to the conclusion that banks first disclosed customer capital, followed by structural capital and then human capital. Ortiz

(2019:477) points out that location is another factor that must be considered in evaluating the components of intellectual capital, because the results may differ depending on the region being observed. Cabrita et al. (2017:486), find that human and structural capital are the categories most reported in the annual reports of banks in Portugal and, conversely, the disclosure of relational capital is higher on websites, and that due to confidentiality protection, banks do not want to report sensitive-nature information.

Jianu and Dumitru (2011:1,3), applied a comparative analysis of several intellectual capital models - Market-to-Book Value, Tobin's Q Ratio, Balanced Scorecard, Sveiby's Intangible Asset Monitor and Skandia Navigator models, according to 4 criteria: (a) key terms and classifications on which the models are based, (2) functional characteristics analysis, (3) operational performance analysis, (4) limitations. She points out that the number of intellectual capital models is continuously increasing, due to the attention that more and more businesspeople and academics are paying more attention to this area, as well as the difficulties in finding the appropriate method.

In the modern conditions of the knowledge economy and in the function of successful functioning on the market, it is necessary for organizations (rationally speaking) to form and increase their own intellectual capital. In this context, it is emphasized that the process of measuring intellectual capital plays an equally important role. It is not possible to control and manage immeasurable things, and in that sense, it is emphasized that the increase of methods that try to measure intellectual capital perceives the importance of intellectual capital (Yıldız et al., 2014: 615). Various models have been in use that have been proposed for measuring, identifying and evaluating intellectual capital since the 1990s, and they can in principle be said to be based on the same principles with different terminology or few practical additions.

## Key Determinants in Managing the Intellectual Capital in Banks

El-Bannany (2008:496) came to very important conclusions by researching the determinants of intellectual capital in United Kingdom banks, and we will point out the development of several indicators that we consider particularly relevant. The results of the research in this paper suggest that investing in IT systems is significant with the expected negative sign, which indicates that investing in IT systems can be considered a threat because it could reflect management's intention to lay off part of the employees, which has negative implications for the employees' performance (human capital). In addition, observing the efficiency of the bank, it was noticed that it is significant with the expected positive sign, so that the more efficient the bank, the better the performance of the employees (human capital), and when it comes to profitability, it is also significant with the expected positive sign which indicates that good financial performance, represented by profit, motivates banks to encourage employees to work better, which will lead to an increase in financial return.

Bontis et al. (2013:142) analysed the impact of intellectual capital on the performance of banks in Serbia. Some of the results of their research have shown that physical capital dominates profitability and return on investment, while human capital is underestimated and not used properly in banks. Zakiha et al. (2018, p.1199), regarding the determination of the effects of intellectual capital on the disclosure of social responsibility in Islamic banks, indicate that the capacity of intangible assets may support the disclosure of corporate liability social disclosure in Islamic banking, on the one hand, but also that this relationship is not supported by the ability of human capital to advance the corporate social responsibility, on the other hand.

In managing bank's human capital, one can also start from the following selected questions developed by the authors for the purpose of creating questionnaires, which are variables related to human capital (Vidotto et al., 2017:323), in terms of whether:

- employees are constantly trying,
- employees have leadership skills,
- employees evaluate their actions,
- employees mostly perform tasks with a lot of energy,
- employees learn from each other,
- the competencies of our employees are at the appropriate level,
- when an employee leaves the bank, it has a successor training program,
- the bank supports employees in improving their skills and qualifications where necessary,
- bank employees are considered the best in the entire banking sector,
- the bank continuously generates new ideas, and
- employees are satisfied with the organization.

Although financial institutions have included the disclosure of intangible assets in recent years, its relevance and lack of knowledge justify any approach related to them (Ruíz-Rodríguez & Castilla-Polo, 2019: 188). However, on the other hand, any bank that wants to remain a competitor in the long run should create an adequate strategy for managing all components of intellectual capital, in order to improve the bank's intellectual capital management and find sustainable competitive advantages.

## Conclusion

In order to properly understand the process of value creation in a company, it is necessary to effectively manage intellectual capital, regardless of the fact that it has not yet found the right path to financial quantification. Consideration of the issue of intellectual capital is inseparable from the issue of strategic advantage. In order to implement a successful strategy, modern banking organizations need to know what their competitive advantage is and to identify the necessary capabilities in order to be able to grow, as well as for this advantage to be sustainable. Successful managers (and owners) in banks should keep in mind at all times that intellectual capital management and knowledge management are vital to continued sustainability.

There are various classifications for intellectual models in the academic literature, and they (models) provide banks and other profit-oriented organizations with new perspectives, but with certain accompanying weaknesses. Intellectual capital measures must be relevant to the profit-oriented organization to which they relate, and relevance is obtained by adequately linking intellectual capital measures to the strategy. In addition to all that has been said, it is necessary to point out that there is a wide need

to increase research in the field of intellectual capital management of banks, especially if we have in mind domestic banks.

Undoubtedly, it can be said that intellectual capital represents the greatest value of society and that, ultimately, it ensures its survival, and the ultimate conclusion is that intellectual capital as a strategic resource of both banks and other economic entities and of society, is of primordial importance. Nowadays, the expression of banks' values must be more focused on maintaining key employees and using their knowledge and innovative skills in the function of maintaining the bank's satisfactory reputation and for the growth of the bank's capital. The banks that develop human capital in an adequate way will have a better position when observing their competitive advantage.

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# TEKAFUL OSIGURANJE U TEORIJI I PRAKSI

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## Rezime

Osiguranju, kao instrumentu zaštite pojedinca i zajednice, islam daje izuzetno veliki značaj i smatra ga nezaobilaznim elementom procesa ostvarivanja socio-ekonomske pravde u društvu. Shodno tome, kod islamskog koncepta osiguranja dominira socijalna u odnosu na komercijalnu komponentu. Međutim, zahtevi savremenog okruženja učinili su neophodnim postojanje šerijatski prihvatljivog komercijalnog osiguranja. S obzirom na to da su konvencionalni modeli osiguranja dobrim delom šerijatski neusklađeni, razvijeno je tekaful osiguranje, da bi se zadovoljile potrebe pojedinaca i institucija koji žele da se osiguraju u skladu sa šerijatskim principima. U ovom radu, analiziraćemo proces evolucije tekaful osiguranja, njegove vrste i modele, vršićemo komparativnu analizu tekaful i konvencionalnog osiguranja, preispitujući argumente u prilog šerijatske problematičnosti konvencionalnog osiguranja, i na kraju, navesti izazove implementacije tekaful osiguranja u praksi.

**Ključne reči:** islamske finansije, osiguranje, tekaful, upravljanje rizicima, uzajamno osiguranje, mudareba, vekala

**JEL klasifikacija:** G22, D47.

## Uvod

Koncept osiguranja je nastao kao posledica svestremene potrebe čoveka da ublaži negativne posledice neizvesnosti s kojom se svakodnevno suočava i zaštiti sebe i svoju imovinu. Shodno tome, istorijski razvoj koncepta osiguranja u potpunosti koindicira sa razvojem civilizacije. Proces evolucije koncepta osiguranja odvijao se u više faza (Masci, 2011, str. 27): primena prvobitnih oblika osiguranja, pojava polise osiguranja, osnivanje prvih osiguravajućih društava, nastanak socijalnog osiguranja, jačanje pozicije osiguravajućih društava na finansijskom tržištu i suočavanje sa problemom terorizma i prirodnih katastrofa. Potrebe za osiguranjem među prvima su postali svesni pomorski trgovci, čija je delatnost uvek bila povezana s brojnim opasnostima (Pak, 2011, str.4). U antičkom periodu, kada se pojavljuju rudimentarni oblici osiguranja, trgovački poduhvati osiguravani su na bazi ugovora o zajmu ili partnerstvu, a ne na bazi klasičnog ugovora o osiguranju (Homer & Sylla, 2005, str. 35). I u srednjem veku osiguranje je najaktivnije korišćeno u pomorskoj trgovini i „razvijano u mediteranskim lukama“ (Ibid, str. 73). „Zasluge“ za nastanak prvog osiguravajućeg društva, pak, nije ponela pomorska trgovina, već Veliki požar u Londonu, koji se desio u 17. veku i čije su strašne posledice podstakle osnivanje osiguravajućeg društva specijalizovanog za osiguranje imovine (Marović, Tepavac i Njegomir, 2013, str. 20). Međutim, dok god nisu primenjene naučne metode za procenu rizika koji se preuzima, osiguranje se moglo poistovetiti sa kockanjem. Moderno osiguranje se ne temelji samo na prostom transferu rizika sa osiguranika na osiguravača, već i na primeni aktuarskih metoda procene rizika, koje su omogućile kvantifikovanje verovatnoće realizacije osiguranih rizika i s njima povezanih ekonomskih posledica. Njihovom primenom stvoreni su uslovi za razvoj koncepta životnog osiguranja. Začetak ovog vida osiguranja se vezuje za dvojicu škotskih sveštenika (Robert Wallace & Alexander Webster) koji su u 18. veku formirali fond za osiguranje porodica preminulih sveštenika, primenjujući aktuarske metode prilikom procene životnog veka sveštenika, premije osiguranja i ukupnog fonda, dovoljnog za isplatu dogovorenih odšteta korisnicima osiguranja (Ferguson, 2009, str. 190–193). Savremeno osiguranje, u svim svojim oblicima, se ne može zamisliti bez primene aktuarskih metoda.

Tekaful je osiguranje zasnovano na šerijatskim principima. Prema principima Šerijata i konceptu opšteg dobra (maqasid shari'ah), zaštita pojedinca i zajednice je obavezna (Aris, Tapsir & Talib, 2012, str. 32), što ukazuje na neophodnost postojanja institucije osiguranja u muslimanskom društvu. Suština tekaful osiguranja sagledava se iz same etimologije reči *tekaful*. Reč *tekaful* je izvedena iz arapskog glagola *kafalah*, koji označava „uzajamnu garanciju“ (Matsawali, et. al., 2012, str. 164; Aris, Tapsir & Talib, 2012, str. 30). Kod tekaful osiguranja zastupljen je koncept *tabarru*, koji u bukvalnom prevodu označava „doniranje, doprinošenje, nuđenje ili davanje“ (Wahab, Lewis & Hassan, 2007, str. 376). Shodno tome, može se zaključiti da kod tekaful osiguranja osiguranici međusobno sarađuju radi zajedničke koristi, uplaćuju doprinose od kojih se formira fond, kao finansijska osnova za podršku osiguranicima kojima je pomoć potrebna, rizici i gubici se međusobno dele i eliminiše se mogućnost ostvarivanja koristi na štetu drugih (Wahab, Lewis & Hassan, 2007, str. 375-376; Swartz & Coetezer, 2010, str. 335; Aris, Tapsir & Talib, 2012, str. 31). Tekaful omogućava okupljenoj zajednici osiguranika da, kroz uzajamnu saradnju i etičko postupanje, zaštite život, imovinu i dostojanstvo (Abdullah, 2012, str. 540). Islamski koncept osiguranja je prošao kroz više faza razvoja (Hadžić, 2014, str. 152): *akillah*<sup>1</sup>, *meaki*<sup>2</sup>, komerci-

<sup>1</sup> Radi se o pomoći koju je zajednica pružala siromašnim porodicama, posebno porodicama čije su izdržavaoce ubili pripadnici neprijateljskog plemena ili naroda.

<sup>2</sup> Osiguranje definisano Medinskim ustavom (Hamidullah, 1989, str. 156), koje obuhvata tri elementa (Rispler-Chaim, 1991, str. 144): 1) al – diyah (krvarina), 2) al – fidya (otkup ratnih zarobljenika) i 3) socijalno osiguranje.

jalno osiguranje<sup>3</sup> i savremeno tekaful osiguranje<sup>4</sup>. Ključni momenat za inicijaciju razvoja savremenog tekaful osiguranja desio se početkom 19. veka, kada je šerijatski pravnik *Syed Ibn Abdin*, na molbu grupe muslimanskih trgovaca da dâ svoje mišljenje o šerijatskoj ispravnosti konvencionalnog pomorskog osiguranja, istakao šerijatsku neusklađenost konvencionalnog osiguranja i potrebu postojanja autentičnog islamskog osiguranja (Khan, 2011, str. 6). Zvaničan stav da je konvencionalno osiguranje šerijatski neusklađeno, usvojen je na konferenciji šerijatskih pravnika i ekonomista (First International Conference on Islamic Economics) u Meki 1976. godine (Ibid). Nedugo zatim osnivaju se i prva tekaful osiguravajuća društva u Sudanu u 1979. i Maleziji 1984. godine (Lim, Idris & Carissa, 2010, str. 2). Detaljniji prikaz funkcionisanja tekaful osiguranja u teoriji i praksi biće dat u nastavku, kroz predstavljanje modela tekaful osiguranja, argumenata u prilog šerijatske neusklađenosti konvencionalnog koncepta osiguranja i, na kraju, dostignuća i izazova u procesu implementacije koncepta tekaful osiguranja.

## Modeli tekaful osiguranja

Primena šerijatskih principa u oblikovanju tekaful osiguranja dovela je do stvaranja specifične pravne, ekonomske i organizacione infrastrukture na kojima se koncept tekaful osiguranja temelji. Kod tekaful osiguranja ugovorne strane su osiguranici i tekaful operator (osiguravajuće društvo). Osiguranici uplaćuju doprinose od kojih se formira tekaful fond, a njime upravlja tekaful operator, koji nema vlasništvo nad fondom, već se samo o njemu stara (Wahab, Lewis & Hassan, 2007, str. 376). Dakle, tekaful operator nema ulogu osiguravača, već samo menadžera tekaful fonda, dok su osiguranici istovremeno i osiguravači (AlNemer, 2013, str. 235). Stoga, ne dolazi do transfera rizika sa osiguranika na tekaful operatora (Bhatti, 2010, str. 7), već teret rizika snose sami osiguranici (Wahab, Lewis & Hassan, 2007, str. 376). Obaveze tekaful operatora, s druge strane, su da upravljajući fondom očuva njegovu sigurnost, sposobnost izmirivanja odštetnih zahteva i ostvarivanja zadovoljavajuće stope prinosa, i osigura stabilno poslovanje u kontinuitetu (Aris, Tapsir & Talib, 2012, str. 36). Shodno navedenom, može se zaključiti da su imovina tekaful fonda i imovina tekaful operatora potpuno odvojene (AlNemer, 2013, str. 249).

Tekaful osiguranje može biti opšte (osiguranje imovine) i porodično (osiguranje života). Na osnovu prava i obaveza koje tekaful operator i osiguranici preuzimaju i obliku naknade koju tekaful operator dobija za svoje usluge, izdiferencirala su se četiri modela tekaful osiguranja (modeli predstavljeni na osnovu: Wahab, Lewis & Hassan, 2007; Akhter, 2010; Jaffer, et. al., 2010; Sadeghi, 2010; Kettell, 2011; Htay & Zaharin, 2012; Cheikh, 2013; Kassim, Odierno & Patel, 2013; Hadžić, 2014; Tahira & Arshad, 2014): *mudaraba* (Mudarabah), *vekala* (Wakalah), *mešoviti* i *vakuf* (Waqf) model.

Kod *mudaraba modela*, tekaful operator i osiguranici ostvaruju partnerski odnos, pri čemu tekaful operator ima ulogu *mudariba*, koji upravlja tekaful fondom i ulaže svoje vreme, napor i znanje, dok osiguranici imaju ulogu *rabbu l-mala*, odnosno ulagača kapitala bez prava na upravljanje fondom. U okviru fonda se formiraju rezerve za izmirenje odštetnih zahteva i investicioni račun na koji se prebacuju sredstva namenjena ulaganju. Ostvareni prinos na ulaganja osiguranici i tekaful operator dele prema unapred određenom ključu, dok gubitak u potpunosti snose osiguranici. S druge strane, pozitivna razlika između uplaćenih doprinosa i isplaćenih odšteta se na kraju obračunskog perioda isplaćuje

<sup>3</sup> Osnivaju se društva za uzajamno pomorsko osiguranje u periodu ekspanzije arapske pomorske trgovine, s ciljem zaštite trgovaca čiji su trgovački poduhvati često završavali neuspešno usled prirodnih nepogoda ili pljački, što je model koji su kasnije preuzeli Evropljani (Aris, Tapsir & Talib, 2012, str. 30).

<sup>4</sup> Prihvatanje i modifikovanje konvencionalnih modela osiguranja i institucija i nastanak savremenog tekaful osiguranja (detaljnije Sadeghi, 2010, str. 101).

isključivo osiguranicima<sup>5</sup>. Ukoliko, pak, uplaćeni doprinosi nisu dovoljni za pokriće odštetnih zahteva, tekaful operator daje tekaful fondu beskamatnu pozajmicu (Qard Hasan), koja treba da se izmiri iz budućih doprinosa nakon što fond ostvari pozitivan tehnički rezultat.

Kod *vekala modela*, tekaful operator ima ulogu zastupnika, odnosno agenta (Wakeel) fonda, dok su osiguranici njegovi principalni (Muwakkil). Tekaful operator ima ulogu da upravlja tekaful fondom, stara se o njegovoj stabilnosti i održivosti, naplati doprinosa i isplati odšteta, zaštita dobija unapred definisanu naknadu. Pored toga, postoji mogućnost da tekaful operator upravlja i investicionim računom tekaful fonda i da za to dobije dodatnu naknadu, koja je, takođe, fiksna. Fiksiranost naknade tekaful operatora i neusklađivanje sa ostvarenim rezultatima poslovanja fonda mogu demotivisati tekaful operatora da maksimira svoje napore kako bi tekaful fond ostvario natprosečne finansijske rezultate. Stoga se preporučuje isplata podsticajne naknade iz ostvarenog viška iznad isplaćenih odšteta.<sup>6</sup> Ovaj problem se može rešiti i primenom *mešovitog mudareba/vekala modela*. Kod ovog modela, tekaful operator kao *vakil* dobija fiksnu naknadu za upravljanje rezervama fonda. Istovremeno upravlja i investicionim računom u ulozi *mudariba*, gde naknadu za pružene usluge ostvaruje u obliku unapred definisanog udela u ostvarenom prinosu na investicije. Status ostvarenog viška iznad isplaćenih odšteta kod *vekala modela* je isti kao kod *mudareba modela*, odnosno višak pripada osiguranicima. Prakse se kod ova modela poklapaju i u slučaju manjka, jer i kod *vekala modela* tekaful operator pokriva manjak beskamatnom pozajmicom koja će biti vraćena nakon ostvarenja pozitivnog tehničkog rezultata.

*Vakuf model* tekaful osiguranja je različit od ostalih jer je njegova funkcija isključivo socijalna i humanitarna. U ovom slučaju tekaful fond se popunjava donacijama, njime upravlja tekaful operator i služi za pružanje finansijske pomoći socijalno ugroženim licima. Vakuf se osniva kao nezavisno pravno lice i tekaful fond je u vlasništvu vakufa, a ne uplatioca, tako da ostvareni višak i eventualni prinos na ulaganja ostaju u posedu samog fonda.

Analizom predstavljenih modela tekaful osiguranja, stručna javnost je dovela u pitanje legitimnost nekoliko bitnih elemenata ovih finansijskih aranžmana. *Jedan od spornih elemenata* je beskamatna pozajmica (Qard Hasan) koju tekaful operator daje fondu u slučaju negativnog tehničkog rezultata. Primena *kard hasana* u tekaful osiguranju otvara brojna pitanja (Jaffer, et. al., 2010, str. 20-21): određivanje visine pozajmice i njena usklađenost sa projektovanim tehničkim rezultatom koji je osnova za njeno vraćanje, dinamika vraćanja pozajmice, raspoređivanje tereta na postojeće i nove osiguranike<sup>7</sup>, otpis duga u slučaju višegodišnjeg negativnog tehničkog rezultata i tretman *kard hasana* kao duga koji se uzima u obzir prilikom preispitivanja solventnosti fonda. Pitanje je da li će u krajnjoj liniji teret kard hasana snositi osiguranici ili akcionari tekaful operatora (Bhatti, 2010, str. 8). Primena *kard hasana* je posebno problematična kod *mudareba modela*, jer se obavezivanje tekaful operatora (*mudariba*) da dâ pozajmicu tekaful fondu (*rabbu l-malu*) kosi sa osnovnim principima *mudareba* aranžmana, prema kojima ostvareni gubitak, pa samim tim i negativni tehnički rezultat, u potpunosti pada na teret *rabbu l-mala* (Htay & Zaharin, 2012, str. 120). Od *mudariba* se ne očekuje da pruža ovaj vid podrške *mudareba* partnerstvu i bude garant tekaful fonda (Wahab, Lewis & Hassan, 2007, str. 381). *Drugi sporan element* je praksa pojedinih tekaful fondova da isplaćuju deo viška iznad isplaćenih odšteta tekaful operatoru.

<sup>5</sup> Postoji mogućnost da se deo viška zadrži u vidu sigurnosnih ili stabilizacionih rezervi (Jaffer, et. al., 2010, str. 23).

<sup>6</sup> Podsticajna naknada se usklađuje sa visinom ostvarenog viška shodno poslovnoj politici fonda (Wahab, Lewis & Hassan, 2007, str. 383).

<sup>7</sup> Postoji mogućnost da vraćanje pozajmice padne na teret pozitivnog tehničkog rezultata namenjenog osiguranicima koji su fondu pristupili nakon uzimanja pozajmice, pa samim tim nisu imali koristi od isplaćenih odšteta koje su nadmašile uplaćene doprinose prethodnih osiguranika, što je fond i dovelo u situaciju da mora da zatraži pozajmicu.

U vezi s tim postoje tri različita mišljenja (Jaffer, et. al., 2010, str. 22): 1. višak pripada isključivo osiguranicima<sup>8</sup>, 2. višak pripada i tekaful operatoru zbog njegovog doprinosa ostvarenju viška i 3. višak se daje u humanitarne svrhe, jer se osigurani slučajevi nisu realizovali, pa samim tim nije bilo isplata odšteta, što je Božja zasluga, a ne zasluga tekaful operatora i osiguranika. U sporne elemente treba dodati i praksu pokrivanja troškova upravljanja fondom kod *mudareba modela* na teret kapitala fonda. Naime, može doći do situacije da ostvareni profit od investicija nije dovoljan za pokriće troškova i da se oni moraju pokriti prikupljenim doprinosima osiguranika, čime bi solventnost fonda i njegova svrha, kao i šerijatska ispravnost aranžmana bili dovedeni u pitanje (Htay & Zaharin, 2012, str. 119-120). Zbog svih navedenih spornih elemenata, koji su posebno problematični kod *mudareba modela*, islamske finansijske regulatorne institucije (poput Računovodstvene i revizorske organizacije za islamske finansijske institucije (Accounting and Auditing Organization for Islamic Financial Institutions – AAOIFI)) (Jaffer, et. al., 2010, str. 14), kao i stručna javnost i pružaoci i korisnici usluga tekaful osiguranja, podržavaju primenu *mešovitog mudareba/vekala modela* (Htay & Zaharin, 2012, str. 125). Kod ovog modela tekaful operator upravlja fondom u svojstvu agenta. Stoga nema pravnih prepreka za davanje beskamratne pozajmice fondu<sup>9</sup> i pokrivanje troškova upravljanja fondom, koji mogu biti uključeni u proviziju tekaful operatora. Takođe, upravljanje investicionim računom fonda se može sprovoditi uz puno poštovanje *mudareba* principa. S druge strane, ključna zamerka ovom modelu je to što tekaful operator može ostvariti „preterano veliku zaradu“, jer ostvaruje pravo kako na *vekala* proviziju, tako i na udeo u dobiti od investicija (Htay & Zaharin, 2012, str. 124).

## Tekaful vs. konvencionalno osiguranje

Prema svojoj osnovnoj funkciji, tekaful i konvencionalno osiguranje se ne razlikuju, jer je svrha oba koncepta osiguranja ublažavanje rizika s kojima se pojedinac i društvo u svom delovanju susreću i delimična ili potpuna nadoknada ekonomske štete koja nastaje realizacijom osiguranog slučaja. Njihova sličnost je posebno izražena kod konvencionalnog uzajamnog osiguranja (Kader, Adams & Hardwick, 2010, str. 163). Ipak, među njima postoje i brojne razlike. Najpre, analizirajući njihov razvojni put, može se videti da je islamsko osiguranje u svom začetku bilo prevashodno socijalno osiguranje, namenjeno jačanju jedinstva zajednice, solidarnosti i socijalnog mira. Tradicija islamskog socijalnog osiguranja je veoma duga, čemu u prilog govori činjenica da je bilo izuzetno razvijeno još za vreme života Muhameda s.a.v.s. i pravednih halifa, posebno Omera (Tolefat & Asutay, 2013, str. 11; Hadžić, 2014, str. 152). Konvencionalno osiguranje se bazira na transferu rizika sa osiguranika na osiguravača (osiguravajuće društvo), zašta osiguravač naplaćuje premiju kao cenu usluge osiguranja, dok, s druge strane, kod tekaful osiguranja osiguravajuće društvo ima isključivo ulogu agenta koji upravlja tekaful fondom i za to dobija odgovarajuću naknadu, a teret rizika solidarno snose osiguranici (Jaffer, et. al., 2010, str. 7). Kod konvencionalnog osiguranja, osiguravajuće društvo ima punu kontrolu nad viškom iznad isplaćenih odšteta i prinosom na investicije, ali i snosi teret manjka i gubitka prilikom investiranja, dok kod tekaful osiguranja osiguravajuće društvo snosi samo rizik upravljanja sopstvenim kapitalom, koji je odvojen od tekaful fonda (Bhatty, 2010, str. 7). Različit je i status uplata koje osiguranici vrše. Kod tekaful osiguranja uplaćuju se doprinosi u fond za uzajamno osiguranje, dok su premije, koje su zastupljene

<sup>8</sup> S obzirom na to da tekaful operator ne preuzima osigurane rizike, nema osnove da učestvuje u raspodeli viška (Jaffer, et. al., 2010, str. 22). Takođe, postoji mišljenje da se učestvovanjem tekaful operatora u raspodeli viška gubi jedna od ključnih razlika u odnosu na konvencionalno osiguranje (Wahab, Lewis & Hassan, 2007, str. 380).

<sup>9</sup> Mada postoje protivnici te prakse i u ovom slučaju (vidi Ibid, str. 386).

u konvencionalnom osiguranju, element kupoprodajne transakcije između osiguranika i osiguravača (Ibid). Priroda odnosa koji se kod konvencionalnog osiguranja formira između osiguravača i osiguranika i prava i obaveze koji iz tog odnosa proističu, doveli su do postojanja brojnih šerijatski neprihvatljivih elemenata kod konvencionalnog osiguranja: garara (Gharar), mejsira (Maysir) i kamate (Riba).

*Garar* se odnosi na nedovoljnu jasnoću ugovornih odredaba i neizvesnost ostvarivanja prava i obaveza (Jaffer, et. al., 2010, str. 7). Kod konvencionalnog osiguranja, u trenutku sklapanja ugovora, ugovorne strane ne znaju da li će se osigurani slučaj desiti i da li će, samim tim, osiguravač doći u priliku da izvrši svoju obavezu i isplati odštetu, jer je kompletna transakcija vezana za ostvarenje budućeg, neizvesnog događaja, nad kojim ugovorne strane nemaju kontrolu (El-Qalqili, 2017, str. 33). Drugim rečima, osiguranici plaćaju uslugu<sup>10</sup> za koju je neizvesno da li će uopšte biti pružena. Takođe, kod konvencionalnog osiguranja postoji i izražen agencijski problem, jer interesi osiguravača (agenata) i osiguranika (principala) nisu uvek savršeno usklađeni (Wahab, Lewis & Hassan, 2007, str. 374). Problem garara nije u potpunosti eliminisan ni kod tekaful osiguranja, ali je značajno ublažen (Jaffer, et. al., 2010, str. 7). Kod tekaful osiguranja je, takođe, neizvesno da li će se osigurani slučaj desiti i da li će, kada i u kom iznosu doći do isplate odštete, ali je izvesno da će teret odštete solidarno podneti sami osiguranici, a ne osiguravajuće društvo. Osiguranici će, takođe, zadržati eventualni višak iznad isplaćenih odšteta. Samim tim, tekaful osiguranici plaćaju osiguravajućem društvu uslugu upravljanja fondom, čije je pružanje sasvim izvesno, a ne uslugu zaštite od rizika. Kod ovog aranžmana je slabije izražen i agencijski problem.

*Mejsir* označava kockanje ili špekulisanje, što su šerijatski strogo zabranjene aktivnosti (vidi Kur'an 2: 219, 5: 90-91). U pitanju je težnja da se ostvari korist bez plaćanja adekvatne naknade, ulaganja napora ili preuzimanja obaveze, na bazi igre na sreću (Ayub, 2007, str. 62). Prisustvo mejsira kod konvencionalnog osiguranja ogleda se u činjenici da osiguranici uplaćuju premije, koje gube ukoliko se osigurani slučaj ne desi, ali ako se osigurani slučaj desi, ostvaruju pravo na odštetu čiji iznos može biti daleko veći od uplaćenih premija (Jaffer, et. al., 2010, str. 7). Na taj način, do izražaja dolazi problem *igre sa nultim ishodom*, koji kod tekaful osiguranja ne postoji, jer osiguranici osiguravaju sami sebe na principu uplate doprinosa, solidarno snose rizik, dele višak i dobitak i ne prenose teret rizika na nekog drugog (Ibid).

*Kamata (riba)* je u islamu strogo zabranjena (vidi detaljnije: Kur'an 2: 275, 2: 276, 2: 278, 2: 279, 3: 130; Chapra, 2000; Siddiqi, 2004; Chapra, 2006; Iqbal & Mirakhor, 2009). Samim tim, praksa konvencionalnih osiguravajućih društava da investiraju u kamatonosne instrumente je šerijatski neprihvatljiva, pa stoga tekaful operatori ulažu u finansijske instrumente koji nose beskametni prinos (Jaffer, et. al., 2010, str. 7; Hussain & Pasha, 2011, str. 26).

Stav da konvencionalno osiguranje sadrži navedene šerijatski zabranjene elemente preovladava, ali nije jedini. Naime, u pogledu šerijatske prihvatljivosti konvencionalnog osiguranja postoje tri stava (Sadeghi, 2010, str. 102-103): 1. preovlađujući stav da je konvencionalno osiguranje šerijatski neprihvatljivo, 2. stav da garar i mejsir ne postoje kod konvencionalnog osiguranja, pa je stoga ono šerijatski prihvatljivo, i 3. stav da je šerijatski prihvatljivo konvencionalno osiguranje imovine, za razliku od konvencionalnog osiguranja života.

Zastupnici stava da je konvencionalno osiguranje šerijatski prihvatljivo i da kod njega nema zabranjenih elemenata, navode brojne argumente u prilog tom stavu (navedeno prema: Khan, 2011, str. 8-12).

<sup>10</sup> Radi se o nadoknadi štete u slučaju realizacije osiguranog slučaja.

*Prvo*, *garar* nije zastupljen kod konvencionalnog osiguranja jer su osigurani predmet, osigurani slučaj i maksimalni iznos odštete unapred definisani. Takođe, ni neizvesnost realizacije osiguranog slučaja i iskorišćenja usluge zaštite se ne mogu staviti u kontekst *garara*, jer naplata odštete nije jedina usluga koju osiguranje pruža. Za osiguranika su podjednako bitni psihički mir i sigurnost koje osiguranjem stiče, a to je usluga čije pružanje postaje izvesno samim potpisivanjem ugovora o osiguranju. *Drugo*, ni *mejsir* se ne može pronaći kod konvencionalnog osiguranja jer je motiv osiguranika sasvim drugačiji od motiva kockara. Cilj kockara je da relativno malim ulogom ostvari visoku zaradu. S druge strane, cilj osiguranika nije da malim ulogom (premijom) ostvari veliku finansijsku korist (naplati odštetu), jer je ostvarenje te koristi povezano sa realizacijom osiguranog slučaja, što osiguranik želi da izbegne. Ukoliko se osigurani slučaj ne dogodi, osiguranik će izbeći brojne neprijatnosti koje ekonomski štetan događaj donosi. To što će u tom slučaju izgubiti uplaćene premije, za njega ima sporedni značaj. *Treće*, postoji stav da savremena kamata nije identična sa šerijatski zabranjenom *ribom*.<sup>11</sup> Prema ovom stavu, *riba* se odlikovala time što je bila „previsoka“ i naplaćivala se na potrošačke kredite, koje su imućni davali siromašnima. Dužnici vrlo često te kredite nisu mogli vraćati, što ih je vodilo u dužničko ropstvo, pa je upravo ova nehumana praksa jedan od razloga zabrane *ribe*.

## Tekaful osiguranje u praksi

Tekaful osiguranje je godinama bio najbrže rastući segment globalnog tržišta osiguranja. Složena stopa rasta doprinosa kod tekaful osiguranja je u periodu od 2011. do 2018. godine iznosila 8,5% (IFSB, 2020, str. 36). U 2018. godini, rast doprinosa kod tekaful osiguranja je bio usporen i iznosio je 3,2% (IFSB, 2020, str. 36), što je na nivou stope rasta globalnog tržišta osiguranja (Swiss Re Institute, 2020, str. 8). Ipak, tekaful osiguranje, i pored visokih stopa rasta doprinosa koje je ostvarivalo godinama, i dalje ima veoma mali udeo na globalnom tržištu osiguranja. Naime, ukupan iznos doprinosa kod tekaful osiguranja je 2018. godine iznosio 27,07 milijardi američkih dolara (IFSB, 2020, str. 36), dok je iste godine ukupan iznos premija osiguranja na globalnom nivou iznosio 6.149 milijardi američkih dolara (Swiss Re Institute, 2020, str. 24). Razlozi zbog kojih tekaful osiguranje četiri decenije nakon osnivanja prvog tekaful osiguravajućeg društva nije ostvarilo sve svoje potencijale su brojni.

*Prvo*, zemlje sa većinskim muslimanskim stanovništvom, koje su i ciljno tržište za tekaful osiguranje, odlikuje niska zainteresovanost za usluge osiguranja. Na globalnom nivou, islamski svet učestvuje sa 25% u ukupnom stanovništvu, ali njegov udeo u ukupno naplaćenoj premiji je svega 5% (Frenz, Sridharan & Iyer, 2008, str. 45). U većini zemalja Bliskog istoka, udeo premija osiguranja u BDP-u *per capita* iznosi manje od 1% (Wahab, Lewis & Hassan, 2007, str. 372-373). Razlog tome je percepcija osiguranja koje tamošnje stanovništvo ima, smatrajući ga protivnim islamskim principima, pa je neophodno kod njih razvijati svest o prednostima koje osiguranje nudi i postojanju šerijatski usklađene varijante osiguranja (Ahmad, Masood & Khan, 2010, str. 13). Na tome treba dodatno raditi kod osiguranja života, prema kom postoji izražena averzija jer se shvata kao kladenje na dužinu života osiguranika i, stoga, na ovaj vid tekaful osiguranja otpada svega 30% tekaful tržišta (AlNemer, 2013, str. 237).

<sup>11</sup> Stav o različitosti kamate i *ribe* zastupa manjina. Najznačajniji šerijatski pravници ovaj stav odbacuju, tvrdeći da je kamata potpuno identična *ribi*. Oni smatraju da nije definisan vrednosni limit koji kamata treba da pređe da bi se smatrala previsokom i zabranjenom ili umerenom i dozvoljenom. Pored toga, u vreme proglašenja zabrane kamate u Arabiji su postojali kako potrošački, tako i poslovni krediti, pa je samim tim kamata koja se naplaćuje kod obe vrste kredita zabranjena (vidi detaljnije: Siddiqi, 2004; Hadžić, 2005; Iqbal & Mirakhor, 2009).

*Drugo*, još uvek ne postoje opšteprihvaćeni principi funkcionisanja tekaful osiguranja, iako je AAOIFI definisala standarde koje su pojedine bliskoistočne zemlje prihvatile (Ahmad, Masood & Khan, 2010, str. 13). U praksi postoje tri načina za regulisanje tekaful poslovanja (Jaffer, et. al., 2010, str. 17): 1. postojanje jedinstvenog zakonskog okvira, koji je kreiran prema potrebama konvencionalnog osiguranja i kojim se tekaful osiguranje ne zabranjuje, ali se ne uzimaju u obzir njegove specifičnosti, što je pristup primenjen u nemuslimanskim zemljama, 2. postojanje jedinstvenog zakonskog okvira koji prepoznaje specifičnosti i potrebe tekaful osiguranja, što je praksa u Maleziji, i 3. postojanje posebnog pravnog okvira koji je kreiran u skladu sa specifičnostima i potrebama tekaful osiguranja, što je primenjeno u Bahreinu. Nestandardizovanost tekaful propisa izaziva brojne negativne posledice. Pojedina prava osiguranika u različitim zemljama su različito regulisana<sup>12</sup>, a pojedine muslimanske zemlje čak i ne prepoznaju potrebu za tekaful osiguranjem<sup>13</sup> (Ibid, str. 16). Zatim, javlja se problem neefikasnog nadzora nad poslovanjem tekaful osiguravajućih društava u mnogim zemljama sa aktivnim tekaful tržištem i nepostojanja podrške nadzornih organa tekaful poslovanju (Bhatty, 2010, str. 6). Takođe, ugrožena je i efikasnost korporativnog upravljanja tekaful fondovima. Bez jasno definisanih principa koji ne ostavljaju mnogo prostora za dileme i diskreciono postupanje upravnih struktura, doći će do konfrontacije između menadžmenata tekaful fondova, prvenstveno fokusiranih na ostvarivanje profita, i šerijatskih odbora, zainteresovanih za šerijatska pitanja (Jaffer, et. al., 2010, str. 19). Poseban problem predstavlja ugrožavanje transparentnosti, koja zbog specifične prirode odnosa između osiguranika i tekaful operatora, ima veći značaj kod tekafula nego kod konvencionalnog osiguranja (Ahmad, Masood & Khan, 2010, str. 12).

*Treće*, uspešnost poslovanja tekaful osiguravajućih društava uslovljena je raspolaganjem stručnim kadrom koji poseduje adekvatna znanja iz oblasti osiguranja i šerijatskog prava, ali je ovaj kadar veoma deficitaran (Jaffer, et. al., 2010, str. 15-16; Lim, Idris & Carissa, 2010, str. 23; AlNemer, 2013, str. 237). Navedeni problem produbljuje činjenica da je pomenuti kadar potreban i upravljačkim i nadzornim strukturama, odnosno šerijatskim odborima koji kontrolišu šerijatsku ispravnost tekaful poslovanja (Jaffer, et. al., 2010, str. 15-16). Ipak, ovaj problem nije nerešiv. Štaviše, može se značajno ublažiti organizovanjem edukativnih programa za zaposlene, među kojima su brojni oni koji su se ranije bavili konvencionalnim osiguranjem i poseduju znanja iz te oblasti (Aris, Tapsir & Talib, 2012, str. 34).

Četvrto, finansijska snaga konvencionalnih osiguravajućih društava, između ostalog, bazira se na uspešnom investiranju dela prikupljenih premija i sopstvenog kapitala u različite instrumente finansijskog tržišta, koje odlikuju visok kreditni rejting i likvidnost. Međutim, sredstva tekaful fondova se ne mogu ulagati u većinu ovih instrumenata jer su oni uglavnom kamatonosni. Nedostatak kvalitetnih i likvidnih, šerijatski prihvatljivih finansijskih instrumenata je jedan od težih izazova sa kojima se tekaful fondovi i njihovi operatori susreću, jer je to faktor koji onemogućava ostvarivanje visokih profita (Kader, Adams & Hardwick, 2010, str. 163-164; Ahmad, Masood & Khan, 2010, str. 13). Pozitivan efekat na ublažavanje ovog problema je imalo kreiranje šerijatski usklađenih instrumenata, poput sukuka. Ipak, raznovrsnost ovih instrumenata je mala, što onemogućava diversifikaciju ulaganja i dovodi do pojave rizika koncentracije ulaganja (Jaffer, et. al., 2010, str. 19-20). Da bi se problem nedostatka šerijatski prihvatljivih finansijskih instrumenata prevazišao, neophodno je značajno angažovanje stručnjaka za osiguranje i šerijatsko pravo na polju finansijskog inženjeringa i inovacija, s ciljem kreiranja novih instrumenata koji će ispunjavati šerijatske i tržišne zahteve (Lim, Idris & Carissa, 2010, str. 23; Ahmad, Masood & Khan, 2010, str. 14). Proces inoviranja usluga osiguranja može biti koristan i za razvijanje šerijatski prihvatljivog obaveznog osiguranja, koje trenutno u većini zemalja ne postoji (Wahab, Lewis & Hassan, 2007, str. 373).

<sup>12</sup> U Saudijskoj Arabiji osiguranici imaju pravo na isplatu 10% viška iznad isplaćenih odšteta (Jaffer, et. al., 2010, str. 16).

<sup>13</sup> U šiitskom Iranu konvencionalno osiguranje se smatra šerijatski prihvatljivim (Ibid).

*Peto*, solventnost tekaful fondova mora biti prioritet tekaful osiguravajućih društava, jer je to ključni uslov za stabilnost poslovanja fondova, redovno izmirivanje obaveza i očuvanje poverenja osiguranika (Yusop, et. al., 2011, str. 66). Upravljanje solventnošću uključuje formiranje sigurnosnih rezervi, politiku raspodele viška iznad isplaćenih odšteta i davanje beskamatnih pozajmica tekaful fondu u slučaju manjka (Jaffer, et. al., 2010, str. 18-19), ali i utvrđivanje kapaciteta tekaful fondova za pokrivanje različitih rizika. Tekaful se uglavnom primenjuje kod osiguranja relativno malih rizika i pokriva lične potrebe za osiguranjem, dok je mogućnost njegove primene kod pokrivanja velikih poslovnih rizika veoma ograničena (Sadeghi, 2010, str. 104; Khan, 2011, str. 17). Da bi se to ograničenje savladalo i istovremeno očuvala solventnost tekaful fondova, neophodno je korišćenje usluga reosiguranja, odnosno retekafula. S obzirom na to da retekaful tržište nije razvijeno (Kader, Adams & Hardwick, 2010, str. 164; Lim, Idris & Carissa, 2010, str. 23), kao jedino rešenje, dok se postojeće stanje ne promeni, nameće se korišćenje usluga konvencionalnog reosiguranja, što šerijatski pravnici odobravaju (Sadeghi, 2010, str. 104).

Brojni izazovi sa kojima se tekaful osiguranje suočava ne smeju zaseniti značajna dostignuća ostvarena na ovom polju. Tokom četiri decenije postojanja institucionalizovanog komercijalnog tekaful osiguranja, ovo osiguranje je postalo globalno dostupna usluga koju nude brojne uspešne, solventne, adekvatnim resursima opremljene finansijske institucije, poput tekaful i konvencionalnih osiguravajućih društava i banaka, sa sve dostupnijom podrškom u vidu reosiguranja (Ahmad, Masood & Khan, 2010, str. 11). Potencijale tekaful osiguranja prepoznala su vodeća svetska osiguravajuća društva, poput Tokio Marine, AIG, Prudential, HSBC Insurance, Zurich, AXA, Munich Re, Swiss Re i Hannover Re, koja su uključila tekaful osiguranja u svoj portfolio usluga (Bhatty, 2010, str. 3). Interesovanje za tekaful osiguranje raste i među vodećim američkim osiguravajućim društvima, koja, ipak, još uvek pokazuju određeni oprez prema ozbiljnijem angažovanju u ovom sektoru (Abdul Rahman, 2009, str. 179). Među korisnicima usluga tekaful osiguranja ima sve više nemuslimana. U Maleziji je njihov udeo u ukupnom broju tekaful osiguranika većinski i iznosi 60% (Bhatty, 2008, navedeno u: AlNemer, 2013, str. 236). Ubrzanom rastu tekaful osiguranja pomaže i čvrsta povezanost sa, takođe, brzorastućim sektorom islamskog bankarstva, gde postoji primetna međusobna tehnička i finansijska podrška (Sadeghi, 2010, str. 106). Ipak, sistemima bankaosiguranja, koji su veoma zastupljeni na islamskom finansijskom tržištu, spočitava se favorizovanje bankarskog poslovanja i znatno slabija podrška sektoru tekafula prilikom promocije i distribucije njegovih proizvoda (Ahmad, Masood & Khan, 2010, str. 15).

Analizirajući razvojni put tekaful osiguranja, primetno je da je ostvaren značajan napredak i da se od početnog, na teoriji utemeljenog, idealističkog shvatanja tekafula došlo do u praksi primenjivog koncepta (Sadeghi, 2010, str. 105). Ipak, balansiranje između poštovanja šerijatskih zahteva i zahteva savremenog, dinamičnog poslovnog okruženja je obaveza sa kojom će sektor tekaful osiguranja morati večno da se nosi (Ibid, str. 106). Uspešnost i održivost tekaful poslovanja biće direktno korelisani sa uspešnošću pomenutog balansiranja.

## Zaključak

Zaštita ljudskog života i imovine spada među najznačajnije principe Šerijata, pa je shodno tome institucija osiguranja inherentan element šerijatski uređenog društva. Osnovna svrha postojanja šerijatski usklađenog, tekaful osiguranja, u prvim fazama njegovog razvoja, bila je stvaranje društva blagostanja, koje podstiče solidarnost, empatiju i pomaganje socijalno ugroženim članovima društva. Tek kasnije

se javljaju komercijalne, profitno orijentisane forme tekaful osiguranja. To je jedna od uočljivijih razlika između tekaful i konvencionalnog osiguranja, čija istorija razvoja započinje pojavom komercijalnih osiguranja, dok je institucionalizovano socijalno osiguranje produkt savremenog doba. Druga razlika između ova dva oblika osiguranja tiče se pravno-ekonomskih odnosa koji se u procesu osiguranja formiraju. Kod konvencionalnog osiguranja, osiguravajuća društva prodaju uslugu zaštite od rizika svojim osiguranicima, čime suštinski dolazi do transfera rizika sa osiguravača na osiguranika. S druge strane, kod tekaful osiguranja, osiguravajuća društva ne preuzimaju rizik osiguranika na sebe, pa stoga ne prodaju uslugu osiguranja u konvencionalnom smislu, već uslugu upravljanja fondom, koji osiguranici formiraju uplatom doprinosa. Na taj način, rizik ostaje na samim osiguranicima, koji ga kroz proces tekaful osiguranja međusobno dele i solidarno snose. U tekaful aranžmanima, osiguravajuće društvo može imati ulogu: *agenta*, koji upravlja tekaful fondom, uplatama doprinosa i isplatama odštete, i za to dobija fiksnu naknadu; *partnera*, koji upravlja rezervama tekaful fonda i investicionim računom i učestvuje u podeli dobiti od investicija, ali ne snosi gubitak; i *kombinovanu ulogu agenta-partnera*, pri čemu prvu ulogu vrši upravljanjem rezervama fonda, uz fiksnu naknadu, a drugu upravljanjem investicionim računom, uz učešće u investicionoj dobiti. Pojedine prakse kod tekaful osiguranja, poput beskamatnog kreditiranja tekaful fonda od strane osiguravajućeg društva i raspodele viška iznad isplaćenih odšteta između osiguravajućeg društva i osiguranika, izazivaju oprečna mišljenja i sporenje među šerijatskim stručnjacima.

Potreba za tekaful osiguranjem javila se usled šerijatske neusklađenosti konvencionalnog osiguranja, koje, prema mišljenju šerijatskih stručnjaka sadrži šerijatski zabranjene elemente: *garar* – jer se osiguranjem kupuje usluga čije pružanje nije sigurno, *mejsir* – jer osiguranje ima elemente kockanja zbog toga što osiguranik uplaćuje mali iznos u vidu premije koji mu može doneti veliki iznos odštete, ako se osigurani slučaj desi, i *ribu (kamatu)* – jer deo prikupljenih premija konvencionalna osiguravajuća društva ulažu u kamatonosne finansijske instrumente. Stav o šerijatskoj neispravnosti konvencionalnog osiguranja dominira, ali ne treba zanemariti činjenicu da postoje i oni koji mu se suprotstavljaju, posebno dovodeći u pitanje argumente u prilog prisustva garara i mejsira u konvencionalnom osiguranju. Postoje šerijatski stručnjaci koji smatraju da se šerijatska ispravnost konvencionalnog osiguranja imovine ne dovodi u pitanje, dok šerijatski stručnjaci šiitske provenijencije ne vide ništa sporno kod konvencionalnog osiguranja.

Sektor tekaful osiguranja je za četiri decenije svog postojanja postigao impozantne rezultate i godina ma je bio najbrže rastući segment globalnog tržišta osiguranja. Osnovana su brojna tekaful osiguravajuća društva, a potencijal ovog tržišta uočila su i pojedina multinacionalna osiguravajuća društva, koja su počela da nude uslugu tekaful osiguranja. Ipak, pomenuta dostignuća padaju u senku činjenice da je tržišno učešće tekaful osiguranja na globalnom osiguravajućem tržištu i dalje zanemarljivo. Faktori koji doprinose održanju postojeće nepovoljne situacije su: *nedovoljna tražnja za uslugom osiguranja u muslimanskim zemljama*, koje su bazična tržišta za tekaful osiguranje, *disharmonija propisa koje uređuju tekaful osiguranje u različitim zemljama*, što ostavlja prostor za diskreciono odlučivanje lokalnih regulatornih vlasti i unosi neizvesnost u tekaful poslovanje, *nedostatak stručnog kadra koji podjednako dobro poznaje šerijatske propise i teoriju i praksu osiguranja*, *nedostatak šerijatski usklađenih finansijskih instrumenata*, što umanjuje investicione mogućnosti tekaful osiguravajućih društava, njihovu profitabilnost i konkurentnost, i *nedovoljna solventnost tekaful fondova*, što sprečava pokrivanje većih rizika. Pomenute prepreke ne smeju usporiti do sada postignuti ekspanzivan rast tekaful osiguranja, već njihovo savladavanje mora biti izazov koji će ujediniti napore šerijatskih i finansijskih stručnjaka, s jedne strane, i nacionalnih i međunarodnih regulatornih tela, s druge strane, kako bi se tekaful osiguranje unapredilo, i time ponuda usluga na globalnom tržištu osiguranja dodatno obogatila.

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# TAKAFUL INSURANCE IN THEORY AND PRACTICE

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## Summary

*Islam attaches great importance to insurance, as an instrument of protection of the individual and the community, and considers it an indispensable element of the process of achieving socio-economic justice in society. Consequently, in the Islamic concept of insurance, the social component dominates over the commercial component. However, requirements of the modern environment have made it necessary to have Shariah-acceptable commercial insurance. Given that conventional insurance models are largely Shariah non-compliant, Takaful insurance has been developed to meet the needs of individuals and institutions that want to be insured in accordance with Shariah principles. In this paper, we will analyze the process of evolution of Takaful insurance, its types and models, perform a comparative analysis of Takaful and conventional insurance, reviewing arguments in favor of Shariah specific nature of conventional insurance, and finally, list the challenges of implementing Takaful insurance in practice.*

**Keywords:** Islamic finance, insurance, Takaful, risk management, mutual insurance, Mudarabah, Wakalah

**JEL Classification:** G22, D47.

## Introduction

The concept of insurance arose as a consequence of a people's all-time need to mitigate the negative consequences of the uncertainty they face on a daily basis and to protect themselves and their property. Consequently, the historical development of the concept of insurance completely coincides with the development of civilization. The evolutionary process of the insurance concept took place in several phases (Masci, 2011, p. 27): the application of the original forms of insurance, the emergence of insurance policies, the establishment of the first insurance companies, the emergence of social insurance, strengthening the position of insurance companies in the financial market and dealing with the problem of terrorism and natural disasters. Among the first, maritime merchants, whose activities have always been associated with numerous dangers, became aware of the need for insurance (Pak, 2011, p. 4). In the ancient period, when rudimentary forms of insurance appeared, commercial ventures were insured on the basis of a loan or partnership agreement, and not on the basis of a classical insurance contract (Homer & Sylla, 2005, p. 35). In the Middle Ages, as well, insurance was most actively used in maritime trade and was further "developed in Mediterranean ports" (Ibid, p. 73). The "credit" for the creation of the first insurance company does not go to maritime trade, but to the Great Fire in London, which occurred in the 17<sup>th</sup> century and whose terrible consequences encouraged the establishment of an insurance company specialized in property insurance (Marović, Tepavac & Njegomir, 2013, p. 20). However, as long as scientific methods were not applied to assess the taken risk, insurance could be equated with gambling. Modern insurance is not only based on the simple transfer of risk from the insured to the insurer, but also on the application of actuarial risk assessment methods, which have enabled the quantification of the probability of insured risks realization and related economic consequences. Their application enabled the creation of conditions for the development of the life insurance concept. The beginnings of this type of insurance are linked to two Scottish priests (Robert Wallace & Alexander Webster) who formed a fund to insure the families of deceased priests in the 18<sup>th</sup> century, using actuarial methods in estimating the life expectancy of priests, insurance premiums and the total fund sufficient to pay agreed indemnity to insurance beneficiaries (Ferguson, 2009, p. 190–193). Modern insurance, in all its forms, cannot be imagined without the application of actuarial methods.

Takaful is insurance based on Shariah principles. According to the principles of Shariah and the concept of the common good (*maqasid shari'ah*), the protection of the individual and the community is mandatory (Aris, Tapsir & Talib, 2012, p. 32), which indicates the necessity of the existence of an insurance institution in Muslim society. The essence of Takaful insurance can be seen from the very etymology of the word *Takaful*. The word *Takaful* is derived from the Arabic verb *kafalah*, which means "mutual guarantee" (Matsawali, et. al., 2012, p. 164; Aris, Tapsir & Talib, 2012, p. 30). In Takaful insurance, the concept of *tabarru* is represented, which literally means "donating, contributing, offering or giving" (Wahab, Lewis & Hassan, 2007, p. 376). Accordingly, it can be concluded that, in Takaful insurance, the insured cooperate with each other for mutual benefit, pay contributions to form fund as a financial basis for support of insured persons in need, share risks and losses, and the possibility of realizing benefits to the detriment of others is eliminated (Wahab, Lewis & Hassan, 2007, p. 375–376; Swartz & Coetezer, 2010, p. 335; Aris, Tapsir & Talib, 2012, p. 31). Takaful enables the assembled community of insured to protect life, property, and dignity, through mutual cooperation and ethical treatment (Abdullah, 2012, p. 540). The Islamic concept of insurance has passed through several stages of devel-

opment (Hadžić, 2014, p. 152): *akillah*<sup>1</sup>, *meakil*<sup>2</sup>, commercial insurance<sup>3</sup> and modern Takaful insurance<sup>4</sup>. The key moment for the initiation of the development of modern Takaful insurance happened at the beginning of the 19<sup>th</sup> century, when Shariah lawyer *Syed Ibn Abdin*, at the request of a group of Muslim traders to give his opinion on the Shariah correctness of conventional maritime insurance, pointed out the Shariah incompatibility of conventional insurance and the need for the existence of authentic Islamic insurance (Khan, 2011, p. 6). The official position that conventional insurance is Shariah non-compliant was adopted at the First International Conference on Islamic Economics in Mecca in 1976 (Ibid). Shortly afterwards, the first Takaful insurance companies were established in Sudan in 1979 and Malaysia in 1984 (Lim, Idris & Carissa, 2010, p. 2). A more detailed overview of the functioning of Takaful insurance in theory and practice will be given below, through the presentation of the Takaful insurance models, arguments in favor of Shariah inconsistency of the conventional insurance concept and, finally, achievements and challenges in the implementation of the Takaful insurance concept.

## Takaful Insurance Models

The application of Shariah principles in shaping Takaful insurance has led to the creation of a specific legal, economic and organizational infrastructure on which the concept of Takaful insurance is based. In the case of Takaful insurance, the contracting parties are the insured and the Takaful operator (insurance company). Insured pay contributions from which a Takaful fund is formed, and it is managed by a Takaful operator, who does not own the fund, but only takes care of it (Wahab, Lewis & Hassan, 2007, p. 376). Thus, the Takaful operator does not have the role of insurer, but only the manager of the Takaful fund, while the insured are also insurers (AlNemer, 2013, p. 235). Therefore, there is no transfer of risk from the insured to the Takaful operator (Bhatty, 2010, p. 7), but the burden of risk is borne by the insured themselves (Wahab, Lewis & Hassan, 2007, p. 376). The obligations of the Takaful operator, on the other hand, are by managing the fund to preserve fund's security, ability to settle claims and achieve a satisfactory rate of return, and ensure stable business continuity (Aris, Tapsir & Talib, 2012, p. 36). Accordingly, it can be concluded that the assets of the Takaful fund and the assets of the Takaful operator are completely separate (AlNemer, 2013, p. 249).

Takaful insurance can be general (property insurance) and family (life insurance). Based on the rights and obligations that the Takaful operator and insured acquire and the form of compensation that the Takaful operator receives for their services, four models of Takaful insurance have been differentiated (models presented on the basis of: Wahab, Lewis & Hassan, 2007; Akhter, 2010; Jaffer, et. al., 2010; Sadeghi, 2010; Kettell, 2011; Htay & Zaharin, 2012; Cheikh, 2013; Kassim, Odierno & Patel, 2013; Hadžić, 2014; Tahira & Arshad, 2014): *Mudarabah*, *Wakalah*, mixed and *Waqf* model.

In the *Mudarabah model*, the Takaful operator and the insured establish a partnership, whereby the Takaful operator is playing the role of *Mudarib*, who manages the Takaful fund and invests his time,

<sup>1</sup> This is the help that the community provided to poor families, especially to families whose supporters were killed by members of an enemy tribe or people.

<sup>2</sup> Insurance defined by the Constitution of Medina (Hamidullah, 1989, p. 156), which includes three elements (Rispler-Chaim, 1991, p. 144): 1) *al-diyah* (bloodshed), 2) *al-fidya* (redemption of prisoners of war) and 3) social insurance.

<sup>3</sup> Mutual insurance companies were established during the expansion of the Arab maritime trade, with the aim of protecting traders whose trading ventures often ended in failure due to natural disasters or looting, a model later adopted by Europeans (Aris, Tapsir & Talib, 2012, p. 30).

<sup>4</sup> Acceptance and modification of conventional insurance models and institutions and the emergence of modern Takaful insurance (for more details, see: Sadeghi, 2010, p. 101).

effort and knowledge, while the insured have the role of *Rabbu l-mal*, i.e. the investor without the right to manage the fund. Within the fund, reserves for settling claims are formed, as well as an investment account to which funds intended for investment are transferred. The realized return on investments is divided by the insured and the Takaful operator according to a predetermined key, while the loss is fully borne by the insured. On the other hand, the positive difference between the paid contributions and the paid indemnities is paid exclusively to the insured<sup>5</sup> at the end of the accounting period. On the other hand, if the paid contributions are not sufficient to cover the claims, the Takaful operator gives the Takaful fund an interest-free loan (*Qard Hasan*), which should be settled from future contributions after the fund achieves a positive technical result.

In the *Wakalah model*, the Takaful operator has the role of agent (*Wakeel*) of the fund, while the insured are its principals (*Muwakkil*). The Takaful operator has the role of managing the Takaful fund, taking care of its stability and sustainability, collecting contributions and paying of compensations, for which it receives a predefined fee. In addition, there is a possibility for the Takaful operator to manage the investment account of the Takaful fund and to receive an additional fee for that, which is also fixed. Fixedness of the Takaful operator's fee and non-compliance with the achieved results of the fund's operations can demotivate the Takaful operator to maximize their efforts in order for the Takaful fund to achieve above-average financial results. Therefore, it is recommended to pay an incentive fee from the realized excess over the paid compensations.<sup>6</sup> This problem can also be solved by applying a mixed *Mudarabah/Wakalah model*. In this model, the Takaful operator as *Wakeel* receives a fixed fee to manage the fund's reserves. At the same time, they manage the investment account in the role of *Mudarib*, where they receive compensation for the services provided in the form of a predefined share in the realized return on investments. The status of the realized surplus above the paid indemnities in the case of *Wakalah* model is the same as in the case of *Mudarabah* model, i. e. the surplus belongs to the insured. The practices of these models also coincide in the event of a shortfall, because in the *Wakalah* model, as well, the Takaful operator covers the shortfall with an interest-free loan that will be repaid after achieving a positive technical result.

The *Waqf model* of Takaful insurance is different from the others because its function is exclusively social and humanitarian. In this case, the Takaful fund is filled in with donations, managed by the Takaful operator, and used to provide financial assistance to socially disadvantaged people. *Waqf* is established as an independent legal entity and the Takaful fund is owned by the *Waqf*, and not by the donors, so the realized surplus and possible return on investments remain in the possession of the fund itself.

By analyzing the presented models of Takaful insurance, the professional public questioned the legitimacy of several important elements of these financial arrangements. *One of the controversial elements* is the interest-free loan (*Qard Hasan*) which the Takaful operator gives to the fund in case of a negative technical result. The application of *Qard Hasan* in Takaful insurance raises a number of questions (Jaffer, et. al., 2010, p. 20-21): determining the amount of the loan and its compliance with the projected technical result that is the basis for its repayment, the dynamics of loan repayment, allocation of burden to existing and new insured<sup>7</sup>, debt write-off in case of multi-year negative technical result and treatment of *Qard Hasan* as debt which is taken into account when reviewing the solvency of the fund. The question is whether the burden of *Qard Hasan* will ultimately be borne by insured or

<sup>5</sup> It is possible to keep part of the surplus in the form of safety or stabilization reserves (Jaffer, et. al., 2010, p. 23).

<sup>6</sup> The incentive fee is adjusted to the amount of the realized surplus in accordance with the business policy of the fund (Wahab, Lewis & Hassan, 2007, p. 383).

<sup>7</sup> There is a possibility that the burden of loan repayment will be borne by a positive technical result intended for insured who joined the fund after taking the loan, and therefore did not benefit from paid compensation that exceeded the contributions of previous insured, which led to a situation where the fund had to apply for a loan.

shareholders of the Takaful operator (Bhatti, 2010, p. 8). The application of *Qard Hasan* is especially problematic in the *Mudarabah* model, because the obligation of the Takaful operator (Mudarib) to lend to the Takaful fund (Rabbu l-mal) contradicts the basic principles of the *Mudarabah* arrangement, according to which the loss, and thus the negative technical result, completely falls on the burden of *Rabbu l-mal* (Htay & Zaharin, 2012, p. 120). *Mudarib* is not expected to provide this form of support to *Mudarabah* partnership and be a guarantor of a Takaful fund (Wahab, Lewis & Hassan, 2007, p. 381). Another controversial element is the practice of some Takaful funds to pay a portion of the surplus over the paid compensation to the Takaful operator. There are three different opinions in this regard (Jaffer, et. al., 2010, p. 22): 1. the surplus belongs exclusively to the insured<sup>8</sup>, 2. the surplus also belongs to the Takaful operator due to its contribution to the surplus and 3. the surplus should be given to humanitarian purposes, because the insured cases were not realized, and therefore there was no payment of compensation, which is the merit of God, and not the merit of the Takaful operator and the insured. Another controversial practice is the practice of covering the costs of fund management in the case of *Mudarabah* models at the expense of the fund's capital. Namely, there may be a situation that the realized profit from investments is not enough to cover the costs and that they must be covered by the collected contributions of the insured, which would jeopardize the solvency of the fund and its purpose, as well as the Shariah-correctness of the arrangement (Htay & Zaharin, 2012, p. 119-120). Due to all the above-mentioned controversial elements, which are particularly problematic in the *Mudarabah* model, Islamic financial regulatory institutions (such as the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI)) (Jaffer, et al., 2010, p. 14), as well as the professional public and providers and users of Takaful insurance services, support the application of a mixed *Mudarabah/Wakalah* model (Htay & Zaharin, 2012, p. 125). In this model, the Takaful operator manages the fund as an agent. Therefore, there are no legal barriers to granting interest-free loans to the fund<sup>9</sup> and covering the costs of fund management, which may be included in the commission of a Takaful operator. Also, the management of the fund's investment account can be carried out with full respect of *Mudarabah* principles. On the other hand, the key objection to this model is that the Takaful operator can make "excessively large earnings", because it is entitled to both a large commission and a share in the return on investment (Htay & Zaharin, 2012, p. 124).

## Takaful vs. Conventional Insurance

According to their basic function, Takaful and conventional insurance do not differ, because the purpose of both insurance concepts is to mitigate the risks that individuals and society face in their actions, and partial or complete compensation for economic damage caused by the realization of the insured event. Their similarity is particularly pronounced in conventional mutual insurance (Kader, Adams & Hardwick, 2010, p. 163). However, there are numerous differences between them. First of all, by analyzing their development path, it can be seen that Islamic insurance in its beginning was primarily social insurance, intended to strengthen the unity of the community, solidarity and social peace. The tradition of Islamic social insurance is very long, which is supported by the fact that it was extremely developed during the life of Muhammad s.a.v.s. and righteous caliphs, especially Omar (Tolefat & Asutay, 2013, p. 11; Hadžić, 2014, p. 152). Conventional insurance is based on the transfer of

<sup>8</sup> Since the Takaful operator does not acquire the insured risks, there is no basis to participate in the distribution of the surplus (Jaffer, et. al., 2010, p. 22). Also, there is an opinion that with the participation of Takaful operators in the distribution of surplus one of the key differences compared to conventional insurance is lost (Wahab, Lewis & Hassan, 2007, p. 380).

<sup>9</sup> Although there are opponents of this practice in this case as well (see Ibid, p. 386).

risk from the insured to the insurer (insurance company), for what the insurer charges a premium as the price of the insurance service, while, on the other hand, in Takaful insurance the insurance company has the role of agent managing the Takaful fund and the burden of risk is borne in solidarity by the insured (Jaffer, et. al., 2010, p. 7). In conventional insurance, the insurance company has full control over the surplus over paid claims and return on investment, but also bears the burden of deficit and loss on investment, while in Takaful insurance the insurance company bears only the risk of equity management, which is separate from the Takaful fund (Bhatti, 2010, p. 7). The status of payments made by the insured is also different. In Takaful insurance, contributions are paid to the mutual insurance fund, while premiums, which are represented in conventional insurance, are an element of the purchase transaction between the insured and the insurer (Ibid). The nature of the relationship formed in conventional insurance between insurers and insured and the rights and obligations arising from that relationship have led to the existence of numerous Shariah-unacceptable elements in conventional insurance: *Gharar*, *Maysir* and interest (*Riba*).

*Gharar* refers to the insufficient clarity of contractual provisions and the uncertainty of exercising rights and obligations (Jaffer, et. al., 2010, p. 7). In conventional insurance, at the time of concluding the contract, the contracting parties do not know whether the insured event will occur and whether, therefore, the insurer will get the opportunity to fulfill their obligation and pay compensation, because the complete transaction is related to the realization of future, uncertain events, over which the contracting parties have no control (El-Qalqili, 2017, p. 33). In other words, the insured pay for the service<sup>10</sup> for which it is uncertain whether it will be provided at all. Also, in conventional insurance, there is a pronounced agency problem, because the interests of insurers (agents) and insured (principals) are not always perfectly aligned (Wahab, Lewis & Hassan, 2007, p. 374). The problem of *Gharar* is not completely eliminated even in Takaful insurance, but it is significantly alleviated (Jaffer, et. al., 2010, p. 7). In Takaful insurance, it is also uncertain whether the insured event will happen and whether, when and in what amount the compensation will be paid, but it is certain that the burden of compensation will be borne by the insured in solidarity, and not by the insurance company. The insured will also keep any surplus over the paid indemnities. Therefore, Takaful insured pay the insurance company for fund management service, whose provision is quite certain, and not a risk protection service. In this arrangement, the agency problem is also less pronounced.

*Maysir* means gambling or speculation, which are strictly forbidden activities in Shariah (see Qur'an 2: 219, 5: 90-91). It is an aspiration to achieve a benefit without paying adequate compensation, effort, or commitment, on the basis of gambling (Ayub, 2007, p. 62). The presence of *Maysir* in conventional insurance is reflected in the fact that insured pay premiums, which they lose if the insured event does not occur, but if the insured event occurs, they are entitled to compensation whose amount may be far higher than the premiums paid (Jaffer, et al., 2010, p. 7). In this way, the problem of a zero-sum game comes to the fore, which does not exist in Takaful insurance, because the insured insure themselves on the principle of payment of contributions, bear the risk in solidarity, share the surplus and profit, and do not transfer the burden of risk to someone else (Ibid).

*Interest (Riba)* is strictly forbidden in Islam (see details: Qur'an 2: 275, 2: 276, 2: 278, 2: 279, 3: 130; Chapra, 2000; Siddiqi, 2004; Chapra, 2006; Iqbal & Mirakhor, 2009). Therefore, the practice of conventional insurance companies to invest in interest-bearing instruments is Shariah-unacceptable, and therefore Takaful operators invest in financial instruments that bear interest-free returns (Jaffer, et. al., 2010, p. 7; Hussain & Pasha, 2011, p. 26).

<sup>10</sup> It is about compensation for damage in case of realization of the insured event.

The view that conventional insurance contains the above-mentioned Shariah-prohibited elements prevails, but it is not the only one. Namely, with regard to the Shariah-eligibility of conventional insurance, there are three views (Sadeghi, 2010, p. 102-103): 1. the prevailing view that conventional insurance is Shariah-unacceptable, 2. the view that *Gharar* and *Maysir* do not exist in conventional insurance, and therefore it is Shariah-acceptable, and 3. the view that conventional property insurance is Shariah-acceptable, as opposed to conventional life insurance.

The proponents of the view that conventional insurance is Shariah-acceptable and that it has no forbidden elements, list a number of arguments in support of that view (listed in accordance to: Khan, 2011, p. 8-12). *First*, *Gharar* is not represented in conventional insurance because the insured subject, the insured event and the maximum amount of compensation are predefined. Also, the uncertainty of the realization of the insured event and the use of the protection service cannot be placed in the context of *Gharar*, because the collection of compensation is not the only service that the insurance provides. For the insured, mental peace and security that they acquire through insurance are equally important, and that is a service whose provision becomes certain by signing the insurance contract. *Second*, even *Maysir* cannot be found in conventional insurance because the motive of the insured is completely different from the motive of the gambler. The goal of gamblers is to make a high profit with a relatively small stake. On the other hand, the goal of the insured is not to achieve a large financial benefit (charge compensation) with a small investment (premium), because the realization of that benefit is related to the realization of the insured event, which the insured wants to avoid. If the insured event does not happen, the insured will avoid numerous inconveniences that an economically harmful event brings. The fact that in that case they will lose the paid premiums is of secondary importance to them. Third, there is the view that modern interest rates are not identical to Shariah-forbidden *Riba*.<sup>11</sup> According to this view, *Riba* was characterized by the fact that it was “too high” and was charged on consumer loans, which the rich gave to the poor. Debtors were often unable to repay these loans, which led them into debt bondage, so this inhumane practice is one of the reasons for banning *Riba*.

## Takaful Insurance in Practice

Takaful insurance has been the fastest growing segment of the global insurance market for years. The compound annual growth rate of Takaful insurance contributions in the period from 2011 to 2018 was 8.5% (IFSB, 2020, p. 36). In 2018, the growth of contributions in Takaful insurance was slowed and amounted to 3.2% (IFSB, 2020, p. 36), which was at the level of the growth rate of the global insurance market (Swiss Re Institute, 2020, p. 8). Nevertheless, Takaful insurance, despite the high contribution growth rates it had made over the years, still has a very small share of the global insurance market. Namely, the total amount of contributions in Takaful insurance in 2018 amounted to 27.07 billion US dollars (IFSB, 2020, p. 36), while in the same year the total amount of insurance premiums at the global level amounted to 6,149 billion US dollars (Swiss Re Institute, 2020, p. 24). The reasons why Takaful insurance did not reach its full potential four decades after founding the first Takaful insurance company are numerous.

<sup>11</sup> A minority advocates the view of the difference between interest and *Riba*. The most important Shariah lawyers reject this position, claiming that the interest is completely identical to *Riba*. They believe that there is no defined value limit that the interest rate should exceed in order to be considered too high and prohibited or moderate and allowed. In addition, at the time of the ban on interest in Arabia there were both consumer and business loans, so interest charged on both types of loans is prohibited (for more details, see: Siddiqi, 2004; Hadžić, 2005; Iqbal & Mirakhor, 2009).

*First*, Muslim-majority countries, which are the target market for Takaful insurance, are characterized by low interest in insurance services. Globally, the Islamic world participates with 25% in the total population, but its share in the total premium collected is only 5% (Frenz, Sridharan & Iyer, 2008, p. 45). In most Middle Eastern countries, the share of insurance premiums in GDP *per capita* is less than 1% (Wahab, Lewis & Hassan, 2007, p. 372-373). The reason for this is the perception of insurance that the local population has, considering it contrary to Islamic principles, so it is necessary to develop awareness of the benefits that insurance offers and the existence of Shariah-compliant insurance (Ahmad, Masood & Khan, 2010, p. 13). There is a need for extra work on it in life insurance, toward which there is a pronounced aversion because it is understood as betting on the life expectancy of the insured and, therefore, this type of Takaful insurance accounts for only 30% of the Takaful market (AlNemer, 2013, p. 237).

*Second*, there are still no generally accepted principles for the functioning of Takaful insurance, although the AAOIFI has defined the standards that have been accepted by some Middle Eastern countries (Ahmad, Masood & Khan, 2010, p. 13). In practice, there are three ways to regulate Takaful business (Jaffer, et. al., 2010, p. 17): 1. the existence of a single legal framework, created according to the needs of conventional insurance and which does not prohibit Takaful insurance but also does not take into account its specifics, which is the approach applied in non-Muslim countries, 2. the existence of a single legal framework that recognizes the specifics and needs of Takaful insurance, which is the practice in Malaysia, and 3. the existence of a special legal framework created in accordance with the specifics and needs of Takaful insurance, which has been applied in Bahrain. The non-standardization of Takaful regulations causes numerous negative consequences. Some rights of insured persons are regulated differently in different countries<sup>12</sup>, and some Muslim countries do not even recognize the need for Takaful insurance<sup>13</sup> (Ibid, p. 16). In addition, there is the problem of inefficient supervision of the operations of Takaful insurance companies in many countries with an active Takaful market and the lack of support from the supervisory authorities to Takaful operations (Bhatti, 2010, p. 6). Also, the efficiency of corporate governance of Takaful funds is endangered. Without clearly defined principles that do not leave much room for dilemmas and discretionary actions of administrative structures, there will be a confrontation between the managements of Takaful funds, primarily focused on making profits, and Shariah boards, interested in Shariah issues (Jaffer, et. al., 2010, p. 19). A special problem is jeopardizing transparency, which due to the specific nature of the relationship between the insured and the Takaful operator, is more important in Takaful than in conventional insurance (Ahmad, Masood & Khan, 2010, p. 12).

*Third*, the success of Takaful insurance companies is conditioned by the availability of professional staff who have adequate knowledge in the field of insurance and Shariah law, but this staff is very deficient (Jaffer, et. al., 2010, p. 15-16; Lim, Idris & Carissa, 2010, p. 23; AlNemer, 2013, p. 237). This problem is exacerbated by the fact that the mentioned staff is needed by both management and supervisory structures, i. e. Shariah boards that control the Shariah correctness of Takaful business (Jaffer, et. al., 2010, p. 15-16). However, this problem is not unsolvable. Moreover, it can be significantly mitigated by organizing educational programs for employees, among who there are many who have previously dealt with conventional insurance and possess knowledge in that field (Aris, Tapsir & Talib, 2012, p. 34).

*Fourth*, the financial strength of conventional insurance companies is, among other things, based on the successful investment of a part of the collected premiums and equity in various financial market in

<sup>12</sup> In Saudi Arabia, insured are entitled to the payment of 10% of the surplus over the paid compensations (Jaffer, et. al., 2010, p. 16).

<sup>13</sup> In Shiite Iran, conventional insurance is considered Shariah-acceptable (Ibid).

struments, which are characterized by a high credit rating and liquidity. However, Takaful funds' money cannot be invested in most of these instruments because they are mostly interest-bearing. The lack of quality and liquid, Shariah-acceptable, financial instruments is one of the more difficult challenges that Takaful funds and their operators face, as it is a factor that prevents high profits (Kader, Adams & Hardwick, 2010, p. 163-164; Ahmad, Masood & Khan, 2010, p. 13). The creation of Shariah-compliant instruments, such as *Sukuk*, had a positive effect on alleviating this problem. However, the diversity of these instruments is lacking, which prevents investment diversification and leads to the risk of investment concentration (Jaffer, et al., 2010, p. 19-20). In order to overcome the lack of Shariah-acceptable financial instruments, it is necessary for experts in insurance and Shariah law to be significantly engaged in the field of financial engineering and innovation, in order to create new instruments that will meet Shariah and market requirements (Lim, Idris & Carissa, 2010, p. 23; Ahmad, Masood & Khan, 2010, p. 14). The process of innovating insurance services can also be useful for developing Shariah-acceptable mandatory insurance, which does not currently exist in most countries (Wahab, Lewis & Hassan, 2007, p. 373).

*Fifth*, the solvency of Takaful funds must be a priority of Takaful insurance companies, as this is a key condition for the stability of fund operations, regular settlement of liabilities and maintaining the confidence of insured (Yusop, et. al., 2011, p. 66). Solvency management includes the formation of security reserves, the policy of allocating the surplus over the paid indemnities and giving interest-free loans to the Takaful fund in case of deficit (Jaffer, et al., 2010, p. 18-19), but also determining the capacity of Takaful funds to cover various risks. Takaful is mainly used in relatively small risk insurance and covers personal insurance needs, while the possibility of its application in covering large business risks is very limited (Sadeghi, 2010, p. 104; Khan, 2011, p. 17). In order to overcome this limitation and at the same time preserve the solvency of Takaful funds, it is necessary to use reinsurance services, i. e. re-Takaful. Given that the re-Takaful market is not developed (Kader, Adams & Hardwick, 2010, p. 164; Lim, Idris & Carissa, 2010, p. 23), the only solution, until the current situation changes, is the use of conventional reinsurance services, which Shariah jurists approve (Sadeghi, 2010, p. 104).

Numerous challenges that Takaful insurance faces must not overshadow the significant achievements made in this field. During the four decades of institutionalized commercial Takaful insurance, this insurance has become a globally available service offered by many successful, solvent, resource-efficient financial institutions, such as Takaful and conventional insurance companies and banks, with increasingly available reinsurance support (Ahmad, Masood & Khan, 2010, p. 11). The potentials of Takaful insurance have been recognized by the world's leading insurance companies, such as Tokyo Marine, AIG, Prudential, HSBC Insurance, Zurich, AXA, Munich Re, Swiss Re and Hannover Re, which have included Takaful insurance in their portfolio of services (Bhatty, 2010, p. 3). Interest in Takaful insurance is also growing among the leading American insurance companies, which, however, still show some caution towards more serious engagement in this sector (Abdul Rahman, 2009, p. 179). There are more and more non-Muslims among the users of Takaful insurance services. In Malaysia, their share in the total number of Takaful policyholders is in majority and amounts to 60% (Bhatty, 2008, cited in: AlNemer, 2013, p. 236). The rapid growth of Takaful insurance is also helped by a strong connection with the also fast-growing sector of Islamic banking, where is noticeable mutual technical and financial support (Sadeghi, 2010, p. 106). However, bank-insurance systems, which are highly prevalent in the Islamic financial market, are rebuked for favoring banking operations and giving significantly weaker support to the Takaful sector in promoting and distributing its products (Ahmad, Masood & Khan, 2010, p. 15).

Analyzing the development path of Takaful insurance, it is noticeable that significant progress has been made, from the initial, theory-based, idealistic understanding of Takaful to a concept applicable in practice (Sadeghi, 2010, p. 105). Nevertheless, balancing between compliance with Shariah requirements and the requirements of a modern, dynamic business environment is an obligation that the Takaful insurance sector will have to deal with forever (Ibid, p. 106). The success and sustainability of Takaful business will be directly correlated with the success of the mentioned balancing.

## Conclusion

The protection of human life and property is one of the most important principles of Shariah, and consequently the institution of insurance is an inherent element of a Shariah-ordered society. The main purpose of the existence of Shariah-compliant, Takaful insurance, in the first stages of its development, was the creation of a welfare society, which encourages solidarity, empathy and helping socially disadvantaged members of society. Commercial, profit-oriented forms of Takaful insurance appeared subsequently. This is one of the more noticeable differences between Takaful and conventional insurance, whose history of development begins with the emergence of commercial insurance, while institutionalized social insurance is a product of the modern age. Another difference between these two forms of insurance concerns the legal and economic relations that are formed in the insurance process. In conventional insurance, insurance companies sell the risk protection service to their policyholders, which essentially leads to the risk transfer from the insurer to the insured. On the other hand, in Takaful insurance, insurance companies do not take on the risk of the insured, and therefore do not sell the insurance service in the conventional sense, but the fund management service, which (the fund) is formed by the insured paying contributions. In that way, the risk remains on the insured, who share it with each other through the process of Takaful insurance and bear it in solidarity. In Takaful arrangements, the insurance company may have the role of: *an agent*, who manages the Takaful fund, contribution and indemnity payments, and receives a fixed fee for it; *a partner*, who manages the reserves of the Takaful fund and the investment account and participates in the distribution of return on investment, but does not bear the loss; and *the combined role of agent-partner*, whereby the first role is performed by managing the fund's reserves, with a fixed fee, and the second by managing the investment account, with participation in the investment profit. Certain practices in Takaful insurance, such as interest-free lending to a Takaful fund by an insurance company and the distribution of surplus over paid indemnities between the insurance company and the insured, provoke conflicting opinions and dispute among Shariah experts.

The need for Takaful insurance arose due to the Shariah-inconsistency of conventional insurance, which, according to Shariah experts, contains Shariah-prohibited elements: *Gharar* – because, through insurance, the insured buy a service whose provision is not certain, *Maysir* – because the insurance has elements of gambling due to the insured paying a small amount in the form of premium that can bring them a large compensation, if the insured event occurs, and *Riba* (interest) – because part of the collected premiums is invested by conventional insurance companies in interest-bearing financial instruments. The position on the Shariah-incorrectness of conventional insurance dominates, but we should not ignore the fact that there are those who oppose it, especially questioning the arguments claiming the presence of *Gharar* and *Maysir* in conventional insurance. There are Shariah experts who believe that the Shariah-correctness of conventional property insurance is not in question, while Shariah experts of Shiite provenance do not see anything controversial with conventional insurance.

The Takaful insurance sector has achieved impressive results in the four decades of its existence and has been the fastest growing segment of the global insurance market for years. Numerous Takaful insurance companies have been established, and the potential of this market has been noticed by some multinational insurance companies, which have started to offer the Takaful insurance service. However, the above-mentioned achievements are overshadowed by the fact that the market share of Takaful insurance in the global insurance market is still negligible. Factors that contribute to the maintenance of the existing unfavorable situation are: *insufficient demand for insurance services in Muslim countries*, which are the basic markets for Takaful insurance, *disharmony of regulations governing Takaful insurance in different countries*, which leaves space for discretionary decision-making of local regulatory authorities and introduces uncertainty into Takaful business, *lack of professional staff who are equally well acquainted with Shariah regulations and insurance theory and practice*, *lack of Shariah-compliant financial instruments*, which reduces the investment opportunities of Takaful insurance companies, their profitability and competitiveness, and *insufficient solvency of Takaful funds*, which prevents covering higher risks. These obstacles must not slow down the expansive growth that Takaful insurance achieved so far, but overcoming them must be a challenge that will unite the efforts of Shariah and financial experts, on the one hand, and national and international regulatory bodies, on the other hand, to improve Takaful insurance and, thus, further enrich the offer of services in the global insurance market.

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# ANALIZA TRŽIŠNE KONCENTRACIJE U BANKARSKOM SEKTORU REPUBLIKE SRBIJE

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## Rezime

*Analiza i merenje nivoa koncentracije bankarskog tržišta je značajna komponenta efikasnog funkcionisanja privrede, pokazatelj razvoja, kako finansijskog, tako i realnog sektora i pokazatelj stepena konkurentnosti u bankarskom sektoru. U ovom radu fokus je na istraživanju i analizi nivoa koncentrisanosti bankarskog tržišta Republike Srbije. Osnovni zadatak i cilj ovog istraživanja se odnosi na analizu nivoa koncentracije na bankarskom tržištu Republike Srbije kroz prizmu dva pokazatelja: racio koncentracije pet najvećih banaka (CR5) i Herfindal-Hiršmanov indeksa koncentracije (HHI), za vremenski period od 2009. godine do 2019. godine. Rezultati istraživanja su pokazali odsustvo koncentracije (ukupno gledano) na domaćem bankarskom tržištu, ali i postojanje trenda (rast tržišnog učešća pet najvećih banaka) koji ukazuje na to da bi u budućem periodu moglo da dođe do narušavanja konkurencije.*

**Ključne reči:** koncentracija, bankarski sektor, bankarsko tržište Republike Srbije, racio koncentracije, Herfindal-Hiršmanov indeks koncentracije

**JEL klasifikacija:** G21, G32.

## Uvod

Visok nivo konkurencije u nekoj privredi je važan preduslov za njeno efikasno funkcionisanje. Praćenje nivoa konkurencije je unapred regulisano i obavezno kako bi se izbegli oblici nesavršene konkurencije na tržištu, koji se mogu javiti u vidu monopola, duopola ili oligopola (Filipović i saradnici, 2016). Stoga, kontrola nivoa koncentracije predstavlja okosnicu politike zaštite konkurencije u svim sektorima, sa posebnim akcentom na bankarski sektor (Vuković, 2006).

Brojnost banaka i disperzija njihovih pojedinačnih tržišnih udela određuju konkurentsku strukturu bankarskog tržišta, koja se iskazuje koncentracijom. Stoga, tržišna koncentracija predstavlja osnovni činiac i indikator konkurencije između banaka (Vuković, 2006). Tržišna koncentracija spada u red najznačajnijih mera konkurentnosti privrede. Za bankarski sektor konkurencija je bitna, jer utiče na efikasnost, kao i na kvalitet ponuđenih proizvoda i usluga (Alihodžić, 2019). Koncentracija bankarskog sektora se posmatra kroz konkurenciju koja postoji između banaka koje posluju na bankarskom tržištu. Viši stepen koncentracije uslovljava ponašanje banaka koje odstupa od ponašanja u modelu potpune konkurencije, što uslovljava i više cene bankarskih usluga i, u krajnjoj instanci, obezbeđuje veći profit (Jović, 2006). To znači da se visoko koncentrisana tržišta odlikuju relativno nižim stepenom konkurencije, i obrnuto (Mirković, 2016). Na osnovu prethodnih stavova, može se zaključiti da koncentracija može u velikoj meri uticati na stabilnost finansijskog sistema (Ljumović i saradnici, 2014).

Na bankarskom tržištu Republike Srbije trenutno posluje 26 banaka sa licencom Narodne banke Srbije. U Republici Srbiji se, iz godine u godinu, uočava trend smanjenja broja banaka, što je uglavnom posledica spajanja ili pripajanja. Stoga je cilj ovog rada analiza nivoa koncentracije na bankarskom tržištu Republike Srbije, kroz prizmu dva osnovna pokazatelja koji se najčešće koriste za merenje nivoa koncentracije: ratio koncentracije (CR) i Herfindal-Hiršmanov indeks koncentracije. S tim u vezi, predmet istraživanja su bilansne sume, kreditne aktivnosti i depozitni potencijal pet najvećih banaka u Republici Srbiji. Analiza dobijenih rezultata treba da pruži odgovor na pitanje da li nivo koncentracije na domaćem bankarskom tržištu ugrožava njegovu konkurentnost.

Rad je strukturiran kroz tri dela. Nakon uvodnog dela, u prvom delu će biti učinjen osvrt na relevantnu literaturu u segmentu pozitivnih/negativnih implikacija koncentracije banaka na konkurentnost bankarskog sektora. U drugom delu rada će biti prikazani osnovni pokazatelji koji se koriste za analizu nivoa koncentracije na tržištu: ratio koncentracije (CR) i Herfindal-Hiršmanov indeks koncentracije (HHI). U trećem delu rada će posebna pažnja biti posvećena analizi nivoa koncentracije na bankarskom tržištu Republike Srbije u periodu od 2009. godine do 2019. godine. Na kraju rada će biti sublimirane ključne činjenice i biće dati zaključci.

## Pregled relevantne literature

Klasična ekonomska teorija ide u prilog zaključku da je bankarska koncentracija štetna, jer dovodi do narušavanja postulata teorije o potpunoj konkurenciji i vodi ka stanjima na tržištu koja se ogledaju u vidu monopola, oligopola ili duopola (Alihodžić, 2019). Bain (1951) u svom istraživanju navodi da visoka koncentracija tržišne moći dovodi do viših cena i natprosečnih profitnih margina, dok Berger (1995) navodi da niži nivo konkurencije utiče na smanjenje tržišne efikasnosti kroz povećanje monopolskih profita. Međutim, u svom ranijem istraživanju Berger & Hannan (1989) tvrde da će se efikasnost

bankarskog sektora povećati ako se bankarski sistem koncentriše. Da bi podržali ovu hipotezu, oni navode da efikasnije banke brže rastu – drugim rečima, efikasnije banke preuzimaju one koje su manje efikasne.

Prema hipotezi efikasne strukture, preduzeća koja imaju efikasniju proizvodnju bolje posluju, te time postaju i veća, čime im se povećava tržišni udeo, te tržište postaje koncentrisanije (Demsetz, 1973). Claessens & Laeven (2003) u svom istraživanju nisu pronašli negativnu korelaciju između nivoa konkurentnosti i nivoa koncentracije u bankarskom sektoru. Došli su do zaključka da viši nivo koncentracije utiče na povećanje nivoa konkurentnosti. Gelos & Roldós (2004) zaključuju da smanjenje broja banaka ne mora nužno voditi do povećanja koncentracije. Autori studije istraživali su koncentraciju bankarskog sektora širom Centralne Evrope. Njihovi rezultati su pokazali da je, sa smanjenjem broja banaka, došlo do pada nivoa koncentracije, iz razloga što su bivše državne banke sa značajnim tržišnim učešćem izgubile svoj tržišni udeo zbog dominacije srednjih banaka koje su bile prilagodljiviye novonastalim okolnostima. Takođe, ova studija je upoređivala bankarski sektor širom Centralne Evrope sa azijskim i latinoameričkim. Došlo se do zaključka da je u azijskim zemljama broj banaka opao zbog privatizacije bankarskog sektora, što je za posledicu imalo i pad nivoa koncentracije na bankarskom tržištu. Trend povećanja konkurencije, zbog smanjenog broja banaka, identifikovan je samo u Latinskoj Americi, i to prvenstveno zbog ranog ulaska stranog kapitala, što dovodi do zaključka da je koncentracija bila praćena bankarskom krizom. Levy & Micco (2006) su sprovedli najobimniju studiju u Latinskoj Americi, identifikujući trend smanjenja broja banaka, ali i trend povećanja koncentracije. Autori ove studije su zaključili da povećanje koncentracije nije rezultiralo smanjenjem konkurencije, već da je direktni uzrok prevremeni ulazak stranih banaka, što se naknadno odrazilo na visok stepen rizika i nestabilnosti u bankarskom sektoru tog područja.

U Republici Srbiji je sprovedeno nekoliko istraživanja sa ovom tematikom. Sva istraživanja su pokazala da je koncentracija u bankarskom sektoru Republike Srbije umerena, uprkos konstantnom smanjenju broja banaka (Marinković 2006; Lončar & Rajić, 2012; Miljković i saradnici, 2013; Barjaktarović i saradnici, 2013; Filipović i saradnici, 2016; Mirković, 2016).

## Pokazatelji kojima se meri koncentracija na tržištu

Veliki broj pokazatelja se koristi za merenje nivoa tržišne koncentracije. U najznačajnije pokazatelje tržišne koncentracije spadaju: racio koncentracije, Herfindal-Hiršmanov indeks koncentracije, Lorenцова kriva, Džini koeficijent, indeks entropije, indeks relativne entropije, sveobuhvatni indeks industrijske koncentracije, Hannah & Kay indeks, Hall-Tideman-ov indeks, Hause indeks (Dumičić i saradnici, 2012). Za potrebe ovog rada razmatrane su vrednosti dva pokazatelja: racio koncentracije (CR) i Herfindal-Hiršmanov indeks koncentracije (HHI).

Racio koncentracije (CR) se najčešće koristi za merenje stepena koncentracije na tržištu. Dobija se kao zbir tržišnih učešća  $n$  najvećih banaka na tržištu (Waldman & Jensen, 2001), i daje odgovor na pitanje koliki deo ukupnog tržišta pokriva grupa od  $n$  banaka (Filipović i saradnici, 2016). Formula za izračunavanje ovog pokazatelja je (Savić, 2000, str. 4):

$$CR_n = \sum_{i=1}^n X_i$$

gde je:

gde je:

$X_i$  – pojedinačno tržišno učešće  $i$ -te banke.

Pojedinačno učešće  $i$ -te banke se dobija na sledeći način (Kostić, 2007, str. 92):

$$X_i = \left( \frac{q_i}{Q} \right) 100$$

gde je:

$q_i$  – ponuda  $i$ -te banke,

$Q$  – ponuda cele grane.

Ovaj pokazatelj se često naziva i CR5, iz razloga što se racio koncentracije odnosi na pet vodećih banaka koje posluju na bankarskom tržištu. U sledećoj tabeli su date referentne vrednosti ovog pokazatelja.

**Tabela 1 - Referentne vrednosti racia koncentracije**

| Vrednost CR indeksa | Nivo koncentracije na tržištu                      |
|---------------------|----------------------------------------------------|
| CR = 0%             | Savršena konkurencija (nema koncentracije tržišta) |
| CR < 25%            | Nisko koncentrisana tržišta                        |
| 25% < CR < 50%      | Umereno koncentrisana tržišta                      |
| CR > 50%            | Visoko koncentrisana tržišta                       |
| CR = 100%           | Monopol (potpuna koncentracija tržišta)            |

Izvor: Filipović, M., Avramović, V., & Račić, Ž. (2016). Analiza nivoa koncentracije aktive u bankarskom sektoru Republike Srbije. *Škola biznisa 2/2016*, 111-119; Dimić, M. Analiza nivoa koncentracije u bankarskom sektoru i u sektoru osiguranja u zemljama centralne i istočne Evrope. *Doktorska disertacija*, Beograd: Univerzitet Singidunum, 2015.

Prednost, a ujedno i nedostatak ovog pokazatelja, jeste njegova jednostavnost. Racio koncentracije pokazuje ukupno tržišno učešće pet najvećih banaka, ali ne uvažava disperziju tih učešća između samih banaka. Takođe se javlja i problem tržišnog učešća ostalih banaka, jer njihovo tržišno učešće (malo, ali postoji) utiče na koncentraciju celokupne ponude (Begović i saradnici, 2002). Da bi se izbegli nedostaci racia koncentracije, u analizi se koristi Herfindal-Hiršmanov indeks koncentracije.

Najpreciznijim pokazateljem nivoa koncentracije smatra se Herfindal-Hiršmanov indeks koncentracije (HHI). Herfindal-Hiršmanov indeks koncentracije u analizu uključuje tržišno učešće svih banaka na bankarskom tržištu i uzima u obzir veličinu tržišnog učešća između konkurenata (Filipović i saradnici, 2016). Prvenstvena namena HHI jeste procena uticaja procesa spajanja i pripajanja na nivou tržišne koncentracije (Mirković, 2016). HHI predstavlja sumu kvadrata tržišnog učešća svih finansijskih insti-

tucija na tržištu po osnovu zajmova, bilansne sume, kredita, ostvarenog profita, depozita, prikupljene premije osiguranja i slično (Dimić, 2015). Formula za izračunavanje ovog pokazatelja je sledeća (Šaj, 2005, str. 172):

$$HHI = \sum_{i=1}^n (X_i^2)$$

pri čemu je:

$n$  – ukupan broj banaka,

$X_i$  – tržišno učešće  $i$ -te banke u sektoru.

Vrednost HHI se kreću u rasponu od 0 do 10.000. U narednoj tabeli su prikazane referentne vrednosti HHI i u skladu s tim, različiti nivoi koncentracije na tržištu.

**Tabela 2 - Referentne vrednosti Herfindal-Hiršmanovog indeksa koncentracije**

| Vrednost HHI indksa    | Nivo koncentracije na tržištu      |
|------------------------|------------------------------------|
| $HHI < 1.000$          | Nekoncentraisano tržište           |
| $1.000 < HHI < 1.800$  | Srednje koncentrisano tržište      |
| $1.800 < HHI < 2.600$  | Visoko koncentrisano tržište       |
| $2.600 < HHI < 10.000$ | Veoma visoko koncentrisano tržište |
| $HHI = 10.000$         | Monopolski koncentrisano tržište   |

Izvor: Kostić, M. (2008). Merenje koncentracije ponude grane. *Ekonomski horizonti* 10(1), 89-108

Osnovna prednost korišćenja HHI u odnosu na ratio koncentracije se ogleda upravo u činjenici da se u razmatranje uzima tržišno učešće svih entiteta na tržištu. Međutim, najveći nedostatak se ogleda u izostavljanju iz analize onih tržišnih učesnika čije je tržišno učešće ispod 1% (Vuković, 2006). Ipak, navedeno ograničenje ne predstavlja značajnu prepreku primene HHI, tako da se danas HHI # smatra pouzdanim indikatorom merenja tržišne koncentracije na svim tržištima (Dimić, 2015).

## Analiza nivoa koncentracije u bankarskom sektoru Republike Srbije

Analiza nivoa koncentracije u bankarskom sektoru Republike Srbije u ovom radu obuhvata vremenski period od 2009. do 2019. godine. Prvi deo istraživanja se odnosi na merenje racia koncentracija pet najvećih banaka u Republici Srbiji, dok je drugi deo istraživanja vezan za izračunavanje Herfindal-Hiršmanovog indeksa koncentracije.

**Tabela 3 - Broj banaka u bankarskom sektoru Republike Srbije u periodu od 2009. do 2019. godine**

| Godina | Broj banaka |
|--------|-------------|
| 2009   | 34          |
| 2010   | 33          |
| 2011   | 33          |
| 2012   | 32          |
| 2013   | 30          |
| 2014   | 29          |
| 2015   | 30          |
| 2016   | 31          |
| 2017   | 29          |
| 2018   | 27          |
| 2019   | 26          |

Izvor: Narodna banka Srbije (2020). Bankarski sektor u Srbiji – Kvartalni izveštaj za period od 2009. godine do 2019. godine (Arhiva). Preuzeto 7. januara 2021, sa [https://nbs.rs/sr\\_RS/finansijske-institucije/banke/izvestaji-i-analize/](https://nbs.rs/sr_RS/finansijske-institucije/banke/izvestaji-i-analize/)

U prvom koraku analize izračunate su vrednosti CR5 i to prema bilansnoj sumi pet najvećih banaka, prema njihovoj kreditnoj aktivnosti i prema ukupnim depozitima. Dobijene vrednosti CR5 indeksa su prikazane u Tabelama 4, 5 i 6. U drugom koraku analize izračunate su vrednosti Herfindal-Hiršmanovog indeksa koncentracije. Vrednosti HHI prikazane su u Tabeli 7.

**Tabela 4 - Racio koncentracije CR5 prema bilansnoj sumi u periodu od 2009. do 2019. godine**

| Godina | Ukupno prvih 5 banaka | Ukupna aktiva bankarskog sektora (mlrd RSD) | CR5 (%) |
|--------|-----------------------|---------------------------------------------|---------|
| 2009   | 992,7                 | 2160                                        | 45,9%   |
| 2010   | 1142                  | 2534                                        | 45,1%   |
| 2011   | 1249                  | 2650                                        | 47,1%   |
| 2012   | 1386,6                | 2880                                        | 48,1%   |
| 2013   | 1469                  | 2846                                        | 51,7%   |
| 2014   | 1590                  | 2968                                        | 53,5%   |
| 2015   | 1653                  | 3048                                        | 54,3%   |
| 2016   | 1773                  | 3242                                        | 54,6%   |
| 2017   | 1850                  | 3369                                        | 55%     |
| 2018   | 2017                  | 3774                                        | 53,4%   |
| 2019   | 2182                  | 4084                                        | 53,4%   |

Izvor: Narodna banka Srbije (2020). Bankarski sektor u Srbiji – Kvartalni izveštaj za period od 2009. godine do 2019. godine (Arhiva). Preuzeto 7. januara 2021, sa [https://nbs.rs/sr\\_RS/finansijske-institucije/banke/izvestaji-i-analize/](https://nbs.rs/sr_RS/finansijske-institucije/banke/izvestaji-i-analize/)

**Tabela 5 - Racio koncentracije CR5 prema kreditnoj aktivnosti u periodu od 2009. do 2019. godine**

| Godina | CR5 (%) |
|--------|---------|
| 2009   | 46,4%   |
| 2010   | 45%     |
| 2011   | 50%     |
| 2012   | 51%     |
| 2013   | 53,2%   |
| 2014   | 53,9%   |
| 2015   | 52,7%   |
| 2016   | 51,2%   |
| 2017   | 53,6%   |
| 2018   | 53,3%   |
| 2019   | 52%     |

Izvor: Narodna banka Srbije (2020). Bankarski sektor u Srbiji – Kvartalni izveštaj za period od 2009. godine do 2019. godine (Arhiva). Preuzeto 7. januara 2021, sa [https://nbs.rs/sr\\_RS/finansijske-institucije/banke/izvestaji-i-analize/](https://nbs.rs/sr_RS/finansijske-institucije/banke/izvestaji-i-analize/)

**Tabela 6 - Racio koncentracije CR5 prema ukupnim depozitima u periodu od 2009. do 2019. godine**

| Godina | CR5 (%) |
|--------|---------|
| 2009   | 50,9%   |
| 2010   | 50%     |
| 2011   | 48%     |
| 2012   | 49%     |
| 2013   | 50,4%   |
| 2014   | 52,5%   |
| 2015   | 53,6    |
| 2016   | 54,3%   |
| 2017   | 55,6%   |
| 2018   | 54,1%   |
| 2019   | 54,9%   |

Izvor: Narodna banka Srbije (2020). Bankarski sektor u Srbiji – Kvartalni izveštaj za period od 2009. godine do 2019. godine (Arhiva). Preuzeto 7. januara 2021, sa [https://nbs.rs/sr\\_RS/finansijske-institucije/banke/izvestaji-i-analize/](https://nbs.rs/sr_RS/finansijske-institucije/banke/izvestaji-i-analize/)

**Tabela 7. Izračunavanje HHI za bankarski sektor Republike Srbije**

| Godina | Bilansna suma | Kreditne aktivnosti | Depozitni potencijal |
|--------|---------------|---------------------|----------------------|
| 2009   | 636           | 650                 | 731                  |
| 2010   | 629           | 649                 | 720                  |
| 2011   | 660           | 722                 | 714                  |
| 2012   | 678           | 721                 | 726                  |
| 2013   | 741           | 774                 | 777                  |
| 2014   | 794           | 771                 | 818                  |
| 2015   | 796           | 763                 | 816                  |
| 2016   | 813           | 736                 | 827                  |
| 2017   | 813           | 788                 | 827                  |
| 2018   | 779           | 793                 | 798                  |
| 2019   | 800           | 789                 | 840                  |

Izvor: Narodna banka Srbije (2020). Bankarski sektor u Srbiji – Kvartalni izveštaj za period od 2009. godine do 2019. godine (Arhiva). Preuzeto 7. januara 2021, sa [https://nbs.rs/sr\\_RS/finansijske-institucije/banke/izvestaji-i-analize/](https://nbs.rs/sr_RS/finansijske-institucije/banke/izvestaji-i-analize/)

Prosečna vrednost koeficijenta CR5 svedoči o tome da se bankarski sektor Republike Srbije može opisati kao visoko koncentrisan. Počevši od 2009. godine primetan je trend rasta ovog koeficijenta, koji u 2012. godini probija granicu od 50%, što domaći bankarski sektor svrstava u rang visoko koncentrisanih sektora, što pretili da ugrozi konkurenciju na bankarskom tržištu Republike Srbije. Međutim, dobijene vrednosti HHI u sve tri posmatrane kategorije (bilansna suma, kreditna aktivnost i depozitni potencijal) ne prelaze donju graničnu vrednost od 1.000, što bankarsko tržište Republike Srbije svrstava u rang nekoncentrisanih tržišta.

## Zaključak

Na osnovu izvršene analize pokazatelja racia koncentracije (CR) i Herfindal-Hiršmanovog indeksa koncentracije (HHI) mogu se doneti sledeći zaključci. Prema dobijenim vrednostima racia koncentracije pet najvećih banaka, može se zaključiti da je bankarsko tržište Republike Srbije visoko koncentrisano, sa trendom rasta koncentracije i pretnjom narušavanja konkurencije. Međutim, vrednost HHI indeksa koncentracije, kao potpunijeg pokazatelja koncentracije i konkurencije, govori u prilog tome da je bankarsko tržište Republike Srbije nisko koncentrisano.

U Republici Srbiji je 2019. godine poslovalo 26 banaka (7 banaka u vlasništvu domaćih lica, dok je 19 banaka bilo u vlasništvu stranih lica), što je za osam manje nego 2009. godine. Stepem koncentracije je upravo rezultat konsolidacije, restrukturiranja ili ulaska i izlaska banaka sa bankarskog tržišta. Imajući u vidu trend smanjenja broja banaka na bankarskom tržištu Republike Srbije, kao i vrednosti pokazatelja koncentracije, u budućnosti se može očekivati dalji trend ukupnjavanja bankarskog sektora, što će pitanje analize i praćenja nivoa koncentracije, kao i zaštite konkurencije, u budućnosti činiti sve značajnijim.

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# ANALYSIS OF MARKET CONCENTRATION IN THE BANKING SECTOR OF THE REPUBLIC OF SERBIA

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## Summary

*Analysis and measurement of the level of concentration of the banking market is a significant component of the efficient functioning of the economy, an indicator of the development of both the financial and real sectors and an indicator of the degree of competitiveness in the banking sector. This paper focuses on research and analysis of the level of concentration in the banking market of the Republic of Serbia. The main task and goal of this research is to analyze the level of concentration in the banking market of the Republic of Serbia through the prism of two indicators: the concentration ratio of the five largest banks (CR5) and Herfindahl-Hirschman concentration index (HHI), for the period from 2009 to 2019. The results of the research showed the absence of concentration (overall) in the domestic banking market, but also the existence of a trend (growth of market share of the five largest banks) which indicates that, in the future, there could be distortions of competition.*

**Keywords:** concentration, banking sector, banking market of the Republic of Serbia, concentration ratio, Herfindahl-Hirschman concentration index

**JEL Classification:** G21, G32.

## Introduction

A high level of competition in an economy is an important prerequisite for its efficient functioning. Monitoring the level of competition is regulated in advance and it is mandatory in order to avoid instances of imperfect competition in the market, which can occur in the form of monopoly, duopoly or oligopoly (Filipović et al., 2016). Therefore, the control of concentration levels is the backbone of competition protection policy in all sectors, with special emphasis on the banking sector (Vuković, 2006).

The number of banks and the dispersion of their individual market shares determines the competitive structure of the banking market, which is expressed by concentration. Therefore, market concentration is a basic factor and indicator of competition between banks (Vuković, 2006). Market concentration is one of the most important measures of economic competitiveness. For the banking sector, competition is important, because it affects the efficiency, as well as the quality of the offered products and services (Alihodžić, 2019). Concentration in the banking sector is observed through the competition that exists between banks operating in the banking market. A higher degree of concentration conditions the behavior of banks that deviates from the behavior in the model of complete competition, which further conditions higher prices of banking services and, ultimately, provides higher profits (Jović, 2006). This means that highly concentrated markets are characterized by a relatively lower degree of competition, and vice versa (Mirković, 2016). Based on the previous views, it can be concluded that concentration can greatly affect the stability of the financial system (Ljumović et al., 2014).

There are currently 26 banks operating on the banking market of the Republic of Serbia, with a license from the National Bank of Serbia. In the Republic of Serbia, a decreasing trend in the number of banks is observed from year to year, which is mainly a consequence of mergers or acquisitions. Therefore, the aim of this paper is to analyze the level of concentration in the banking market of the Republic of Serbia, through the prism of two basic indicators that are most often used to measure the level of concentration: concentration ratio (CR) and Herfindahl-Hirschman concentration index. In this regard, the subject of the research are balance sheet amounts, credit activities and deposit potential of the five largest banks in the Republic of Serbia. The analysis of the obtained results should provide an answer to the question of whether the level of concentration on the domestic banking market endangers its competitiveness.

The paper is structured in three parts. After the introductory part, the first part will look at the relevant literature in the segment of positive/negative implications of the concentration of banks on the competitiveness of the banking sector. The second part of the paper will present the basic indicators used to analyze the level of concentration in the market: concentration ratio (CR) and Herfindahl-Hirschman concentration index (HHI). In the third part of the paper, special attention will be paid to the analysis of the level of concentration on the banking market of the Republic of Serbia in the period from 2009 to 2019. At the end of the paper, the key facts will be sublimated, and conclusions will be given.

## Review of Relevant Literature

Classical economic theory supports the conclusion that banking concentration is harmful because it violates the postulates of the theory of complete competition and leads to market conditions that are reflected in the form of monopoly, oligopoly or duopoly (Alihodžić, 2019). Bain (1951) states in his research that a high concentration of market power leads to higher prices and above-average profit margins, while Berger (1995) states that a lower level of competition affects the reduction of market efficiency, through an increase in monopoly profits. However, in their earlier research, Berger & Hannan (1989) argue that the efficiency of the banking sector will increase if the banking system is concentrated. To support this hypothesis, they state that more efficient banks grow faster - in other words, more efficient banks take over those that are less efficient.

According to the hypothesis of efficient structure, companies that have more efficient production do better, and thus become larger, which increases their market share, and the market becomes more concentrated (Demsetz, 1973). In their study, Claessens & Laeven (2003) did not find a negative correlation between the level of competitiveness and the level of concentration in the banking sector. They came to the conclusion that a higher level of concentration affects the increase of the level of competitiveness. Gelos & Roldós (2004) conclude that a decrease in the number of banks does not necessarily lead to an increase in concentration. The authors of the study investigated the concentration of the banking sector across Central Europe. Their results showed that, with the decrease in the number of banks, the level of concentration decreased, due to the fact that former state-owned banks with significant market share lost their market share due to the dominance of medium-sized banks that were more adaptable to the new circumstances. Also, this study compared the banking sector across Central Europe with the Asian and Latin American ones. It was concluded that the number of banks in Asian countries decreased due to the privatization of the banking sector, which resulted in a decrease in the level of concentration in the banking market. The trend of increasing competition, due to the reduced number of banks, was identified only in Latin America, primarily due to the early entry of foreign capital, which leads to the conclusion that the concentration was accompanied by a banking crisis. Levy & Micco (2006) conducted the most extensive study in Latin America, identifying a downward trend in the number of banks, but also an upward trend in concentration. The authors of this study concluded that the increase in concentration did not result in a decrease in competition, but that the direct cause was the early entry of foreign banks, which subsequently reflected on a high degree of risk and instability in the banking sector.

Different research with this topic has been conducted in the Republic of Serbia. All research has shown that the concentration in the banking sector of the Republic of Serbia is moderate, despite the constant decrease in the number of banks (Marinkovic 2006; Loncar & Rajic, 2012; Miljkovic et al., 2013; Barjaktarovic et al., 2013; Filipovic et al., 2016; Mirkovic, 2016).

## Indicators that Measure Market Concentration

A large number of indicators are used to measure levels of market concentration. The most important indicators of market concentration include: concentration ratio, Herfindahl-Hirschman concentration index, Lorentz curve, Gini coefficient, entropy index, relative entropy index, comprehensive industrial concentration index, Hannah & Kay index, Hall-Tideman index, Haid Tideman index, Hause index

(Dumičić et al., 2012). For the purposes of this paper, the values of two indicators were considered: concentration ratio (CR) and Herfindahl-Hirschman concentration index (HHI).

Concentration ratio (CR) is most commonly used to measure the degree of concentration on the market. It is obtained as the sum of market shares of the  $n$  largest banks in the market (Waldman & Jensen, 2001), and provides an answer to the question of how much of the total market is covered by a group of  $n$  banks (Filipović et al., 2016). The formula for calculating this indicator is (Savić, 2000, p. 4):

$$CR_n = \sum_{i=1}^n X_i$$

where in:

$X_i$  - individual market share of the  $i$ -th bank.

The individual participation of the  $i$ -th bank is obtained in the following way (Kostić, 2007, p. 92):

$$X_i = \left( \frac{q_i}{Q} \right) 100$$

where in:

$q_i$  - offer of the  $i$ -th bank,

$Q$  - offer of the whole branch.

This indicator is often called CR5, because the concentration ratio refers to the five leading banks operating in the banking market. The following table gives the reference values of this indicator.

**Table 1 - Concentration Ratio Reference Values**

| CR index value | Market concentration level                    |
|----------------|-----------------------------------------------|
| CR = 0%        | Perfect competition (no market concentration) |
| CR < 25%       | Low concentrated markets                      |
| 25% < CR < 50% | Moderately concentrated markets               |
| CR > 50%       | Highly concentrated markets                   |
| CR = 100%      | Monopoly (complete market concentration)      |

Source: Filipović, M., Avramović, V., & Račić, Ž. (2016). Analiza nivoa koncentracije aktive u bankarskom sektoru Republike Srbije. *Škola biznisa 2/2016*, 111-119; Dimić, M. Analiza nivoa koncentracije u bankarskom sektoru i u sektoru osiguranja u zemljama centralne i istočne Evrope. *Doktorska disertacija*, Belgrade: Singidunum University, 2015.

The advantage, and at the same time the disadvantage of this indicator, is its simplicity. The concentration ratio shows the total market share of the five largest banks, but does not take into account the dispersion of these shares between the banks themselves. There is also the problem of the market share of other banks, because their market share (small, but present) affects the concentration of the entire supply (Begović et al., 2002). To avoid deficiencies in the concentration ratio, the Herfindahl-Hirschman concentration index is used in the analysis.

The Herfindahl-Hirschman concentration index (HHI) is considered to be the most accurate indicator of concentration levels. The Herfindahl-Hirschman concentration index includes in the analysis the market share of all banks in the banking market and takes into account the size of the market share between competitors (Filipović et al., 2016). The primary purpose of the HHI is to assess the impact of mergers and acquisitions at the level of market concentration (Mirković, 2016). The HHI represents the sum of the squares of the market share of all financial institutions in the market on the basis of loans, balance sheet total, loans, realized profit, deposits, collected insurance premiums, etc. (Dimić, 2015). The formula for calculating this indicator is as follows (Šaj, 2005, p. 172):

$$HHI = \sum_{i=1}^n (X_i^2)$$

where:

$n$  - total number of banks,

$X_i$  - market share of the  $i$ -th bank in the sector.

The values of the HHI range from 0 to 10,000. The following table shows the reference values of the HHI index and, accordingly, the different levels of market concentration.

**Table 2 - Reference Values of Herfindahl-Hirschman Concentration Index**

| HHI value            | Market concentration level      |
|----------------------|---------------------------------|
| HHI < 1,000          | Unconcentrated market           |
| 1,000 < HHI < 1,800  | Medium concentrated market      |
| 1,800 < HHI < 2,600  | Highly concentrated market      |
| 2,600 < HHI < 10,000 | Very highly concentrated market |
| HHI = 10,000         | Monopoly concentrated market    |

Izvor: Kostić, M. (2008). Merenje koncentracije ponude grane. *Ekonomski horizonti* 10(1), 89-108

The main advantage of using HHI as opposed to the concentration ratio is that the market share of all entities in the market is taken into consideration. However, the biggest defect is the omission of those market participants whose market share is below 1% from the analysis (Vuković, 2006). However, this limitation does not represent a significant obstacle to the application of the HHI, so that today the HHI is considered a reliable indicator of measuring market concentration in all markets (Dimić, 2015).

## Analysis of the Level of Concentration in the Banking Sector of the Republic of Serbia

The analysis of the level of concentration in the banking sector of the Republic of Serbia, in this paper, covers the period from 2009 to 2019. The first part of the research refers to the measurement of the concentration ratio of the five largest banks in the Republic of Serbia, while the second part of the research is related to the calculation of the Herfindahl-Hirschman concentration index.

**Table 3 - Number of Banks in the Banking Sector of the Republic of Serbia in the Period from 2009 to 2019**

| Year | Number of banks |
|------|-----------------|
| 2009 | 34              |
| 2010 | 33              |
| 2011 | 33              |
| 2012 | 32              |
| 2013 | 30              |
| 2014 | 29              |
| 2015 | 30              |
| 2016 | 31              |
| 2017 | 29              |
| 2018 | 27              |
| 2019 | 26              |

Source: Narodna banka Srbije (2020). Bankarski sektor u Srbiji – Kvartalni izveštaj za period od 2009. godine do 2019. godine (Arhiva). Downloaded 7 January 2021, from [https://nbs.rs/sr\\_RS/finansijske-institucije/banke/izvestaji-i-analize/](https://nbs.rs/sr_RS/finansijske-institucije/banke/izvestaji-i-analize/)

In the first step of the analysis, the values of CR5 were calculated according to the balance sheet total of the five largest banks, according to their credit activity and according to total deposits. The obtained CR5 index values are shown in Tables 4, 5 and 6. In the second step of the analysis, the values of the Herfindahl-Hirschman concentration index were calculated. The values of the HHI are shown in Table 7.

**Table 4 - Ratio of CR5 Concentration According to the Balance Sum in the Period from 2009 to 2019**

| Year | A total of the first 5 banks | Total assets of the banking sector (billion RSD) | CR5 (%) |
|------|------------------------------|--------------------------------------------------|---------|
| 2009 | 992.7                        | 2160                                             | 45.9%   |
| 2010 | 1142                         | 2534                                             | 45.1%   |
| 2011 | 1249                         | 2650                                             | 47.1%   |
| 2012 | 1386.6                       | 2880                                             | 48.1%   |
| 2013 | 1469                         | 2846                                             | 51.7%   |
| 2014 | 1590                         | 2968                                             | 53.5%   |
| 2015 | 1653                         | 3048                                             | 54.3%   |
| 2016 | 1773                         | 3242                                             | 54.6%   |
| 2017 | 1850                         | 3369                                             | 55%     |
| 2018 | 2017                         | 3774                                             | 53.4%   |
| 2019 | 2182                         | 4084                                             | 53.4%   |

Source: Narodna banka Srbije (2020). Bankarski sektor u Srbiji – Kvartalni izveštaj za period od 2009. godine do 2019. godine (Arhiva). Downloaded 7 January 2021, from [https://nbs.rs/sr\\_RS/finansijske-institucije/banke/izvestaji-i-analize/](https://nbs.rs/sr_RS/finansijske-institucije/banke/izvestaji-i-analize/)

**Table 5 - CR5 Concentration Ratio According to Credit Activity in the Period from 2009 to 2019**

| Year | CR5 (%) |
|------|---------|
| 2009 | 46.4%   |
| 2010 | 45%     |
| 2011 | 50%     |
| 2012 | 51%     |
| 2013 | 53.2%   |
| 2014 | 53.9%   |
| 2015 | 52.7%   |
| 2016 | 51.2%   |
| 2017 | 53.6%   |
| 2018 | 53.3%   |
| 2019 | 52%     |

Source: Narodna banka Srbije (2020). Bankarski sektor u Srbiji – Kvartalni izveštaj za period od 2009. godine do 2019. godine (Arhiva). Downloaded 7 January 2021, from [https://nbs.rs/sr\\_RS/finansijske-institucije/banke/izvestaji-i-analize/](https://nbs.rs/sr_RS/finansijske-institucije/banke/izvestaji-i-analize/)

**Table 6 - CR5 Concentration Ratio According to Total Deposits in the Period from 2009 to 2019**

| Year | CR5 (%) |
|------|---------|
| 2009 | 50.9%   |
| 2010 | 50%     |
| 2011 | 48%     |
| 2012 | 49%     |
| 2013 | 50.4%   |
| 2014 | 52.5%   |
| 2015 | 53.6    |
| 2016 | 54.3%   |
| 2017 | 55.6%   |
| 2018 | 54.1%   |
| 2019 | 54.9%   |

Source: Narodna banka Srbije (2020). Bankarski sektor u Srbiji – Kvartalni izveštaj za period od 2009. godine do 2019. godine (Arhiva). Downloaded 7 January 2021, from [https://nbs.rs/sr\\_RS/finansijske-institucije/banke/izvestaji-i-analize/](https://nbs.rs/sr_RS/finansijske-institucije/banke/izvestaji-i-analize/)

**Table 7 - Calculation of the HHI for the Banking Sector of the Republic of Serbia**

| Year | Balance sheet total | Credit activity | Deposit potential |
|------|---------------------|-----------------|-------------------|
| 2009 | 636                 | 650             | 731               |
| 2010 | 629                 | 649             | 720               |
| 2011 | 660                 | 722             | 714               |
| 2012 | 678                 | 721             | 726               |
| 2013 | 741                 | 774             | 777               |
| 2014 | 794                 | 771             | 818               |
| 2015 | 796                 | 763             | 816               |
| 2016 | 813                 | 736             | 827               |
| 2017 | 813                 | 788             | 827               |
| 2018 | 779                 | 793             | 798               |
| 2019 | 800                 | 789             | 840               |

Source: Narodna banka Srbije (2020). Bankarski sektor u Srbiji – Kvartalni izveštaj za period od 2009. godine do 2019. godine (Arhiva). Downloaded 7 January 2021, from [https://nbs.rs/sr\\_RS/finansijske-institucije/banke/izvestaji-i-analize/](https://nbs.rs/sr_RS/finansijske-institucije/banke/izvestaji-i-analize/)

The average value of the CR5 coefficient indicates that the banking sector of the Republic of Serbia can be described as highly concentrated. Starting from 2009, there is a noticeable growth trend of this ratio, which in 2012 broke the limit of 50%, which places the domestic banking sector in the rank of highly concentrated sectors, which threatens to impend competition in the banking market of the

Republic of Serbia. However, the obtained values of the HHI in all three observed categories (balance sheet total, credit activity and deposit potential) do not exceed the lower limit value of 1,000, which places the banking market of the Republic of Serbia in the rank of non-concentrated markets.

## Conclusion

Based on the performed analysis of concentration ratio indicators (CR) and Herfindahl-Hirschman concentration index (HHI), the following conclusions can be made. According to the obtained values of the concentration ratio of the five largest banks, it can be concluded that the banking market of the Republic of Serbia is highly concentrated, with a trend of increasing concentration and the threat of distortion of competition. However, the value of the HHI concentration index, as a more complete indicator of concentration and competition, speaks in favor of the fact that the banking market of the Republic of Serbia has a low level of concentration.

In 2019, there were 26 banks operating in the Republic of Serbia (7 banks owned by domestic persons, while 19 banks were owned by foreign persons), which is eight less than in 2009. The degree of concentration is precisely the result of the consolidation, restructuring or entry and exit of banks from the banking market. Having in mind the decreasing trend of the number of banks on the banking market of the Republic of Serbia, as well as the value of concentration indicators in the future, a further trend of enlarging the banking sector can be expected, which will make the matter of analysis and monitoring of concentration levels, as well as the matter of competition protection, ever more significant in the future.

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BEOGRADSKA BERZA  
BELGRADE STOCK EXCHANGE

## BAROMETAR/BAROMETER JANUAR 2021 – MART 2021. / JANUARY 2021 – MARCH 2021

### 1. PROMET / TURNOVER

| Mesec/<br>Month   | Listing        | Open<br>Market | Regulisano<br>tržište/<br>Regulated<br>market | MTP/MTF     | Ukupno/<br>Total | Broj<br>transakcija/<br>Number of<br>transactions |
|-------------------|----------------|----------------|-----------------------------------------------|-------------|------------------|---------------------------------------------------|
| April 2020        | 5.307.696.037  | 103.385.875    | 5.411.081.912                                 | 11.449.781  | 5.422.531.693    | 1.039                                             |
| Maj 2020          | 3.095.888.499  | 54.226.931     | 3.150.115.430                                 | 3.021.914   | 3.153.137.344    | 1.384                                             |
| Jun 2020          | 1.284.277.059  | 61.939.404     | 1.346.216.463                                 | 18.295.881  | 1.364.512.344    | 1.862                                             |
| Jul 2020          | 2.732.815.873  | 33.352.111     | 2.766.167.984                                 | 29.191.898  | 2.795.359.882    | 1.238                                             |
| Avgust<br>2020    | 769.981.610    | 25.293.837     | 795.275.447                                   | 23.454.407  | 818.729.854      | 1.167                                             |
| Septembar<br>2020 | 3.451.939.927  | 10.300.290     | 3.462.240.217                                 | 41.511.949  | 3.503.752.166    | 1.009                                             |
| Oktobar<br>2020   | 2.767.941.193  | 116.908.135    | 2.884.849.328                                 | 63.331.505  | 2.948.180.833    | 1.463                                             |
| Novembar<br>2020  | 2.697.283.452  | 17.597.428     | 2.714.880.880                                 | 69.874.336  | 2.784.755.216    | 1.289                                             |
| Decembar<br>2020  | 4.574.035.074  | 288.316.813    | 4.862.351.887                                 | 144.728.160 | 5.007.080.047    | 1.923                                             |
| Januar 2021       | 1.347.760.980  | 16.481.850     | 1.364.242.830                                 | 26.775.647  | 1.391.018.477    | 1.038                                             |
| Februar<br>2021   | 5.088.160.062  | 44.949.749     | 5.133.109.811                                 | 155.648.215 | 5.288.758.026    | 1.857                                             |
| Mart 2021         | 1.384.264.827  | 144.884.876    | 1.529.149.703                                 | 198.744.779 | 1.727.894.482    | 1.810                                             |
|                   | 34.502.044.593 | 917.637.299    | 35.419.681.892                                | 786.028.472 | 36.205.710.364   | 17.079                                            |

\*RSD

## 2. INDEKSI / INDICES

| Januar/Mart 2021.<br>January/March 2021 |                                        | BELEX15          | BELEXline        |
|-----------------------------------------|----------------------------------------|------------------|------------------|
|                                         | Poslednja vrednost / Last value        | 761,69           | 1.589,35         |
|                                         | Promena (abs) / Change (abs)           | 1,89             | -73,18           |
|                                         | Promena (%) / Change (%)               | 0,25%            | -4,40%           |
|                                         | Najviša vrednost / Maximum value       | 784,67           | 1.667,49         |
|                                         | Najniža vrednost / Minimum value       | 718,64           | 1.500,14         |
|                                         | Istorijski max / History maximum value | 3.335,20         | 5.007,34         |
|                                         | Istorijski min / History minimum value | 347,46           | 841,99           |
|                                         | Vrednost prometa / Value of turnover   | 5.810.179.628,00 | 6.075.078.154,00 |

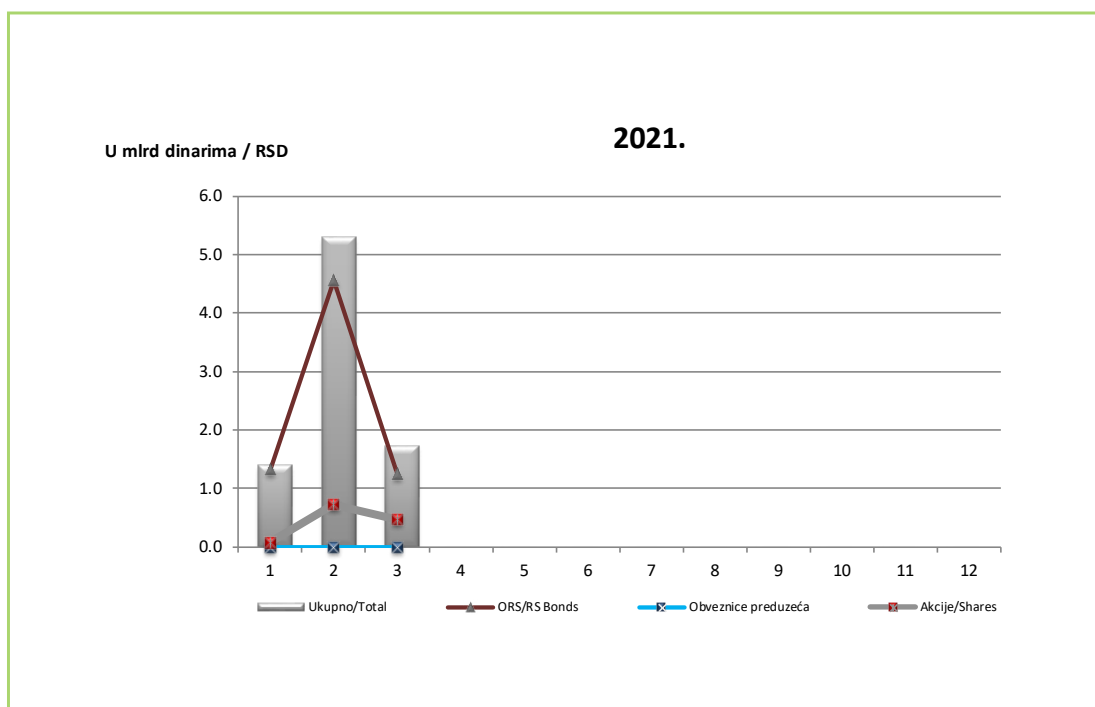
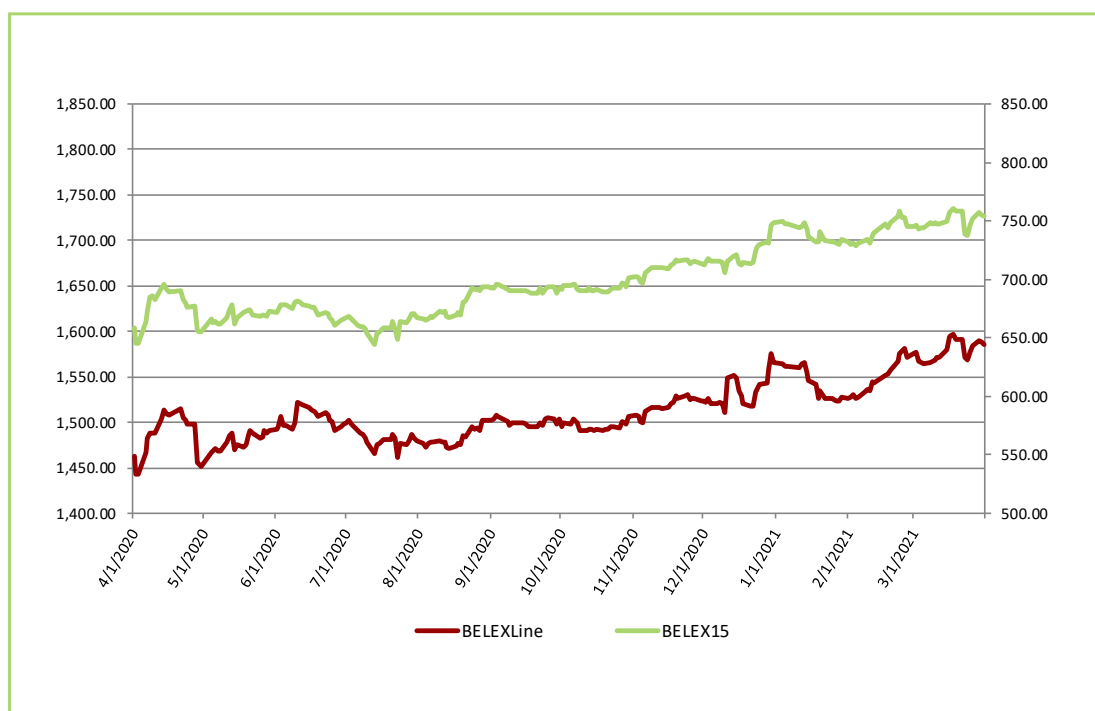
### 3. TRŽIŠNA KAPITALIZACIJA / MARKET CAPITALISATION

|                                                               | Januar      | Februar     | Mart        |
|---------------------------------------------------------------|-------------|-------------|-------------|
| Ukupna tržišna kapitalizacija/<br>Total market capitalisation | 520.886.027 | 531.224.501 | 534.607.601 |
| Regulisano tržište/Regulated<br>Market                        | 279.645.039 | 286.107.867 | 290.325.271 |
| Listing                                                       | 214.789.772 | 218.780.759 | 218.828.830 |
| Prime Listing – akcije/<br>Prime Listing – shares             | 158.760.759 | 159.699.134 | 158.401.768 |
| Standard Listing – akcije/<br>Standard Listing – shares       | 56.029.013  | 59.081.625  | 60.427.061  |
| Open Market                                                   | 64.855.267  | 67.327.108  | 71.496.442  |
| MTP/MTF                                                       | 241.240.988 | 245.116.633 | 244.282.329 |
| BELEX15                                                       | 255.240.809 | 260.725.450 | 263.864.245 |
| BELEXline                                                     | 264.232.396 | 270.407.182 | 272.855.227 |

\*u hiljadama RSD / in RSD thousands

### 4. UČEŠĆE STRANIH INVESTITORA / FOREIGN INVESTORS PARTICIPATION

| Januar/Mart 2021.<br>January/March 2021 | Učešće stranih investitora /<br>Foreign Investors Participation |       |        |
|-----------------------------------------|-----------------------------------------------------------------|-------|--------|
|                                         | FIS                                                             | total | 27,74% |
|                                         |                                                                 | b-FIS | 15,79% |
|                                         |                                                                 | s-FIS | 39,68% |
|                                         | FIB                                                             |       | 14,45% |
|                                         | FIT                                                             |       | 16,46% |





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- Naslov rada mora da bude kratak i jasan.
- Posle naslova rada napisati rezime dužine do 150 reči.
- Posle rezimea dati do 10 ključnih reči, pogodnih za indeksiranje i pretraživanje.
- Osim glavnog naslova (naslova rada) koristiti u tekstu do dva nivoa naslova, bez numeracije.
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- Tabela po širini ne sme da prelazi margine, a po dužini ne sme biti duža od jedne stranice i mora imati naslov i izvor.
- U tekstu i tabelama ne koristiti tekst boksove.
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