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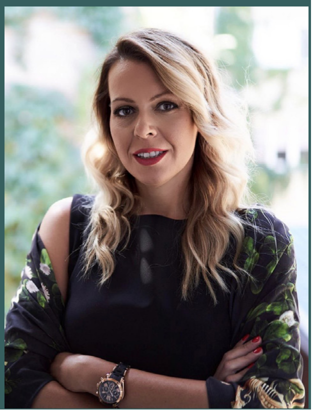

O KRIZNOM PR-U

Marina Kostadinović,
Urednik časopisa Bankarstvo

San svih nas koji radimo u bankarstvu je da poslujemo u okruženju u kojem vlada sigurnost, mir i poverenje, jer je to atmosfera koja pogoduje svakom biznisu, a posebno ovako osetljivom, kao što je naš. Ali san je jedno, a realnost drugo i obaveza svih profesionalaca je da se prilagode objektivnoj situaciji, a ona je često i više nego turbulentna, krizna i sa povećanim rizikom.

Upravo takav period je iza bankarskog sistema u Srbiji. I to objašnjava zašto je poslednjih godina fokus UBS u oblasti komunikacija bio više na rešavanju teških pitanja, a manje na uobičajenoj bankarskoj praksi.

Poslednje dve godine u čitavom svetu obeležila je korona. Sa izbijanjem pandemije, o kojoj u martu 2020. nismo znali baš ništa, važno je bilo najpre da se brzom, pouzdanom i (samo)uverenom komunikacijom spreči izbijanje panike i nepredvidivih reakcija klijenata, koje su u ovako teškim potresima apsolutno moguće. Udruženje se, uz Narodnu banku Srbije, pojavilo kao najaktivniji autoritet i tumač situacije u finansijskom sistemu. U tome smo imali presudnu podršku banaka, koje su svojim organizovanim radom i tačnim ispunjavanjem obaveza potvrđivale sve optimističke izjave.

Kada smo u početnoj fazi zatvaranja potvrdili stabilnost i sposobnost bankarskog sistema, pokazalo se koliki je značaj banaka za građane i privredu u ovakvim kriznim situacijama. Komunikacija Udruženja fokusirala se upravo na tu temu, da što glasnije prenesemo javnosti koliki je zapravo udeo banaka u podršci koju klijenti dobijaju tokom pandemije - kroz tri faze moratorijuma, kroz garantnu šemu za privredu, ali i kroz sve druge olakšice u politici stambenih i gotovinskih kredita i drugih bankarskih usluga, koje su tokom kriznog perioda uvedene.

Kada danas analiziramo rad celog bankarskog sektora, kao i komunikaciju povodom toga, možemo zaista da budemo zadovoljni utiskom koji smo ostavili u najširoj javnosti, ali i u stručnim krugovima, regulatornim i državnim telima.

Naravno, svedoci smo da ovo nije jedina krizna situacija koju su Udruženje i svi predstavnici banaka rešavali u poslednjem periodu. Kada smo 2019. uspeli da dođemo do nimalo lakog rešenja za kredite indeksirane u švajcarskim francima, samo nakratko pojavio se utisak da ulazimo u period mirnijeg poslovanja. Sem globalnog velikog iznenađenja – korone, dočekala nas je i jedna sasvim lokalna specifičnost – talas tužbi zbog naknade za obradu kredita.

Iako je reč o pravnom nonsensu, o jednoj poslovnoj situaciji koja se nije pojavila nigde kao u Srbiji, naišli smo na ozbiljnu prepreku, koja je tražila ne samo izuzetno veliko angažovanje Udruženja, već i neke nimalo lake odluke. Iako smo od početka bili uvereni u ispravnost poslovanja banaka po pitanju naknada, u praksi smo se susreli sa donekle razumljivom željom jednog broja ljudi da ostvare određenu materijalnu dobit, ali i sa nekoliko interesnih grupa koje su vrlo beskrupulozno podgrevale takve želje, kršeći sva pravila ne samo fer poslovne prakse, već i profesionalnih standarda svojih profesija, a neretko i zakona.

Ako ovome dodamo spremnost jednog broja medija da eksploatiše jednu za njih atraktivnu temu, kao i sudove čija je praksa bila neujednačena, našli smo se u veoma komplikovanoj poslovnoj, ali i komunikacionoj situaciji.

Danas možemo da kažemo da smo na dobrom putu da ovu složenu situaciju rešimo. U tome su nam naravno pomogli pre svega kvalitetni argumenti, kojima su banke potvrdile svoje ispravno poslovanje. Međutim, i uz vrlo dobre argumente trebalo je uložiti puno energije da oni dođu do svih relevantnih krugova, da budu prihvaćeni u medijima i da oni, uprkos prvobitnoj spremnosti da se gotovo isključivo stave na stranu građana, prihvate da su činjenice ipak značajno drugačije.

Trebalo je savladati i saradnju nekoliko lobija koji su u talasu masovnih tužbi videli priliku za izvanrednu zaradu, koja se meri desetinama miliona evra. Čini nam se da je danas taj interes javno razobličen i da se ne može tako lako sakrivati iza navodne brige za malog čoveka, građanina i klijenta banke.

Danas, kao što znamo, imamo jasan stav Vrhovnog kasacionog suda, koji je ocenio da su bankarske naknade za obradu troškova kredita naplaćivane u skladu sa zakonom. Imamo sudsku praksu koja se značajno menja i prilagođava pomenutom stavu VKS.

Sve krize koje smo zajedno prošli bile su velika škola. Upozorile su nas da vreme za poslovanje nikad nije idealno i ako nam se učini da jeste – to je samo zato što je sledeće iznenađenje još dobro sakriveno. Verujemo da smo sada značajno spremniji za izazove nego što smo bili pre samo nekoliko godina i to je veliki plus za Udruženje banaka i celokupan bankarski sistem.

Mi se već sada okrećemo onim standardnim temama kojima i želimo da se bavimo: razvojem samog bankarskog sistema, edukacijom građana i unapređenjem reputacije banaka. To ćemo činiti svakog dana, ali uz svest da su nove krize moguće i uz mnogo veću spremnost da im se suprotstavimo i prilagodimo.

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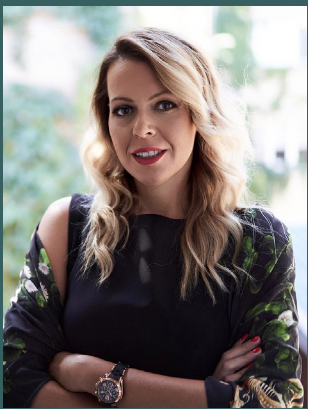

ABOUT CRISIS COMMUNICATION

Marina Kostadinović,
Editor of Bankarstvo Journal

The dream of all of us who work in banking is to operate in an environment where security, peace and trust prevail, as such an atmosphere is beneficial to every business, and especially to such a sensitive field as ours. But a dream is one thing, and the reality is another, and the obligation of all professionals is to adapt to the objective situation, which is often more than turbulent, with crises and increased risk.

The banking system in Serbia has faced such a period. And that explains why, in recent years, the ASB's focus in the field of communications has been more on resolving difficult issues, and less on common banking practice.

The last two years have been marked by Covid-19 on a global level. With the outbreak of the pandemic, about which we knew nothing back in March 2020, it was important to maintain fast-paced, reliable and (self-)confident communication to quickly prevent panic and unpredictable reactions of clients, which are an absolute possibility in such severe circumstances. The Association, along with the National Bank of Serbia, has emerged as the most active authority and interpreter of the situation in the financial system. In that, we have had the crucial support of the banks, which, with their organized work and accurate fulfilment of obligations, confirmed all the optimistic statements.

When we confirmed the stability and capability of the banking system in the initial phase of lockdown, it became clear how important banks are for citizens and the economy in such crisis situations. The Association's communication focused on this topic, to convey to the public, as loudly as possible, the contribution of banks in the support that clients received during the pandemic - through three phases of the moratorium, through the Guarantee Scheme for the economy, but also through all other benefits in housing and cash loans policy, as well as other banking services, which were introduced during the crisis.

By analysing the work of the entire banking sector today, as well as the communication about it, we can truly understand how satisfied we can be with the impression we left on the general public, as well as on professional circles, regulatory, and state bodies.

Of course, we are aware that this is not the only crisis that the Association and all representatives of banks have resolved in the last period. In 2019, when we managed to reach a not at all easy solution for the issue of loans indexed in Swiss francs, we were only briefly under the impression that we were entering a period of calmer business operations. Apart from the big surprise for the global community – the coronavirus, we also faced a problem fully contained to our domestic sector - a wave of lawsuits over loan processing fees.

Although the matter is legally nonsensical, a business situation the likes of which had not appeared anywhere besides Serbia, we have encountered a serious obstacle, which required not only the substantial engagement of the Association, but also making some not at all easy decisions. Although we were convinced from the onset that the banks' operations in terms of fees were lawful, in practice we were met with a somewhat understandable desire of a number of people to make some material gain, and with several interest groups that unscrupulously fuelled such desires, breaking all fair business practices, the professional standards of their professions, and often the law.

If we add to this the readiness of a number of media outlets to exploit a topic that is attractive to them, as well as the courts whose practice was not uniform, we found ourselves in a very complicated business and communication situation.

Today we can say that we are on a good path to solve this complex situation. Of course, we were helped by quality arguments, with which the banks confirmed their lawful operations. However, even with presenting very good arguments, a lot of energy had to be invested to reach all relevant circles, to be accepted in the media and for them, despite their initial readiness to almost exclusively side with the citizens, to accept that the facts are significantly different.

It was also necessary to overcome the cooperation of several lobbies, which saw the wave of mass lawsuits as an opportunity for extraordinary earnings, which is measured in tens of millions of euros. It seems to us that that interest has now been publicly exposed and that it cannot be so easily hidden behind the alleged care for the regular people, citizens, and bank clients.

Today, as we know, we have a clear position of the Supreme Court of Cassation, which assessed that banks' loan processing fees were collected in accordance with the law. We have case law that is significantly changing and adapting to the mentioned position of the Supreme Court of Cassation.

All the crises we went through together were a great lesson. They warned us that the time for business is never ideal, and if it seems to us that it is – that is only because the next surprise is still well hidden. We believe that we are now significantly more prepared for challenges than we had been just a few years ago, and that is a big plus for the Association of Serbian Banks and the entire banking system.

We are already turning our focus to those standard topics that we want to cover: the development of the banking system itself, the education of citizens and the improvement of the banks' reputation. We will keep doing so on a daily basis, while bearing in mind that new crises are possible, and with a much greater readiness to react and adapt to them.

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OBELODANJIVANJE O PORESKOM RIZIKU U FINANSIJSKIM IZVEŠTAJIMA: SLUČAJ BANAKA U REPUBLICI SRBIJI

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Rezime

U poslednjoj deceniji, rastući broj kompanija posvećuje pažnju poreskom riziku. Poreski rizik može nastati kao posledica nenamernih grešaka zaposlenih prilikom obračuna poreskog opterećenja, ali i kao posledica primene rizičnih strategija izbegavanja poreza. Istraživanje u ovom radu je sprovedeno sa ciljem ispitivanja determinanti obelodanjivanja o poreskom riziku u bankama u Republici Srbiji. Stoga je istraživanje obuhvatilo dvadeset šest banaka u periodu od 2018. do 2020. godine. Rezultati pokazuju da većina banaka obelodanjuje informacije o poreskom riziku, ali da su one samo formalne i uopštene. Takođe, identifikovan je značajan broj banaka koje informacije o poreskom riziku obelodanjuju na potpuno identičan način. Logit i probit regresioni modeli su pokazali da manje profitabilne i banke sa manjim opterećenjem porezom na dobitak više obelodanjuju informacije o poreskom riziku. Banke koje su u većinskom domaćem vlasništvu, takođe, više obelodanjuju informacije o poreskom riziku. Dodatno, rezultati istraživanja su robustni na značajne promene u istraživačkom modelu. Rezultati istraživanja mogu koristiti brojnim interesnim grupama, a posebno menadžerima banaka i zaposlenim u sektoru finansijskog izveštavanja, nacionalnim poreskim vlastima, revizorima finansijskih izveštaja i nacionalnim telima za sertifikovanje računovođa.

Ključne reči: porez; poreski rizik; upravljanje rizikom; finansijski izveštaji; banke; logit i probit regresije

JEL klasifikacija: G21, G32, H25, M41

Uvod

S obzirom na to da je nemoguće identifikovati kompaniju koja nije poreski obveznik i koja ne obračunava i plaća poreze, upravljanje porezima i poreskim rizikom predstavlja važno pitanje u svakoj kompaniji. Upravljanje poreskim rizikom je posebno dobilo na značaju početkom dvadeset prvog veka, nakon velikih korporativnih skandala u najrazvijenijim državama sveta (Johnston, 2006). Neuman i saradnici (2020) smatraju da poreski rizik predstavlja nesigurnost po pitanju budućih poreskih plaćanja, koja je posledica tekućih aktivnosti ili propusta da se neke aktivnosti preduzmu. Dakle, poreski rizik proističe iz činjenice da nacionalne poreske vlasti mogu, u postupcima naknadnih poreskih revizija, retroaktivno nametnuti dodatno poresko opterećenje kompanijama.

Moguće je identifikovani najmanje dva potencijalna izvora poreskog rizika u bankama. Prvo, nenamerne greške zaposlenih mogu dovesti do nepravilnosti prilikom obračuna poreskih obaveza, u smislu obračuna pogrešnog iznosa ili kašnjenja prilikom podnošenja poreske prijave. Poseban problem predstavlja činjenica da se poreski zakoni relativno često menjaju.

Drugo, brojne kompanije sagledavaju umanjenje poreskog opterećenja kao faktor konkurentnosti (Dyreng i saradnici, 2010). S tim u vezi, kompanije često primenjuju rizične strategije izbegavanja poreza, koje mogu biti ocenjene kao ilegalne od strane nacionalnih poreskih vlasti. Drugim rečima, za brojne strategije izbegavanja poreza je teško napraviti razliku između legalnog izbegavanja poreza i ilegalne poreske evazije, pa je prilikom primene ovakvih strategija uvek prisutan poreski rizik.

U Republici Srbiji (RS) poreski rizik, takođe, zauzima značajno mesto u praksi. Prema Zakonu o poreskom postupku i poreskoj administraciji (Službeni glasnik RS, br. 144/2020), pravo poreskih vlasti na utvrđivanje i naplatu poreza zastareva u roku od pet godina. Dodatno, finansijske performanse bankarskog sektora RS su značajno poboljšane u poslednjoj deceniji (Lukić, 2021). Teorijski, poboljšane performanse vode povećanom poreskom opterećenju, pa upravljanje porezima i poreskim rizikom tada ima veći značaj. Banke u RS su, takođe, obveznici brojnih poreskih oblika, kao što su porez na dobitak, porez na dodatu vrednost, porez na zarade, porezi na imovinu i ostali poreski oblici.

Narodna banka Srbije propisuje način na koji banke treba da upravljaju različitim tipovima rizika. Odluka o upravljanju rizicima banke (Službeni glasnik RS, br. 67/2020) predstavlja pravni akt, donet od strane izvršnog odbora Narodne banke Srbije, kojim se definišu sledeće vrste rizika kojima banke treba da upravljaju: rizik likvidnosti, kreditni rizik (uključujući i rezidualni rizik, rizik od smanjenja vrednosti potraživanja, rizik izmirenja/isporuke i rizik druge ugovorne strane), kamatni rizik, devizni rizik i ostali tržišni rizici, rizik koncentracije, rizik ulaganja banke, rizik zemlje, operativni rizik (uključujući i pravni rizik), rizik usklađenosti poslovanja banke, rizik od pranja novca i finansiranja terorizma, strateški rizik i ostale vrste rizika.

Interesantno je primetiti da se pomenutom odlukom ne propisuje poreski rizik kao zasebna vrsta rizika. Ipak, racionalno je pretpostaviti da se poreski rizik može smatrati sastavnim delom operativnog rizika i rizika usklađenosti poslovanja banke. Operativni rizik, između ostalog, ukazuje na mogućnost negativnih efekata na rezultat i kapital banke usled propusta u radu zaposlenih. Takođe, pravni rizik (kao sastavni deo operativnog rizika), između ostalog, ukazuje na mogućnost gubitaka usled kazni iz sudskih sporova po osnovu neispunjavanja ugovornih i zakonskih obaveza. S druge strane, rizik usklađenosti poslovanja banke ukazuje, između ostalog, na mogućnost nastanka negativnih efekata na rezultat i kapital banke usled propuštanja da se poslovanje uskladi sa zakonom i drugim propisima.

S obzirom na važnost poreskog rizika, brojne banke u napomenama uz finansijske izveštaje obelodanjuju informacije o poreskom riziku. Obelodanjivanja u finansijskim izveštajima banaka su privlačila pažnju još u dvadesetom veku, s obzirom na javni karakter banaka. Tako je Međunarodni komitet za računovodstvene standarde 1990. godine doneo Međunarodni računovodstveni standard (MRS) 30 – Obelodanjivanja u finansijskim izveštajima banaka i sličnih finansijskih institucija. Ovaj standard više nije na snazi, a danas se relevantnim naslednikom smatra Međunarodni standard finansijskog izveštavanja (MSFI) 7 – Finansijski instrumenti: Obelodanjivanja.

Računovodstveni standardi se posebno bave porezom na dobitak. Tako su banke obavezne da primenjuju MRS 12 – Porezi na dobitak. Ovaj standard propisuje način obračuna tekućeg i odloženog poreza na dobitak, ali se ne bavi efektima neizvesnosti po ovim pitanjima. Moguće je da prihvatljivost određenog poreskog tretmana ne bude poznata dok poreske vlasti ili sud ne donesu odluku u budućnosti. Stoga, banke primenjuju i tumačenje Komiteta za tumačenje Međunarodnih standarda finansijskog izveštavanja IFRIC 23 – Neizvesnost u pogledu tretmana poreza na dobitak, čija je primena počela 2019. godine.

Predmet istraživanja jeste obelodanjivanje informacija o poreskom riziku, koje banke vrše u napomenama uz finansijske izveštaje. Poreski rizik je u poslednje dve decenije postao atraktivno pitanje u tranzicionim državama. Brojne računovodstvene firme nude usluge procene i minimiziranja poreskog rizika, a Chyz i saradnici (2021) pokazuju da angažovanje takvih firmi ima statistički značajan uticaj na minimiziranje poreskog rizika. Osnovni cilj istraživanja jeste ispitivanje determinanti obelodanjivanja o poreskom riziku. Drugim rečima, u radu se testira uticaj nekih od osnovnih karakteristika banaka na odluku banke o obelodanjivanju informacija o poreskom riziku.

Bankarski sektor RS je, uprkos konsolidaciji tokom poslednje decenije, i dalje veoma heterogen. Na primer, banke se značajno razlikuju po veličini. Bankarski sektor RS je na kraju 2020. godine brojao dvadeset šest banaka, od kojih su devet predstavljale sistemski važne banke. Banke u RS se značajno razlikuju i po profitabilnosti i poreskom opterećenju (Vržina, 2020). Dodatno, većinu bankarskog sistema čine banke u većinskom stranom vlasništvu. Stoga je korisno ispitati kako neke karakteristike banaka (veličina, profitabilnost, poresko opterećenje i poreklo kapitala) utiču na obelodanjivanje informacija o poreskom riziku.

Originalnost rada se nalazi u činjenici da je, prema najboljim saznanjima autora, ovo prvo istraživanje o obelodanjivanju informacija o poreskom riziku banaka u tranzicionim državama. Generalno, prethodna istraživanja o poreskom riziku su retka, a primarno su zabeležena u najrazvijenijim državama sveta.

Izuzev uvoda i zaključka, rad je sačinjen iz tri dela. U prvom delu rada su razvijene istraživačke hipoteze. U drugom delu rada je predstavljena metodologija istraživanja i razvoj istraživačkog uzorka. Rezultati istraživanja su dati u trećem delu rada.

1. Razvoj istraživačkih hipoteza

Generalno, prakse obelodanjivanja informacija u napomenama uz finansijske izveštaje banaka su u poslednje tri decenije značajno uznapredovale (Perignon i Smith, 2010; Aryani i Hussainey, 2017). Međutim, Maffei i saradnici (2014) dovode u pitanje korisnost obelodanjenih informacija o riziku, s obzirom na to da banke imaju veliku slobodu u izboru informacija koje će obelodaniti. Tako, brojne banke ispunjavaju zahteve regulatornih tela, iako obelodanjuju samo uopštene i nedovoljno upotrebljive informacije. S druge strane, obelodanjivanja predstavljaju jedno od problematičnih područja MSFI (Hoogendoorn, 2006). Drugim rečima, MSFI ostavljaju značajnu fleksibilnost kompanijama prilikom izbora obima i načina obelodanjivanja u napomenama uz finansijske izveštaje.

Drake i saradnici (2019) nalaze da investitori negativno vrednuju poreski rizik kompanija, izražen kroz varijabilnost opterećenja porezom na dobitak. Ipak, obelodanjivanje o izloženosti riziku i o sistemu upravljanja rizicima može imati brojne pozitivne efekte na kompaniju. Tako, obelodanjivanje može uticati na smanjenje cene kapitala (Nahar et al., 2016; Heinle i Smith, 2017) ili na povećanje vrednosti kompanije (Abdullah i saradnici, 2015; Giner i saradnici, 2020).

Aryani i Hussainey (2017) smatraju da veće banke kvalitetnije obelodanjuju informacije o rizicima. Takođe, Brown (2020) nalazi da veće kompanije obelodanjuju više poreskih informacija. Bedard i saradnici (2010) nalaze pozitivnu povezanost između veličine kompanije i odluke o obelodanjivanju informacija o naknadama računovodstvenim firmama za usluge poreskog savetovanja. Velike banke su od sistemske važnosti za funkcionisanje finansijskog tržišta, pa podležu strožijoj regulativi regulatornih organa. Stoga je moguće da veće banke vrše detaljnija obelodanjivanja o poreskom riziku.

Međutim, velike banke su obično ključni igrači na finansijskom tržištu. U literaturi je poznata paradigma „suviše velika da bi propala" (engl. too big to fail), koja govori o tome da velike banke mogu biti zaštićene od strane države kako bi se izbegla destabilizacija finansijskog sistema (Moosa, 2010). Stoga veće banke mogu osećati veću moć u odnosu na manje banke, percipirati manju izloženost poreskom riziku i, posledično, obelodanjivati manje informacija o njemu.

Profitabilnost je, takođe, faktor koji može uticati na odluku banke da obelodani informacije o poreskom riziku. Tako, Heinle i Smith (2017) smatraju da kompanije obelodanjuju više informacija o riziku kada postižu finansijske performanse bolje od očekivanih. Profitabilnije banke imaju više sredstava koje mogu investirati u upravljanje poreskim rizikom, pa je racionalno pretpostaviti da će i obelodanjivanja o poreskom riziku biti detaljnija.

S druge strane, manje profitabilne banke mogu imati detaljnija obelodanjivanja o poreskom riziku usled straha od poreskih kazni. Ove banke imaju manje sredstava za plaćanje eventualnih poreskih kazni, pa više pažnje posvećuju upravljanju poreskim rizikom. S tim u vezi, Nahar i saradnici (2016) nalaze negativnu povezanost finansijskih performansi banaka i odluke o obelodanjivanju o rizicima. Bedard i saradnici (2010) nalaze negativnu povezanost između profitabilnosti banke i odluke o obelodanjivanju informacija o naknadama računovodstvenim firmama za usluge poreskog savetovanja.

Poresko opterećenje može, takođe, biti determinanta obelodanjivanja o poreskom riziku. Henry i saradnici (2016) pokazuju da zahtevi regulatornih tela za povećanim obelodanjivanjem poreskih informacija utiču na nivo izbegavanja poreza. Pri tome, obično je predmet istraživanja bio isključivo porez na dobitak. Brown (2020) nalazi da kompanije sa većim opterećenjem porezom na dobitak obelodanjuju više poreskih informacija, promovišući tako status „dobrog građanina". Hope i saradnici (2013) smatraju da kompanije koje izbegavanju porez na dobitak koristeći poreske rajeve obelodanjuju manje informacija, kako bi prikrile sumnjive poreske prakse.

Ipak, izbegavanje poreza može voditi povećanom riziku preduzeća (Guenther i saradnici, 2017), a posebno poreskom riziku, usled mogućnosti različite interpretacije određenih transakcija od strane poreskih vlasti i menadžmenta banke. Dyreng i saradnici (2019) pokazuju da kompanije sa nižim poreskim opterećenjem ispoljavaju veće nesigurnosti po pitanju poreskog tretmana određenih transakcija. Stoga bi banke sa nižim opterećenjem porezom na dobitak mogle biti više zainteresovane za poreski rizik i, posledično, obelodanjivati više informacija o poreskom riziku.

Grassa i saradnici (2021) nalaze da banke u stranom vlasništvu bolje obelodanjuju informacije o riziku u odnosu na banke u domaćem vlasništvu. Brojne banke u većinskom stranom vlasništvu predstavljaju filijale multinacionalnih bankarskih grupa iz razvijenih evropskih država. Ove banke su pod strogim monitoringom Evropske centralne banke, te je racionalno očekivati da posvećuju veliku pažnju upravljanju rizicima.

S druge strane, brojne multinacionalne banke ostvaruju godišnje prihode veće od javnih prihoda većine država u svetu (Global Justice Now, 2016). To znači da ove banke imaju jaku pregovaračku moć, te stoga mogu imati dominantnu poziciju u odnosu na nacionalne poreske vlasti. Posledično, ovakve banke mogu biti manje zainteresovane za upravljanje poreskim rizikom.

Računovođe u RS smatraju da su obelodanjivanja u finansijskim izveštajima, pripremljena u skladu sa MSFI, adekvatna (Obradović i saradnici, 2018). Međutim, Pivac i saradnici (2017) analiziraju obelodanjivanja u finansijskim izveštajima kompanija u tranzicionim državama i primećuju da srpske kompanije imaju samo prosečan kvalitet finansijskih izveštaja. Oni posebno ističu upravljanje rizicima, kao jednu od oblasti kojoj se pridaje nedovoljno pažnje. Dodatno, Vržina i saradnici (2020) nalaze loš kvalitet obelodanjivanja o odloženom porezu na dobitak u kompanijama u Srbiji.

Obelodanjivanje o poreskom riziku nije bilo predmet značajnijih istraživanja u RS u prošlosti. Takođe, istraživanja o poreskom riziku nisu sprovedena na bankama u RS. Ipak, na bazi prethodnih istraživanja koja su se bavila obelodanjivanjima u finansijskim izveštajima, identifikovane su varijable koje bi mogle uticati na obelodanjivanje o poreskom riziku banaka u RS – veličina, profitabilnost, opterećenje porezom na dobitak i poreklo kapitala banke. Kako se na bazi prethodnih istraživanja ne može utvrditi očekivani smer uticaja ovih varijabli, istraživačke hipoteze su definisane na sledeći način:

H1: Veličina banke ima statistički značajan uticaj na obelodanjivanje informacija o poreskom riziku

H2: Profitabilnost banke ima statistički značajan uticaj na obelodanjivanje informacija o poreskom riziku

H3: Opterećenje porezom na dobitak banke ima statistički značajan uticaj na obelodanjivanje informacija o poreskom riziku

H4: Poreklo kapitala banke ima statistički značajan uticaj na obelodanjivanje informacija o poreskom riziku

2. Metodologija istraživanja i razvoj uzorka

Obelodanjivanje o poreskom riziku je mereno binarnom varijablom TRD (engl. Tax Risk Disclosure), koja uzima vrednost 1 ukoliko je banka adekvatno obelodanila informacije o poreskom riziku, odnosno 0 u ostalim slučajevima. Za svrhe ovog istraživanja, smatra se da je banka adekvatno obelodanila informacije o poreskom riziku ukoliko je prikazano na koji način je banka izložena poreskom riziku, odnosno na koji način banka upravlja poreskim rizikom. Drugim rečima, samo pominjanje poreskog rizika u nekom od pasusa napomena uz finansijske izveštaje se ne smatra adekvatnim obelodanjivanjem.

U istraživanju su korišćene četiri nezavisne varijable – SIZE, PROF, TpA (engl. Tax per Assets) i FOREIGN, kojima su mereni veličina, profitabilnost, poresko opterećenje i poreklo kapitala banke, respektivno. U vezi sa poreskim opterećenjem, važno je primetiti da je korišćeno isključivo opterećenje porezom na dobitak, usled ograničene dostupnosti podataka o poreskom opterećenju banaka. U statističkoj analizi su, takođe, korišćene dummy varijable, kako bi se kontrolisala varijabilnost obelodanjivanja o poreskom riziku po godinama. Definicije ovih varijabli su prikazane u Tabeli 1.

Tabela 1: *Definicije varijabli*

Varijabla	Definicija
TRD	1 – ako je banka adekvatno obelodanila poreski rizik, 0 – obrnuto
SIZE	Prirodni logaritam ukupne imovine (u hiljadama RSD)
PROF	Neto rezultat : Ukupna imovina
TpA	Tekući rashod za porez na dobitak : Ukupna imovina
FOREIGN	1 – ako je banka u većinskom stranom vlasništvu, 0 – obrnuto

Uticaj nezavisnih varijabli na obelodanjivanje o poreskom riziku je ispitano korišćenjem logit (logističkog) i probit regresionih modela. Ove vrste regresije predstavljaju standardne metode analize kada je zavisna varijabla binarna (Allison, 1999). Na bazi definisanih varijabli, moguće je formirati sledeći panel regresioni model za i-tu banku i godinu t:

$$TRD_{i,t} = \alpha + \beta_1 SIZE_{i,t} + \beta_2 PROF_{i,t} + \beta_3 TpA_{i,t} + \beta_4 FOREIGN_{i,t} + \varepsilon_{i,t}$$

Za svrhe statističke obrade podataka, u radu je korišćen ekonometrijski softver EViews. Podaci iz finansijskih izveštaja su preuzeti sa zvanične internet prezentacije Agencije za privredne registre RS (www.apr.gov.rs). U radu su korišćeni podaci iz pojedinačnih finansijskih izveštaja, kako bi se minimizirao uticaj nerezidentnih pravnih lica i uticaj nebankarskih povezanih pravnih lica.

Istraživanje je obuhvatilo period od 2018. do 2020. godine. Uzorkovane su isključivo banke koje su bile aktivne na kraju svake od posmatrane tri godine. U RS je identifikovano dvadeset šest takvih banaka. Spisak uzorkovanih banaka je dat u Tabeli 2. Stoga, inicijalni uzorak predstavlja balansirani panel podataka od sedamdeset osam opservacija. Ipak, iz uzorka su eliminisane određene ekstremne vrednosti. Kako PROF može uzeti bilo koju vrednost, eliminisane su dve najveće i dve najmanje vrednosti ove varijable. Takođe, kako TpA može uzeti bilo koju nenegativnu vrednost, eliminisane su dve najveće vrednosti ove varijable.

Tabela 2: *Spisak uzorkovanih banaka*

Naziv banke	Matični broj	Naziv banke	Matični broj
Addiko Bank	07726716	Komercijalna banka	07737068
AIK banka	06876366	Mirabank	21080608
ALTA banka	07074433	Mobi banka	17138669
API Bank	20439866	MTS banka	09081488
Banca Intesa	07759231	NLB banka	08250499
Bank of China Srbija	21251640	Opportunity banka	08761132
Banka Poštanska štedionica	07004893	OTP banka Srbija	07552335
Credit Agricole banka Srbija	08277931	ProCredit Bank	17335677
Direktna banka	07654812	Raiffeisen banka	17335600
Erste Bank	08063818	Sberbank Srbija	07792247
Eurobank	17171178	Srpska banka	07092288
Expobank	07534183	Unicredit Bank Srbija	17324918
Halkbank	07601093	Vojvođanska banka	08603537

3. Rezultati istraživanja

3.1. Deskriptivna statistika

U Tabeli 3 su prikazani rezultati deskriptivne statističke analize. Deskriptivna analiza pokazuje da su četrdeset dve opservacije (53,85% uzorka) obelodanile informacije o poreskom riziku u napomenama uz finansijske izveštaje. Interesantno je primetiti da je četrnaest banaka izveštavalo o poreskom riziku u svakoj od tri uzorkovane godine, dok dvanaest banaka nije uopšte izveštavalo o poreskom riziku. S tim u vezi, samo jedna banka je informacije o poreskom riziku obelodanila u sekciji o upravljanju rizicima, dvanaest banaka je obelodanilo u sekciji o preuzetim i potencijalnim obavezama, dok je jedna banka obelodanila u sekciji o ključnim računovodstvenim procenama i prosuđivanjima. Vredno je primetiti da je jedna banka samo pomenula poreski rizik u okviru analize izloženosti operativnom riziku. Za svrhe ovog rada, to se smatralo nedovoljnim obelodanjivanjem o poreskom riziku.

Tabela 3: *Deskriptivna statistika*

	TRD	SIZE	PROF	TpA	FOREIGN
Broj opservacija	78	78	74	76	78
Aritmetička sredina	0,5385	18,1426	0,5958%	0,0640%	0,7436
Minimum	0,0000	15,5969	-3,9465%	0,0000%	0,0000
25. percentil	0,0000	16,7392	0,2457%	0,0000%	0,2500
Medijana	1,0000	18,4162	0,6557%	0,0000%	1,0000
75. percentil	1,0000	19,2559	1,3161%	0,0998%	1,0000
Maksimum	1,0000	20,3908	3,6808%	0,4670%	1,0000
Standardna devijacija	0,5017	1,3810	1,4953%	0,1087%	0,4395
Koeficijent varijacije	0,9317	0,0761	2,5097	1,6984	0,5910

Obelodanjivanja o poreskom riziku banaka u RS su izuzetno saglasna. To može ukazivati na to da banke obelodanjivanje o poreskom riziku posmatraju kao rutinsku aktivnost. Tako, čak devet banaka je obelodanjivanje o poreskom riziku izvršilo na sledeći način:

Poreski sistem RS je u procesu kontinuirane revizije i izmena. U RS poreski period je otvoren tokom perioda od pet godina (poreske obaveze ne zastarevaju u periodu od pet godina). U različitim okolnostima, poreski organi mogu imati različite pristupe određenim pitanjima i mogu utvrditi *dodatne poreske obaveze zajedno sa naknadnim zateznim kamatama i penalima. Rukovodstvo banke smatra da su poreske obaveze evidentirane u priloženim finansijskim izveštajima pravilno iskazane.*

Neke banke su pružile dodatne informacije uz tekst iz prethodno pomenutog pasusa. Tako je jedna banka obelodanila da u izveštajnoj godini nije imala poreske kontrole, dok je druga banka obelodanila da ne očekuje materijalno značajne posledice potencijalno različitih tumačenja rukovodstva banke i nacionalnih poreskih vlasti po pitanju poreskog tretmana određenih pozicija.

S druge strane, u nekim opservacijama je naglašeno da je rukovodstvo banke uspostavilo interne kontrole po pitanju poreza, tako da ne postoji razlog da se procenjuje dodatno poresko opterećenje. Takođe, u nekim opservacijama su analizirane neizvesne poreske pozicije, pa je obelodanjeno da se dodatne poreske obaveze evidentiraju za poreske pozicije za koje rukovodstvo banke utvrdi da je više verovatno nego što nije da će pozicija rezultirati u nametanju dodatnih poreskih obaveza, ako poreske vlasti ospore te pozicije.

U vezi nezavisnih varijabli, veličina banke je varijabla koja ispoljava najmanje varijacije, mereno koeficijentom varijacije. U kontekstu profitabilnosti, jedanaest opservacija je iskazalo negativno PROF, usled ostvarenog neto gubitka. Brojne banke su, uprkos ostvarenom neto dobitku, ostvarile samo umerene stope profitabilnosti, pa je u trideset četiri opservacije PROF pozitivno, ali manje od 1%.

Četrdeset jedna opservacija je zabeležila TpA od 0%, usled tekućeg rashoda za porez na dobitak jednakog nuli. S obzirom na to da dobitak pre oporezivanja predstavlja najbližu aproksimaciju oporezivog dobitka, važno je primetiti da je trinaest banaka poslovalo sa gubitkom pre oporezivanja i imalo TpA od 0%, dok je dvadeset osam banaka imalo TpA od 0%, uprkos ostvarenom dobitku pre oporezivanja.

Na kraju 2020. godine je dvadeset banaka bilo u većinskom stranom vlasništvu, dok je šest banaka bilo u većinskom domaćem vlasništvu. Tokom uzorkovanog perioda je samo jedna banka promenila status, nakon što je privatizovana od strane stranog investitora. Stoga je pedeset osam opservacija imalo vrednost FOREIGN jednaku jedan, dok je dvadeset opservacija imalo vrednost FOREIGN jednaku nuli.

Tabela 4: *Prosečne vrednosti nezavisnih varijabli za različite vrednosti TRD*

	TRD	Broj opservacija	Aritmetička sredina	Medijana
SIZE	0	36	18,4521	18,4804
	1	42	17,8772	18,1063
PROF	0	35	1,0785%	1,0804%
	1	39	0,1626%	0,3264%
TpA	0	34	0,1110%	0,0796%
	1	42	0,0260%	0,0000%
FOREIGN	0	36	0,8300	1,0000
	1	42	0,6700	1,0000

U Tabeli 4 su prikazane prosečne vrednosti korišćenih nezavisnih varijabli za različite vrednosti TRD. Iz tabele je primetno da banke koje obelodanjuju informacije o poreskom riziku imaju, u proseku, manju ukupnu imovinu i nižu profitabilnost. Takođe, ove banke imaju manje opterećenje porezom na dobitak po jedinici ukupne imovine. Konačno, banke koje obelodanjuju informacije o poreskom riziku su više u domaćem vlasništvu u odnosu na banke koje takve informacije ne obelodanjuju, ali takva razlika postoji samo prema aritmetičkoj sredini. Ipak, prethodni zaključci uzimaju u obzir odnos samo jedne nezavisne varijable i TRD, apstrahujući potencijalni istovremeni uticaj ostalih nezavisnih varijabli. Stoga je za donošenje potpunih zaključaka neophodno sprovesti višestruku regresionu analizu.

3.2. Rezultati regresione analize

Rezultati logit i probit regresione analize su prikazani u Tabeli 5. Generalno, rezultati su jako saglasni nezavisno od korišćenog regresionog modela. Takođe, uključivanje dummy varijabli za godine ne utiče na donošenje zaključaka o determinantama obelodanjivanja informacija o poreskom riziku.

Tabela 5: *Rezultati regresione analize*

	Logit		Probit	
	Zavisna varijabla: TRD			
Konstanta	-3,0212 (-0,6180)	-5,0172 (-0,9320)	-1,4031 (-0,4804)	-2,3578 (-0,7623)
SIZE	0,2720 (0,9536)	0,4152 (1,2722)	0,1381 (0,8240)	0,2076 (1,1366)
PROF	*-0,4855 (-1,6907)	*-0,6406 (-1,9040)	*-0,2890 (-1,6683)	*-0,3700 (-1,8945)
TpA	*-5,8185 (-1,7055)	*-6,2938 (-1,7850)	*-3,2231 (-1,6772)	*-3,4713 (-1,7575)
FOREIGN	**-1,4976 (-1,9789)	**-1,6371 (-2,0744)	**-0,8508 (-2,0206)	**-0,8963 (-2,1133)
Dummy za godine	Ne	Da	Ne	Da
Mek Fadenovo R^2	0,1583	0,1710	0,1550	0,1668
LR statistika	***15,7167	***16,9808	***15,3905	**16,5624
Broj opservacija	72	72	72	72

Napomena: beta koeficijenti su dati ispred zagrada, a z-statistike u zagradama; statistički značajno na nivou od 10% (*), 5% (**) i 1% (***).

Regresiona analiza ukazuje na to da veličina banke nije statistički značajna determinanta obelodanjivanja o poreskom riziku. To znači da veće banke, za koje se veruje da su pod strožijim nadzorom regulatornih tela, ne obelodanjuju poreski rizik više od manjih banaka. Ovaj nalaz za banke u RS je razumljiv, imajući u vidu činjenicu da Narodna banka Srbije, koja nadgleda bankarski sistem RS, ne pridaje značajnu pažnju poreskom riziku u Odluci o upravljanju rizicima banke (Službeni glasnik RS, br. 67/2020). Takođe, očigledno je da veće banke nisu pod većim pritiskom revizorske profesije za obelodanjivanjima o poreskom riziku, s obzirom na to da veće banke mahom dobijaju nekvalifikovana (pozitivna) mišljenja revizora.

S druge strane, uticaj ostalih nezavisnih varijabli je statistički značajan. Odnos između profitabilnosti banke i obelodanjivanja o poreskom riziku je statistički značajno negativan. Ovaj nalaz ukazuje na to da manje profitabilne banke češće obelodanjuju informacije o poreskom riziku. Drugim rečima, rezultati ukazuju na to da manje profitabilne banke osećaju veći strah od poreskih kazni u odnosu na profitabilnije banke, jer bi eventualna poreska kazna teže pogodila manje profitabilne banke.

Banke koje imaju niže opterećenje porezom na dobitak češće obelodanjuju informacije o poreskom riziku. Moguće je da banke sa nižim poreskim opterećenjem smatraju da će pre biti predmet poreskih kontrola nego banke sa višim opterećenjem, pa više pažnje pridaju poreskom riziku. Takođe, moguće je da banke sa nižim opterećenjem porezom na dobitak ispoljavaju veću nesigurnost po pitanju poreskog tretmana određenih transakcija.

Rezultati regresione analize pokazuju i da je za banke koje su u većinskom domaćem vlasništvu verovatnije da će obelodaniti informacije o poreskom riziku u odnosu na strane banke. Ovaj nalaz ukazuje na to da strane banke posvećuju manje pažnje poreskom riziku od domaćih. Većina banaka u stranom vlasništvu predstavlja filijale evropskih multinacionalnih grupa. Moguće je da ove banke, usled veličine matične bankarske grupe, ne osećaju strah od poreskih kontrola, odnosno smatraju da ne postoji verovatnoća plaćanja poreskih kazni.

3.3. Ispitivanje robustnosti rezultata

Kako bi se ispitala osetljivost rezultata istraživanja, učinjene su značajne promene istraživačkog modela. Korišćena merila veličine, profitabilnosti i poreskog opterećenja banke predstavljaju samo neke od mogućnosti, pa su pomenute kategorije aproksimirane drugačijim varijablama. Stoga su napravljene sledeće izmene u istraživačkom modelu:

- umesto veličine banke, merene ukupnom imovinom (SIZE), korišćena je varijabla SIZE', koja ima vrednost 1 ukoliko je banka sistemski značajna banka, odnosno 0 ukoliko nije – podaci o sistemski važnim bankama su preuzeti od Narodne banke Srbije, a korišćena je lista sistemski važnih banaka na kraju 2020. godine;

- umesto odnosa neto dobitka i ukupne imovine (PROF), profitabilnost banke je merena varijablom PROF', koja se dobija kao odnos neto dobitka i sopstvenog kapitala i

- umesto odnosa tekućeg rashoda za porez na dobitak i ukupne imovine (TpA), opterećenje porezom na dobitak banke je mereno varijablom TpE (engl. Tax per Equity), koja se dobija kao odnos tekućeg rashoda za porez na dobitak i sopstvenog kapitala.

Tabela 6: *Rezultati regresione analize za izmenjeni istraživački model*

	Logit		Probit	
	Zavisna varijabla: TRD			
Konstanta	1,6062 (2,4238)	**1,8448 (2,2730)	**0,9777 (2,4755)	**1,1283 (2,3246)
SIZE'	0,6870 (0,9495)	0,8023 (1,0732)	0,4102 (0,9480)	0,4644 (1,0561)
PROF'	*-0,1072 (-1,9152)	**-0,1190 (-1,9851)	**-0,0650 (-2,0078)	**-0,0721 (-2,0846)
TpE	**-1,4772 (-2,0984)	**-1,4906 (-2,1030)	**-0,8906 (-2,1509)	**-0,8912 (-2,1507)
FOREIGN	*-1,1689 (-1,6861)	*-1,1626 (-1,6800)	*-0,7071 (-1,6867)	*-0,7073 (-1,6885)
Dummy za godine	Ne	Da	Ne	Da
Mek Fadenovo R^2	0,2296	0,2351	0,2312	0,2369
LR statistika	***22,9074	***23,4484	***23,0654	***23,6306
Broj opservacija	72	72	72	72

Napomena: beta koeficijenti su dati ispred zagrada, a z-statistike u zagradama; statistički značajno na nivou od 10% (*), 5% (**) i 1% (***)

Rezultati regresione analize za izmenjeni istraživački model su prikazani u Tabeli 6. Generalno, rezultati su saglasni sa rezultatima iz inicijalnog istraživačkog modela, te potvrđuju da manje profitabilne banke, banke sa nižim opterećenjem porezom na dobitak i domaće banke posvećuju više pažnje poreskom riziku. Uticaj veličine banke na obelodanjivanje o poreskom riziku nije statistički značajan ni u izmenjenom istraživačkom modelu. Takođe, primetno je da izmenjeni istraživački model bolje objašnjava varijacije TRD u odnosu na inicijalni model, s obzirom na veću vrednost Mek Fadenovog R2. LR statistika u izmenjenom istraživačkom modelu je, takođe, veća u odnosu na inicijalni model.

Zaključak

Prelaskom na tržišno orijentisanu privredu i uvećanim prilivom stranih direktnih investicija, poreski rizik je postao važno pitanje u poslovanju banaka u tranzicionim državama. Stoga je istraživanje u ovom radu sprovedeno sa ciljem ispitivanja determinanti obelodanjivanja informacija o poreskom riziku u finansijskim izveštajima banaka u RS. S tim u vezi, formiran je uzorak od dvadeset šest banaka u periodu od 2018. do 2020. godine.

Istraživanje je pokazalo da većina banaka obelodanjuje informacije o poreskom riziku u napomenama uz finansijske izveštaje. Takođe, većina banaka ove informacije obelodanjuje u sekciji o potencijalnim i preuzetim obavezama, a ne u sekciji o upravljanju rizicima. Ipak, većina banaka samo formalno i uopšteno obelodanjuje informacije o poreskom riziku, ne prikazujući detaljnije informacije.

Logit i probit panel regresione analize su pokazale da veličina banke ne utiče na obelodanjivanje o poreskom riziku. Stoga se prva istraživačka hipoteza može odbaciti. S druge strane, manje profitabilne banke više obelodanjuju o poreskom riziku, pa se druga istraživačka hipoteza ne može odbaciti. Banke sa manjim opterećenjem porezom na dobitak, takođe, više obelodanjuju o poreskom riziku, pa se ni treća istraživačka hipoteza ne može odbaciti. Konačno, banke koje su u većinskom domaćem vlasništvu obelodanjuju više informacija o poreskom riziku, pa se četvrta istraživačka hipoteza ne može odbaciti. Rezultati istraživanja su robustni na značajne promene u istraživačkom modelu.

Nalazi u radu ukazuju na to da je odluka o obelodanjivanju informacija o poreskom riziku banaka pre vođena ekstrinzičnom nego intrinzičnom motivacijom. Drugim rečima, manje profitabilne banke obelodanjuju više informacija o poreskom riziku usled većeg straha od poreskih kazni, odnosno nedostatka sredstava za plaćanje eventualnih poreskih kazni. Takođe, banke koje više primenjuju strategije upravljanja porezom na dobitak i imaju niže poresko opterećenje obelodanjuju više informacija usled potencijalnih sumnji u legalnost primenjenih strategija. S druge strane, nalazi u radu ne ukazuju na to da je odluka o obelodanjivanju informacija o poreskom riziku vođena intrinzičnom motivacijom, odnosno željom banaka da budu ,,dobri građani" i predstave društvu što više informacija o porezima, odnosno državnim prihodima.

Rezultati istraživanja mogu biti od koristi brojnim interesnim grupama. Prvo, menadžment banaka i zaposleni u sektoru finansijskog izveštavanja mogu imati koristi prilikom odlučivanja o obelodanjivanju informacija o poreskom riziku i o nivou detaljnosti obelodanjivanja. Svakako, banke bi u budućnosti trebalo da obelodanjuju detaljnije informacije o izloženosti poreskom riziku i o načinu upravljanja njime, a takvo obelodanjivanje bi mogli inicirati revizorska profesija i Narodna banka Srbije. Drugo, nacionalne poreske vlasti mogu imati koristi o informaciji koje banke pridaju više pažnje poreskom riziku prilikom dizajniranja poreskih kontrola. Treće, revizori finansijskih izveštaja mogu imati koristi od rezultata istraživanja prilikom planiranja revidiranja napomena uz finansijske izveštaje. Četvrto, nacionalna tela za sertifikovanje računovođa treba da prepoznaju potrebu podizanja svesti o značaju upravljanja poreskim rizikom prilikom sprovođenja obuka za sertifikovanje računovođa.

Prezentovane rezultate istraživanja bi trebalo posmatrati u svetlu određenih ograničenja. Istraživanjem je pokriven samo ograničen vremenski period, pa je moguće da bi rezultati bili drugačiji kada bi bio korišćen neki drugi period. Takođe, moguće je da bi rezultati bili drugačiji da su korišćene neke druge nezavisne varijable ili drukčija metodologija istraživanja. Buduća istraživanja bi trebalo da obuhvate i druge tranzicione države u cilju kompariranja rezultata. Posebno bi interesantno bilo ispitati da li filijale iste multinacionalne bankarske grupe različito pristupaju obelodanjivanju informacija o poreskom riziku u različitim tranzicionim državama.

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DISCLOSURE OF TAX RISK IN FINANCIAL STATEMENTS: THE CASE OF BANKS IN THE REPUBLIC OF SERBIA

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Summary

An increasing number of companies has been paying attention to tax risk in the last decade. Tax risk may arise as a result of unintentional employee mistakes when calculating tax burden, but also as a result of implementation of risky tax avoidance strategies. Research in this paper is conducted in order to study the determinants of disclosure of tax risk in banks in the Republic of Serbia. Therefore, the research captured twenty-six banks in the period between 2018 and 2020. Results show that most banks disclose information on tax risk, though they are only formal and generalized. In addition, there is identified a significant number of banks that disclose the information on tax risk in a similar manner. Logit and probit regression models showed that less profitable banks and those with lower corporate income tax burden disclose more information on tax risk. Banks that are majority domestically owned also disclose more information on tax risk. In addition, research results are robust to important changes of the research model. Research results may be of interest to many interest groups, in particular to banks' management and employees in the financial reporting sector, national tax authorities, auditors of financial statements and national bodies for accountants' certification.

Keywords: tax; tax risk; risk management; financial statements; banks; logit and probit regressions

JEL classification: G21, G32, H25, M41

Introduction

Tax management and tax risk management are important issues in every company, as it is impossible to identify a company that is not a taxpayer and that does not calculate and pay taxes. Tax risk management has become especially important at the beginning of the twenty-first century, after large corporate scandals in most developed countries in the world (Johnston, 2006). Neuman et al. (2020) argue that tax risk is the uncertainty regarding future tax payments that is result of current activities or failure to take certain activities. Therefore, tax risk stems from the fact that national tax authorities may retroactively impose additional tax burden on companies in later tax audit procedures.

It is possible to identify at least two different sources of tax risk in banks. First, unintentional employee mistakes may lead to anomalies when calculating tax liabilities, in terms of incorrect liability calculation or delays when filling the tax return. The particular problem lies in the fact that tax law often changes.

Second, many companies consider the reduction of tax burden as a matter of competitiveness (Dyreng et al., 2010). In this regard, companies often implement risky tax avoidance strategies that may be considered as illegal by national tax authorities. In other words, for many tax avoidance strategies it is hard to distinguish between legal tax avoidance and illegal tax evasion, so the tax risk is ever-present when implementing such strategies.

Tax risk is also an important issue in the practice in the Republic of Serbia (RS). Law on Tax Procedure and Tax Administration (The Official Gazette of the RS, no. 144/2020) prescribes that the right of tax authorities to determine and collect taxes expires after a period of five years. In addition, financial performance of the banking sector of the RS has been improved significantly in the last decade (Lukić, 2021). In theory, improved performance leads to higher tax burden, so tax management and tax risk management have greater importance. Banks in the RS are also subject to many tax types, such as corporate income tax, value added tax, payroll tax, property taxes and other tax types.

The National Bank of Serbia prescribes that the framework within banks should manage various types of risks. The Decision on Risk Management by Banks (The Official Gazette of the RS, no. 67/2020) is a legal act adopted by the Executive Board of the National Bank of Serbia, defining following types of risks that banks should manage: liquidity risk, credit risk (including residual risk, dilution risk, settlement/delivery risk and counterparty credit risk), interest rate risk, foreign exchange risk and other market risks, concentration risk, bank's investment risk, country risk, operational risk (including legal risk), risk of compliance of the bank's operations, risk of money laundering and terrorism financing, strategic risk and other types of risks.

It is interesting to note that the mentioned Decision does not prescribe tax risk as a separate type of risk. However, it is rational to assume that tax risk is an integral part of operational risk and compliance risk. Operational risk, inter alia, indicates the possibility of adverse effects on the bank's financial result and capital due to mistakes in employees' work. In addition, legal risk (as an integral part of operational risk), inter alia, indicates the possibility of losses due to penalties from court disputes due to a breach of contractual and legal obligations. On the other hand, compliance risk indicates, inter alia, the possibility of adverse effects on the bank's financial result and capital due to failure to comply its operations with the law and other regulation.

Considering the importance of tax risk, many banks disclose the information on tax risk in notes to the financial statements. Disclosures in the financial statements of banks attracted the attention since the twentieth century, considering the public character of the banks. Thus, the International Accounting Standards Committee in 1990 adopted the International Accounting Standard (IAS) 30 – Disclosures in the Financial Statements of Banks and Similar Financial Institutions. This standard is no longer effective and the International Financial Reporting Standard (IFRS) 7 – Financial Instruments: Disclosures is considered a relevant successor.

Accounting standards are especially dedicated to the corporate income tax. Therefore, banks are required to follow IAS 12 – Income Taxes. This standard prescribes the way of current and deferred corporate income tax calculation, but does not deal with the effects of uncertainty over these issues. It is possible that the legality of a certain tax treatment will not be known until tax authorities, or the court, make a decision in the future. Therefore, in 2019, banks started to implement the interpretation of the International Financial Reporting Standards Interpretations Committee IFRIC 23 – Uncertainty over Income Tax Treatments.

The research subject is the disclosure of information on tax risk that banks conduct in notes to the financial statements. In the last two decades, tax risk has become an attractive research issue in transition countries. Many accounting firms offer to assess and minimize the tax risk and Chyz et al. (2021) show that contracting such firms has statistically significant impact on tax risk minimization. The main objective of the paper is to study the determinants of disclosure of tax risk. In other words, in the paper, the author tested the impact of some basic bank characteristics on the bank's decision to disclose information on tax risk.

Despite the consolidation in the last decade, the banking sector of the RS is still highly heterogeneous. For instance, banks differ a lot in terms of their size. The banking sector of the RS comprised twenty-six banks at the end of 2020 with nine of them being systemically important banks. Banks in the RS also significantly differ in terms of profitability and tax burden (Vržina, 2020). In addition, most of the banks are majority foreign-owned banks. Therefore, it is useful to study how some bank characteristics (size, profitability, tax burden and origin of capital) influence the disclosure of information on tax risk.

The originality of the paper may be found in the fact that, to the author's best knowledge, this is the first research on disclosure of information on tax risk of banks in transition countries. In general, prior studies on tax risk are scarce and are primarily conducted in the most developed countries of the world.

Aside from the introduction and conclusion, the paper consists of three parts. The first part develops the research hypotheses. The second part presents the research methodology and development of the research sample. The research results are given in the third part of the paper.

1. Development of Research Hypotheses

In general, practices of disclosures in notes to the financial statements has improved significantly in the last three decades (Perignon and Smith, 2010; Aryani and Hussainey, 2017). However, Maffei et al. (2014) question the value of disclosed information on risk, since banks have a great flexibility regarding the information that will be disclosed. Thus, many banks meet the requirement of the regulatory bodies, thought they disclose only generalized and insufficiently usable information. On the other hand, disclosures are one of the most problematic IFRS issues (Hoogendoorn, 2006). In other words, IFRS leave important flexibility to the companies when deciding on the scope and way of disclosures in the notes to the financial statements.

Drake et al. (2019) find that investors negatively value tax risk of the companies, measured as the variability in the corporate income tax burden. However, disclosures of the risk exposure and risk management system may have several positive effects on the companies. Thus, disclosure may result in lowering cost of capital (Nahar et al., 2016; Heinle and Smith, 2017) or in increasing the company value (Abdullah et al., 2015; Giner et al., 2020).

Aryani and Hussainey (2017) argue that larger banks better disclose information on risks. In addition, Brown (2020) finds that larger companies disclose more tax information. Bedard et al. (2010) find positive relation between company size and decision to disclose the information on fees to the accounting firms for tax consulting services. Larger banks are of systemically importance for financial market operations, so they are prone to more strict regulation by the regulatory bodies. Therefore, it is possible that larger banks disclose the tax risk in more details.

However, larger banks are often the key players on the financial market. The paradigm "too big to fail", often present in literature, presents the idea that larger banks may be bailed out by governments in order to avoid destabilization of the financial system (Moosa, 2010). Therefore, larger banks may feel stronger than smaller banks, may perceive lower exposure to the tax risk and, as a result, disclose less information on it.

Profitability may also be a factor that influences the decision of banks to disclose the information on tax risk. Thus, Heinle and Smith (2017) argue that companies disclose more information on risk when their financial performance is better than expected. More profitable banks have more resources to invest in tax risk management, so it is rational to assume that their disclosures of the tax risk would be more detailed.

On the other hand, less profitable banks may have more detailed disclosures of the tax risk due to concerns regarding tax penalties. These banks have fewer resources to pay possible tax penalties, so they pay more attention to the tax risk management. In this regard, Nahar et al. (2016) find negative relation between the financial performance of banks and the decision to disclose the risks. Bedard et al. (2010) find negative relation between bank profitability and the decision to disclose the information on fees to the accounting firms for tax consulting services.

Tax burden may also be the determinant of disclosures of tax risk. Henry et al. (2016) show that requirements of the regulatory bodies to increase disclosure of tax information influence the tax avoidance level. In this regard, the research subject was usually the corporate income tax. Brown (2020) finds that companies with higher corporate income tax burden disclose more tax information, thus promoting a "good citizen" status. Hope et al. (2013) argue that companies that avoid corporate income tax using tax havens disclose less information in order to mask suspicious tax practices.

However, tax avoidance may lead to the increased firm risk (Guenther et al., 2017) and tax risk in particular, due to possible different interpretations of certain transactions by tax authorities and bank management. Dyreng et al. (2019) show that companies with a lower tax burden have higher uncertainty regarding tax treatment of certain transactions. Therefore, banks with a lower corporate income tax burden might be more interested in tax risk and, as a result, disclose more information on tax risk.

Grassa et al. (2021) find that foreign-owned banks better disclose information on risk, compared to domestic-owned banks. Many foreign-owned banks are subsidiaries of multinational banking groups from developed European countries. These banks are under strong monitoring of the European Central Bank, so it is rational to expect that they pay significant attention to risk management.

On the other hand, many multinational banks report annual revenue higher than the public revenue of most countries in the world (Global Justice Now, 2016). That implies that these banks have strong bargaining power, so they may have a dominant position in relation to the national tax authorities. As a result, these banks may be less interested in tax risk management.

Accountants in the RS argue that disclosures in the financial statements, prepared in line with IFRS, are adequate (Obradović et al., 2018). However, Pivac et al. (2017) analyze disclosures in financial statements of companies in transition countries and note that Serbian companies have only average quality of financial statements. In particular, they point out at risk management as an issue that is not enough considered. In addition, Vržina et al. (2020) find low quality of disclosures of deferred corporate income tax in companies in the RS.

Disclosure of tax risk has not been the subject of significant studies in the RS in the past. In addition, studies on tax risk have not been conducted on the banks in the RS. However, based on prior research on disclosures in financial statements, variables have been identified that may influence the disclosure of tax risk of banks in the RS – size, profitability, corporate income tax burden and origin of bank capital. Since the expected direction of the impact of these variables cannot be determined on the basis of prior research, research hypotheses are formulated as follows:

H1: Bank size has statistically significant impact on the disclosure of information on tax risk.

H2: Bank profitability has statistically significant impact on the disclosure of information on tax risk.

H3: Bank corporate income tax burden has statistically significant impact on the disclosure of information on tax risk.

H4: Origin of bank capital has statistically significant impact on the disclosure of information on tax risk.

2. Research Methodology and Sample Development

Disclosure of tax risk is measured with binary variable TRD (Tax Risk Disclosure) that takes value 1 if a bank adequately disclosed information on tax risk and 0 in the contrary. For the purposes of this research, it is considered that the bank adequately disclosed information on tax risk if it presents the way it is exposed to tax risk or the way it manages the tax risk. In other words, purely mentioning the tax risk in some of the paragraphs of notes to the financial statements is not considered adequate disclosure.

In the paper, the author employed four independent variables – SIZE, PROF, TpA (Tax per Assets) and FOREIGN to measure bank size, profitability, tax burden and origin of capital, respectively. Regarding tax burden, it is worth noting that only corporate income tax burden is used, due to limited availability of the data on the tax burden of banks. In statistical analysis the author also employed dummy variables in order to control the variability of tax risk disclosure in time. Definitions of these variables are presented in Table 1.

Table 1: *Variables' Definition*

Variable	Definition
TRD	1 – if the bank adequately disclosed tax risk, 0 – in contrary
SIZE	Natural logarithm of total assets (in thousands RSD)
PROF	Net result: Total assets
TpA	Current corporate income tax expense: Total assets
FOREIGN	1 – if the bank is majority foreign-owned, 0 – in contrary

The impact of independent variables on the disclosure of tax risk is examined using logit (logistic) and probit regression models. These regression types are standard methods of analysis when the dependent variable is binary (Allison, 1999). Based on defined variables, it is possible to formulate the following panel regression model for bank i and year t:

$$TRD_{i,t} = \alpha + \beta_1 SIZE_{i,t} + \beta_2 PROF_{i,t} + \beta_3 TpA_{i,t} + \beta_4 FOREIGN_{i,t} + \varepsilon_{i,t}$$

For purposes of statistical data processing, the econometric software EViews was used. Financial statements' data are retrieved from the official website of the Business Registers Agency of the RS (www.apr.gov.rs). Data was used from statutory financial statements in order to mitigate the impact of non-resident legal entities and the impact of non-banking related parties.

Research captured the period between 2018 and 2020. Only the banks that were active at the end of each sampled year were included. In the RS there were twenty-six such banks. The list of sampled banks is given in Table 2. Therefore, the initial sample represents balanced panel data with seventy-eight observations. However, some extreme values were eliminated from the sample. As a PROF may take any value, the two highest and two lowest values were eliminated. In addition, as TpA may take any non-negative value, two highest values were eliminated.

Table 2: *The List of Sampled Banks*

Bank name	ID number	Bank name	ID number
Addiko Bank	07726716	Mirabank	21080608
AIK Bank	06876366	Mobi Bank	17138669
ALTA Bank	07074433	MTS Bank	09081488
API Bank	20439866	NLB Bank	08250499
Banca Intesa	07759231	Opportunity Bank	08761132
Bank of China Serbia	21251640	OTP Bank Serbia	07552335
Credit Agricole Bank Serbia	08277931	Postal Savings Bank	07004893
Direktna Banka	07654812	ProCredit Bank	17335677
Erste Bank	08063818	Raiffeisen Bank	17335600
Eurobank	17171178	Sberbank Serbia	07792247
Expobank	07534183	Srpska Banka	07092288
Halkbank	07601093	Unicredit Bank Serbia	17324918
Komercijalna Banka	07737068	Vojvođanska Banka	08603537

3. Research Results

3.1. Descriptive Statistics

Table 3 shows the results of descriptive statistical analysis. Descriptive analysis shows that forty-two observations (53.85% of the sample) disclosed the information on tax risk in notes to the financial statements. It is interesting to note that fourteen banks reported on tax risk in each of the three sampled years, while twelve banks did not report on tax risk at all. In this regard, only one bank disclosed the information on tax risk in risk management sections, twelve banks disclosed it in the commitments and contingencies section, while one bank disclosed it in key accounting estimates and judgments section. It is worth noting that one bank only mentioned tax risk when analyzing the exposure to the operational risk. For the purposes of this paper, this was not considered as sufficient disclosure of tax risk.

Table 3: *Descriptive Statistics*

	TRD	SIZE	PROF	TpA	FOREIGN
Number of observations	78	78	74	76	78
Arithmetic mean	0.5385	18.1426	0.5958%	0.0640%	0.7436
Minimum	0.0000	15.5969	-3.9465%	0.0000%	0.0000
25th percentile	0.0000	16.7392	0.2457%	0.0000%	0.2500
Median	1.0000	18.4162	0.6557%	0.0000%	1.0000
75th percentile	1.0000	19.2559	1.3161%	0.0998%	1.0000
Maximum	1.0000	20.3908	3.6808%	0.4670%	1.0000
Standard deviation	0.5017	1.3810	1.4953%	0.1087%	0.4395
Coefficient of variation	0.9317	0.0761	2.5097	1.6984	0.5910

Disclosures of tax risk of banks in the RS are highly consistent. It indicates that banks treat disclosure of tax risk as routine activity. Thus, as much as nine banks had the disclosure of tax risk as follows:

The tax system of the RS is in the process of continuous audits and changes. In the RS the tax period is opened over a five-year period (tax liabilities do not expire before a five-year period). In some circumstances, tax authorities may have different approaches to certain issues and impose additional tax liabilities with subsequent default interest and penalties. Bank management argues that tax liabilities presented in the attached financial statements are adequately reported.

Some banks provided additional information to the text from the previously mentioned paragraph. Thus, one bank disclosed that it did not have tax audits in the reporting year, while another bank disclosed it did not expect materially significant effects of possible different interpretations of the tax treatment of certain position by bank management and national tax authorities.

On the other hand, some observations emphasized that bank management implemented internal controls regarding taxes, so it was not necessary to estimate an additional tax burden. In addition, some observations analyzed uncertain tax positions, so it was disclosed that additional tax liabilities are reported for a tax position that was more likely than not to result in additional tax liability if challenged by tax authorities, based on the bank management's assessment.

Regarding independent variables, bank size is the variable that has the least variation, as measured by the coefficient of variation. In the context of profitability, eleven observations have negative PROF due to reported net loss. Despite a reported net income, many banks achieved only modest profitability rates, so thirty-four observations have positive PROF, but less than 1%.

Forty-one observations recorded TpA of 0% due to null current corporate income tax expense. Considering that income before taxation is the most accurate approximation of taxable income, it is important to note that thirteen banks had loss before taxation and TpA of 0%, while twenty-eight banks had TpA of 0%, despite recording income before taxation.

At the end of 2020, twenty banks were majority foreign-owned, while six banks were majority domestic-owned. Only one bank changed the status during the sampled period, after its privatization by a foreign investor. Therefore, fifty-eight observations had FOREIGN value equal to one, while twenty observations had FOREIGN value equal to null.

Table 4: *Average Values of Independent Variables for Different TRD Levels*

	TRD	Number of observations	Arithmetic mean	Median
SIZE	0	36	18.4521	18.4804
	1	42	17.8772	18.1063
PROF	0	35	1.0785%	1.0804%
	1	39	0.1626%	0.3264%
TpA	0	34	0.1110%	0.0796%
	1	42	0.0260%	0.0000%
FOREIGN	0	36	0.8300	1.0000
	1	42	0.6700	1.0000

Table 4 shows the average values of independent variables for different TRD levels. It may be concluded from the table that banks disclose information on tax risk when they have, on average, less total assets and lower profitability. In addition, these banks have a lower corporate income tax burden per the unit of total assets. Finally, more information on tax risk is disclosed by banks that are domestic-owned, than by banks that are foreign-owned, but such difference is valid only for arithmetic mean. However, presented findings consider only the relation between one independent variable and TRD, thus abstracting the simultaneous influence of other independent variables. Therefore, it is necessary to employ multiple regression analysis in order to reach complete conclusions.

3.2. Regression Analysis Results

Results of logit and probit regression analysis are presented in Table 5. In general, the results are highly consistent regardless of the employed regression model. In addition, the inclusion of year dummy variables does not influence the conclusions on the determinants of disclosure of information on tax risk.

Table 5: *Regression Analysis Results*

	Logit		Probit	
	Dependent variable: TRD			
Intercept	-3.0212 (-0.6180)	-5.0172 (-0.9320)	-1.4031 (-0.4804)	-2.3578 (-0.7623)
SIZE	0.2720 (0.9536)	0.4152 (1.2722)	0.1381 (0.8240)	0.2076 (1.1366)
PROF	*-0.4855 (-1.6907)	*-0.6406 (-1.9040)	*-0.2890 (-1.6683)	*-0.3700 (-1.8945)
TpA	*-5.8185 (-1.7055)	*-6.2938 (-1.7850)	*-3.2231 (-1.6772)	*-3.4713 (-1.7575)
FOREIGN	**-1.4976 (-1.9789)	**-1.6371 (-2.0744)	**-0.8508 (-2.0206)	**-0.8963 (-2.1133)
Year dummies	No	Yes	No	Yes
McFadden R^2	0.1583	0.1710	0.1550	0.1668
LR statistics	***15.7167	***16.9808	***15.3905	**16.5624
Number of observations	72	72	72	72

Note: beta coefficients in front of parentheses, z-statistics in parentheses; statistically significant at the 10% (*), 5% (**) and 1% (***) level.

Regression analysis indicates that bank size is not a statistically significant determinant of disclosure of tax risk. It implies that larger banks do not disclose tax risk more than smaller banks, although they are prone to stricter monitoring of regulatory bodies. This finding is understandable for banks in the RS, as the National Bank of Serbia, that monitors the banking system of the RS, does not pay significant attention to the tax risk in the Decision on Risk Management by Banks (The Official Gazette of the RS, no. 67/2020). In addition, it is obvious that larger banks are not under higher pressure from audit profession to disclose the tax risk, as larger banks dominantly have unqualified (positive) audit opinions.

On the other hand, the influence of other independent variables is statistically significant. The relation between bank profitability and the disclosure of tax risk is statistically significantly negative. This finding indicates that less profitable banks are more afraid of tax penalties compared to more profitable banks, since the possible tax penalty would affect less profitable banks harder.

Banks that have lower corporate income tax burden more often disclose information on tax risk. It is possible that banks with a lower tax burden believe they will be the subject of tax audits rather than banks with higher burden, so they pay more attention to the tax risk. In addition, it is possible that banks with lower corporate income tax burden have higher uncertainty over tax treatment of certain transactions.

Results of the regression analysis also show that majority domestic-owned banks are more probable to disclose information on tax risk compared to the foreign banks. This finding indicates that foreign banks pay less attention to the tax risk compared to domestic banks. Most of foreign-owned banks are subsidiaries of European multinational groups. It is possible that these banks are not afraid of tax audits and believe there is no possibility of paying tax penalties due to the large size of a parent banking group.

3.3. Results' Robustness Check

In order to examine the sensitivity of the research results, the important changes of the research model have been made. The employed measures of bank size, profitability and tax burden are only some of many possibilities, so these categories are measured by different variables. Therefore, the following changes of the research model were made:

• instead of measuring the bank size with total assets (SIZE), the variable SIZE' was employed that has value 1 if the bank is systemically important bank and 0 if not – data on systemically important banks were retrieved from the National Bank of Serbia with the list of systemically important banks at the end of 2020 used;

• instead of the relation between net income and total assets (PROF), profitability of the bank was measured by variable PROF' that is calculated as a relation between net income and shareholders' equity and

• instead of the relation between current corporate income tax expense and total assets (TpA), the corporate income tax burden was measured by variable TpE (Tax per Equity) that is calculated as a relation between current corporate income tax expense and shareholders' equity.

Table 6: *Regression Analysis Results for Modified Research Model*

	Logit		Probit	
	Dependent variable: TRD			
Intercept	1.6062 (2.4238)	**1.8448 (2.2730)	**0.9777 (2.4755)	**1.1283 (2.3246)
SIZE'	0.6870 (0.9495)	0.8023 (1.0732)	0.4102 (0.9480)	0.4644 (1.0561)
PROF'	*-0.1072 (-1.9152)	**-0.1190 (-1.9851)	**-0.0650 (-2.0078)	**-0.0721 (-2.0846)
TpE	**-1.4772 (-2.0984)	**-1.4906 (-2.1030)	**-0.8906 (-2.1509)	**-0.8912 (-2.1507)
FOREIGN	*-1.1689 (-1.6861)	*-1.1626 (-1.6800)	*-0.7071 (-1.6867)	*-0.7073 (-1.6885)
Year dummies	No	Yes	No	Yes
McFadden R^2	0.2296	0.2351	0.2312	0.2369
LR statistics	***22.9074	***23.4484	***23.0654	***23.6306
Number of observations	72	72	72	72

Note: beta coefficients in front of parentheses, z-statistics in parentheses; statistically significant at the 10% (*), 5% (**) and 1% (***) level.

Results of the regression analysis for modified research model are presented in Table 6. In general, the results are consistent with results from the initial research model and confirm that less profitable banks, banks with lower corporate income tax burden and domestic banks pay more attention to tax risk. The influence of bank size on the disclosure of tax risk is not statistically significant even in the modified research model. In addition, it is worth noting that the modified research model better explains TRD variations compared to the initial model, as the value of McFadden R2 is higher in the modified model. LR statistics in the modified research model is also higher than in the initial model.

Conclusion

With the transition to the market-oriented economy and increased inflow of foreign direct investments, tax risk became an important issue in bank operations in transition countries. Therefore, the research in this paper has been conducted in order to examine the determinants of disclosure of information on tax risk in financial statements of banks in the RS. In this regard, a sample of twenty-six banks in period between 2018 and 2020 was developed.

Research showed that most of the banks disclose information on tax risk in notes to the financial statements. In addition, most of the banks disclose this information in commitments and contingencies section, not in the risk management section. However, most of the banks have only formal and generalized disclosure of information on tax risk, not providing more detailed information.

Logit and probit panel regression analysis showed that bank size does not influence the disclosure of tax risk. Therefore, the first research hypothesis is rejected. On the other hand, less profitable banks disclose more on tax risk, so the second research hypothesis cannot be rejected. Banks with lower corporate income tax burden also disclose more on tax risk, so the third research hypothesis also cannot be rejected. Finally, majority domestic-owned banks disclose more information on tax risk, so the fourth research hypothesis cannot be rejected. Research results are robust to important changes in the research model.

Findings in the paper indicate that a bank's decision to disclose the information on tax risk is led by extrinsic rather than intrinsic motivation. In other words, less profitable banks disclose more information on tax risk as they are more afraid of tax penalties due to lack of resources to pay possible tax penalties. In addition, banks that employ more tax avoidance strategies and have a lower tax burden disclose more information due to potential doubts regarding the legality of implemented strategies. On the other hand, findings in the paper do not indicate that the decision to disclose the information on tax risk is led by intrinsic motivation, i.e., by the desire of banks to be a "good citizen" and present the society with as much information as possible about taxes as public revenue.

Research results may be of interest to several interest groups. First, bank management and employees in the financial reporting sector may benefit when deciding on the disclosure of information on tax risk and the level of details of the disclosure. Banks should certainly disclosure in more detail the information on the exposure to tax risk and how they manage it, and such disclosure may be also initiated by audit profession and the National Bank of Serbia. Second, national tax authorities may benefit from the information on banks that pay more attention to the tax risk when designing tax audits. Third, auditors of financial statements may benefit from the research results when planning the audit of the notes to the financial statements. Fourth, national bodies for accountants' certification should recognize the need to raise awareness of the importance of tax risk management when conducting training for accountants' certification.

Presented research results should be considered in light of certain limitations. The research captured only a limited time period, so it is possible that results would have been different if another period had been used. In addition, it is possible that results would have differed if some other independent variables or other methodology had been employed. Future research should also capture other transition countries in order to compare results. In particular, it would be interesting to examine whether subsidiaries of the same multinational banking group in different countries differ in terms of disclosure of information on tax risk.

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KOMPARATIVNA ANALIZA UTICAJA VELIČINE BILANSNE SUME NA POSLOVANJE BANAKA U REPUBLICI SRBIJI U PERIODU PRE I TOKOM PANDEMIJE COVID-19

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Rezime

Cilj rada je da analizira uticaj veličine banaka koje posluju u Republici Srbiji na osnovne pokazatelje njihovog poslovanja i da oceni da li je pandemija Covid-19 promenila prirodu i intenzitet tog uticaja. Istraživanje je izvršeno na reprezentativnom uzorku od dvadeset i tri domaće banke. Zaključci rada su bazirani na rezultatima primene statičkih panel regresionih modela i odnose se na vremenski period od drugog kvartala 2014. godine do trećeg kvartala 2021. godine. Na osnovu rezultata istraživanja se može zaključiti da su tokom pandemije veće banke smanjile nivo kreditne aktivnosti i povećale nivo likvidnosti u odnosu na manje banke. To nije uticalo na njihovu profitabilnost, što znači da veće banke, kao i u periodu pre pandemije, ostvaruju više stope prinosa na kapital u odnosu na svoje manje konkurente. Takođe, istraživanje je rezultiralo ocenom da su tokom pandemije veće banke smanjile udeo kapitala u bilansnoj sumi u odnosu na manje banke, ali ne u meri koja ugrožava stabilnost bankarskog sektora.

Ključne reči: bankarski sektor Republike Srbije; veličina bilansne sume banaka; likvidnost banaka; profitabilnost banaka; kreditna aktivnost banaka; solventnost banaka; koncentracija bankarskog sektora; pandemija Covid-19; statički panel regresioni modeli

JEL klasifikacija: G21, M41, C33, C65

Uvod

Osnovna uloga banaka je da obezbede privredni rast i razvoj posredstvom brzog i efikasnog protoka novčanih sredstava između suficitarnih i deficitarnih transaktora na tržištu. Stoga je stabilnost bankarskog sektora u svim zemljama u konstantnom fokusu regulatora. Jedan od najvažnijih i najbolje regulisanih segmenata bankarskog poslovanja je održavanje nivoa konkurencije na bankarskom tržištu, koji se meri Herfindahl–Hirschman indeksom (u daljem tekstu HHI indeks). U poslednjih nekoliko godina u bankarskom sektoru Srbije je primetan trend smanjenja broja banaka, kao i raslojavanje u smislu dominacije najvećih pet banaka u odnosu na ostatak sektora (Filipović i saradnici, 2016).

Primarni cilj rada je da oceni da li varijacije u visini bilansnih suma banaka koje posluju u Republici Srbiji (u daljem tekstu banke) utiču na njihovu likvidnost, kreditnu aktivnost, profitabilnost i nivo kapitala (solventnost). Takođe, cilj rada je da oceni da li je tokom pandemije Covid-19 (u daljem tekstu pandemija) došlo do promene prirode i intenziteta tog uticaja u odnosu na period pre proglašenja pandemije. Analiza i izvedeni zaključci rada su bazirani na primeni statičkih panel regresionih modela. Zaključci rada se odnose na vremenski period između drugog kvartala 2014. godine i trećeg kvartala 2021. godine.

Nakon uvodnog dela i pregleda literature koja analizira uticaj veličine banaka na različite aspekte poslovanja, dat je kratak osvrt na odnos veličine banaka i koncentracije na domaćem bankarskom tržištu. U nastavku rada je prikazana metodologija koja je korišćena u istraživanju, kao i karakteristike uzorka na osnovu kog je istraživanje sprovedeno. U poslednjem delu rada je izvršena analiza dobijenih ocena regresionih koeficijenata, na osnovu kojih su izvedeni prikazani zaključci rada.

Pregled literature

Uticaj veličine banaka na različite aspekte njihovog poslovanja, predmet je mnogih istraživanja širom sveta. Na osnovu sumiranja i analize njihovih rezultata, stiče se opšti utisak da veće banke posluju stabilnije i da pružaju doprinos sveopštem razvoju tržišta na kojima posluju (Adusei, 2015). Razlog za to pretežno leži u činjenici da veće banke imaju mogućnost da u većoj meri koriste ekonomiju obima i ekonomiju okvira (Bikker i saradnici, 2006). Međutim, svest o tome da nestabilnost banaka može da ugrozi sigurnost svakog finansijskog sistema (Kamani, 2021), često dovodi do toga da su velike banke protežirane od strane države. Zaštita velikih banaka od bankrotstva od strane države, poznatija je kao „too big to fail" koncept, čija primena često dovodi do tzv. agencijskog problema i rasta njihove izloženosti različitim oblicima rizika (Virginie, 2015), (Račić, 2013b).

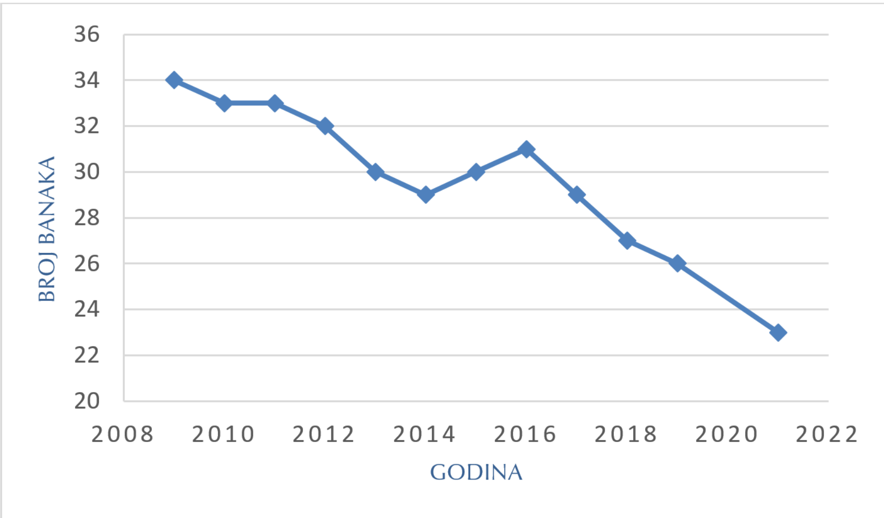
U zavisnosti od geografskog područja i vremenskog intervala obuhvaćenog istraživanjem, variraju i ocene uticaja veličine banaka na njihove poslovne pokazatelje. Tako veličina bilansne sume u većini slučajeva determiniše njihovu likvidnost (Virginie, 2015), s tim što veće banke pretežno drže manje novčanih sredstava, oslanjajući se na sekundarne rezerve likvidnosti (Račić, 2018). Što se tiče uticaja veličine banaka na profitabilnost, većina istraživanja ocenjuje da rast bilansne sume podstiče profitabilnost (Ozcan i saradnici, 2018). Međutim, postoje i ona koja ocenjuju da na tržištima nerazvijenih zemalja i zemalja u razvoju ne postoji statistički značajna veza između veličine i profitabilnosti banaka (Al-Harbi, 2019), kao i ona koja zaključuju da rast bilansne sume utiče na smanjenje pokazatelja profitabilnosti (Muzammil & Siddiqui, 2020). Pored toga, treba istaći i to da nekolicina istraživanja pronalazi negativnu vezu između veličine banaka i stope adekvatnosti kapitala (Račić, 2018).

S obzirom da se rad bavi uticajem pandemije na poslovanje banaka, važno je ukazati na činjenicu da malobrojna istraživanja na ovu temu svedoče da pandemija značajno determiniše različite aspekte njihovog poslovanja i da intenzitet tog uticaja zavisi od faktora kao što su fokus banaka na implementaciju strategije vođstva u troškovima (Vasić, 2020a), stepen digitalizacije poslovanja (Vasić, 2020b), struktura finansijskog tržišta u smislu institucionalnog okruženja i važećeg regulatornog okvira, zatim nivo razvijenosti tržišta dužničkih hartija od vrednosti, kao i odgovor javnog zdravstvenog sistema na pojavu pandemije (Colak & Öztekin, 2021).

Odnos veličine banaka i koncentracije u bankarskom sektoru Republike Srbije

U periodu nakon 2000. godine, značajan broj stranih banaka je proširio poslovanje na finansijsko tržište Republike Srbije. Međutim, uticaj veličine samog tržišta i činjenica da se tranzicija domaće privrede odvija sporije u odnosu na prvobitna očekivanja, rezultiraju postepenim smanjenjem broja banaka na tržištu (Stojmenović, 2021). Na grafikonu 1 je dat prikaz kretanja broja banaka na tržištu Republike Srbije.

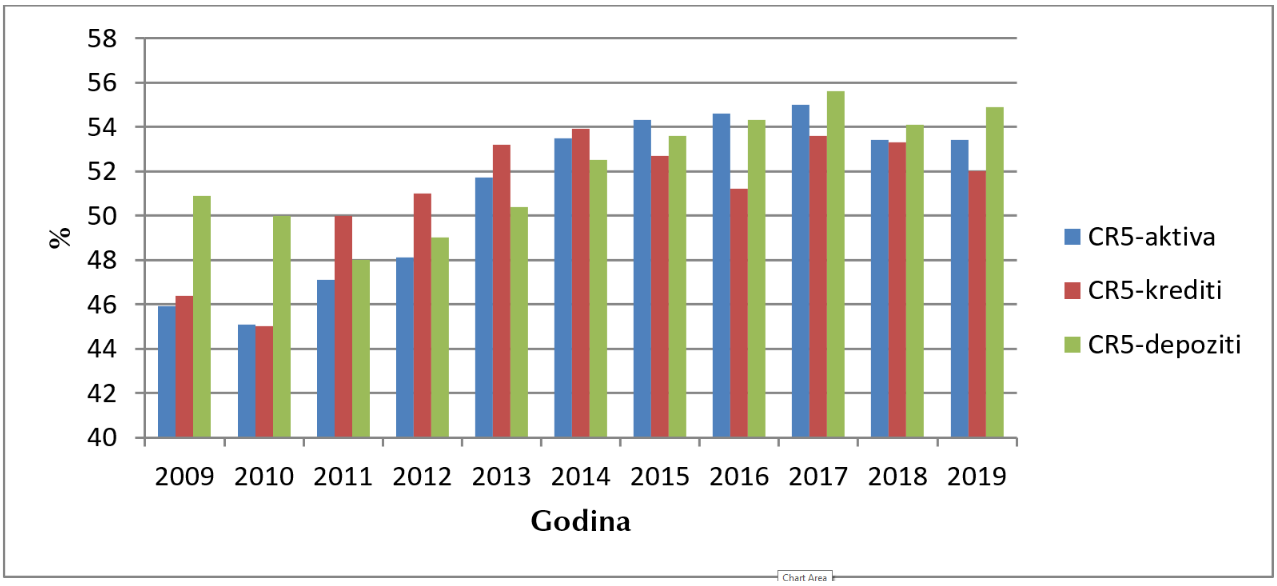
Grafikon 1: *Kretanje broja banaka na tržištu Republike Srbije*



Izvor: Prikaz autora na osnovu podataka Narodne banke Srbije (www.nbs.rs)

Trenutno na domaćem tržištu posluju dvadeset i tri banke, što ukazuje na visok nivo razvijenosti konkurencije. Tome u prilog ide i konstantno niska vrednost HHI indeksa aktive, koja je na kraju 2019. god. iznosila 840. Međutim, potencijalnu pretnju stabilnosti i daljem razvoju konkurencije na domaćem bankarskom tržištu predstavljaju visoke vrednosti pokazatelja koncentracije pet najvećih banaka (u daljem tekstu CR5 indeks), koje ukazuju na to da pet najvećih banaka u Srbiji zauzima preko 50% udela u ukupnoj aktivi, depozitima i kreditnim plasmanima (Stojmenović, 2021). Kretanje vrednosti CR5 indeksa na domaćem bankarskom tržištu, prikazano je na grafikonu 2.

Grafikon 2: *Kretanje CR5 indeksa aktive, kredita i depozita*



Izvor: Prikaz autora na osnovu podataka Narodne banke Srbije (www.nbs.rs)

Imajući u vidu činjenicu da na bankarskom tržištu u Srbiji, kao i u regionu, postoji jasan trend smanjenja broja banaka i njihovog raslojavanja prema kriterijumu veličine (Jović, 2006), želja autora je bila da se ispita priroda i intenzitet uticaja veličine bilansne sume na osnovne pokazatelje bankarskog poslovanja, sa posebnim osvrtom na uticaj pandemije na to pitanje.

Uzorak i metodologija istraživanja

Uzorak koji je korišćen u istraživanju uticaja veličine banaka na njihovo poslovanje u periodu pre početka pandemije obuhvata dvadeset i tri banke, koje su na kraju trećeg kvartala 2019. godine poslovale na domaćem tržištu. Sa druge strane, uzorak obuhvaćen istraživanjem istog uticaja tokom trajanja pandemije, obuhvata dvadeset i jednu banku koja je u Republici Srbiji poslovala krajem trećeg kvartala 2021. godine. Razlika u broju banaka u uzorku je posledica bankarskih akvizicija tokom perioda istraživanja (Société Générale banka je pripojena OTP banci, dok je MTS banka pripojena Banci Poštanska štedionica). Oba segmenta uzorka su reprezentativna, jer obuhvataju preko 90% ukupne aktive domaćeg bankarskog sektora. Banke obuhvaćene istraživanjem prikazane su u tabeli 1.

Istraživanje je bazirano na analizi podataka iz kvartalnih bilansa banaka. Panel regresionom analizom je obuhvaćeno ukupno šesto dvadeset osam opservacija, koje pokrivaju vremenski period od drugog kvartala 2014. godine do trećeg kvartala 2021. godine.

Tabela 1: *Uzorak banaka obuhvaćen istraživanjem*

R.br.	Naziv banaka
1.	API Bank a.d. Beograd
2.	Addiko Bank a.d. Beograd
3.	AIK banka a.d. Beograd
4.	Banca Intesa a.d. Beograd
5.	Banka Poštanska štedionica a.d. Beograd
6.	Crédit Agricole banka Srbija a.d. Novi Sad
7.	Direktna banka a.d. Kragujevac
8.	Erste Bank a.d. Novi Sad
9.	Eurobank a.d. Beograd
10.	Expobank a.d. Beograd
11.	Halkbank a.d. Beograd
12.	JUBMES (Alta) banka
13.	Komercijalna banka a.d. Beograd
14.	MTS banka (pripojena Banci Poštanska štedionica)
15.	NLB banka a.d. Beograd
16.	Opportunity banka a.d. Novi Sad
17.	ProCredit Bank a.d. Beograd
18.	Raiffeisen banka a.d. Beograd
19.	Sberbank Srbija a.d. Beograd
20.	Société Générale banka a.d. Beograd (pripojena OTP banci)
21.	Srpska banka a.d. Beograd
22.	Telenor banka a.d. Beograd
23.	Unicredit Bank a.d. Beograd

Izvor: Prikaz autora (www.nbs.rs)

Istraživanje je bazirano na primeni sledećih statičkih panel modela: Pooled effects model, Fixed Effects model i Random Effects model. Primena panel modela u empirijskim istraživanjima pruža mnogobrojne prednosti, kao što su veća informativnost, koja je rezultat povećanja uzorka i broja stepena slobode. Veći varijabilitet podataka doprinosi većoj efikasnosti ocena regresionih koeficijenata i smanjenju multikolinearnosti u modelu. Pored toga, važno je istaći da panel modeli analiziraju varijacije podataka po dve dimenzije: po jedinicama posmatranja i po vremenskoj dimenziji, dajući na taj način mogućnost analize strukture podataka, kao i promena u strukturi podataka tokom vremena (Račić, 2013a). Izbor statičkog panel modela koji daje najpreciznije ocene posmatranih međuzavisnosti, izvršen je na bazi rezultata odgovarajućih testova: F-test, Breusch- Pagan Test, Hausman Test (Račić i saradnici, 2014).

U radu su analizirani sledeći regresioni modeli:

$$l_{ij} = \beta_0 + \beta_1 \, vel_{ij} + \varepsilon_{ij} \quad (1)$$

$$kred_{ij} = \beta_0 + \beta_1 \, vel_{ij} + \varepsilon_{ij} \quad (2)$$

$$roe_{ij} = \beta_0 + \beta_1 \, vel_{ij} + \varepsilon_{ij} \quad (3)$$

$$cap_{ij} = \beta_0 + \beta_1 \, vel_{ij} + \varepsilon_{ij} \quad (4)$$

gde je,

$vel_{i,j}$ - prirodni logaritam bilansnih suma banke i u vremenskom trenutku j,

$l1_{i,j}$ - količnik likvidne aktive i ukupne aktive banke i u vremenskom trenutku j,

$kred_{i,j}$ - udeo kreditnih plasmana u bilansnoj sumi banke i u vremenskom trenutku j,

$roe_{i,j}$ - količnik neto dobiti i kapitala banke i u vremenskom trenutku j,

$cap_{i,j}$ - udeo kapitala u bilansnoj sumi banke i u vremenskom trenutku j,

ε_{ij} - standardna greška modela.

Tabela 2: *Prosečne vrednosti nezavisnih varijabli modela u periodu pre/posle početka pandemije*

Varijabla	Prosečna vrednost	Promena
l1	0,15/0,16	rast
roe	0,01/0,03	rast
kred	0,61/0,64	rast
cap	0,20/0,17	pad

Izvor: Proračun autora

Analiza kretanja prosečnih vrednosti pokazatelja likvidnosti, solventnosti, kreditne aktivnosti i profitabilnosti, kao nezavisnih varijabli regresionih modela, pokazala je da je domaći bankarski sektor u periodu pre proglašenja pandemije bio stabilan. Prosečan udeo likvidnih sredstava u aktivi za banke iz uzorka iznosio je 15%, dok je prosečan udeo kapitala u bilansnoj sumi za banke iz uzorka bio 20%. Pored toga, prosečan udeo kredita od 61% u aktivi svedoči o tome da su banke bile pretežno orijentisane na tradicionalnu kreditno-depozitnu aktivnost, što takođe ide u prilog stabilnosti, posebno u uslovima većih ekonomskih kriza. Prosečna vrednost prinosa na kapital je iznosila 1,2%, što znači da je domaći bankarski sektor profitabilan. Prosečne vrednosti analiziranih pokazatelja poslovanja banaka u periodu pandemije, pokazuju da je došlo do neznatnog povećanja likvidnosti, kreditne aktivnosti i profitabilnosti banaka, dok je njihova solventnost neznatno smanjena. To znači da pandemija suštinski nije ugrozila stabilnost bankarskog sektora Srbije.

Analiza rezultata istraživanja

Primena statičkih panel modela rezultirala je ocenama regresionih koeficijenata čija je analiza predmet ovog dela rada. S obzirom na činjenicu da su posebno analizirani periodi pre i tokom pandemije, primenom T- testa (2 tails) je izvršena procena postojanja statistički značajnih promena vrednosti analiziranih pokazatelja u periodima pre i nakon proglašenja pandemije. Analiza dobijenih rezultata predstavljena je u delu rada koji sledi.

U tabeli 3 su prikazane dobijene ocene regresionih koeficijenata, koje opisuju uticaj veličine banaka na njihovu likvidnost. Primenom regresionih modela i odgovarajućih testova za odabir najrelevantnijeg modela i procenu ispunjenosti standardnih pretpostavki modela, zaključeno je da uticaj veličine banaka na likvidnost najbolje opisuje Fixed effects model.

Tabela 3: *Rezultati primene statičkih panel modela: uticaj veličine na likvidnost banaka*

	Pooled (OLS) model		Fixed effects model		Random effects model	
	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.
vel	-0,01***	0,002	-0,04***	0,012	-0,018****	0,004
_cons	0,334***	0,030	0,942***	0,212	0.484***	0,072
Koeficijent determinacije	**R2** = 0,07 (adjust)		**R2** = 0,073 (within)		**R2** = 0,024 (within)	
Izbor modela	Hausman test: Prob>chi2= 0,0001 => FE model najrelevantniji					
Otklanjanje heteroskedastičnosti i Autokorelacije	-		Robust. Std.Err.		-	
Rezultati u periodu pandemije						
	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.
vel	-0,001	0,003	0,088***	0,027	-0,004	0,007
_cons	0,182***	0,058	-1,462***	0,5	0,082	0,132
Koeficijent determinacije	R2 = -0,005 (adjust)		R2 = 0,0671 (within)		R2 = 0,0671 (within)	
Izbor modela	Hausman test: Prob>chi2= 0,0014 => FE model najrelevantniji					
Otklanjanje heteroskedastičnosti i autokorelacije	-		-		-	

*P-vrednosti: * signifikantnost 10%, ** signifikantnost 5%, *** signifikantnost 1%*
Izvor: Prikaz autora- STATA 13

Rezultat T-testa (p=0,000) ukazuje na to da je u periodu pandemije došlo do statistički značajnih promena u nivou likvidnosti banaka u odnosu na period pre pandemije. Rezultati panel analize idu u prilog oceni da su pre pandemije veće banke u bilansu držale manje likvidnih sredstava, što se tokom pandemije promenilo. Pandemija je dakle uticala na to da veće banke povećaju nivo likvidnosti u odnosu na banke sa nižim nivoima bilansne sume. Na osnovu vrednosti koeficijenta determinacije (R2 = 0,0671), može da se izvede zaključak da varijacije bilansnih suma banaka determinišu njihovu likvidnost u procentu od 6,7%, dok 93,3% varijacija likvidnosti determinišu drugi faktori, koji nisu obuhvaćeni istraživanjem.

U tabeli 4 su prikazane ocene regresionih koeficijenata, koje opisuju uticaj veličine banaka na njihovu profitabilnost. Primenom identičnih modela i testova kao u prethodnom slučaju, zaključeno je da uticaj veličine na profitabilnost banaka u periodu pre pandemije najbolje opisuje Fixed effects model, dok je u slučaju analize podataka iz perioda pandemije to Random effects model.

Tabela 4: *Rezultati primene panel modela: uticaj veličine na profitabilnost banaka*

	Pooled (OLS) model		Fixed effects model		Random effects model	
	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.
vel	-0,01***	0,002	-0,04***	0,012	-0,018****	0,004
_cons	0,334***	0,030	0,942***	0,212	0.484***	0,072
Koeficijent determinacije	R2 = 0,07 (adjust)		R2 = 0,073 (within)		R2 = 0,024 (within)	
Izbor modela	Hausman test: Prob>chi2= 0,0001 => FE model najrelevantniji					
Otklanjanje heteroskedastičnosti i Autokorelacije	-		Robust. Std.Err.		-	
Rezultati u periodu pandemije						
	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.
vel	-0,001	0,003	0,088***	0,027	-0,004	0,007
_cons	0,182***	0,058	-1,462***	0,5	0,082	0,132
Koeficijent determinacije	R2 = -0,005 (adjust)		R2 = 0,0671 (within)		R2 = 0,0671 (within)	
Izbor modela	Hausman test: Prob>chi2= 0,0014 => FE model najrelevantniji					
Otklanjanje heteroskedastičnosti i autokorelacije	-		-		-	

*P-vrednosti: * signifikantnost 10%, ** signifikantnost 5%, *** signifikantnost 1%*
Izvor: Prikaz autora- STATA 13

Rezultat T-testa (p=0,03) ide u prilog oceni da je u periodu pandemije došlo do statistički značajnih promena u nivou profitabilnosti banaka u odnosu na period pre pandemije. Vrednosti koeficijenta determinacije ukazuju na to da je pre pandemije profitabilnost banaka bila određena varijacijama bilansne sume u procentu od 5,9%, dok je u periodu pandemije taj uticaj pao na svega 0,05%. Drugim rečima, od početka pandemije profitabilnost banaka nije određena njihovom veličinom u meri u kojoj je to bio slučaj pre pandemije. Ocene regresionih koeficijenata u periodu pre (0,112) i tokom pandemije (0,024) svedoče da su u oba perioda veće banke profitabilnije u odnosu na manje banke, uz napomenu da je uticaj veličine na profitabilnost u periodu pandemije oslabio.

U tabeli 5 su prikazane dobijene ocene regresionih koeficijenata, koje opisuju uticaj veličine banaka na kreditnu aktivnost. Model koji najbolje opisuje ovu međuzavisnost u oba analizirana perioda je Fixed effects model.

Tabela 5: *Rezultati primene panel modela: uticaj veličine na kreditnu aktivnost banaka*

KRED	Pooled (OLS) model		Fixed effects model		Random effects model	
	Coef.	Std. Err.	Coef.		Coef.	Std. Err.
vel	**0,021*****	0,005	**0,114*****	vel	**0,021*****	0,005
_cons	**0,227****	0,089	**-1,438****	_cons	**0,227****	0,089
Koeficijent determinacije	**R^2** = 0,037 (adjust)		**R^2** = 0,177 (within)		**R^2** = 0,177 (within)	
Izbor modela	**Hausman test:** Prob>chi2= 0,0000 => FE model najrelevantniji					
Otklanjanje heteroskedastičnosti i autokorelacije	-		Robust. Std.Err.		-	
Rezultati u periodu pandemije						
	Coef.	Std. Err.	Coef.		Coef.	Std. Err.
vel	0,006	0,008	**-0,068*****	vel	0,006	0,008
_cons	**0,522*****	0,144	**1,889*****	_cons	**0,522*****	0,144
Koeficijent determinacije	**R^2** = -0,002 (adjust)		**R^2** = 0,05 (within)		**R^2** = 0,05 (within)	
Izbor modela	**Hausman test:** Prob>chi2= 0,023 => FE model najrelevantniji					
Otklanjanje heteroskedastičnosti i autokorelacije	-		-		-	

*P-vrednosti: * signifikantnost 10%, ** signifikantnost 5%, *** signifikantnost 1%*
Izvor: Prikaz autora- STATA 13

Na osnovu rezultata T-testa (p=0,94) se može zaključiti da u periodu pandemije nije došlo do statistički značajnih promena u kretanju udela kredita u aktivi banaka, u odnosu na period pre pandemije. Vrednosti ocena regresionih koeficijenata u periodu pre (0,114) i tokom pandemije (-0,068), idu u prilog oceni da su veće banke pre pandemije bile kreditno aktivnije, što znači da su tokom pandemije smanjile kreditnu aktivnost u odnosu na manje banke. Pored toga, rezultati istraživanja idu u prilog oceni da je tokom pandemije došlo do smanjenja intenziteta uticaja veličine banaka na njihovu kreditnu aktivnost. Vrednosti koeficijenta determinacije pre (R2 = 0,177) i tokom pandemije (R2 = 0,05) idu u prilog zaključku da je pre pandemije kreditna aktivnost banaka bila određena varijacijama bilansne sume u procentu od 17,7%, dok je u periodu pandemije taj uticaj smanjen na 5%.

U tabeli 6 su prikazane ocene regresionih koeficijenata, koje opisuju uticaj veličine banaka na njihovu solventnost. Regresioni model koji u oba perioda najbolje opisuje međuzavisnost veličine i nivoa kapitala banaka je Fixed effects model.

Tabela 6: *Rezultati primene panel modela: uticaj veličine na nivo kapitala banaka*

CAP	Pooled (OLS) model		Fixed effects model		Random effects model	
	Coef.	Std. Err.	Coef.		Coef.	Std. Err.
vel	**-0,006*****	0.005	**-0,058***	vel	**-0,006*****	0.005
_cons	**0,307*****	0.04	**1,247****	_cons	**0,307*****	0.04
Koeficijent determinacije	**R^2** = 0,013 (adjust)		**R^2** = 0, 203 (within)		**R^2** = 0, 203 (within)	
Izbor modela	**Hausman test:** Prob>chi2= 0,0000 => FE model najrelevantniji					
Otklanjanje heteroskedastičnosti i autokorelacije	-		Robust. Std.Err.		-	
REZULTATI U PERIODU PANDEMIJE						
	Coef.	Std. Err.	Coef.		Coef.	Std. Err.
vel	**-0,011*****	0,003	**-0,161*****	vel	**-0,011*****	0,003
_cons	**0,388*****	0,054	**3,136*****	_cons	**0,388*****	0,054
Koeficijent determinacije	**R^2** = 0,084 (adjust)		**R^2** = 0, 443 (within)		**R^2** = 0, 443 (within)	
Izbor modela	**Hausman test:** Prob>chi2= 0,000 => FE model najrelevantniji					
Otklanjanje heteroskedastičnosti i	-		Robust. Std.Err.		-	

*P-vrednosti: * signifikantnost 10%, ** signifikantnost 5%, *** signifikantnost 1%*
Izvor: Prikaz autora- STATA 13

Rezultat T-testa (p=0,000) svedoči o tome da je u periodu pandemije došlo do statistički značajnih promena u udelu kapitala u bilansnoj sumi, u poređenju sa periodom pre pandemije. Rezultati panel analize idu u prilog zaključku da su veće banke u oba slučaja slabije kapitalizovane u odnosu na manje banke, uz napomenu da to ne ugrožava stabilnost bankarskog sektora, iz razloga što je stopa adekvatnosti kapitala na nivou sektora daleko iznad regulatornog minimuma koji iznosi 12% u odnosu na rizikom ponderisanu aktivu.

Zaključak

Na osnovu rezultata istraživanja može se izvesti zaključak da je veličina banaka važan faktor, koji na statistički značajnom nivou determiniše poslovne rezultate banaka. Ocene regresionih koeficijenata su pokazale da je u periodu pre pandemije rast bilansne sume uticao na smanjenje likvidnosti banaka, što znači da su veće banke držale u bilansu manje likvidne aktive u odnosu na manje banke. Međutim, u periodu pandemije je došlo do promene u smislu da su veće banke povećale nivo likvidnosti u odnosu na svoje manje konkurente. Iako držanje većih iznosa likvidne aktive povećava oportunitetne troškove, što se posebno odnosi na držanje primarnih rezervi likvidnosti, profitabilnost većih banaka u periodu pandemije nije ugrožena, što potvrđuju i rezultati istraživanja. Dobijene ocene regresionih koeficijenata svedoče o tome da su pre, kao i tokom pandemije, veće banke ostvarile višu stopu prinosa na kapital u odnosu na manje banke, uz napomenu da je tokom pandemije došlo do značajnog smanjenja uticaja veličine na profitabilnost. Postoje dva osnovna razloga koja većim bankama na domaćem tržištu omogućavaju više stope profitabilnosti. Prvi razlog je taj što veće banke imaju mogućnost primene strategije vođstva u troškovima, odnosno mogućnost da kroz digitalizaciju smanje broj filijala i broj zaposlenih. Drugi razlog koji većim bankama obezbeđuje više stope profitabilnosti su niske pasivne kamatne stope, koje su prevashodno posledica činjenice da je domaći bankarski sektor visoko likvidan. Što se tiče kreditne aktivnosti banaka, rezultati istraživanja idu u prilog zaključku da su tokom pandemije veće banke smanjile kreditnu aktivnost u odnosu na manje banke. Važno je istaći i to da je tokom pandemije uticaj veličine na kreditnu aktivnost banaka značajno opao. Rezultati istraživanja daju ocenu da veće banke imaju manji udeo kapitala u bilansnoj sumi u odnosu na manje banke. S obzirom na činjenicu da je nivo adekvatnosti kapitala u domaćem bankarskom sektoru značajno iznad minimuma koji propisuju Bazel 3 standardi i Narodna banka Srbije, može se izvesti zaključak da veće banke u cilju poboljšanja poslovnih rezultata više koriste raspoloživi potencijal za preuzimanje rizika, što je posebno došlo do izražaja tokom pandemijskog perioda.

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COMPARATIVE ANALYSIS OF THE IMPACT OF BALANCE SHEET SIZE ON BANK OPERATIONS IN THE REPUBLIC OF SERBIA IN THE PERIOD BEFORE AND DURING THE COVID-19 PANDEMIC

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Summary

This paper aims to analyze the impact of the size of banks operating in the Republic of Serbia on the main indicators of their business activity and assess whether the Covid-19 pandemic has changed the nature and intensity of this impact. The research was conducted on a representative sample of twenty-three domestic banks. The paper's conclusions are based on the results of applying static panel regression models and cover the period from the second quarter of 2014 to the third quarter of 2021. From the study results, it can be concluded that larger banks reduced lending activities and increased liquidity during the pandemic compared to smaller banks. This had no impact on their profitability, meaning that banks achieved higher returns on capital compared to smaller banks, as in the pre-pandemic period. In addition, the study found that larger banks reduced the ratio of capital to total assets during the pandemic compared to smaller banks, but not to the extent that threatened the banking sector's stability.

Keywords: banking sector of the Republic of Serbia; size of total assets of banks; liquidity of banks; profitability of banks; lending of banks; solvency of banks; concentration of banking sector; Covid-19 pandemic; static panel regression models.

JEL classification: G21, M41, C33, C65

Introduction

The fundamental role of banks is to ensure economic growth and development through the rapid and efficient flow of money between market participants with surpluses and deficits. Therefore, the banking sector's stability is a constant focus of regulators worldwide. One of the most important and best-regulated banking business segments is maintaining competition in the banking market, which is measured by the Herfindahl-Hirschman Index (hereinafter: HHI Index). In recent years, there has been a clear trend in the Serbian banking sector towards a reduction in the number of banks and stratification in terms of the dominance of the five largest banks compared to the rest of the sector (Filipović et al., 2016).

The main objective of this paper is to assess whether the fluctuations in the balance sheets of banks operating in the Republic of Serbia (hereinafter: banks) affect their liquidity, credit activity, profitability and capital level (solvency). It also aims to investigate whether the nature and intensity of these effects changed during the Covid-19 pandemic (hereinafter: pandemic) compared to the period before the pandemic was declared. The analysis and conclusions derived are based on static panel regression models. The paper's conclusions cover the period between the second quarter of 2014 and the third quarter of 2021.

After the introductory section and a review of the literature analyzing the impact of bank size on various operations, a brief overview of the relationship between bank size and concentration in the domestic banking market is presented. The remainder of the paper presents the methodology used in the study and the characteristics of the sample based on which the study was conducted. In the last part of the paper features the analysis of the estimated regression coefficients based on which the paper's conclusions were derived.

Literature Review

The impact of banks' size on various aspects of their operations has been the subject of numerous studies worldwide. From the summary and analysis of their results, the general impression is that larger banks operate more stably and contribute to the overall development of the markets in which they operate (Adusei, 2015). This is mainly because larger banks use economies of scale and scope more than smaller banks (Bikker et al., 2006). However, the awareness that bank instability can threaten the safety of any financial system (Kamani, 2021) often leads to large banks being protected by the state. The protection of large banks from bankruptcy by the state is better known as the "too big to fail" concept, the application of which often leads to the agency problem and the increase in their exposure to various forms of risk (Virginie, 2015), (Račić, 2013b).

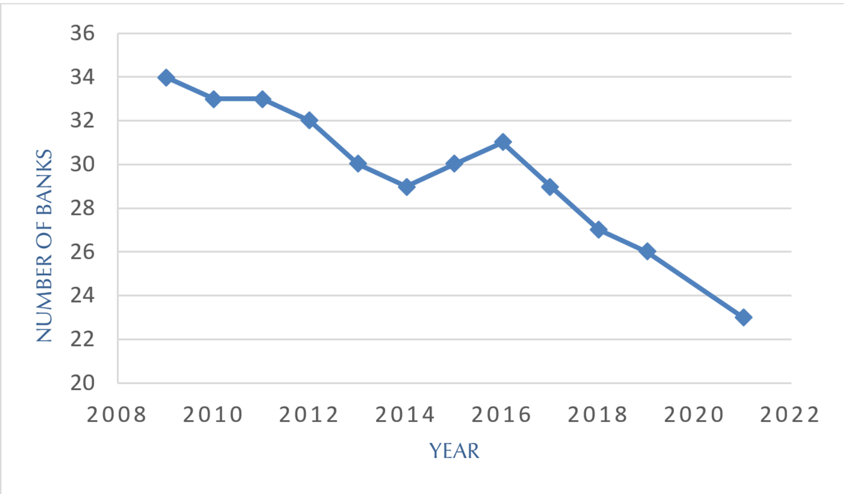
Depending on the geographic area and the time interval covered by the survey, estimates of the impact of banks' size on their business indicators also vary. For example, in most cases, the size of total assets determines their liquidity (Virginie, 2015), with larger banks usually holding less cash and relying on secondary liquidity reserves (Račić, 2018). Regarding the impact of bank size on profitability, most studies assume that growth in total assets promotes profitability (Ozcan et al., 2018). However, some assume that there is no statistically significant relationship between bank size and profitability in the markets of underdeveloped and developing countries (Al-Harbi, 2019) and those who conclude that growth in total assets reduces profitability (Siddiqui, 2020). In addition, it should be noted that several studies find a negative relationship between the size of banks and the capital adequacy ratio (Račić, 2018).

As the paper addresses the impact of the pandemic on banks' operations, it is essential to note that few studies on this topic show that the pandemic significantly affects various aspects of their operations and that the intensity of this impact depends on factors such as banks' focus on leadership costs (Vasić, 2020a), the degree of digitalization of the business (Vasić, 2020b), the structure of the financial market in terms of the institutional environment and the regulatory framework, the level of development of the debt securities market, and the response of the public health system to the pandemic (Colak & Oztekin , 2021).

Relationship Between Bank Size and Concentration in the Banking Sector of the Republic of Serbia

In the post-2000 period, a significant number of foreign banks have expanded their operations into the financial market of the Republic of Serbia. However, the impact of the market size and the fact that the transition of the domestic economy is slower than initially expected lead to a gradual decline in the number of banks on the market (Stojmenović, 2021). Chart 1 shows the decline in the number of banks on the market in the Republic of Serbia.

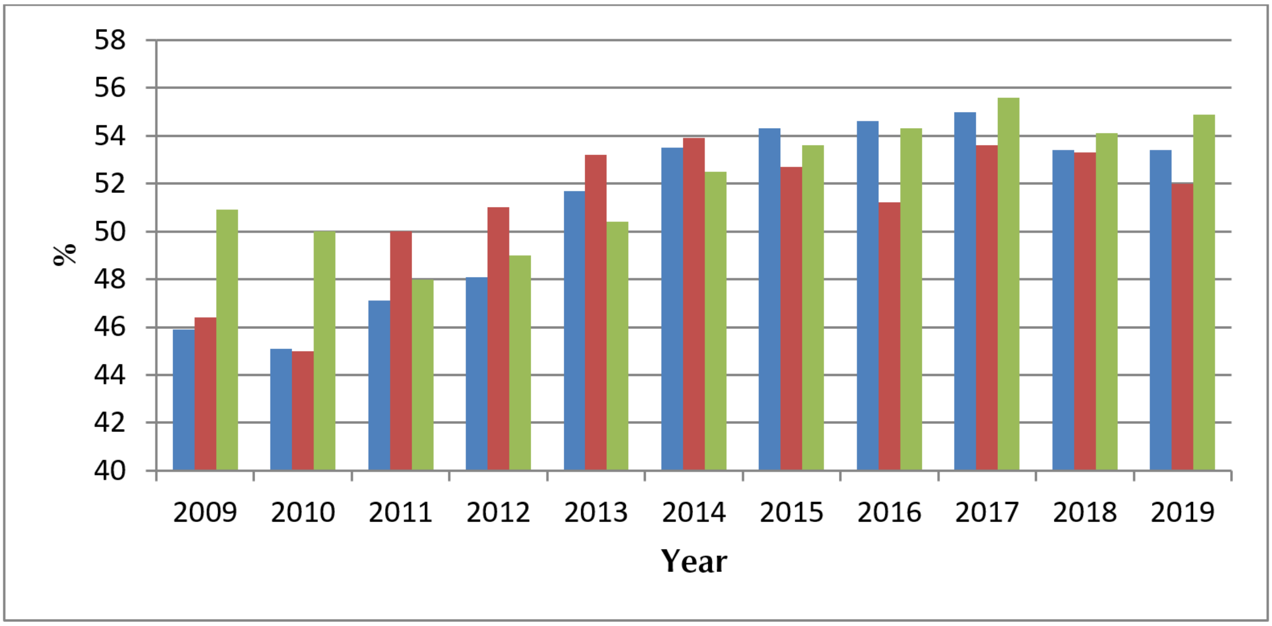
Chart 1: *Movement of the Number of Banks on the Market of the Republic of Serbia*



Source: Review of authors based on data from the National Bank of Serbia (www.nbs.rs)

Twenty-three banks currently operate in the domestic market, which indicates a high degree of competition. This is supported by the consistently low value of the HHI index, which stood at 840 at the end of 2019. However, a potential threat to the stability and further development of competition in the domestic banking market is the high concentration of the five largest banks (after this CR5 index). Values of CR5 indicate that the five largest banks in Serbia hold more than 50% of the share in total assets, deposits and lending (Stojmenović, 2021). The movement of the value of the CR5 index in the domestic banking market is shown in Chart 2.

Chart 2: *Movement of CR5 Index of Assets, Loans and Deposits*



Source: Review of authors based on data from the National Bank of Serbia (www.nbs.rs)

Considering the fact that in the banking market in Serbia, as well as in the region, there is a clear trend to reduce the number of banks and their stratification by size criteria (Jovic, 2006), the author wanted to study the nature and intensity of banking business in the balance sheet size, with particular attention to the impact of the pandemic on this issue.

Sample and Research Methodology

The sample related to the period before the pandemic includes twenty-three banks operating in the domestic market at the end of the third quarter of 2019. On the other hand, the sample included in the study of the same impact during the pandemic includes twenty-one banks operating in the Republic of Serbia at the end of the third quarter of 2021. The difference in the number of banks in the sample is a result of bank acquisitions during the study period (Société Générale bank was merged with OTP bank, while MTS bank was merged with Postal Savings Bank). Both segments of the sample are representative, as they cover over 90% of the total assets of the domestic banking sector. The banks covered by the survey are listed in table 1.

The study is based on analyzing data from banks' quarterly balance sheets. The panel regression analysis included six hundred twenty-eight observations covering period from the second quarter of 2014 to the third quarter of 2021.

Table 1: *Sample of Banks Included in the Survey*

No.	Bank name
1.	API Bank
2.	Addiko Bank
3.	AIK banka
4.	Banca Intesa
5.	Postal Savings Bank
6.	Crédit Agricole banka Srbija
7.	Direktna banka
8.	Erste Bank
9.	Eurobank
10.	Expobank
11.	Halkbank
12.	JUBMES (Alta) banka
13.	Komercijalna banka
14.	MTS banka (merged with the Postal Savings Bank)
15.	NLB banka
16.	Opportunity banka
17.	ProCredit Bank
18.	Raiffeisen banka
19.	Sberbank Srbija
20.	Société Générale banka (merged with the OTP banka)
21.	Srpska banka
22.	Telenor banka
23.	Unicredit Bank

Source: Review of authors (STATA 13)

The study applies the following static panel models: pooled-effects model, fixed-effects model, and the random-effects model. The use of panel models in empirical research offers many advantages, such as greater informativeness resulting from the size of the sample and the number of degrees of freedom. The more significant variability in the data contributes to greater efficiency in the regression coefficients' estimates and the reduction of multicollinearity in the model. In addition, it is essential to point out that panel models analyze variations in the data according to two dimensions: by units of observation and by the temporal dimension, which provides an opportunity to analyze the data structure as well as changes in the data structure over time (Račić, 2013a). The choice of the static panel model, which provides the most accurate estimates of the observed interdependencies, was made based on the results of the corresponding tests: F-test, Breusch-Pagan test and Hausman test (Račić et al., 2014).

The following regression models are analyzed in this paper:

$$l_{ij} = \beta_0 + \beta_1 \text{ vel}_{ij} + \varepsilon_{ij} \quad (1)$$

$$\text{kred}_{ij} = \beta_0 + \beta_1 \text{ vel}_{ij} + \varepsilon_{ij} \quad (2)$$

$$\text{roe}_{ij} = \beta_0 + \beta_1 \text{ vel}_{ij} + \varepsilon_{ij} \quad (3)$$

$$\text{cap}_{ij} = \beta_0 + \beta_1 \text{ vel}_{ij} + \varepsilon_{ij} \quad (4)$$

where is,

$vel_{i,j}$ - the natural logarithm of the bank's balance sheets and at time j,
$l1_{i,j}$ - ratio of liquid assets and total assets of the bank and at time j,
$kred_{i,j}$ - share of lending in the bank's total assets and at time j,
$roe_{i,j}$ - the ratio of net profit and capital of the bank and at time j,
$cap_{i,j}$ - share of capital in the bank's balance sheet and at time j,
ε_{ij} - standard error.

Table 2: *Average Values of the Independent Variables of the Model in the Period Before/After the Pandemic.*

Variables	Average value	Change
l1	0.15 / 0.16	increase
roe	0.01 / 0.03	increase
kred	0.61 / 0.64	increase
cap	0.20 / 0.17	decrease

Source: Author's calculation (STATA 13)

The analysis of the evolution of the average values of the indicators of liquidity, solvency, lending activity and profitability as independent variables of the regression models showed that the domestic banking sector was stable in the pre-pandemic period. The average ratio of liquid assets to assets was 15% for banks in the sample, while the average ratio of capital to total assets was 20% for banks in the sample. In addition, the average ratio of loans to assets of 61% indicates that banks were predominantly focused on traditional lending and deposit-taking activities, which also supports stability, especially in times of major economic crises. The average value of return on assets was 1.2%, which means that the domestic banking sector is profitable. The average values of the analyzed indicators of banks' operations during the pandemic show that banks' liquidity, lending and profitability have slightly increased, while their solvency has slightly decreased. It means that the pandemic did not significantly threaten the stability of the Serbian banking sector.

Analysis of Research Results

The application of static panel models led to estimates of regression coefficients, which analysis is the subject of this part of the paper. Since the periods before and during the pandemic were analyzed separately, the T-test (2 tails) was used to evaluate statistically significant changes in the values of the analyzed indicators in the periods before and after the pandemic. The analysis of the obtained results is presented in the following part of the paper.

Table 3 shows the profit estimates of the regression coefficients describing the impact of bank size on their liquidity. The application of regression models and appropriate tests to select the most relevant model and evaluate the satisfaction of the standard model assumptions led to the conclusion that the fixed-effects model best describes the impact of bank size on liquidity.

Table 3: *Results of the Application of Static Panel Models: the Impact of Size on Bank Liquidity*

l1	Pooled (OLS) model		Fixed- effects model		Random- effects model	
	Coef.	Std. Err.	Coef.		Coef.	Std. Err.
vel	**-0.01*** **	0.002	**-0.04*** **	vel	**-0.01*** **	0.002
_cons	**0.334*** **	0.030	**0.942*** **	_cons	**0.334*** **	0.030
Coefficient of determination	R^2 = 0.07 (adjust)		R^2 = 0. 073 (within)		R^2 = 0. 024 (within)	
Model selection	**Hausman test:** Prob>chi2= 0.0001 => FE model is the most relevant					
Elimination of heteroscedasticity and autocorrelation	-		Robust. Std. Err.		-	
Results in the pandemic period						
	Coef.	Std. Err.	Coef.		Coef.	Std. Err.
vel	-0,001	0,003	**0,088*** **	vel	-0,001	0,003
_cons	**0,182*** **	0,058	**-1,462*** **	_cons	**0,182*** **	0,058
Coefficient of determination	R^2 = -0,005 (adjust)		R^2 = 0,0671 (within)		R^2 = 0,0671 (within)	
Model selection	**Hausman test:** Prob>chi2= 0,0014 => FE model is the most relevant					
Elimination of heteroscedasticity and autocorrelation	-		-		-	

*P-values: * significant at 10%, ** significant at 5%, *** significant at 1%*
Source: Author's review - STATA 13

The result of the T-test (p = 0.000) shows that there were statistically significant changes in the liquidity levels of banks during the pandemic period compared to the pre-pandemic period. The results of the panel analysis support the view that larger banks had lower level of liquid assets on their balance sheets before the pandemic, which changed during the pandemic. Therefore, the pandemic caused larger banks to increase liquidity relative to smaller banks. From the value of the coefficient of determination (R2 = 0.0671), we can conclude that fluctuations in bank balance sheets determine 6.7% of liquidity, while 93.3% of liquidity fluctuations are determined by other factors not captured in the survey.

Table 4 shows the estimates of the regression coefficients describing the impact of bank size on their profitability. Using the same models and tests as in the previous case, it was found that the influence of size on banks' profitability in the pre-pandemic period is best described by the fixed effects model, while in the case of the pandemic data analysis it is the random effects model.

Table 4: *Results of the Application of the Panel Model: Influence of Size on the Profitability of Banks*

ROE	Pooled (OLS) model		Fixed- effects model		Random- effects model	
	Coef.	Std. Err.	Coef.		Coef.	Std. Err.
vel	**0.039*****	0.005	**0.112*****	vel	**0.039*****	0.005
_cons	**-0.68*****	0.085	**-1,998*****	_cons	**-0.68*****	0.085
Coefficient of determination	R^2 = 0.127 (adjust)		R^2 = 0. 059 (within)		R^2 = 0. 059 (within)	
Model selection	**Hausman test:** Prob>chi2= 0.0022 => FE model is the most relevant					
Elimination of heteroscedasticity and autocorrelation	-		Robust. Std. Err.		-	
Results in the pandemic period						
	Coef.	Std. Err.	Coef.		Coef.	Std. Err.
vel	**0.026*****	0.003	-0.007	vel	**0.026*****	0.003
_cons	**-0.452*****	0.05	0.154	_cons	**-0.452*****	0.05
Coefficient of determination	R^2 = 0.349 (adjust)		R^2 = 0.0005 (within)		R^2 = 0.0005 (within)	
Model selection	**Hausman test:** Prob>chi2= 0.188 => RE model is the most relevant					
Elimination of heteroscedasticity and autocorrelation	-		-		*Robust. Std. Err.*	

*P-values: * significant at 10%, ** significant at 5%, *** significant at 1%*

Source: Author's review - STATA 13

The result of the T-test (p = 0.03) supports the view that there were statistically significant changes in the profitability level of banks during the pandemic period compared to the pre-pandemic period. The values of the coefficient of the determination indicate that before the pandemic, 5.9% of banks' profitability was determined by fluctuations in total assets. In comparison, this influence decreased to only 0.05% during the pandemic period. In other words, since the onset of the pandemic, bank profitability is no longer determined by size to the same extent as it was before the pandemic. Estimates of the regression coefficients in the pre-pandemic period (0.122) and during the pandemic (0.024) show that larger banks are more profitable in both periods than smaller banks, with the influence of size on profitability becoming weaker in the pandemic period.

Table 5 shows the profit estimates of the regression coefficients describing the effect of bank size on lending activities. The model that best describes this interdependence in both periods analyzed is the fixed effects model.

Table 5: *Results of the Application of the Panel Model: Influence of Size on Bank Lending Activities*

KRED	Pooled (OLS) model		Fixed- effects model		Random- effects model	
	Coef.	Std. Err.	Coef.		Coef.	Std. Err.
vel	**0.021***	0.005	**0.114***	vel	**0.021***	0.005
_cons	**0.227**	0.089	**-1.438**	_cons	**0.227**	0.089
Coefficient of determination	R^2 = 0.037 (adjust)		R^2 = 0. 177 (within)		R^2 = 0. 177 (within)	
Model selection	**Hausman test:** Prob>chi2= 0.0000 => FE model is the most relevant					
Elimination of heteroscedasticity and autocorrelation	-		Robust. Std. Err.		-	
Results in the pandemic period						
	Coef.	Std. Err.	Coef.		Coef.	Std. Err.
vel	0.006	0.008	**-0.068***	vel	0.006	0.008
_cons	**0.522***	0.144	**1.889***	_cons	**0.522***	0.144
Coefficient of determination	R^2 = -0.002 (adjust)		R^2 = 0. 05 (within)		R^2 = 0. 05 (within)	
Model selection	**Hausman test:** Prob>chi2= 0.023 => FE model is the most relevant					
Elimination of heteroscedasticity and autocorrelation	-		-		-	

*P-values: * significant at 10%, ** significant at 5%, *** significant at 1%*

Source: Author's review - STATA 13

From the T-test results (p = 0.94), we can conclude that there were no statistically significant changes in the share of loans in banks' assets during the pandemic period compared to the pre-pandemic period. Values of regression coefficients before (0.114) and during the pandemic (-0.068) support the view that larger banks were more active in lending before the pandemic, implying that they reduced their lending activity during the pandemic compared to smaller banks. In addition, the study results support the assessment that during the pandemic, the intensity of the influence of the size of banks on their lending activity decreased. The coefficient of determination values before (R2 = 0.177) and during the pandemic (R2 = 0.05) support the conclusion that 17.7% of banks' lending activity was determined by variations in total assets in the pre-pandemic period. In comparison, during the pandemic, it decreased to 5%.

Table 6 shows the estimates of the regression coefficients describing the impact of bank size on their solvency. The regression model that best describes the interdependence of bank size and level of capital in both periods is the fixed effects model.

Table 6: *Results of the Application of the Panel Model: Influence of Size on the Level of Banks' Equity.*

CAP	Pooled (OLS) model		Fixed- effects model		Random- effects model	
	Coef.	Std. Err.	Coef.		Coef.	Std. Err.
vel	**-0.006*****	0.005	**-0.058***	vel	**-0.006*****	0.005
_cons	**0.307*****	0.04	**1.247****	_cons	**0.307*****	0.04
Coefficient of determination	R^2 = 0.013 (adjust)		R^2 = 0. 203 (within)		R^2 = 0. 203 (within)	
Model selection	**Hausman test:** Prob>chi2= 0.0000 => FE model is the most relevant					
Elimination of heteroscedasticity and autocorrelation	-		Robust. Std. Err.		-	
Results in the pandemic period						
	Coef.	Std. Err.	Coef.		Coef.	Std. Err.
vel	**-0.011*****	0.003	**-0.161*****	vel	**-0.011*****	0.003
_cons	**0.388*****	0.054	**3.136*****	_cons	**0.388*****	0.054
Coefficient of determination	R^2 = 0.084 (adjust)		R^2 = 0. 443 (within)		R^2 = 0. 443 (within)	
Model selection	**Hausman test:** Prob>chi2= 0.000 => FE model is the most relevant					
Elimination of heteroscedasticity and autocorrelation	-		Robust. Std. Err.		-	

*P-values: * significant at 10%, ** significant at 5%, *** significant at 1%*

Source: Author's review - STATA 13

The T-test result (p = 0.000) shows that there were statistically significant changes in the share of capital in total assets during the pandemic period compared to the pre-pandemic period. The results of the panel analysis support the conclusion that larger banks are less capitalized than smaller banks in both cases. However, it should be noted that this does not threaten the banking sector's stability, as the capital adequacy ratio at the sector level is well above the regulatory minimum of 12% relative to risk-weighted assets.

Conclusion

Based on the research results, it can be concluded that bank size is an essential factor that determines bank business performance at a statistically significant level. The estimates of regression coefficients showed that in the pre-pandemic period, growth in total assets influenced the decline in bank liquidity, implying that larger banks held fewer liquid assets on their balance sheets than smaller banks. During the pandemic, however, changes occurred because larger banks increased their liquidity holdings relative to smaller banks. Although holding more significant amounts of liquid assets increases opportunity costs, which mainly refers to holding primary liquidity reserves, the profitability of larger banks is not threatened during the pandemic, which is confirmed by the research results. The obtained estimates of the regression coefficients demonstrate that larger banks had a higher return on capital compared to smaller banks both before and during the pandemic. However, it should be noted that the effect of size on profitability was much smaller during the pandemic. There are two main reasons that larger banks can achieve higher profitability rates in the domestic market. The first reason is that larger banks can implement a cost leadership strategy, i.e., reduce the number of branches and the number of employees through digitization. Another reason that helps larger banks achieve higher profitability rates is the low deposit rates, mainly because the domestic banking sector is very liquid. In terms of bank lending, the survey results support the conclusion that larger banks reduced their lending during the pandemic compared to smaller banks. It is important to note that the size of bank lending decreased significantly during the pandemic. The study results suggest that larger banks have a lower proportion of capital to total assets than smaller banks. Considering that the level of capital adequacy in the domestic banking sector is significantly higher than the minimum required by the Basel 3 standards and the National Bank of Serbia, it can be concluded that larger banks use the available risk potential to improve their business results, especially during the pandemic period.

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PRIMENA 5S ALATA U BANKARSKOM SEKTORU REPUBLIKE SRBIJE

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Rezime

Svaka organizacija teži ostvarivanju efikasnog poslovanja. Radi poboljšanja efikasnosti u jednoj organizaciji u praksi se koriste razne tehnike, metode i alati. Jedan od tih alata jeste i 5S alat koji omogućava organizovanje radnog mesta u cilju obavljanja posla na efikasan, efektivan i siguran način. Primena alata podrazumeva da se određena stvar stavlja na određeno mesto radi lakšeg identifikovanja kada dođe vreme za njenu upotrebu. 5S alat se odnosi na 5 reči koje su izvedene iz japanske terminologije, koje počinju slovom S, i kojima se opisuju prakse na radnom mestu koje vode ka vizuelnoj kontroli i lean proizvodnji: seiri (sortirati), seiton (srediti), seiso (očistiti), seiketsu (standardizovati) i shitsuke (sprovoditi). Cilj ovog rada jeste sagledavanje primene 5S alata u bankarskom sektoru Republike Srbije, na nivou odabranih bankarskih filijala. Rezultati istraživanja su pokazali da ukupna prosečna primena ovog alata u analiziranim filijala iznosi 48,6%.

Ključne reči: 5S alat, lean proizvodnja, bankarstvo

JEL klasifikacija: M11, L15, D24, G21

Uvod

Poslovanje u savremenim uslovima zahteva stalno učenje i poboljšanje performansi zaposlenih, ali takođe podrazumeva i unapređenje radnog prostora. 5S alat je alat koji se koristi kako bi se na najbolji mogući način organizovao radni prostor. Ovaj alat se razvio u japanskoj kompaniji Tojota, kao deo njenog lean proizvodnog sistema. U Tojoti su verovali da neuredan prostor može dovesti do problema, zastoja u radu, pa čak i do nesreće, što na nepovoljan način utiče na poslovanje kompanije (Marshettiwar & Sangode, 2018). U cilju izbegavanja navedenih problema koji se mogu javiti u svakodnevnom poslovanju, praksa nalaže primenu pet koraka organizacije radnog prostora prema 5S alatu (Joksimović et al., 2009):

1. seiri – sortirati – osloboditi se svega što nije potrebno,

2. seiton – srediti – uredno rasporediti potrebne stvari kako bi one bile lako dostupne,

3. seiso – sijati – očistiti sve,

4. seiketsu – standardizovati – definisati pravila za održavanje prva 3S koraka i

5. shitsuke – sprovoditi – obezbediti poštovanje pravila.

U raznovrsnim okolnostima kako u proizvodnji, tako i u uslužnim delatnostima, pa sve do organizacije radnog prostora, kancelarija, prodavnica i slično, moguća je i poželjna primena ovog alata. Praksa je pokazala da primena vodi: boljoj organizaciji prostora, smanjenju troškova, smanjenju količine otpada, smanjenju nepotrebnih radnih zadataka, eliminisanju praznog hoda i prevelike potrošnje materijala, kao i povećanju produktivnosti zaposlenih i sigurnijem radnom okruženju (Krajewski et al., 2013; Marshettiwar & Sangode, 2018). Stoga je osnovni cilj istraživanja ovog rada sagledavanje primene 5S alata u bankarskom sektoru Republike Srbije, odnosno na nivou odabranih bankarskih filijala.

Primena 5S alata u bankarskom sektoru

Ne postoji organizacija niti delatnosti koja ne bi mogla primenjivati 5S alat u svakodnevnom poslovanju (Marshettiwar & Sangode, 2018). 5S alat je deo lean koncepta poslovanja. Lean koncept poslovanja podrazumeva eliminisanje gubitaka koji mogu nastati prilikom obavljanja poslovnih procesa. Cilj koncepta je uspostavljanje kontinuiranog poslovanja bez zastoja, kako bi troškovi poslovanja bili niži. Adekvatna implementacija koncepta utiče na: povećanje efektivnosti i efikasnosti u radu, smanjenje otpada, smanjenje grešaka, povećanje kvaliteta poslovnih procesa koji uslovljavaju niže operativne troškove i veće satisfakcije korisnika (Novićević-Čečević & Jemović, 2018; Chourasia & Nema, 2016; Gupta, 2021; Liker, 2004; Ahlstrom, 2004). Studija Chourasia & Nema (2016) je pokazala da razne uslužne industrije poput bolnica, hotela, banaka i institucija visokog obrazovanja koriste principe i alate lean metode da bi povećale svoju konkurentnost. Ikatrinasari & Hryanto (2014) takođe navode da je lean uspešno implementiran i u sektoru transporta, administracije i osiguranja.

Primena 5S alata u sektoru usluga donosi sledeće prednosti: smanjuje vreme izvođenja procesa, olakšava organizaciju radnog mesta, standardizuje operativne procedure, poboljšava vreme odaziva kupaca, instalira smernice koje pokreću radno mesto, doprinosi troškovnoj efikasnosti, pomaže u identifikovanju otpada, gradi kulturu stalnog usavršavanja, uklanja nered na radnom mestu, smanjuje otpad na radnom mestu i poboljšava izgled radnog mesta (Sarkar, 2009).

U sektoru usluga, između ostalog i u bankarskom sektoru, najčešća je primena 5S alata koji podrazumeva sledeće prakse (Gerhard, 2007, 249):

1. sortirati (Sorting – Seiri) – razdvajanje potrebnog od nepotrebnog,

2. urediti (Set in Order – Seiton) – organizacija radnog mesta,

3. očistiti (Schine, Scrub – Seiso) – očistiti i pomeriti sve ono što može da stvara problema u radu,

4. standardizovati (Standardize – Seiketsu) – primeniti procedure i obezbediti njihovo razumevanje od strane zaposlenih, i

5. održavati (Sustain – Shitsuke) – podesiti sistem da funkcioniše uz potpunu komunikaciju i po principu neprekidnog toka.

Seiri (sortirati) se odnosi na izdvajanje nepotrebnih stvari i eliminisanje istih iz radnog okruženja, odnosno zadržavaju se samo one stvari koje su potrebne za rad. Zaposleni su odgovorni za sortiranje kancelarijskog materijala, fajlova, mejlova kako bi se u pružanju bankarskih usluga fokusirali isključivo na bitne informacije i aktivnost koje dodaju vrednost sa stanovišta klijenta (Novićević-Čečević & Jemović, 2018). Seiton (urediti) obuhvata postupak urednog raspoređivanja i klasifikovanja bitnih stvari i to prema nameni, kako bi one bile lako dostupne u trenutku kada postoji potreba za njihovom upotrebom. U banci se ovo postiže definisanjem standardnih lokacija za pristup bazama podataka, operativnim procedurama, izveštajima. Seiso (očistiti) se odnosi na čišćenje radnog mesta dok ono ne dobije „sjaj". S tim u vezi, svako u organizaciji ima svoja zaduženja vezana za čišćenje, od najnižih do najviših nivoa (http://tqmkonsalting.com/usluge/tehnike-metode-i-alati/5s-metoda/). Čist radni prostor omogućava da se lako uoče problemi, zbog toga sređivanje i čišćenje radnog mesta mora da postane navika i da prodre u svest svih zaposlenih. Seiketsu (standardizovati) podrazumeva uvođenje standarda. U pitanju je korak kojim se definišu pravila za održavanje prva tri koraka i koji predstavlja stub primene 5S alata. Shitsuke (sprovoditi) predstavlja nastavak prethodnog koraka. Cilj ovog koraka je da se primena 5S alata uvuče u kulturu kompanije, odnosno kompanija mora težiti ka tome da 5S postane način života u njoj (https://quality-one.com/5s/). Ipak, održivost ovakvog koncepta poslovanja zahteva motivisane zaposlene, njihovu snažnu saradnju i aktivno učešće svih članova organizacije (Novićević-Čečević & Jemović, 2018).

U bankarstvu, kao i u drugim oblastima, glavni fokus poslovanja jeste profitabilnost i zadovoljenje očekivanja potrošača, kroz pružanje efikasne, pouzdane i pristupačne usluge (Marjanović & Vrećo, 2019). Banke stalno inoviraju svoje bankarske usluge kako bi udovoljile promenljivim zahtevima klijenata. Složenija bankarska struktura kakva prati univerzalne finansijske posrednike povećava rizik, troškove i vreme pružanja bankarske usluge. U takvim uslovima, primena različitih tehnika lean koncepta poslovanja, među kojima je i 5S alat, omogućuje pružanje kvalitetnije bankarske usluge po ekonomskim principima - što jeftinije i što brže (Novićević-Čečević & Jemović, 2018), kao i uspostavljanje dugoročnih odnosa sa klijentima i ostvarivanje lojalnosti (Barjaktarović & Ječmenica, 2011).

Primena 5S alata u bankarskom sektoru Republike Srbije

Za sagledavanje primene 5S alata u bankarskom sektoru Republike Srbije, sprovedeno je empirijsko istraživanje. Za prikupljanje primarnih podataka korišćen je anketni metod u formi upitnika, koji se sastoji od 18 konstatacija koje predstavlja prakse u primeni 5S alata. Podaci su prikupljeni iz filijala odabranih banaka (Credit Agricole, Eurobanke, Raiffeisen banke i OTP banke) koje posluju na teritoriji Republike Srbije. Anketiranje je sprovedeno indirektnim putem slanjem upitnika na i-mejl adrese ispitanika. Stepen slaganja ispitanika sa navedenim konstatacijama iskazan je putem Likertove skale. Analiza primene 5S alata u bankarstvu Republike Srbije je sprovedena na uzorku od 80 ispitanika. Ispitanici su bili grupisani na osnovu pola, starosti i mesta rada. Obrada prikupljenih podataka je sprovedena u statističkom paketu za društvene mreže, IBM SPSS Statistics Version 20.

Tabela 1: *Struktura uzorka: sumaran pregled*

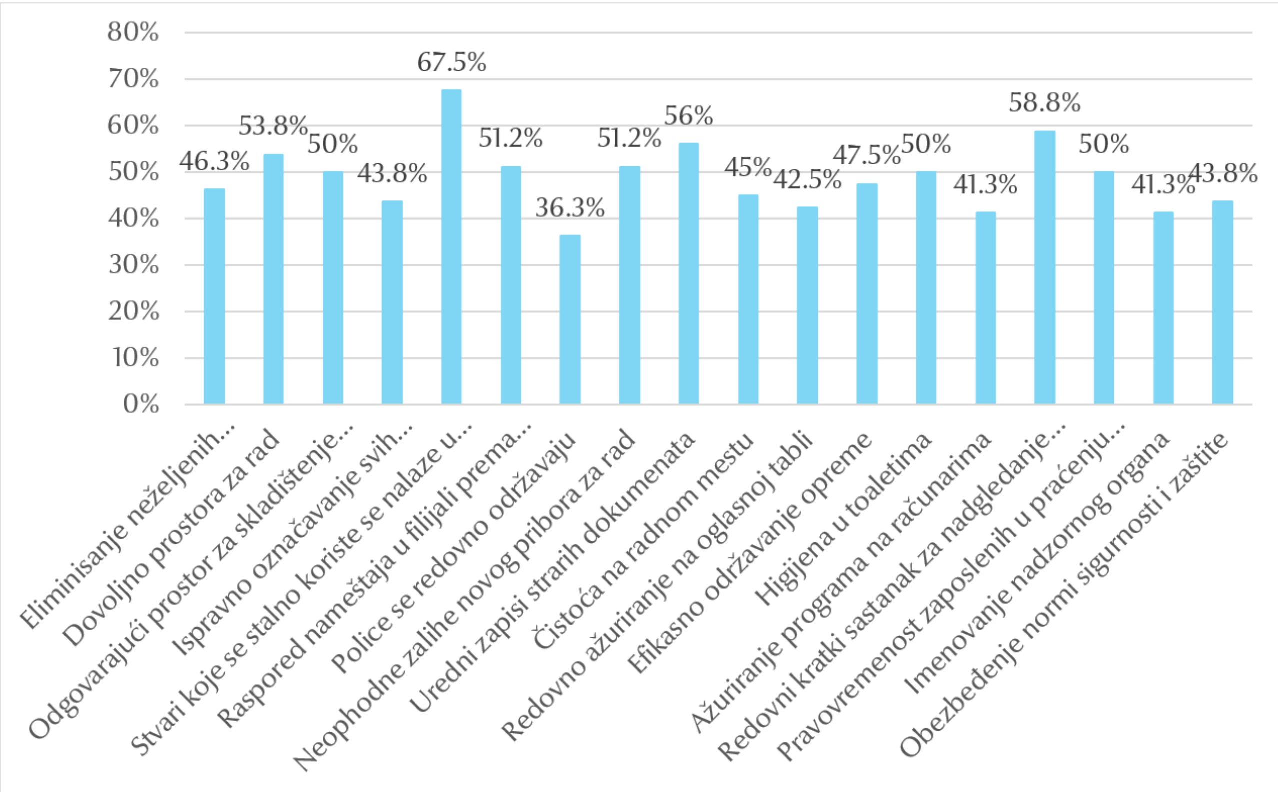
		Broj ispitanika	% ispitanika
POL	Žensko	57	71,3%
	Muško	23	28,7%
	Ukupno:	80	100%
STAROST	Do 30 godina	4	5%
	31 – 50 godina	58	72,5%
	51 godina i više	18	22,5%
	Ukupno:	80	100%
MESTO RADA	Leskovac	7	8,8%
	Niš	15	18,9%
	Vranje	22	27,5%
	Ćuprija	2	2,5%
	Svilajnac	4	5%
	Prokuplje	5	6,3%
	Pirot	6	7,5%
	Kruševac	7	8,8%
	Jagodina	5	6,3%
	Bor	7	8,8%
	Ukupno:	80	100%

Izvor: kalkulacija autora

Na osnovu podataka iz Tabele 1 zaključuje se da u uzorku ima više žena nego muškaraca, 57 ispitanika je ženskog pola (71,3%), dok je 23 ispitanika muškog pola (28,7%). Najveći deo uzorka čine ispitanici od 31 – 50 godina (72,5%). Najveći broj ispitanika je iz banaka koje posluju na teritoriji grada Vranja (27,5%).

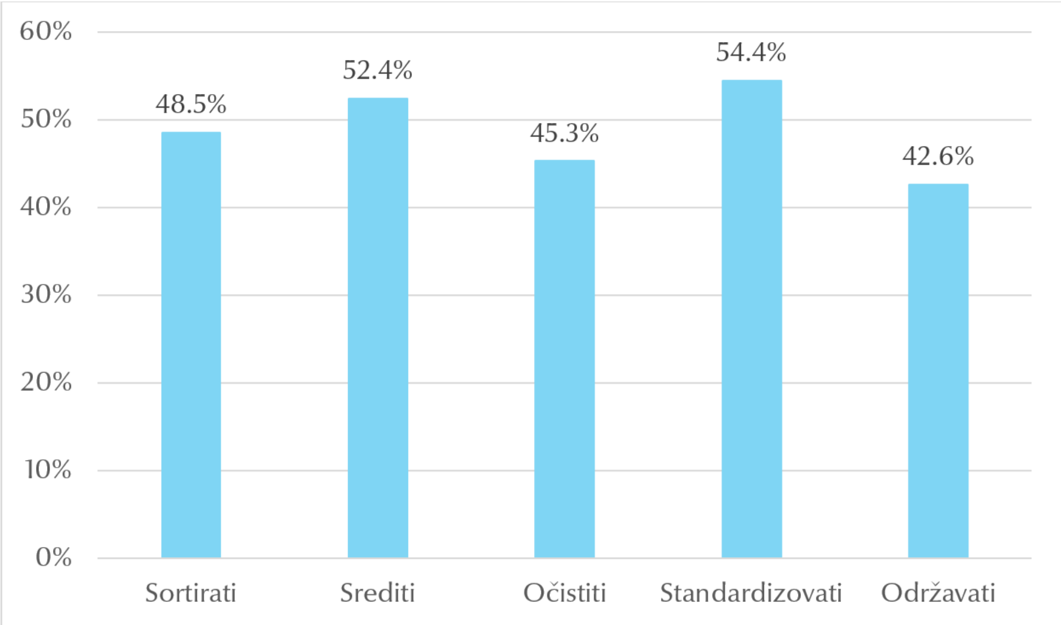
Grafikon 1 prikazuje u kojoj meri banke sprovode prakse 5S alata. Može se videti da se banke najmanje bave redovnim održavanjem polica. Ovo se može pripisati velikom obimu posla koji bankarski službenici moraju da obave u toku dana i nedostatka vremena za obavljanje ove aktivnosti. Drugi aspekt 5S alata koji se najmanje praktikuje je ažuriranje programa na računarima i imenovanje nadzornog organa za nadgledanje primene prva tri koraka 5S alata. Primena, evaluacija i kontrola sprovođenja 5S alata smatra se obavezom svakog zaposlenog, pa se ne pridaje veliki značaj prilikom identifikovanja posebnog organa čiji bi posao bio praćenje, odnosno nadgledanje primene. Neredovno ažuriranje programa na računarima najmanje zavisi od zaposlenih. Stvari koje se stalno koriste se nalaze u blizini radnog mesta, dovoljno prostora za rad, uredni zapisi starih dokumenata i redovni kratki sastanci za nadgledanje primene prva tri koraka iz 5S alata su aktivnosti koje se uveliko praktikuju. Pravilna organizacija predmeta, nameštaja i dokumenata rezultiralo je slobodnijim prostorom koji osoblje koristi za efikasniji rad. Održavanje adekvatnog rasporeda nameštaja u filijali i čišćenje toaleta i drugih prostorija su aktivnosti koje banke redovno praktikuju.

Grafikon 1: *Procenat implementacije aktivnosti iz 5S alata*



Izvor: kalkulacija autora

Grafikon 2: *Procenat primene 5S alata u bankarskom sektoru Republike Srbije*



Izvor: kalkulacija autora

Na osnovu podataka iz Grafikona 2 može se zaključiti da je primena 5S alata u posmatranim filijalama banaka koje posluju na teritoriji Republike Srbije na srednjem nivou i iznosi 54,4%, ali se takođe primećuje i da je održivost ovakvog koncepta na nezadovoljavajućem nivou i iznosi 42,6%.

Zaključak

5S alat je alat za poboljšanje efikasnosti na radnom mestu. Iako se najviše primenjuje u proizvodnim sistemima, uslužna industrija se takođe fokusirala na alate za poboljšanje produktivnosti kroz upravljanje radnim mestom. Ova studija je pokazala da bankarski sektor takođe primenjuje 5S alat, međutim ta primena je na nezadovoljavajućem nivou. Ukupna prosečna primena 5S alata u posmatranim filijala iznosi 48,6%. Ovakav rezultat se može pripisati nedovoljnim poznavanjem primene 5S alata u bankarstvu, finansijskim i resursnim ograničenjima, nedostatku motivacije za učešće u primeni od strane zaposlenih, nedostatkom obuka (Singh & Ahuja, 2015), ali i specifičnim obeležjima bankarskih usluga, među kojima spadaju: nematerijalnost, heterogenost i slično.

Najviši organi banke bi u budućnosti trebalo da se fokusiraju na donošenje smernica za povećanje primene 5S alata, jer će veća primena uticati na povećanje efikasnosti zaposlenih na radnom mestu, a time i na efikasnost celokupne organizacije. Takođe, buduća istraživanja se mogu sprovesti kako bi se identifikovao uticaj primene 5S alata na efikasnost i produktivnosti zaposlenih u bankarskom sektoru. Ovo istraživanje je sprovedeno u okviru odabranih banaka iz privatnog sektora, dok bi buduće istraživanje moglo da obuhvati i banke koje posluju u državnom sektoru i ostale banke iz privatnog bankarskog sektora Republike Srbije.

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Upitnik

Cilj istraživanja je da se sagleda primena 5S alata u bankarskom sektoru Republike Srbije. U skladu sa ciljem istraživanja formulisan je upitnik koji obuhvata 5S prakse koje kompanije prate.

Molim Vas da na petostepenoj numeričkoj skali od 1 (nikada se nije praktikovalo) od 5 (redovno se praktikuje), iskažete Vaš stav o uticaju primene 5S alata na povećanje produktivnosti zaposlenih u bankarskom sektoru.

Rezultati istraživanja neće biti korišćeni u komercijalne svrhe, već isključivo upotrebljeni za naučno-istraživački rad. Anketiranje je anonimno, a odgovori dobijeni iz upitnika biće sumirani na kraju i svi rezultati zbirno prikazani. Molim Vas da date iskrene odgovore. Hvala.

1. Pol

   Ženski

   Muški

2. Starost

   Do 30 godina

   31 – 50 godina

   51 godina i više

3. Mesto rada

4. Stvari koje se stalno koriste se nalaze u blizini radnog mesta.

   1 2 3 4 5

5. Eliminisanje neželjenih datoteka/dokumenta.

   1 2 3 4 5

6. Dovoljno prostora za rad.

1 2 3 4 5

7. Odgovarajući prostor za skladištenje dokumenata.

1 2 3 4 5

8. Ispravno označavanje svih datoteka/direktorijuma.

1 2 3 4 5

9. Raspored nameštaja u filijali prema njegovoj nameni.

1 2 3 4 5

10. Police se pravilno održavaju.

1 2 3 4 5

11. Uredni zapisi starih dokumenta.

1 2 3 4 5

12. Čistoća na radnom mestu.

1 2 3 4 5

13. Redovno ažuriranje na oglasnoj tabli.

1 2 3 4 5

14. Efikasno održavanje opreme.

1 2 3 4 5

15. Higijena u toaletima.

1 2 3 4 5

16. Neophodne zalihe novog pribora za rad.

1 2 3 4 5

17. Ažuriranje programa na računarima.

1 2 3 4 5

18. Obezbeđenje normi sigurnosti i zaštite.

1 2 3 4 5

19. Imenovanje nadzornog organa.

1 2 3 4 5

20. Redovni kratki sastanak za nadgledanje primene prva tri koraka iz 5S metodologiju. (1. korak - Sortirati; 2. korak - Srediti; 3. korak - Očistiti; 4. korak - Standardizovati; 5. korak - Sprovoditi)

1 2 3 4 5

21. Pravovremenost zaposlenih u praćenju prva tri koraka iz 5S metodologiju. (1. korak - Sortirati; 2. korak - Srediti; 3. korak - Očistiti; 4. korak - Standardizovati; 5. korak - Sprovoditi)

1 2 3 4 5

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APPLICATION OF 5S TOOL IN THE BANKING SECTOR OF THE REPUBLIC OF SERBIA

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Summary

Every organization strives to achieve efficient business. In order to improve efficiency in one organization, various techniques, methods and tools are used in practice. One of these tools is the 5S tool, which enables the organization of the workplace in such a way so as to perform work in an efficient, effective and safe way. The application of a tool implies that a certain thing is placed in a certain place for easier identification when the time comes for its use. The 5S tool refers to 5 words derived from Japanese terminology that begin with the letter S, and which describe workplace practices that lead to visual control and lean production: seiri (sort), seiton (set in order), seiso (clean), seiketsu (standardize) and shitsuke (implement). The aim of this paper is to consider the application of the 5S tool in the banking sector of the Republic of Serbia, at the level of selected banking branches. The results of the research showed that the total average application of this tool in the analyzed branches is 48.6%.

Keywords: 5S tool, lean manufacturing, banking

JEL classification: M11, L15, D24, G21

Introduction

Doing business in modern conditions requires constant learning and improving employee performance, but it also means improving the workspace. The 5S tool is a tool used to organize workspace in the best possible way. This tool was developed by the Japanese company Toyota, as part of its lean production system. At Toyota, they believed that untidy space could lead to problems, downtime, and even accidents, which adversely affects the company's business (Marshettiwar & Sangode, 2018). In order to avoid these problems that may occur in everyday business, the practice requires the application of five steps to organize the workspace according to the 5S tool (Joksimović et al., 2009):

1. seiri - sort - to get rid of everything that is not necessary,

2. seiton – set in order - neatly arrange the necessary things so that they are easily accessible,

3. seiso - shine - to cleanse everything,

4. seiketsu - standardize - define rules for maintaining the first 3S steps and

5. shitsuke - implement - ensure compliance with the rules.

In various circumstances, both in production and in service activities, all the way to the organization of workspace, offices, shops, etc., it is possible and desirable to use this tool. Practice has shown that the application leads to: better organization of space, reduction of costs, reduction of waste, reduction of unnecessary work tasks, elimination of idling and excessive consumption of materials, as well as increasing employee productivity and safer working environment (Krajewski et al., 2013; Marshettiwar & Sangode, 2018). Therefore, the main goal of the research of this paper is to consider the application of the 5S tool in the banking sector of the Republic of Serbia, i.e., at the level of selected bank branches.

Application of 5C Tool in the Banking Sector

There is no organization or activity that could not apply the 5S tool in everyday business (Marshettiwar & Sangode, 2018). The 5S tool is part of the lean business concept. A lean business concept means eliminating losses that may occur when performing business processes. The goal of the concept is to establish continuous business without downtime, so that business costs are lower. Adequate implementation of the concept affects: increasing efficiency and effectiveness in work, reducing waste, reducing errors, increasing the quality of business processes which lead to lower operating costs and higher satisfaction of users (Novićević-Čečević & Jemović, 2018; Chourasia & Nema, 2016; Gupta, 2021; Liker, 2004; Ahlstrom, 2004). The study of Chourasia & Nema (2016) showed that various service industries such as hospitals, hotels, banks, and higher education institutions use the principles and tools of the lean method to increase their competitiveness. Ikatrinasari & Hryanto (2014) also state that lean has been successfully implemented in the transport, administration and insurance sectors as well.

The application of the 5S tool in the service sector brings the following advantages: reduces process execution time, facilitates workplace organization, standardizes operational procedures, improves customer response time, installs guidelines that drive the workplace, contributes to cost efficiency, helps identify waste, builds a culture of continuous improvement, removes clutter in the workplace, reduces waste in the workplace and improves the appearance of the workplace (Sarkar, 2009).

In the services sector, among others in the banking sector, the most common application is the 5S tool, which includes the following practices (Gerhard, 2007, 249):

1. sort (Sorting - Seiri) - separating the necessary from the unnecessary;

2. set in Order (Seiton) - organization of the workplace;

3. shine (Scrub - Seiso) - clean and move everything that can create problems in work;

4. standardize (Seiketsu) - apply procedures and ensure their understanding by employees, and

5. sustain (Maintain - Shitsuke) - set the system to function with full communication and on the principle of continuous flow.

Seiri (sort) refers to the separation of unnecessary things and their elimination from the work environment, i.e., only those things that are necessary for work are retained. Employees are responsible for sorting office supplies, files, emails in order to focus exclusively on relevant information and activities that add value from the client's point of view, when providing banking services (Novićević-Čečević & Jemović, 2018). Seiton (set in order) includes the process of orderly arrangement and classification of important things according to their purpose, so that they are easily accessible at a time when there is a need for their use. In the bank, this is achieved by defining standard locations for access to databases, operating procedures, reports. Seiso (clean) refers to cleaning the workplace until it gets a "shine". In this regard, everyone in the organization has their own responsibilities related to cleaning, from the lowest to the highest levels (http://tqmkonsalting.com/usluge/tehnike-metode-i-alati/5s-metoda/). A clean workspace makes it easy to spot problems, which is why tidying up and cleaning the workplace must become a habit and reach the conscious awareness of all employees. Seiketsu (standardize) implies the introduction of standards. It is a step that defines the rules for maintaining the first three steps and which is a pillar of the application of the 5S tool. Shitsuke (sustain) is the continuation of the previous step. The goal of this step is to introduce the application of the 5S tool into the company's culture, i.e., the company must strive to make 5S its way of life (https://quality-one.com/5s/). However, the sustainability of this business concept requires motivated employees, their strong cooperation and active participation of all members of the organization (Novićević-Čečević & Jemović, 2018).

In banking, as in other areas, the main focus of business is profitability and meeting consumer expectations, through the provision of efficient, reliable and affordable services (Marjanović & Vrećo, 2019). Banks are constantly innovating their banking services to meet the changing demands of customers. The more complex banking structure that accompanies universal financial intermediaries increases the risk, costs and time of providing banking services. In such conditions, the application of different techniques of the lean business concept, including the 5S tool, enables the provision of better banking services according to economic principles - as cheaply and as quickly as possible (Novićević-Čečević & Jemović, 2018), as well as establishing long-term relationships with clients and gaining loyalty (Barjaktarović & Ječmenica, 2011).

Application of the 5S Tool in the Banking Sector of the Republic of Serbia

Empirical research was conducted to consider the application of the 5C tool in the banking sector of the Republic of Serbia. For the collection of primary data, a survey method in the form of a reference was used, which consists of 18 statements that represent practices in the application of the 5S tool. Data were collected from branches of selected banks (Credit Agricole, Eurobank, Raiffeisen bank and OTP bank) operating in the territory of the Republic of Serbia. The survey was conducted indirectly, by sending a questionnaire to the e-mail addresses of respondents. The degree of agreement of the respondents with the stated statements was expressed through the Likert scale. The analysis of the application of the 5S tool in the banking of the Republic of Serbia was conducted on a sample of 80 respondents. Respondents were grouped based on gender, age, and place of work. The processing of the collected data was carried out in the statistical package for social networks, IBM SPSS Statistics Version 20.

Table 1: *Sample Structure: Summary Overview*

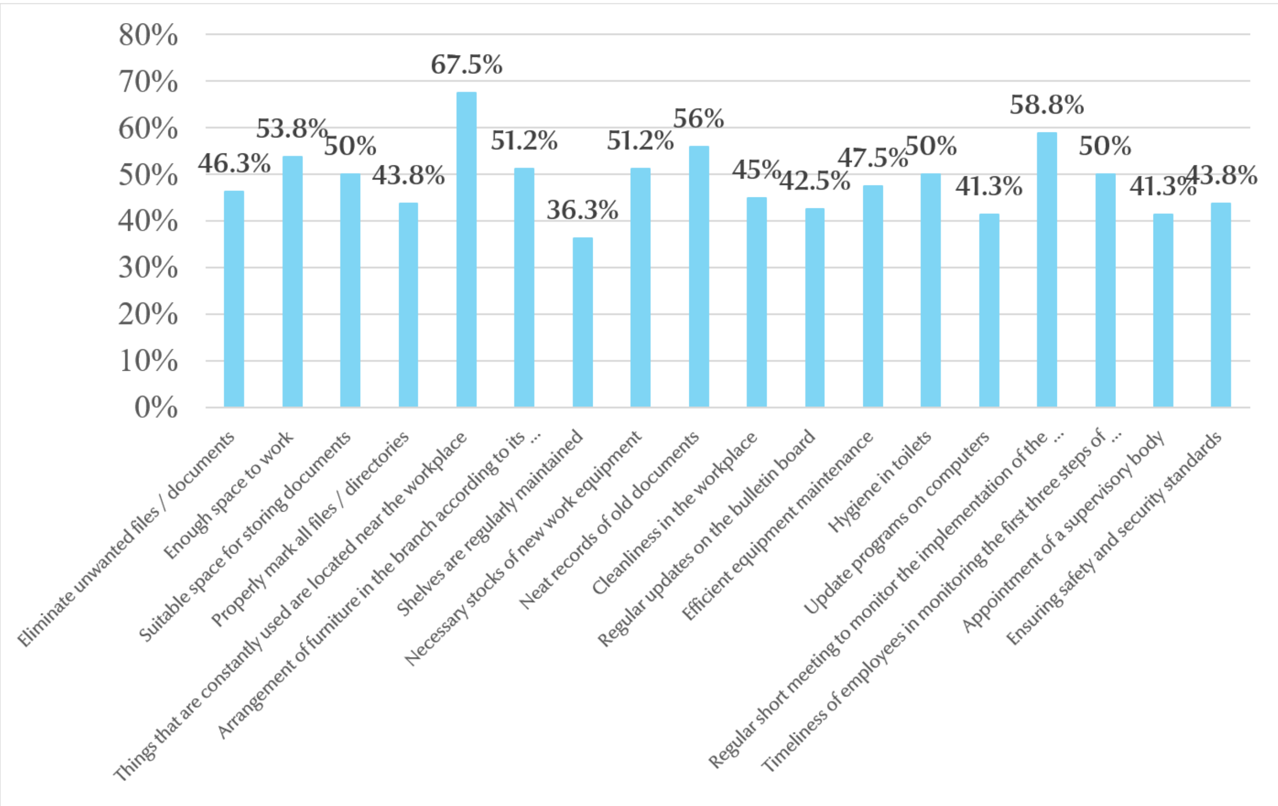
		Number of respondents	% of respondents
GENDER	Female	57	71.3%
	Male	23	28.7%
	Summary:	80	100%
AGE	Up to 30 years of age	4	5%
	31 – 50 years of age	58	72.5%
	51 years and older	18	22.5%
	Summary:	80	100%
WORKPLACE	Leskovac	7	8.8%
	Niš	15	18.9%
	Vranje	22	27.5%
	Ćuprija	2	2.5%
	Svilajnac	4	5%
	Prokuplje	5	6.3%
	Pirot	6	7.5%
	Kruševac	7	8.8%
	Jagodina	5	6.3%
	Bor	7	8.8%
	Summary:	80	100%

Source: author's calculation

Based on the data from Table 1, it is concluded that there are more women than men in the sample, 57 respondents are female (71.3%), while 23 respondents are male (28.7%). The largest part of the sample consists of respondents aged 31-50 (72.5%). The largest number of respondents are from banks operating in the city of Vranje (27.5%).

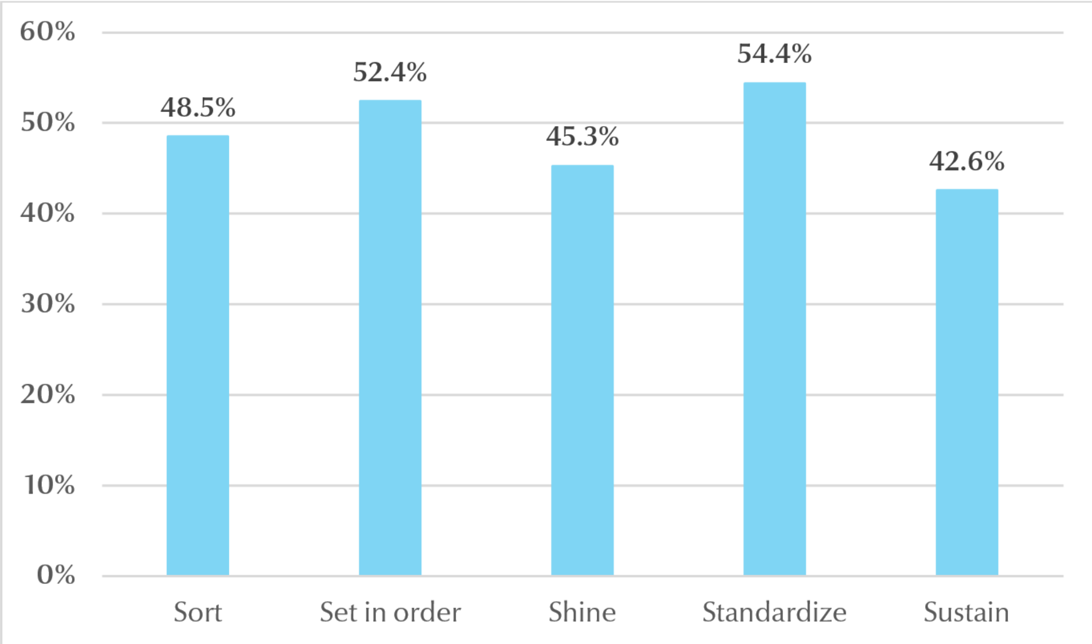
Graph 1 shows the extent to which banks implement the 5S tool practices. It can be seen that banks are the least involved in regular policy maintenance. This can be attributed to the large amount of work that bank employees must do during the day and the lack of time to perform this activity. Another aspect of the least practiced 5S tool is updating software on computers and appointing a supervisory body to oversee the implementation of the first three steps of the 5S tool. The application, evaluation, and control of the implementation of the 5S tool is considered the obligation of every employee, so no great importance is attached when identifying a special body whose job would be to monitor, i.e., supervise the implementation. Irregular updating of software on computers is the least dependent on employees. Things that are constantly used are close to the workplace, enough work space, neat records of old documents and regular short meetings to monitor the implementation of the first three steps of the 5S tool are activities that are widely practiced. Proper organization of objects, furniture and documents has resulted in freer space that staff use for more efficient work. Maintaining an adequate arrangement of furniture in the branch and cleaning toilets and other premises are activities that banks regularly practice.

Graph 1: *Percentage of Implementation of Activities from the 5S Tool*



Graph 1 - Source: author's calculation

Graph 2: *Percentage of 5S Tool Application in the Banking Sector of the Republic of Serbia*



Graph 1 - Source: author's calculation

Based on the data from Graph 2, it can be concluded that the application of 5S tools in the observed branches of banks operating in the Republic of Serbia is at the middle level and amounts to 54.4%, but it is also noted that the sustainability of this concept is unsatisfactory and amounts to 42.6%.

Conclusion

The 5S tool is a tool for improving workplace efficiency. Although most widely used in manufacturing systems, the service industry has also focused on tools to improve productivity through workplace management. This study showed that the banking sector also applies the 5S tool, however this application is at an unsatisfactory level. The total average application of the 5S tool in the observed branches is 48.6%. This result can be attributed to insufficient knowledge of the application of the 5S tool in banking, financial and resource constraints, lack of motivation to participate in the application by employees, lack of training (Singh & Ahuja, 2015), but also specific features of banking services, including: intangibility, heterogeneity and the like.

In the future, the highest bodies of the bank should focus on adopting guidelines for increasing the application of 5S tools, because greater application will increase the efficiency of employees in the workplace, and thus the efficiency of the entire organization. Also, future research can be conducted to identify the impact of the application of 5S tool on the efficiency and productivity of employees in the banking sector. This research was conducted within selected banks from the private sector, while future research could include banks operating in the public sector and other banks from the private banking sector of the Republic of Serbia.

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Questionnaire

The aim of the research is to consider the application of 5S tool in the banking sector of the Republic of Serbia. In accordance with the aim of the research, a questionnaire was formulated that includes 5S practices that companies follow.

Please express your position on the impact of the application of 5S tool on increasing the productivity of employees in the banking sector on a five-point numerical scale of 1 (never practiced) out of 5 (regularly practiced).

The research results will not be used for commercial purposes, but exclusively used for scientific research. The survey is anonymous, and the answers obtained from the referral will be summarized at the end and all results will be summarized. Please give honest answers. Thanks.

1. Gender

   Ladies

   Male

2. Age

   Up to 30 years

   31 - 50 years

   51 years and older

3. Work place

4. Things that are constantly used are located near the workplace.

   1 2 3 4 5

5. Eliminate unwanted files / documents.

   1 2 3 4 5

6. Enough space to work.

   1 2 3 4 5

7. Adequate storage space for documents.

1 2 3 4 5

8. Properly mark all files / directories.

1 2 3 4 5

9. Arrangement of furniture in the branch according to its purpose.

1 2 3 4 5

10. Shelves are properly maintained.

1 2 3 4 5

11. Neat records of old documents.

1 2 3 4 5

12. Cleanliness in the workplace.

1 2 3 4 5

13. Regular updates on the bulletin board.

1 2 3 4 5

14. Efficient equipment maintenance.

1 2 3 4 5

15. Hygiene in toilets.

1 2 3 4 5

16. Necessary stocks of new work equipment.

1 2 3 4 5

17. Updating programs on computers.

1 2 3 4 5

18. Ensuring safety and security standards.

1 2 3 4 5

19. Appointment of the supervisory body.

1 2 3 4 5

20. Regular short meeting to monitor the implementation of the first three steps of the 5S methodology. (Step 1 - Sort; Step 2 - Sort; Step 3 - Clean; Step 4 - Standardize; Step 5 - Implement)

1 2 3 4 5

21. Timeliness of employees in monitoring the first three steps of the 5S methodology. (Step 1 - Sort; Step 2 - Sort; Step 3 - Clean; Step 4 - Standardize; Step 5 - Implement)

1 2 3 4 5

Pregledni naučni rad

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ULOGA DRŽAVNE REVIZORSKE INSTITUCIJE U SRBIJI

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Abstract:

Tema ovog članka jeste upoznavanje sa važnostima državne revizorske institucije, njenom ulogom i nadležnostima, organizacijom, etičkim kodeksom i međunarodnom saradnjom. Državna revizorska institucija (DRI) je najviši organ revizije javnih sredstava u Republici Srbiji. Osnovana je 2005. godine Zakonom o Državnoj revizorskoj instituciji. Državna revizorska institucija je samostalan i nezavisan državni organ. Za obavljanje poslova iz svoje nadležnosti DRI je odgovorna Narodnoj skupštini Republike Srbije. Poslove iz svoje nadležnosti obavlja na osnovu Ustava Republike Srbije, Zakona o Državnoj revizorskoj instituciji i Poslovnika Državne revizorske institucije, koji u skladu sa Zakonom, bliže uređuje način i postupak po kome DRI vrši svoju nadležnost revizije, način obezbeđivanja javnosti rada, odlučivanja i druga pitanja utvrđena Zakonom koja su od značaja za rad DRI.

Ključne reči: Državna revizorska institucija, INTOSAI, Zakon o državnoj revizorskoj instituciji, etički kodeks, međunarodna saradnja

JEL klasifikacija: M42, M48

Uvod

Pod revizijom se podrazumeva postupak ispitivanja i ocene finansijskih izveštaja, na osnovu kojih se daje stručno mišljenje o realnosti i objektivnosti stanja imovine, kapitala, obaveza i rezultata poslovanja. Revidiranje poslovanja prema Zakonu o Državnoj revizorskoj instituciji znači pribavljanje dovoljnog, adekvatnog i pouzdanog dokaza za izražavanje mišljenja o pravilnosti i svrsishodnosti poslovanja korisnika javnih sredstava.

DRI ima za cilj da ispita i utvrdi da li su finansijske transakcije i odluke u vezi sa primanjima i izdacima, radi utvrđivanja da li su odnosne transakcije izvršene u skladu sa zakonom, drugim propisima, datim ovlašćenjima, i za planirane svrhe. Da ispita trošenje sredstava iz budžeta i drugih javnih sredstava, radi sticanja dovoljnog, adekvatnog i pouzdanog dokaza za izveštavanje da li su sredstva od strane subjekta revizije upotrebljena u skladu sa načelima ekonomije, efikasnosti i efektivnosti kao i u skladu sa planiranim ciljevima.

Državna revizorska institucija ostvaruje međunarodnu saradnju u okviru svojih nadležnosti u cilju jačanja kapaciteta i primene međunarodnih standarda revizije. U okviru te saradnje uspostavljeni su kontakti sa brojnim vrhovnim revizorskim institucijama širom sveta, radi razmene iskustava i unapređenja procesa revizije.

Za kvalitet revizije od presudnog značaja je njena nezavisnost, koja mora biti institucionalizovana kroz adekvatnu organizacionu strukturu i propise. U radu će biti opisan postupak koji DRI Srbije primenjuje prilikom izvođenja revezije. DRI obavlja reviziju na osnovu godišnjeg programa revizije, koji je dužna da usvoji pre kraja godine za narednu kalendarsku godinu. Godišnji program revizije Savet DRI na osnovu utvrđenih kriterijuma za izbor subjekta revizije. Rad je sastavljen iz šest delova. Prvi deo odnosi se na delokrug državne revijije. Drugi deo opisuje sastav i organizaciju DRI. Treći deo govori o vrstama revizije. Kroz četvrti deo prikazana je uloga Saveta DRI. Peti deo je fokusiran na međunarodnu saradnju, šesti deo govori o etičkom kodeksu, dok se sedmi deo odnosi na doprinos državne revizije parlamentarnoj kontroli i finansijskoj stabilnosti sistema zemlje.

Delokrug i nadležnosti Državne revizorske institucije

Državna revizorska institucija, kao najviši organ revizije javnih sredstava, u okviru svoje nadležnosti, obavlja sledeće poslove: (www.dri.rs, pristupljeno 10.09.2021.god.)

1. Planira i obavlja reviziju, u skladu sa Zakonom o Državnoj revizorskoj instituciji;

2. Donosi podzakonske i druge akte radi sprovođenja Zakona o Državnoj revizorskoj instituciji;

3. Podnosi izveštaje Narodnoj skupštini Republike Srbije i skupštinama lokalnih vlasti;

4. Zauzima stavove i daje mišljenja kao i druge oblike javnih saopštenja u vezi sa primenom i sprovođenjem pojedinih odredaba Zakona o Državnoj revizorskoj instituciji;

5. Po potrebi i u skladu sa svojim mogućnostima, pruža stručnu pomoć Skupštini, Vladi Republike Srbije i drugim državnim organima o pojedinim značajnim merama i važnim projektima, na način kojim se ne umanjuje nezavisnost DRI;

6. Može da daje savete korisnicima javnih sredstava;

7. Može davati primedbe na radne nacrte predloga zakonskih tekstova i drugih propisa i može davati mišljenja o pitanjima iz oblasti javnih finansija;

8. Može da daje preporuke za izmene važećih zakona na osnovu informacija do kojih je došla u postupku obavljanja revizije, a odnose se na to da proizvode ili mogu proizvesti negativne posledice ili dovode do neplaniranih rezultata;

9. Usvaja i objavljuje standarde revizije u vezi sa javnim sredstvima koji se odnose na izvršavanje revizijske nadležnosti DRI, na priručnike za reviziju i na drugu stručnu literaturu od značaja za unapređenje revizorske struke;

10. Utvrđuje program obrazovanja i ispitni program za sticanje zvanja državni revizor i ovlašćeni državni revizor, organizuje polaganje ispita za sticanje revizorskih zvanja državni revizor i ovlašćeni državni revizor i vodi Registar lica koja su stekla ova zvanja;

11. Utvrđuje kriterijume i vrši nostrifikaciju stručnih zvanja iz nadležnosti DRI stečenih u inostranstvu;

12. Sarađuje sa međunarodnim revizorskim i računovodstvenim organizacijama u oblastima koje se odnose na računovodstvo i reviziju u okviru javnog sektora;

13. Obavja druge poslove utvrđene Zakonom o Državnoj revizorskoj instituciji.

Sastav i organizacija državne revizorske institucije

Državna revizorska institucija ima predsednika Institucije, potpredsednika, Savet, revizorske službe i prateće službe.

Savet Državne revizorske institucije je najviši organ Institucije. Savet je kolegijalni organ i ima pet članova, i to: predsednika, potpredsednika i tri člana.

U skladu sa Zakonom o Državnoj revizorskoj instituciji, predsednik Saveta je istovremeno predsednik DRI koji rukovodi njenim radom, a ujedno je i generalni državni revizor. Za obavljanje stručnih i administrativnih poslova iz nadležnosti DRI obrazovane su osnovne unutrašnje jedinice – revizorske službe i službe za podršku revizije. DRI ima pet vrhovnih državnih revizora koji rukovode sektorima za reviziju, i sekretara koji rukovodi sektorima podrške reviziji. (www.dri.rs, pristupljeno 10.10.2021. god.,)

Revizorske službe u okviru DRI su:

1. Sektor broj 1

2. Sektor broj 2

3. Sektor broj 3

4. Sektor broj 4

5. Sektor broj 5

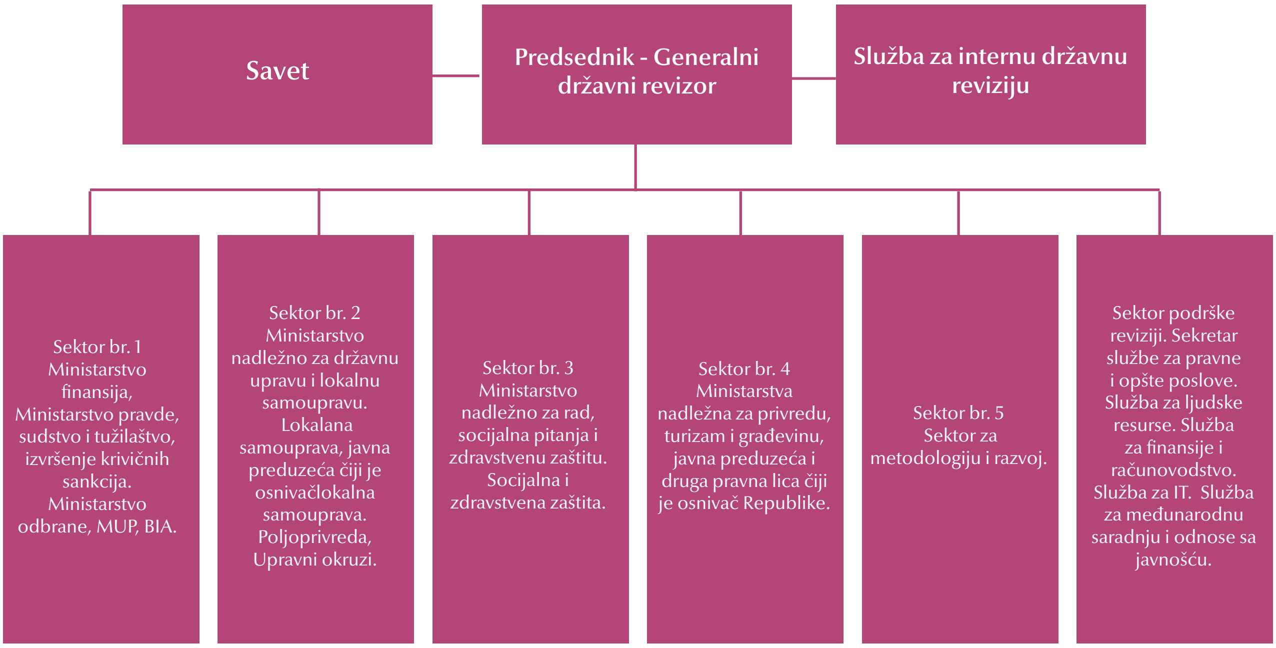
Službe za podršku revizije su organizovane u Sektor podrške reviziji:

(www.dri.rs, preuzeto 15.10.2021.god.)

1. Služba za pravne i opšte poslove
2. Služba za ljudske resurse
3. Služba za finansije i računovodstvo
4. Služba za informacione tehnologije
5. Služba za međunarodnu saradnju i odnose sa javnošću

U DRI je obrazovana i posebna unutrašnja jedinica: Služba za internu reviziju.

Grafički prikaz organizacione strukture Državne revizorske institucije biće prikazan na sledećoj slici:



Grafikon 1: *Organizaciona struktura Državne revizorske institucije*

Izvor: Informator o radu Državne revizorske institucije, 2020. god., str.5.

Vrste revizije

DRI vrši sledeće vrste revizije: (Jelena P, 2016.god., str.23)

Reviziju finansijskih izveštaja - ispitivanje dokumenata, isprava, izveštaja i drugih informacija, radi prikupljanja dovoljnog, adekvatnog i pouzdanog dokaza za izražavanje mišljenja da li finansijski izveštaji subjekta revizije istinito i objektivno prikazuju njegovo finansijsko stanje, rezultate poslovanja i novčane tokove, u skladu sa prihvaćenim računovodstvenim načelima i standardima;

Reviziju pravilnosti poslovanja - ispitivanje finansijskih transakcija i odluka u vezi sa primanjima i izdacima, radi utvrđivanja da li su odnosne transakcije izvršene u skladu sa zakonom, drugim propisima, datim ovlašćenjima, i za planirane svrhe;

Reviziju svrsishodnosti poslovanja - ispitivanje trošenja sredstava iz budžeta i drugih javnih sredstava, radi sticanja dovoljnog, adekvatnog i pouzdanog dokaza za izveštavanje da li su sredstva od strane subjekta revizije upotrebljena u skladu sa načelima ekonomije, efikasnosti i efektivnosti kao i u skladu sa planiranim ciljevima (Andrić i dr, 2009).

Savet Državne revizorske institucije

Savet je najviši organ Državne revizorske institucije. Savet Državne revizorske institucije donosi poslovnik Institucije, godišnji program revizije, akt kojim bliže uređuje postupak revizije, finansijski plan Institucije, utvrđuje završni račun Institucije, odlučuje o prigovoru subjekta revizije na predlog izveštaja o izvršenoj reviziji i donosi godišnji izveštaj i posebne izveštaje, kao i druga akta Institucije i obavlja druge poslove utvrđene Zakonom o Državnoj revizorskoj instituciji i aktima Institucije.Savet je kolegijalni organ. Ima pet članova – predsednika, potpredsednika i tri člana. Predsednik Saveta je istovremeno predsednik Institucije. Savet odlučuje na sednicama kojima predsedava predsednik Saveta ili potpredsednik koji ga zamenjuje i donosi odluke većinom glasova svih članova. Članovi Saveta ne mogu dovesti u pitanje nezavisnost pri donošenju svojih odluka, kao ni nezavisnost Institucije. Poslovnikom o radu Saveta Institucije bliže se uređuju pitanja vezana za rad Saveta. (https://www.dri.rs/upload/documents/Informator/informator_30092021.pdf, str.10, pristupljeno 16.10.2021.g.).

Treći saziv Saveta Državne revizorske institucije Narodna skupština Republike Srbije izabrala je 19. aprila 2018. godine na Trećoj sednici Prvog redovnog zasedanja u 2018. godini. Narodni poslanici, većinom glasova, za predsednika Saveta izabrali su dr Duška Pejovića, do tada vrhovnog državnog revizora u Sektoru za reviziju budžeta lokalnih vlasti, dok su za potpredsednicu reizabrali dr Bojanu Mitrović. Za članove Saveta izabarni su Nevenka Bojanić, Marijana Simović i Ljiljana Dimitrijević. Predsednika, potpredsednicu i članove Saveta narodni poslanici izabrali su na predlog Odbora za finansije, republički budžet i kontrolu trošenja javnih sredstava. (https://www.dri.rs/o-nama/istorijat-dri.123.html, pristupljeno 16.10.2021.god.)

Međunarodna saradnja

Državna revizorska institucija ostvaruje međunarodnu saradnju u okviru svojih nadležnosti u cilju jačanja kapaciteta i primene međunarodnih standarda revizije. U okviru te saradnje uspostavljeni su kontakti sa brojnim vrhovnim revizorskim institucijama širom sveta, radi razmene iskustava i unapređenja procesa revizije.

Državna revizorska institucija je punopravna članica Međunarodne organizacije vrhovnih revizorskih institucija (INTOSAI) od novembra 2008. godine, Evropske organizacije vrhovnih revizorskih institucija (EUROSAI) od juna 2009. godine, kao i Mreže vrhovnih revizorskih institucija država kandidata i potencijalnih kandidata za članstvo u Evropskoj uniji i Evropskog revizorskog suda, od avgusta 2010. godine .(www.dri.rs, pristupljeno 15.10.2021.god.).

DRI ima i ulogu aktivnog posmatrača u Kontakt komitetu vrhovnih revizorskih institucija EU do dana pristupanja, nakon čega postaje punopravna članica.

Etički kodeks državnih revizora

Od državnih revizora i drugih zaposlenih se zahteva da poštuju etička načela, pravila ponašanja i profesionalne standarde utvrđene ovim kodeksom i to: integritet, poštenje, nezavisnost, objektivnost i nepristrasnost, političku neutralnost, sprečavanje sukoba interesa, poverljivost informacija, kompetentnost i profesionalno ponašanje.

(https://www.dri.rs/upload/documents/Opsti_dokumenti/Eticki_kodeks_DRI_2021.pdf, pristupljeno 20.10.2021)

- Integritet - princip integriteta je osnovna vrednost Kodeksa. Integritet obavezuje državne revizore i druge zaposlene da postupaju ispravno i časno u profesionalnim i poslovnim odnosima, što podrazumeva takvo ponašanje koje doprinosi očuvanju i podsticanju poverenja javnosti u integritet, nepristrasnost i efikasnost Državne revizorske institucije.

- Poštenje - dužnost državnih revizora i drugih zaposlenih je da se pridržavaju visokih standarda ponašanja u toku rada i u odnosima sa odgovornim licima u subjektu revizije. Da bi očuvali poverenje javnosti državni revizori i drugi zaposleni su dužni da postupaju pošteno i iskreno, tako da se u njihovo ponašanje ne može posumnjati. Državni revizori su dužni da se pridržavaju procedura revizije i opštih etičkih normi.

- Nezavisnost, objektivnost i nepristrasnost - nezavisnost podrazumeva nezavisnost načina mišljenja i ponašanja državnih revizora u odnosu na subjekte revizije i na ostale spoljne interesne grupe. Osnovno je da državni revizori budu nezavisni i nepristrasni, što znači da državni revizori treba da se ponašaju u svom nastupu na način koji uvećava, a ne smanjuje njihovu nezavisnost. Nezavisnost zahteva način mišljenja koji omogućava izražavanje zaključka bez uticaja koji dovode u pitanje profesionalno rasuđivanje, što omogućava državnim revizorima da deluju nezavisno, uz objektivnu i profesionalnu nepoverljivost.

- Politička neutralnost - veoma je bitno da Državna revizorska institucija očuva političku neutralnost, jer sarađuje sa zakonodavnim i izvršnim organima vlasti kao organima koji su po zakonu ovlašćeni da razmatraju njene izveštaje. Državni revizori i drugi zaposleni su dužni da se ponašaju politički neutralno i da u obavljanju svojih aktivnosti očuvaju političku neutralnost Državne revizorske institucije.

- Sprečavanje sukoba interesa - Državni revizori i drugi zaposleni u javnoj praksi treba da preduzimaju razumne korake u cilju identifikovanja slučajeva koji mogu dovesti do sukoba interesa. Državni revizori i drugi zaposleni ne mogu koristiti svoju zvaničnu poziciju u privatne svrhe i treba da izbegavaju odnose koji bi mogli uključiti rizik od korupcije ili koji bi mogli dovesti do sumnje u njihovu objektivnost i nezavisnost.

- Poverljivost informacija - poverljivost obavezuje državne revizore i druge zaposlene da očuvaju poverljivost informacija do kojih su došli u obavljanju poslova, prema zakonskim i drugim propisima, aktima Državne revizorske institucije i datim ovlašćenjima. Državni revizori i drugi zaposleni ne smeju otkrivati trećim licima informacije i podatke do kojih su došli u toku procesa revizije, osim ako postoji zakonsko ili profesionalno pravo ili obaveza obelodanjivanja..

- Kompetentnost i profesionalno ponašanje - Obaveza državnih revizora i drugih zaposlenih je da se uvek ponašaju na profesionalan način i da primenjuju visoke profesionalne standarde u vršenju svog posla, koji će im omogućiti kompetentno i nepristrasno vršenje njihove dužnosti. Državni revizori ne smeju preduzimati bilo koju aktivnost za koju nisu kompetentni. Državni revizori treba da poznaju i slede standarde revizije, računovodstva i finansijskog poslovanja, postupaka i prakse. Isto tako oni moraju dobro razumeti ustavne, pravne i institucionalne principe i standarde koji rukovode poslovanjem subjekta revizije. Državni revizori i zaposleni su dužni da se pridržavaju principa održavanja profesionalne osposobljenosti što podrazumeva stalno stručno usavršavanje.

Doprinos državne revizije parlamentarnoj kontroli i stabilnosti finansijskog sistema zemlje

Državna revizija se može definisati kao poseban vid parlamentarne kontrole zakonitosti trošenja javnih finansijskih sredstava i upravljanja javnom imovinom koju vrše nadležni državni organi i institucije. Stoga institucije koje obavljaju reviziju javnog sektora predstavljaju jedan od najvažnijih instrumenata parlamentarne kontrole. Da bi odgovorila zahtevima koji se pred nju postavljaju, DRI u svim zemljama, pa i u Srbiji mora da bude institucionalno nezavisna, što se reguliše ustavom i posebnim zakonom. (Sretenović, Janković Andrejević, 2015.,79) Veza između vrhovne revizorske institucije i parlamenta kao zakonodavnog tela države objašnjena je Limskom deklaracijom. U Deklaraciji se navodi da je nezavisnost VRI garantovana ustavom konkretne zemlje, kao i da je Vrhovna revizorska institucija ustavom ovlašćena da nezavisno izveštava parlament ili drugo kompetentno javno telo o svojim nalazima, kao i da objavi izveštaj (INTOSAI, 1977). Međusobni odnos parlamenta i vrhovne revizorske institucije svake zemlje se zasniva na lancu odgovornosti. Vrhovna revizorska institucija je sredstvo kojim parlament nadzire vladu i javnu upravu. S druge strane, da bi izveštaji o reviziji imali efekta, vrhovna revizorska institucija oslanja se na sposobnost parlamenta da na osnovu tih izveštaja preduzima korake i da traži od vlade da položi račune o tome kako troši javna sredstva. (Sretenović, Janković Andrejević, 2015.,79-80)

Efektivnost u radu DRI pozitivno se odražava na efektivnost u radu Narodne skupštine. To je razlog zbog kog DRI stalno sarađuje sa svim nadležnim skupštinskim odborima, naročito sa Odborom za finansije, republički budžet i kontrolu trošenja javnih finansija i Pododborom za razmatranje izveštaja o revizijama DRI.

DRI je opredeljena da kontinuirano saopštava rezultate svog rada Narodnoj skupštini i skupštinskim odborima, izvršnoj vlasti i subjektima revizije, medijima, javnosti i posebnim interesnim grupama, poput organizacija civilnog društva, razvojnih partnera, akademskih krugova i strukovnih udruženja.

Imajući to opredeljenje u vidu, a u nastojanju da poveća uticaj svojih izveštaja o reviziji, DRI će kontinuirano izgrađivati odnose sa ključnim zainteresovanim stranama kako bi doprinosila korisnim promenama, uvođenju novih zakona, većem stepenu odgovornosti, sprovođenju zakona i propisa i praćenju efektivnosti njihovog sprovođenja.

DRI izveštava Skupštinu podnošenjem: 1) godišnjeg izveštaja o svom radu; 2) posebnih izveštaja u toku godine; 3) izveštaja o reviziji završnog budžeta Republike, završnih računa i finansijskih plaova organizacija obaveznog socijalnog osiguranja. Godišnji izveštaj o radu DRI za prethodnu godinu podnosi se Narodnoj skupštini do 31. marta tekuće godine. Nadležni odbor Skupštine nakon razmatranja izveštaja Institucije svoje stavove i preporuke u vidu izveštaja dostavlja Narodnoj skupštini. Skupština može da zahteva od DRI dodatno pojašnjenje pojedinih činjenica i okolnosti. (Informator o radu Državne revizorske institucije, 2020.god.)

Sposobnost zakonodavca da čita i koristi izveštaje o reviziji i druge revizorske proizvode je od suštinskog značaja za efektivnost DRI. Izveštaji o reviziji nisu cilj sami po sebi, već predstavljaju ključni deo procesa u kom se izvršna vlast poziva na transparentnost i odgovornost. Ako se izveštaj o reviziji ne pročita i ne shvati na ispravan način, neće doći do unapređenja. Najstručniji kadar DRI je na raspolaganju Narodnoj skupštini u cilju što bolje podrške i saradnje na preduzimanju mera i pokretanju inicijativa na osnovu preporuka iz izveštaja o revizijama. Pažnja koju Narodna skupština može dati izveštajima o reviziji pomaže u stavljanju izvršne vlasti pod dodatni pritisak, što takođe stvara pogodne uslove za aktivnosti u vezi sa praćenjem i obezbeđivanjem sprovođenja preporuka i mera DRI.

Merenju doprinosa državne revizije parlamentarnoj kontroli i stabilnosti finansijskog sistema zemlje, doprinosi primena INTOSAI metodologije koji obezbeđuje objektivnu osnovu za izražavanje stalne važnosti VRI za građane i druge zainteresovane strane, za procenu doprinosa boljem upravljanju javnim finansijama, većoj odgovornosti, kao i doprinosu naporima u borbi protiv korupcije. Primenom ove metodologije i odgovarajućih dokaza moguće je proceniti da li neka VRI obavlja svoje zadatke u skladu sa dobrom međunarodnom praksom, i da li je sposobna da identifi kuje sopstvene snage i slabosti.

Zaključak

U savremenim uslovima poslovanja, globalizacije i značajnih promena na tržištu, Državna revizorska institucija izdvaja se kao bitan segment u poslovanju državnih ustanova i institucija. Ona je usmerena ka ispitivanju finansijskih izveštaja s ciljem izražavanja mišljenja o njihovoj tacnosti i objektivnosti. U svom radu koristi brojne metode i pri tome se rukovodi Zakonom o DRI, računovodstvenim standardima, načelima, pravilima i slično. Osnovni zadatak i cilj DRI je zaštita interesa vlasnika kapitala i održavanja sigurnosti odvijanja poslovnog procesa. Pouzdane činjenice koje DRI čine bitnim segmentom međunarodnog korporativnog upravljanja su nepristranost, objektivnost, sveobuhvatnost, racionalnost, relevantnost i slično. Za obavljanje poslova revizije u primeni s opšteprihvaćena računovodstvena načela, računovodstveni standardi, kao i odgovarajuce smernice revizije. Primarna uloga DRI je da analizira i izvrši proveru finansijskih izveštaja, postojanje nezakonitih procedura za trošenje javnih sredstava finansiranja i da putem svojih izveštaja uveri parlament, građane i vladu u kvalitet izveštaja o trošenju sredstava poreskih obveznika, kao i da podržava i promoviše javnu odgovornost i da doprinos u borbi protiv korupcije.

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11. Pravilnik o obrascu službene legitimacije lica ovlašćenih za vršenje revizije poslovanja korisnika javnih sredstava ;

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Scientific eview article

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THE ROLE OF THE STATE AUDIT INSTITUTION IN SERBIA

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Abstract:

The topic of this paper is introduction to the importance of the State Audit Institution, its role and competencies, organization,Code of Ethics and international cooperation. The State Audit Institution (SAI) is the supreme authority forauditing of public funds in the Republic of Serbia.It was founded in 2005pursuant to the Law on State Audit Institution. The State Audit Institution is an independent and autonomous state authority. For performance of activities within its competence, the State Audit Institution is accountable to the National Assembly of the Republic of Serbia. SAI performsthe activities within its competence pursuant to the Constitution of the Republic of Serbia, Law on State Audit Institution andRules of Procedure of the State Audit Institution which, in compliance with the Law, regulate more closely theaudit procedure conductedby SAI, the manner of ensuring transparency in work, decision-making process and other issues established by the Law that are relevant for operations of SAI.

Keywords: State Audit Institution, INTOSAI, Law on State Audit Institution, Code of Ethics, international cooperation

JEL classification: M42, M48

Introduction

Audit implies a procedure of reviewing and assessing financial statements based on which a professional opinion onaccuracy and objectivity of financial position, assets, liabilities and operating results is given.Pursuant to the Law on State Audit Institution, audit of operations includes obtaining sufficient, adequate and reliable evidence for expressing professional opinion oncompliance and performanceof public funds users.

SAI aims at reviewing and establishing whether financial transactions and decisionsare compliantwith income and expenses, whether the respective transactions were performed in conformity with the law, other regulations, granted authorizations and for the intended purpose. It aims at reviewing the manner in which the budget fund and other public funds are spent, with the purpose of acquiring sufficient, adequate and reliable evidence for reporting whether the audited entityused the funds in compliance with the principles of economy, efficiency and effectiveness as well as in line with the intended objectives.

Within its scope of competence, the State Audit Institution maintains international cooperation with the purpose of reinforcing capacities and implementing International Auditing Standards. In the course of that cooperation, contacts have been made with many supreme audit institutions round the world with the intention of exchanging experience and improvingthe auditing process.

Audit quality depends primarily on audit independence which must be institutionalized via adequate organizational structure and regulations. In this paper, the audit procedure of the State Audit Institution will be described. The audit conductedby SAI is based on Annual Audit Program that SAI must adopt before the end of the year for the next calendar year. Annual Audit Program is adopted by the SAI Council based on established criteria for the selection of auditees. The paper consists of six parts. The first part refers to the scope of state audit. The second part describes competences and organization of SAI. The third part is about types of audits. The role of SAI Council is presented in the fourth part. The fifth part is focused on international cooperation, the sixth part isabout the Code of Ethics and seventh part is talk about the contribution of the state audit to the parliamentary control and stability of the country's financial system.

Scope of the State Audit Institution

State Audit Institution, as the supreme authority for public funds auditing, performs the following activities within its scope of competence: (www.dri.rs, accessed on 10.09.2021)

1. Plans and conducts audit, in compliance with the Law on State Audit Institution;

2. Enacts bylaws and other regulations with the purpose of enforcement of the Law on State Audit Institution;

3. Submits reports to the National Assembly of the Republic of Serbia and assemblies oflocal governments;

4. Provides views and opinions and other forms of public announcements related to application and implementation of particular provisions of the Law on State Audit Institution;

5. As needed and in line with its capacities, provides professional support to the Assembly, Government

of the Republic of Serbia and other state authorities concerning certain significant measures and important projects, in a manner that does not diminish its independence;

6. May give advice to public funds users;

7. May remark on draft texts of legal proposals and other regulations and may give opinion on public finance issues;

8. May give recommendations for amendments to applicable laws based on information acquired in the course of audit, which produce or may produce negative consequences or may lead to unforeseen results;

9. Adopts and publishes auditing standards about public funds that refer to its auditing competence, audit manuals and other professional literature significant for improvement of the auditing profession;

10. Establishes education and examination programfor acquiring the titles of State Auditor and Certified State Auditor, organizes exams for acquiring the titles of State Auditor and Certified State Auditor and keeps Register of persons who acquired such titles;

11. Defines criteria and performs validation of professional titles acquired abroad that are within its competence;

12. Cooperates with international auditing and accounting organizations in the areas related to accounting and auditing in public sector;

13. Performs other activities defined by the Law on State Audit Institution.

Structure and organization of the State Audit Institution

The State Audit Institution has the President of the Institution, Vice-President, Council, audit departments and audit support departments.

State Audit Institution Council is the supreme body of the Institution. It is a collegial body that consists of five members: President, Vice-President and three members.Pursuant to the Law on State Audit Institution, Council President is at the same time the President of the State Audit Institution, managing its activities, and the Auditor General.Professional and administrative activities from SAI's scope of competence are performed by main internal units– audit departments and audit support departments. SAI has five Supreme State Auditors who manage audit departments and a Secretary who managesaudit support departments.(www.dri.rs, accessed on10.10.2021)

Audit departments are:

1. Sector number 1

2. Sector number 2

3. Sector number 3

4. Sector number 4

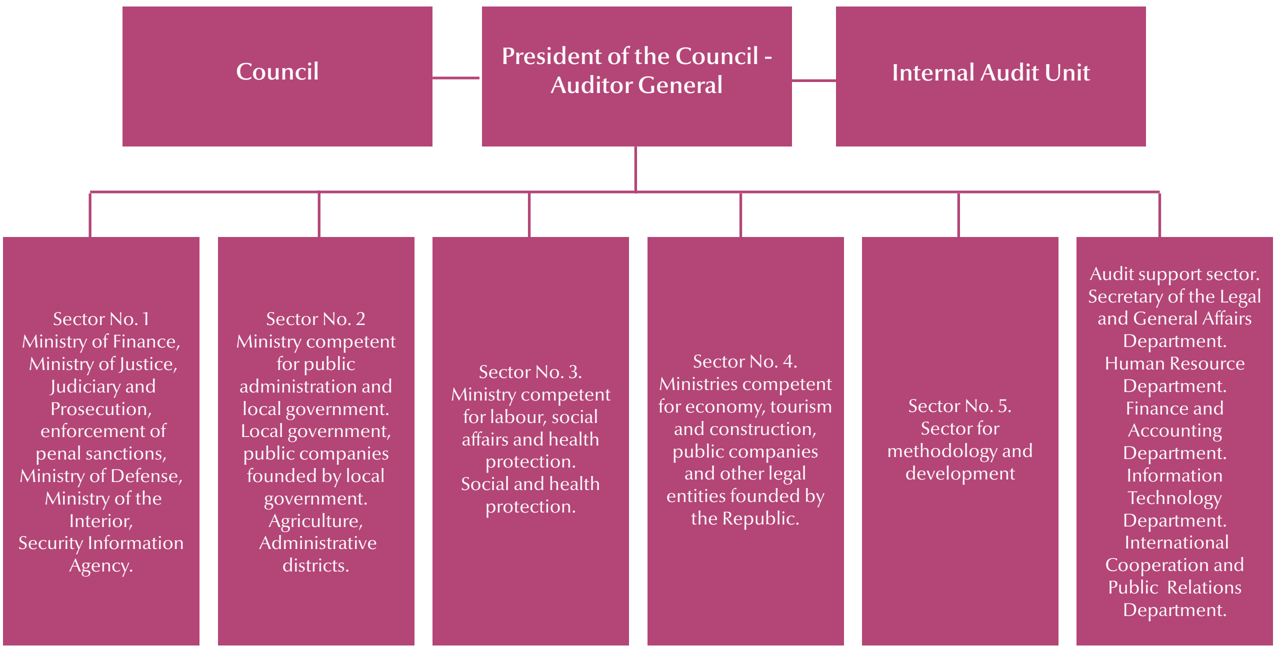
5. Sector number 5

Audit support departments are organized withinthe Audit support sector: (www.dri.rs, accessed on 15.10.2021)

1. Legal and General AffairsDepartment
2. Human ResourceDepartment
3. Finance and AccountingDepartment
4. Information TechnologyDepartment
5. International Cooperation and Public RelationsDepartment

There is also a separate internal unit within SAI: Internal Audit Unit.

Organizational structure of the State Audit Institutionis presented in the chart below:



Grafikon 1: *Organizational structure of the State Audit Institution*

Source: Information Bulletin on activities of State Audit Institution, 2020, pg.5

Types of audits

SAI performs the following types of audits: (Jelena P, 2016, p.23)

Financial statements audit – reviewing of documents, credentials, reports and other forms of information with the purpose of collecting sufficient, adequate and reliable evidence for giving opinionas to whether the financial statements of the audited entitypresent its financial position, operating results and cashflows truthfully and objectively and in compliance with recognized accounting principles and standards;

Compliance audit – reviewing of financial transactions and decisions on income and expenses with the purpose of establishing whether the respective transactions were performed in compliance with the law, other regulations, granted authorizations and for intended purpose;

Performance audit – reviewing of the manner in which the budget fund and other public funds are spent with the purpose of acquiring sufficient, adequate and reliable evidence for reporting whether the audited entity used the funds in compliance with the principles of economy, efficiency and effectiveness as well as in line with the intended objectives (Andric etal., 2009).

State Audit Institution Council

Council is the supremebodyof the State Audit Institution.The Council approves Institution's Rules of Procedure, Annual Audit Program, the actwhichmore closely regulates the audit procedure, Institution's Financial Plan and Institution's annual statement of accounts. Itdecides on audited entity's complaint against the draft report on performed audit and approves the annual report and special reports as well as other Institution's acts, and also performs other activities defined by the Law on State Audit Institution and Institution's acts.Council is a collegial body. It consist of five members – the President, the Vice-President and three members.The President of the Council is at the same timethe President of Institution.The Council makes decision at the sessions presided by the Council President, or Vice President acting on behalf of President, and it makes decisionsby majority vote of all its members. Members of the Council may question neither the independence of the decision-making process not the independence of the Institution. Issues pertaining to operating of the Council are more closely regulatedin the Council's Rules of Procedure. (https://www.dri.rs/upload/documents/Informator/informator30092021.pdf, p.10, accessed on 16.10.2021)

The National Assembly of the Republic of Serbia elected the third convocation of the State Audit Institution Council on 19th April 2018 at the Third Sitting of the First Regular Session in 2018. By majority vote, DrDuskoPejovic, up to that moment a supreme state auditor in the Sector for Audit of Local Governments Budget, was elected the President of the Council and Dr Bojana Mitrovic was reelectedthe Vice-President. Nevenka Bojanic, Marijana Simovic and Ljiljana Dimitrijevic were elected members of the Council. President, Vice-President and Members of the Council were elected by the Members of Parliament following the proposal put forward by the Committee for Finance, National Budget and Control of Public Funds. .(https://www.dri.rs/o-nama/istorijat-dri.123.html, accessed on 16.10.2021)

International cooperation

State Audit Institutionmaintains international cooperation within the scope of its competence, with the purpose of reinforcing capacities and implementing International Audit Standards. In the course of that cooperation, contacts have been made with many supreme audit institutions round the world with the intention of exchanging experience and improving the auditing process.

State Audit Institution has been a full member of the International Organization of Supreme Audit Institutions (INTOSAI) since November 2008, of the European Organization of Supreme Audit Institutions (EUROSAI) since June 2009 and of the Network of Supreme Audit Institutions of the EU Candidate and Potential Candidate Countries and of the European Court of Auditors since August 2010. .(www.dri.rs, accessed on 15.10.2021)

SAI also has the status of an active observer in the Contact Committee of the EU Supreme Audit Institutions, and after the accession dateit will become a full member.

Code of Ethics for the state auditors

State auditors and other employees shall comply with the ethical principles, rules of conduct and professional standards established by this Code, namely: integrity, honesty, independence, objectivity and impartiality, political neutrality, prevention of the conflict of interests, confidentiality, competence and professional conduct. (https://www.dri.rs/upload/documents/Opsti_dokumenti/Eticki_kodeks_DRI_2021.pdf, accessed on 20.10.2021)

- Integrity–principle of integrity is the main value of the Code. Integrity compels state auditors and other employees to act properly and honestly in their professional and business relations, which implies conduct thatcontributes to preserving and encouraging public confidence in the integrity, impartiality and efficiency of the State Audit Institution.

- Honesty–it is the duty of state auditors and other employees tocomply with high standards of conduct in the course of their work and in relations with audited entity's employees. In order to preserve the public trust, state auditors and other employees shall act honestly and sincerely so that their conduct cannot be questioned. State auditors shall abide by audit procedures and general ethical principles.

- Independence, objectivity and impartiality –independence implies independent thinking and conduct of state auditors in relation to audited entities and other external interest groups. It is crucial that state auditors are independent and impartial, which means that they shall act in manner that increases their independence and not vice versa. Independence requires such manner of thinking that allows making conclusions without influences that question professional judgement, which enables state auditors to act independently, with objective and professional distrust.

- Political neutrality–it is very important that State Audit Institution maintains its political neutrality, since it cooperates with legislative and executive authorities authorized to review its reports according to the law. State auditors and other employees shallmaintain politicalneutrality and shall perform their work in such manner so as to maintain political neutrality of the State Audit Institution.

- Prevention of the conflict of interests –State auditors and other public employees shall take reasonable steps to identify cases that may lead to the conflict of interests.State auditors and other employees shall not use their official status for private matters and shall avoid relations that might include risk of corruption or question their objectivity and independence.

- Confidentiality of information–confidentiality obliges state auditors and other employees to preserve confidentiality of information obtained overthe course of work, according to legal and other regulations, State Audit Institution's acts and grated authorizations. State auditors and other employees shallnot reveal to third persons information and data obtained over the course of audit unless there is a legal or professional right or obligation for disclosure.

- Competence and professional conduct–state auditors and other employees shall act professionally and apply high professional standards in their work at all times which will enable them to perform their duty with extreme competence and impartiality. State auditors shall not undertake any actions they are not competent for. State auditors shall know and comply with the auditing, accounting and financial operating standards, procedures and practice. At the same time they shall have proper knowledge and understanding of constitutional, legal and institutional principles and standards that govern the operations of the audited entity. State auditors and employees shall comply with the principle of professional competence maintenance which implies constant professional improvement.

Contribution of the state audit to the parliamentary control and stability of the country's financial system

State audit can be defined as a specific form of parliamentary control of legality of public funds spending and public property management, performed by competent state authorities and institutions. Consequently, the institutions that perform the auditing of public sector represent one of the most important parliamentary control instruments. In order to meet the imposed requirements, in all the countries, including Serbia, SAI must be an independent institution,aslaid downin the constitution and a special law. (Sretenović, Janković Andrejević, 2015.,p.79) The relationship between the Supreme Audit Institution and the Parliament as a state legislative body is explained by the Lima Declaration. According to the Declaration, the Supreme Audit Institution's independence shall be guaranteed by the constitution of the respective country, and the Supreme Audit Institution shall be authorized by the constitution to report its findings independently to the Parliament or other competent public authority, as well as to publish the report (INTOSAI, 1977). The relationship between the Parliament and the Supreme Audit Institution of each country shall be based on chain of responsibility. Supreme Audit Institution is a means by which the Parliament controls Government and public administration. On the other hand, for the purpose of effectiveness of audit reports, Supreme Audit Institution relies on Parliament's abilityto undertake measures based on those reports and to require the Government to account for public funds spending (Sretenović, Janković Andrejević, 2015., 79-80).

Efficiency of SAI has positive effects on the efficiency of the National Assembly. This explains SAI's continuous cooperation with all competent assembly committees, especially the Committee for Finance, State Budget and the Control of Public Spendingand Subcommittee for the Consideration of Reports on SAI's Audits.

SAIhas a commitment to continuously report the results of its activities to the National Assembly and Assembly committees, executive bodies and audited entities, media, public and special interest groups such ascivil society organizations, development partners, academic circles andprofessional associations. With that commitment in mind, and with the intention to increase the effects of its audit reports, SAI shall keep building its relationships with crucial interested parties so as to contribute to useful changes, introduction of new laws, higher degree of responsibility, implementation of law and regulations and monitoring of their implementation effectiveness.

SAIshall report to the Assembly by submitting: 1) annual activity report; 2) special reports during the year; 3) audit report forthe annualstatement of accounts of the budget of the Republic, annual statements of accounts and financial plans of compulsory social insurance organizations. Annual activity report of SAIfor the previous year shall be submitted to the National Assembly not later than 31 March of the ongoing year. After inspection of the Institution's report, the competent committee of the Assembly shall submit their opinion and recommendations to the National Assembly in the form of report. The Assembly may require SAI to provide additional clarification of particular facts and circumstances. (Information on the work of the SAI, 2020)

A legislator's ability to read and use the audit reports and other audit products is of crucial importance for the effectiveness of SAI. Audit reports as such are not the main objective. Instead, they represent a vital part of the process in which the executive bodiesrefer to transparency and responsibility. If the audit report is not read and interpreted in the correct manner, there will be no improvement. The National Assembly has at its disposal the most skilled professionals of SAI who aim to provide the best possible support and assistance in undertaking measures and launching initiatives based on audit reports recommendations. The attention given to audit reports by the National Assembly may help put additional pressure on executive bodies, thus creating a favorable environment for activities of monitoring and assuring the implementation of SAI's recommendations and measures.

Measurement of state audit's contribution to the parliamentary control and stability of the financial system of the country could be improved through implementation of INTOSAI methodology. This methodology provides an objective foundation for highlighting the constant importance of the Supreme Audit Institution for the citizens and other interested parties,for measuring the contribution to better public finance management, for greater responsibility and more successful fight against corruption. By applying this methodology and proper evidence, it is possible to estimate whether the Supreme Audit Institutionis functioning in compliance with good international practice and whether it is capable of identifying its own strengths and weaknesses.

Conclusion

In the contemporary business and globalization environment and in conditions ofconsiderable market changes, State Audit Institution stands out as an important segment in operating of state establishments and institutions. It is focussed on reviewing financial statementswith the purpose of expressing the opinion on their truthfulness and objectivity. SAI uses various methods for its operations that are fully complied with accounting standards, principles, rules etc. The main task and objective of SAI is the protection of equity holders' interest, which is why it uses its impartiality to express opinion on truthfulness and objectivity of financial statements and on maintenance of business processes safety. Relevant facts that make SAI an important element of international corporate governance include impartiality, objectivity, comprehensiveness, rationality, reliability etc. Auditing activities are based on universally accepted accounting principles and accounting standards, i.e. audit guidelines.

Relations between State Audit Institution and audited entities show that the external audit, carried out by SAI, supports credibility of financial statements, contributes to their better quality but also to their better utilization in corporative governance. Communication between external and internal audits, as two fundamental and most significant segments of the entire auditing profession, is of major importance as well. Audit quality depends principally on audit independence which must be institutionalized via adequate organizational structure and regulations.

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11. Rules on Official Identification Form for Persons Authorized for Auditing Public Funds Users;

12. International Standards of Supreme Audit Institutions("Official Gazette of the RS ", no. 77/2015);

13. Information Bulletin on Activities of State Audit Institution, 2020.;

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REPO TRŽIŠTE REPUBLIKE SRBIJE

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Rezime:

U radu je izvršena analiza sledećih aspekata repo tržišta Republike Srbije: pravni okvir koji podrazumeva identifikaciju propisa kojima je uređena oblast poslovanja, osnovne odlike repo tržišta i njegova uloga, institucionalni okvir i učesnici, utvrđivanje veličine repo tržišta u zemlji, način ugovaranja, procesuiranja i saldiranja repo transakcije, podobni kolaterali u formi hartija od vrednosti, cenovni aspekt repo transakcija, transakcioni troškovi realizacije repo transakcija i perspektive razvoja ovog tržišta.

Analizom stanja repo tržišta očekuje se sticanje sposobnosti za projekciju budućih trendova razvoja ovog segmenta finansijskih tržišta koji je već postao međunarodni.

Keywords: Repo tržište, repo instrument monetarne politike, repo transakcija, reverzna repo transakcija, referentna kamatna stopa, repo stopa, kolateral

JEL klasifikacija: E52, E40, G11, O16

Uvod

U skladu sa stavom Narodne banke Srbije, repo transakcije se mogu podeliti na reverzne repo transakcije - repo prodaja hartija od vrednosti i repo transakcije - repo kupovina hartija od vrednosti.

Reverzna repo transakcija znači da NBS bankama repo prodaje hartije od vrednosti - datum prodaje, sa obavezom da te hartije od vrednosti otkupi na ugovoreni datum - datum reotkupa. Na datum prodaje hartija od vrednosti NBS naplaćuje od banaka kupovnu cenu za te hartije, dok na datum reotkupa plaća bankama kupovnu cenu uvećanu za kamatu - reotkupna cena. Efekat transakcije je privremeno povlačenje viškova likvidnosti iz bankarskog sektora (Tumačenje je preuzeto sa internet strana NBS).

U repo transakciji NBS od banaka repo kupuje hartije od vrednosti - datum kupovine, pri čemu su banke u obavezi da te hartije od vrednosti otkupe na ugovoreni datum - datum reotkupa. Na datum kupovine hartija od vrednosti NBS plaća bankama kupovnu cenu za te hartije od vrednosti, dok na datum reotkupa naplaćuje od banaka kupovnu cenu uvećanu za kamatu - reotkupna cena. Efekat transakcije je privremeno obezbeđenje nedostajuće likvidnosti bankarskog sektora (Tumačenje je preuzeto sa internet strana NBS).

Repo i reverzna repo transakcija su vrsta operacija na otvorenom tržištu koje spadaju u ostale instrumente monetarne politike Narodne banke Srbije. Referentna kamatna stopa je osnovni instrument monetarne politike u režimu ciljanja inflacije. Referentna kamatna stopa je najviša, odnosno najniža kamatna stopa koju Narodna banka Srbije primenjuje prilikom vršenja repo transakcija.

Operacije na otvorenom tržištu se razvrstavaju na: 1. glavne operacije, 2. operacije dužih ročnosti, 3. operacije finog podešavanja. Glavne operacije sprovode se primenom reverznih repo transakcija s rokom dospeća transakcije od jedne nedelje. NBS sprovodi glavne operacije redovno, na standardnim aukcijama, prema unapred utvrđenom kalendaru aukcija. Operacije dužih ročnosti se sprovode da bi se bankarskom sektoru obezbedila nedostajuće likvidnosti na duži rok, odnosno da bi se povukao višak likvidnosti. Navedene operacije se, po pravilu, sprovode na standardnim aukcijama, ali se mogu sprovoditi i bilateralno. Operacije finog podešavanja služe za sprečavanje ili ublažavanje efekata iznenadnih poremećaja likvidnosti bankarskog sektora i njihovog uticaja na kratkoročne kamatne stope. Navedene operacije se, po pravilu, sprovode na brzim aukcijama, odnosno istog dana kada je doneta odluka o organizovanju aukcije, ali se mogu sprovoditi i bilateralno (Tumačenje je preuzeto sa internet strana NBS).

Pravni i institucionalni okvir repo tržišta Republike Srbije

Identifikovana su sledeća dokumenta u kojima se mogu pročitati odredbe kojima se objašnjava i reguliše funkcionisanje repo tržišta na teritoriji Republike Srbije:

1. Zakoni

1.1. Zakon o Narodnoj banci Srbije, prečišćen tekst sačinjen je na osnovu teksta Zakona o NBS; „Službeni glasnik RS", br. 72/2003 i njegovih izmena i dopuna objavljenih u „Službenom glasniku RS", br. 55/2004, 85/2005-dr.zakon, 44/2010, 76/2012, 106/2012, 14/2015 i 40/2015-odluka US i 44/2018;

1.2. Zakon o bankama, prečišćen tekst sačinjen na osnovu teksta Zakona o bankama;„Službeni glasnik

RS“, br.107/2005 i njegovih izmena i dopuna objavljenih u „Službenom glasniku RS“, br.91/2010 i 14/2015;

1.3. Zakon o finansijskom obezbeđenju;„Službeni glasnik RS“, br. 44/2018.

2. Odluke

2.1. Odluka o visini referentne kamatne stope Narodne banke Srbije; IO NBS broj 114 od 10.12.2020. godine;

2.2. Odluka o kamatnim stopama koje NBS primenjuje u postupku sprovođenja monetarne politike; IO NBS broj 56 od 08.08.2019. godine;

2.3. Odluka o izmenama Odluke o kamatnim stopama koje NBS primenjuje u postupku sprovođenja monetarne politike; IO NBS broj 1 od 14.01.2021. godine;

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2.5. Odluka o dostavljanju Narodnoj banci Srbije podataka o pozajmicama na međubankarskom novčanom tržištu; „Službeni glasnik RS“, br 28/2018; Odluka broj 2, 5.april 2018. godine;

2.6. Odluka o uslovima i načinu izdavanja i prodaje kratkoročnih hartija od vrednosti;„Službeni glasnik RS“, br.45/2011; IO NBS br.52, 16. jun 2011;

2.7. Odluka o utvrđivanju glavnih operacija na otvorenom tržištu; „Službeni glasnik RS“, br. 119/2012; IO NBS 49, 14. decembar 2012. godine;

2.8. Odluka o uslovima i načinu sprovođenja operacija na otvorenom tržištu; „Službeni glasnik RS“, br. 45/2011, 34/2013, 74/2020 i 98/2020; IO NBS br.49, 16. juna 2011. godine;

2.9. Odluka o utvrđivanju kalendara redovnih aukcija hartija od vrednosti za avgust 2021. godine; G.br.5759,26.jul2021.godine;https://www.nbs.rs/static/nbs_site/gen/latinica/30/kalendari/kalendar.pdf;

2.10. Odluka o organizovanju (npr.75) aukcije hartija od vrednosti; G.br. 7433, 23. septembar 2021. godine; https://nbs.rs/static/nbs_site/gen/latinica/20/hov/2_2_1_22_75.pdf;

2.11. Odluka o utvrđivanju procenta uvećanja/umanjenja nominalne vrednosti hartija od vrednosti; G.br. 6642,30. jun2020.godine;https://www.nbs.rs/export/sites/NBS_site/documents/propisi/propisimp/oot_procenat_umanjenja_uvecanja.pdf;

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2.13. Odluka o kriterijumima pod kojima Narodna banka Srbije u monetarnim operacijama može prihvatiti hartije od vrednosti koje izdaju domaća privredna društva; G.br. 6489, 24. juna 2020. godine; https://nbs.rs/export/sites/NBS_site/documents/propisi/propisi-mp/kriterijumi_korporativne_obveznice.pdf;

2.14. Odluka o izmenama odluke o kriterijumima pod kojima Narodna banka Srbije u monetarnim operacijama može prihvatiti hartije od vrednosti koje izdaju domaća privredna društva; G.br. 7499, 24. jula 2020. godine; https://nbs.rs/export/sites/NBS_site/documents/propisi/propisi-mp/kriterijumi_korporativne_obveznice_i.pdf.

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3.3.Korisničko uputstvo Centralnog registra, depoa i kliring hartija od vrednosti; http://www.crhov.rs/pravnaregulativa/srpski/korisnicko_uputstvo/korisnicko_uputstvo.pdf.

4. Ugovori

4.1. Okvirni repo ugovor; https://nbs.rs/export/sites/NBS_site/documents/propisi/propisi-mp/oot_okvirni_repo_ugovor.pdf;

4.2. Okvirni ugovor o reotkupu hartija od vrednosti (Okvirni repo ugovor); http://www.aci.rs/documents/.

5. Memorandum

5.1.Memorandum o ciljanju (targetiranju) inflacije kao monetarnoj strategiji; https://nbs.rs/export/sites/NBS_site/documents/monetarnapolitika/memorandum_monetarna_strategija_122008.pdf, decembar 2008. godine.

6. Pravilnik

6.1. Pravilnik o tarifi Centralnog registra, depoa i kliringa hartija od vrednosti; Prečišćen tekst zaključno sa izmenama i dopunama koje su stupile na snagu 17.09.2020.godine; http://www.crhov.rs/pravnaregulativa/srpski/tarifnik/Pre%C4%8Di%C5%A1%C4%87en_tekst_Pravilnika_o_tarifi_septembar_2020.pdf;

6.2. Pravila poslovanja centralnog registra, depoa i kliringa hartija od vrednosti, Prečišćen tekst (zajedno sa izmenama i dopunama koje su stupile na snagu 31.03.2020. godine); http://www.crhov.rs/pravnaregulativa/srpski/pravila_poslovanja/Pre%C4%8Di%C5%A1%C4%87en_tekst_Pravila_poslovanja_od_25_03_2020.pdf;

6.3. Pravilnik o terminskom planu rada Centralnog registra, depoa i kliringa hartija od vrednosti; Prečišćen tekst (zaključno sa izmenama i dopunama koje su stupile na snagu 01.01.2016.godine); http://www.crhov.rs/pravnaregulativa/Preciscen_tekst_Terminski_plan_23_03_2016.pdf.

7. Bilten

7.1. Statistički bilten NBS-jul 2021. godine; https://nbs.rs/export/sites/NBS_site/documents/publikacije/sb/sb_07_21.pdf

8. Izveštaj

8.1. Izveštaj o inflaciji-avgust 2021. godine; https://nbs.rs/export/sites/NBS_site/documents/publikacije/ioi/izvestaji/ioi_08_2021.pdf;

8.2. Godišnji izveštaj o monetarnoj politici-2020. godine; https://nbs.rs/export/sites/NBS_site/documents/publikacije/mp/monetarna_politika_II_2020.pdf;

8.3. Polugodišnji izveštaj o monetarnoj politici: januar-jun 2020. godine; https://nbs.rs/export/sites/NBS_site/documents/publikacije/mp/monetarna_politika_I_2020.pdf;

8.4. Godišnji izveštaj o poslovanju i rezultatima rada 2020. godine; https://nbs.rs/export/sites/NBS_site/documents/publikacije/godisnji-izvestaj/godisnji_izvestaj_2020.pdf

U skladu sa identifikovanim dokumentima kojima se reguliše repo tržište na teritoriji Republike Srbije, može se zaključiti da se navedenom problematikom bave sledeće institucije u zemlji:

- Narodna banka Srbije;
- Poslovne banke na teritoriji Republike Srbije;
- Centralni registar, depo i kliring hartija od vrednosti;
- Komisija za hartije od vrednosti;
- ACI Srbija;
- U slučaju spora, sud u Beogradu.

Kada je reč o učesnicima na repo tržištu na teritoriji Republike Srbije, za sada su to jedino poslovne Banke i Narodna banka Srbije. Najveći obim i broj repo transakcija je realizovan između NBS i poslovnih banaka na redovnim aukcijama.

Repo instrument

Ugovor o rekupovini (eng. „Repurchase agreement“, repo) je sporazum o prodaji i rekupovini finansijske aktive i esencijalno je instrument koji podrazumeva da se dve ugovorne strane dogovore o izvršenju dve transakcije („dila“) koje čine jedinstveni paket. Prva transakcija je kupovina ili prodaja finansijske aktive, obično državne obveznice ili druge hartije od vrednosti, za promptnu isporuku (tačan datum saldiranja će varirati u skladu sa tržišnom konvencijom hartije od vrednosti). Druga transakcija je reverzna prvoj, datum saldiranja je na utvrđeni budući datum („ACI Diploma Course“, Markets International Ltd., 13.01.2010. godine, Odeljak o Repo tržištu).

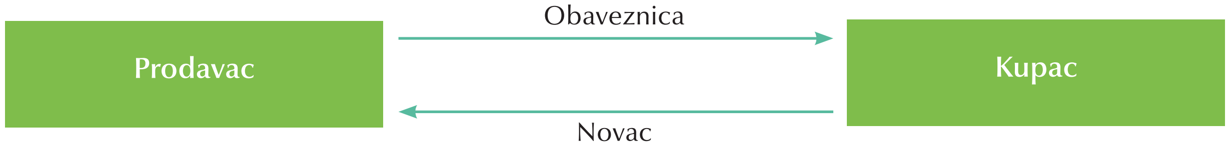
Zbog toga što je poznato od početka da će saldiranje repa na promptni datum biti praćeno reverznom transakcijom na terminski datum, jasno je da obe strane nameravaju da transfer aktive u jednom smeru i transfer novca u drugom bude privremen, a ne trajan. Transakcija je stoga ekvivalentna davanju na zajam finansijske aktive u formi hartija od vrednosti u jednom smeru i davanju na zajam novca u drugom. Svaka repo transakcija je motivisana potrebom da se novac plasira na zajam ili uzme na zajam, što je kolaterizovano finansijskom aktivom. Međutim, repo transakcija može biti motivisana i potrebom da se uzme na zajam specifična hartija od vrednosti. Cene i za originalnu prodaju i naknadnu rekupovinu su dogovorene na početku. Razlika između dve cene je izračunata da bude ekvivalentna troškovima uzimanja na zajam kolaterizovanog novca. Stoga se navedena aktiva naziva kolateralom.

Bez obzira što pravni benefit kolaterala prelazi sa prodavca na kupca u toku trajanja repo transakcije, ekonomska korist ostaje na strani prodavca. Bez obzira što kupac ima pravo svojine na kolateral, namera nije da korišćena aktiva čini deo kalkulacije ekonomije transakcije. Finansijska nagrada kupca za zaključenje transakcije proističe iz kamate na davanje na zajam novca, koju će on efektivno primiti u formi razlike između novčanog iznosa u prvom i drugom koraku repo transakcije. Ukoliko vrednost aktive poraste tokom trajanja repo transakcije od toga će profitirati prodavac, a ne kupac, zbog toga što mu se aktiva vraća u drugom koraku transakcije. Ukoliko se vrednost aktive smanji, prodavac će trpeti zbog toga jer mu se aktiva vraća na kraju repo transakcije, u drugom koraku. Dakle, tokom trajanja repo transakcije, pravni benefit kolaterala prelazi na kupca, ali ekonomski benefit ostaje na strani prodavca.

Zbog toga što dve ugovorne strane vrše suprotne transakcije, repo jedne strane je reverzan za drugu stranu, učesnicu transakcije. U repo transakciji, prodavac (eng.„seller“ ili „lender“) je strana koja prodaje hartije od vrednosti na početku i rekupuje ih kasnije na ugovoreni terminski datum. Kupac (eng.„buyer“, „borrower“ ili „investor“) je druga strana učesnica transakcije. Važno je primetiti da se koristi metodologija sa tačke gledišta tržišta obveznica, a ne tržišta novca (“ACI Diploma Course“, Markets International Ltd., 13.01.2010.godine, Odeljak o Repo tržištu).

Tokovi novca i finansijske aktive na promptni datum se mogu prikazati grafički kao što prikazuje Slika 1. Prodavac prenosi vlasništvo hartije od vrednosti na kupca, dok kupac transferiše novac prodavcu.

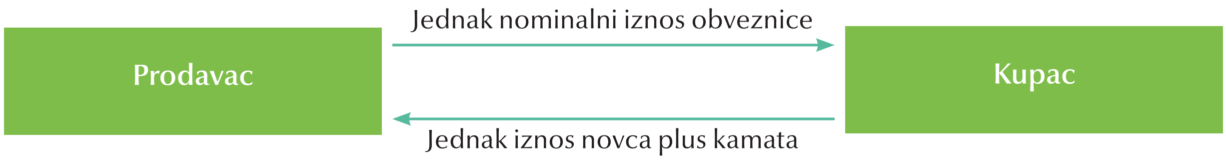
Slika 1: *Tokovi repo transakcije na promptni datum*



Izvor: “ACI Diploma Course“, Markets International Ltd., 13.01.2010. godine, Odeljak o Repo tržištu

Na datum dospeća repo transakcije, novac se vraća sa kamatom. Tokovi na datum dospeća repo transakcije su grafički prikazani na Slici 2. Kupac vraća prodavcu obveznicu jednake nominalne vrednosti. Strana „prodavac“ vraća jednak iznos novca plus kamata „kupac“ strani.

Slika 2: *Tokovi novca i finansijske aktive drugog koraka repo transakcije*



Izvor: „ACI Diploma Course", Markets International Ltd., 13.01.2010. godine, Odeljak o Repo tržištu

Zakonsko pravo na kolateral prelazi na kupca za vreme trajanja repo transakcije. Ukoliko prodavac ne izvrši vraćanje novca sa pripadajućom kamatom, kupac neće morati da dokazuje svoje pravo na kolateral. Za stranu koja daje na zajam novac, repo transakcija obezbeđuje duplu sigurnost. Ukoliko druga ugovorna strana ne izvrši svoje obaveze, kolateral služi za namirenje potraživanja. Zbog toga je važno sagledati kreditni rejting i druge ugovorne strane u repo transakciji, ali i emitenta hartije od vrednosti. Navedeno ne znači da kupac ne treba da ima kreditnu liniju za prodavca, već da navedeno povećava sigurnost novčane pozajmice, posebno ukoliko je kolateral državna obveznica, što je najčešće slučaj. Drugim rečima, i dalje postoji rizik druge ugovorne strane, ali je on znatno umanjen pravilnim dizajniranjem repo transakcije. Navedeno uključuje i pravni rizik. Repo takođe uključuje i tržišni rizik. Kao što bilo koje davanje na zajam ili uzimanje na zajam novca podrazumeva tržišni rizik, vrednost kolaterala može iznenada pasti. Za stranu koja uzima na zajam novac, prednost je ta da može upotrebiti investiciju u portfolio da uzme na zajam novac po povoljnijim uslovima ili koji ne bi mogla uzeti na zajam po drugim uslovima.

Važno je primetiti da se reč „kolateral" ne koristi u uobičajenom smislu. Kolateral označava nešto što je dato privremeno kao garancija, ali ne menja vlasnika. U repo transakcijama, vlasništvo na hartijama od vrednosti prelazi sa jedne strane na drugu. Prodavac zadržava ekonomske benefite i tržišni rizik vezan za hartije od vrednosti koje imaju funkciju kolaterala. Direktan transfer prava svojine na kolateral znači da kupac ima automatsko pravo da ponovo koristi kolateral tokom trajanja repo transakcije, nezavisno od toga da li će ili neće prodavac izvršiti svoje obaveze. Navedeno znači da on može da vrši repo ili proda kolateral trećoj strani u bilo koje vreme (kupac jedino treba da bude siguran da je sposoban da obezbedi ekvivalentan kolateral koji će vratiti prodavcu na datum reotkupa). Navedeno pravo ponovnog korišćenja kolaterala smanjuje rizik likvidnosti kome je kupac izložen davanjem na zajam novca.

Veličina repo tržišta Republike Srbije

Podaci o veličini repo tržišta Republike Srbije se crpe sa internet stranica Narodne banke Srbije i Centralnog registra, depoa i kliringa hartija od vrednosti. Na internet stranicama NBS se nalaze podaci o repo transakcijama između NBS i poslovnih banaka, dok se na internet stranicama Centralnog registra, depoa i kliringa hartija od vrednosti prikazuju i podaci o repo transakcijama između poslovnih banaka.

Podaci o ukupnom obimu i učestalosti repo transakcija između poslovnih banaka ne mogu se precizno utvrditi. Najveći obim ovih transakcija je vršen 2012. i 2020. godine. Poslovne banke se najčešće opredeljuju da vrše repo transakcije sa NBS na redovnim nedeljnim aukcijama ročnosti 7 dana. Navedene transakcije sačinjavaju više od 90 procenata veličine repo tržišta. U budućnosti se može očekivati rast učestalosti, volumena i varijeteta međubankarskih repo transakcija. Može se očekivati i proširenje liste podobnih kolaterala dužničkih hartija od vrednosti, ali i prihvatanje vlasničkih hartija od vrednosti. Dodatno, može se očekivati primena novih platformi trgovanja i načina saldiranja transakcija shodno preferencijama rizika i troškovnoj efikasnosti. Navedeno će imati uticaj na vremensku strukturu kamatnih stopa u Republici Srbiji.

Tabela broj 1: *Veličina repo tržišta kada su ugovorne strane NBS i poslovne banke*

Godina	Vrsta transakcije	Prosečna ponderisana kamatna stopa na NBS aukciji (u %)	Prodato HOV - kupovna cena	Prosečan devizni kurs EUR/RSD	Prekursiran iznos u EUR
2005	repo prodaja	15,58	217.366.138.481,50	82,9904	2.619.172.078,72
2006	repo prodaja	18,02	1.083.556.562.660,00	84,1101	12.882.597.484,25
2007	repo prodaja	10,40	3.873.834.491.773,23	79,9640	48.444.731.276,24
2008	repo prodaja	14,67	5.239.123.717.415,96	81,4405	64.330.691.945,85
2009	repo prodaja	12,65	3.121.914.864.042,90	93,9517	33.228.934.272,00
2010	repo prodaja	8,97	2.510.399.909.487,76	103,0431	24.362.620.199,58
2011	repo prodaja	11,42	2.136.085.000.000,00	101,9502	20.952.239.426,70
2012	repo prodaja	9,59	1.273.220.000.000,00	113,1277	11.254.714.804,60
2012	repo kupovina	11,00	67.478.314.400,00	113,1277	596.479.150,55
2013	repo prodaja	8,93	4.247.200.000.000,00	113,1369	37.540.360.395,24
2014	repo prodaja	6,98	3.585.820.000.000,00	117,3060	30.568.086.883,88
2015	repo prodaja	3,46	1.504.700.000.000,00	120,7328	12.463.058.920,19
2016	repo prodaja	2,82	2.343.430.000.000,00	123,1179	19.034.031.607,10
2017	repo prodaja	2,83	2.701.669.000.000,00	121,3367	22.265.884.930,12
2018	repo prodaja	2,42	2.488.400.000.000,00	118,2716	21.039.708.602,91
2019	repo prodaja	1,49	2.521.000.000.000,00	117,8524	21.391.163.862,59
2020	repo prodaja	0,63	1.748.500.000.000,00	117,5777	14.871.017.208,20
2020	repo kupovina	0,54	41.635.451.500,00	117,5777	354.110.103,36

Izvor: Obrađeni podaci NBS

Način ugovaranja, procesuiranja i saldiranja repo transakcije

Poslovna banka može ugovarati i realizovati repo transakcije sa Narodnom bankom Srbije ili drugom poslovnom bankom.

Ukoliko poslovna banka repo transakcije zaključuje sa Narodnom bankom Srbije, trgovanje se obavlja preko veb platforme Monetarne operacije Narodne banke Srbije. Ukoliko postoje tehnički problemi u radu veb platforme NBS, dostavljanje ponuda banaka i njihovo prihvatanje može se vršiti elektronskom poštom i telefaksom. Učesnici mogu biti banke koje zadovoljavaju određene kriterijume.

Procesu ugovaranja i procesuiranja repo transakcije prethodi donošenje odluke o aukciji određenog tipa. Aukcije mogu biti po fiksnoj ili po varijabilnoj kamatnoj stopi. Ukoliko je reč o aukcijama po fiksnoj kamatnoj stopi, hartije od vrednosti se kupuju ili prodaju po kamatnoj stopi koju je NBS unapred utvrdila i o tome obavestila učesnike. Aukcije po varijabilnoj kamatnoj stopi podrazumevaju da NBS nije unapred odredila stopu i da se kupovina ili prodaja hartija od vrednosti vrši po kamatnoj stopi koja se formira na bazi ponude i tražnje učesnika u kupoprodajnim transakcijama.

Razlikuju se dva tipa aukcija po varijabilnoj kamatnoj stopi: a) aukcija po višestrukoj kamatnoj stopi i b) aukcija po jedinstvenoj kamatnoj stopi (Odluka o uslovima i načinu sprovođenja operacija na otvorenom tržištu; „Službeni glasnik RS“, br. 45/2011, 34/2013, 74/2020 i 98/2020; IO NBS br. 49, 16. juna 2011. godine)

U skladu sa dokumentom naziva „Odluka o utvrđivanju kalendara redovnih aukcija hartija od vrednosti za određeni mesec“, NBS određuje datum, vrstu operacije i ročnost transakcije operacija na otvorenom tržištu gde je po pravilu reč o glavnoj operaciji.

Nezavisno da li je reč o glavnoj operaciji ili operaciji duže ročnosti, na dan održavanja aukcije NBS objavljuje dokument „Odluka o organizovanju tačno određenog broja aukcije hartija od vrednosti“ u kojem navodi:

• Datum aukcije;

• Broj aukcije;

• Vrsta operacije: npr. glavna operacija ili operacija duže ročnosti;

• Vrsta transakcije: npr. reverzna repo transakcija-prodaja hartija od vrednosti ili repo transakcija-kupovina hartija od vrednosti;

• Vrsta aukcije: npr. aukcija po varijabilnoj višestrukoj kamatnoj stopi ili aukcija po fiksnoj kamatnoj stopi;

• Datum reotkupa: broj dana od dana održavanja aukcije tj. tačan datum;

• Utvrđuje se nominalni iznos hartija od vrednosti koje će se prodavati ili kupiti na aukciji;

• Vrsta hartija od vrednosti koje se kupuju ili prodaju;

• ISIN broj u situaciji kada NBS repo prodaje hartije od vrednosti;

• Oznaka emisije u situaciji kada NBS repo prodaje hartije od vrednosti;

• Pojedinačna nominalna vrednost blagajničkih zapisa NBS, u situaciji kada NBS repo prodaje hartije od vrednosti;

• Datum izdavanja, u situaciji kada NBS repo prodaje hartije od vrednosti;

• Datum dospeća, u situaciji kada NBS repo prodaje hartije od vrednosti;

• Druge odredbe u zavisnosti od vrste transakcije.

NBS na internet strani objavljuje i „Saopštenje o održavanju aukcija hartija od vrednosti“ koje sadrži sledeće bitne podatke:

- Datum aukcije;
- Vreme dostavljanja ponude: 12:00 do 12:30;
- Redni broj aukcije;
- Vrsta operacije;
- Vrsta transakcije;
- Vrsta aukcije;
- Minimalni iznos ponude u mln din.=1;
- Maksimalni broj ponuda na aukciji 1;
- Ročnost transakcije: broj dana;
- Datum dospeća transakcije;
- Kamatna stopa;
- Minimalna kamatna stopa;
- Maksimalna kamatna stopa = RKS;
- Nominalni iznos ponude hartija od vrednosti u mln din.

U operacijama na otvorenom tržištu može učestvovati banka koja ispunjava sledeće uslove:

1. da je član Centralnog registra, depoa i kliringa hartija od vrednosti;

2. da je sa NBS zaključila okvirni repo ugovor ako se obavljaju repo transakcije, odnosno okvirni ugovor o trajnim transakcijama ako se obavljaju trajne transakcije;

3. da joj nije izrečena zabrana obavljanja sa NBS određenih vrsta transakcija kupovine/prodaje hartija od vrednosti.

Banka koja ispunjava uslove kupuje i prodaje hartije od vrednosti u svoje ime i za svoj račun. Poslovna banka koja želi da učestvuje na reverznoj repo aukciji NBS, šalje svoju ponudu u kojoj navodi količinu hartija od vrednosti koje želi da kupi i kamatnu stopu. U slučaju repo transakcija u kojima poslovna banka prodaje hartije od vrednosti Narodnoj banci Srbije, banka unosi i ISIN brojeve hartija od vrednosti koje prodaje.

U skladu sa dobrom bankarskom praksom, poslovna Banka u cilju procesuiranja repo transakcije sa NBS treba da poseduje sledeću dokumentaciju:

1. Okvirni REPO ugovor;

2. Poslovna banka sa NBS razmenjuje za svaku repo transakciju poseban Ugovor, koji sadrži sledeće podatke: a) vrsta transakcije - npr. reverzna repo transakcija - repo prodaja HOV od strane NBS, b) broj aukcije, c) datum održavanja aukcije, d) vrsta HOV: blagajnički zapisi NBS, e) Valuta HOV, f) Nominalna vrednost po komadu: 10.000,00, h) Ročnost transakcije u danima, i) Datum reotkupa, g) Datum i vreme uplate sredstava prilikom reotkupa, k) Valuta transakcije. U posebnom ugovoru je prikazana i: a) nominalna vrednost, b) kupovna vrednost, c) kamatna stopa, d) reotkupna vrednost. Takođe, navodi se specifikacija hartija od vrednosti: a) redni broj, b) ISIN HOV, c) broj komada, d) procenat uvećanja, e) kupovna cena po komadu (ako nema procenta uvećanja onda je jednaka nominalnoj vrednosti), f) kamatna stopa (%), g) Reotkupna cena po komadu, h) nominalna vrednost, i) kupovna vrednost, j) reotkupna vrednost. Zatim se za sve ISIN brojeve navodi: nominalna vrednost, kupovna vrednost, reotkupna vrednost. Nominalna, kupovna i reotkupna vrednost obračunavaju se na osnovu nominalne, kupovne i reotkupne cene po komadu i broja prihvaćenih komada hartija od vrednosti. Obaveze iz ovog posebnog ugovora proizilaze iz odluke kojom se uređuju uslovi i način sprovođenja operacija na otvorenom tržištu i propisa NBS za sprovođenje te odluke, kao i okvirnog repo ugovora. Za rešavanje sporova nadležan je sud u Beogradu;

3. Od strane Centralnog registra, depo i kliring hartija od vrednosti a.d. prima poruke za verifikaciju koja sadrži sledeće podatke: a) Broj zaključnice, redni broj, broj poruke, b) Jedinstveni matični broj (akronim:JMB) brokera, naziv brokera, c) vrsta posla, vrsta plaćanja, d) Datum trgovanja, datum obračuna, provizija, d) tiker, šifra valute, e) broj hartija od vrednosti, tržišna vrednost, diskont, f) račun, JMB klijenta, Naziv klijenta.

Nakon završetka aukcije, NBS, Sektor za monetarne i devizne operacije na internet stranici NBS objavljuje dokument naziva „Izveštaj o rezultatima aukcije koju je organizovala NBS na dan određeni“. Podaci koje sadrži ovaj izveštaj su sledeći:

- Vrsta operacije: npr. Glavna operacija;
- Vrsta transakcije: Reverzna repo transakcija - repo prodaja HOV;
- Vrsta aukcije: npr.varijabilna/višestruka;
- Vrsta HOV;
- Broj aukcije;
- Datum aukcije;
- Datum reotkupa;
- Ročnost transakcije u danima;
- Obim ponude NBS (kupovna vrednost);
- Ponude banaka (kupovna vrednost);
- Realizovano: kupovna vrednost i reotkupna vrednost;
- Najviša prihvaćena repo stopa p.a.;

- Prosečna ponderisana repo stopa p.a.;
- Koeficijent realizacije;
- Procenat prihvaćenih ponuda banaka sa najvišom repo stopom.

Kolaterali podobni za sprovođenje repo transakcija

Pravnim aktima Narodne banke Srbije su propisane hartije od vrednosti koje mogu imati ulogu kolaterala u repo i reverznim repo transakcijama. Narodna banka Srbije može kupovati i prodavati dinarske hartije od vrednosti, bez devizne klauzule čiji je izdavalac:

1. Narodna banka Srbije;

2. Republika Srbija;

3. Međunarodna finansijska organizacija i razvojna banka ili finansijska institucija čiji je osnivač strana država i čiji je kreditni rejting agencija za procenu rejtinga Standard and Poor's ili Fitch-IBCA utvrdila sa „AAA", odnosno Moody's sa „Aaa";

4. Domaće privredno društvo čiji je bonitet Agencija za privredne registre ocenila najmanje ocenom „(D) prihvatljiv bonitet" ili koje ima drugu ocenu svog boniteta/kreditne sposobnosti koja je odgovarajuća oceni boniteta „(D) prihvatljiv bonitet".

Na internet strani Narodne banke Srbije u skladu sa Odlukom o izmeni odluke o utvrđivanju procenta uvećanja/umanjenja nominalne vrednosti hartija od vrednosti („G. Br.7500 od 24.jula 2020.godine), dat je pregled hartija od vrednosti podobnih za repo prodaju i kupovinu.

U Tabeli broj 2 i 3 dat je pregled podobnih vrsta hartija od vrednosti i ročnosti koje mogu biti kolateral u repo transakciji.

Tabela broj 2: *Repo prodaja hartija od vrednosti*

Vrsta hartija od vrednosti	Preostala ročnost u danima	Procenat uvećanja
Blagajnički zapisi Narodne banke Srbije	do 371	0,00%

Izvor:Narodna banka Srbije

Tabela broj 3: *Repo kupovina hartija od vrednosti, kredit za održavanje dnevne likvidnosti, kratkoročni dinarski kredit*

Vrsta hartija od vrednosti	Preostala ročnost u danima	Procenat umanjenja
Blagajnički zapisi Narodne banke Srbije	do 371	3,00%
Diskontne hartije od vrednosti Republike Srbije i međunarodnih finansijskih organizacija i međunarodnih razvojnih banaka ili finansijskih institucija	do 371	3,00%
	372-731	5,00%
Kuponske hartije od vrednosti Republike Srbije i međunarodnih finansijskih organizacija i međunarodnih razvojnih banaka ili finansijskih institucija	do 371	2,00%
	372-731	2,00%
	732-2.008	2,00%
	Preko 2.008	2,00%
Obveznice domaćih privrednih društava (korporativne obveznice) sa osnovnom ocenom boniteta A (odličan bonitet) i B (veoma dobar bonitet)	do 1830	5,00%
	1.831-3.660	5,50%
Obveznice domaćih privrednih društava (korporativne obveznice) sa osnovnom ocenom boniteta C (dobar bonitet)	Do 1830	6,00%
	1.831-3.660	6,50%
Obveznice domaćih privrednih društava (korporativne obveznice) sa osnovnom ocenom boniteta D (prihvatljiv bonitet)	Do 1830	7,00%
	1.831-3.660	8,00%

Izvor: Narodna banka Srbije

Troškovi realizacije repo transakcije

Kliring i saldiranje repo transakcija vrši Centralni registar, depo i kliring hartija od vrednosti (Dalje u tekstu: CRHOV) po DVP (eng. „Delivery versus Payment“) modelu. Navedeni model označava istovremeni prenos finansijskih instrumenata i novčanih sredstava. Saldiranje svih repo transakcija se vrši i u skladu sa dokumentom naziva „Korisničko uputstvo centralnog registra, depoa i kliring hartija od vrednosti". Utvrđena je obaveza plaćanja naknade u skladu sa Pravilnikom o tarifi Centralnog registra.

Za repo transakcije kada NBS finansijske instrumente prodaje bankama, kao i za transakcije reotkupa kada je NBS u obavezi da finansijske instrumente otkupi od banaka na ugovoreni datum - datum reotkupa, Centralni registar naplaćuje naknadu učesnicima u transakciji po nalogu u skladu sa Pravilnikom o tarifi Centralnog registra.

Za repo transakcije kada NBS od banaka kupuje finansijske instrumente, Centralni registar naplaćuje naknadu učesnicima u transakciji po ugovoru koji NBS, kao repo kupac, zaključuje sa bankama, kao repo prodavcima. Ugovor se tretira kao jedan nalog u skladu sa Pravilnikom o tarifi Centralnog registra, bez obzira da li obuhvata više finansijskih instrumenata različitih ISIN brojeva.

Za transakcije reotkupa kada su banke u obavezi da finansijske instrumente otkupe od NBS na ugovoreni datum-datum reotkupa, Centralni registar naplaćuju naknadu učesnicima u transakciji po repo ugovoru. Ugovor se tretira kao jedan nalog u skladu sa Pravilnikom o tarifi Centralnog registra, bez obzira da li obuhvata više finansijskih instrumenata različitih ISIN brojeva.

U Tabeli broj 4 su prikazani osnovni tarifni stavovi Pravilnika o tarifi Centralnog registra, depoa i kliringa hartija od vrednosti, prečišćen tekst zaključno sa izmenama i dopunama koje su stupile na snagu 17.09.2020. godine.

Plaćanje tarife naknada na račun Centralnog registra vrši se mesečno na osnovu fakture koju ova institucija dostavlja do 5. u mesecu za prethodni obračunski period. Rok za plaćanje fakture koju Centralni registar ispostavlja je 15 dana od dana izdavanja fakture.

Tabela broj 4: *Tarifa naknada CRHOV, osnovni stavovi, za repo transakcije*

Tarifni stav	Iznos RSD	PDV	Način obračuna	Način naplate	Obveznik plaćanja tarife
6.8. Prenos finansijskih instrumenata i novca po „DVP" principu po osnovu REPO/REOTKUP i trajnih transakcija, koje sprovodi Republika Srbija ili NBS	550,00	oslobođeno	po transakciji	mesečno	Članovi koji vode novčane račune kupca i prodavca
6.17. Prenos finansijskih instrumenata i novca po „DVP" principu po osnovu zaključenih REPO ugovora i ugovora o finansijskom obezbeđenju	1.250,00	oslobođeno	po transakciji	mesečno	Članovi koji vode novčane račune kupca i prodavca
6.18. Zamena finansijskih instrumenata kod REPO transakcija i ugovora o finansijskom obezbeđenju	1.250,00	oslobođeno	po nalogu	mesečno	Nalogodavac/inicijator prenosa finansijskog instrumenta
6.19. Promena podataka kod REPO transakcija i ugovora o finansijskom obezbeđenju	550,00	+ PDV	po promeni	mesečno	Podnosilac zahteva

Izvor: Centralni registar, depo i kliring hartija od vrednosti

Na prihod od kamate po osnovu repo transakcija se ne plaća porez.

Zaključak

Ugovor o rekupovini i repo tržište imaju ključnu ulogu u podršci toka novca i hartija od vrednosti u finansijskom sistemu i ključni su za implementaciju monetarne politike. Repo je način da se plasira novac, obezbedi finansiranje ili kolateral. Dodatno, centralne banke često implementiraju monetarnu politiku tako što pruže bankama obezbeđeno finansiranje. Tada banke mogu preneti likvidnost na međubankarsko tržište kroz repo tržište.

Uticaj referentne kamatne stope, osnovnog instrumenta monetarne politike NBS, na aktivne i pasivne kamatne stope banaka ostvaruje se posredno, putem kratkoročnih kamatnih stopa na tržištu novca, koje centralne banke uobičajeno koriste kao operativni cilj monetarne politike. U slučaju Srbije, efikasnost kamatnog kanala zavisi od jačine prenosa jednonedeljene repo stope NBS na kamatne stope na međunarodnom novčanom tržištu, a zatim od njihovog prenosa na dinarske kamatne stope banaka (NBS, Izveštaj o inflaciji, novembar 2020. godine).

Značaj repo tržišta postaje sve veći sa približivanjem Republike Srbije Evropskoj uniji. U stresnim situacijama, kao što je pandemija virusa korona, prilike na repo tržištu Evropske unije su ostale stabilne. Transakcioni troškovi ostali su niski i cene su se nesmetano prilagodile tržišnim dešavanjima. Poučeni iskustvom zemalja u okruženju, može se očekivati da u budućnosti vrsta kolaterala postane sve značajniji motiv vršenja repo transakcija. Drugim rečima, primarni motiv u brojnim situacijama neće biti likvidnost već kolateral. Međutim, državne obveznice će i dalje biti dominantna vrsta kolaterala u repo transakcijama. Repo tržište je povezano sa globalnim tržištem novca, tržištem obveznica, tržištima fjučersa i svop tržištima. Prednosti primene repo transakcija su brojne i razlog su ubrzanog razvoja ovog tržišta.

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THE REPUBLIC OF SERBIA REPO MARKET

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Abstract:

The purpose of this paper is to analyze the following aspects of the Republic of Serbia repo market: legislative frame in order to identify all documents related to repo market, the main repo market features and its role, institutional frame and participants, determination of the scope of the domestic repo market, the way of negotiating, processing and settlement of repo transaction, acceptable collaterals in the securities form, price aspects of repo transactions, transaction costs of completing repo transaction and suggestions for the improvement of this market.

After analysing the facts, it is to be expected to gain ability to project future development trends of this segment of financial markets which has already become international.

Keywords: Repo market, monetary policy repo instrument, repo transaction, reverse repo transaction, referent interest rate, repo rate, collateral

JEL classification: E52, E40, G11, O16

Introduction

In accordance with the NBS' opinion, repo transactions can be divided into reverse repo transaction - repo sale of securities and repo transaction - repo purchase of securities.

In a reverse repo transaction, the NBS sells securities to banks on the sale date, assuming at the same time the obligation to repurchase those securities on the agreed repurchase date in the future. On the sale date, banks pay to the NBS the purchase price of securities, whereas on the repurchase date the NBS pays to banks the purchase price plus interest – repurchase price of securities. The effect of the transaction is a temporary withdrawal of excess liquidity from the banking sector (The explanation is taken from websites of the NBS).

In a repo transaction, the NBS buys securities from banks on the purchase date and banks assume the obligation to repurchase those securities on the agreed repurchase date in the future. On the purchase date, the NBS pays to banks the purchase price of securities, whereas on the repurchase rate it charges banks the purchase price plus interest – the repurchase price of securities. The effect of the transaction is a temporary supply of needed liquidity to the banking sector (The explanation is taken from websites of the NBS).

Repo and reverse repo transaction are the sort of open market operations which belong to a group of other monetary policy instruments. The key policy rate is the main monetary policy instrument in the inflation-targeting regime. The key policy rate is the highest e.g. the lowest interest rate which the National Bank of Serbia implements in the conduct of repo transactions.

Open market operations of the NBS may be classified into: 1. main operations, 2. longer-term operations, 3. fine-tuning operations. Main operations are implemented by applying repo transactions with a one-week term to maturity of transaction. The NBS implements main operations regularly at standard auctions, according to the previously defined auction schedule. Longer-term operations' aim is to provide liquidity to the banking sector and/or absorb excess liquidity in the longer run. They are implemented at standard auctions and bilaterally as well. Fine-tuning operations are implemented to prevent or ease swings in banking sector liquidity and particularly their effect on short-term interest rates. As a rule, they are conducted at quick auctions, i.e., on the day a decision is made to hold an auction, but they also can be implemented bilaterally (The explanation is taken from websites of the NBS).

The Regulatory and Institutional Framework of the Repo Market in The Republic Of Serbia

The following documents, the purpose of which is to explain and define functioning of the Republic of Serbia repo market, have been identified:

1. Laws

1.1. Law on the National bank of Serbia; „RS Official Gazette" No. 72/2003 and its amendments and supplements published in the „RS Official Gazette" No. 55/2004, 85/2005-other law, 44/2010, 76/2012, 106/2012, 14/2015 and 40/2015-Constitutional Court decision and 44/2018;

1.2. Law on Banks, „RS Official Gazette“ No.107/2005, no.91/2010 and 14/2015;

1.3. Law on Financial Collateral, „RS Official Gazette“ No.44/2018.

2. Decisions

2.1. Decision on the Key Policy Rate of the National Bank of Serbia; NBS Executive Board No 114, 10 December2020, Belgrade;

2.2. Decision on interest rates applied by the National Bank of Serbia in the implementation of Monetary Policy, EB NBS 56, 8 August 2019, Belgrade;

2.3. Addition to Decision on interest rates applied by the National Bank of Serbia in the implementation of Monetary Policy, EB NBS 1, 14 January 2021, Belgrade;

2.4. Decision on the National Bank of Serbia Discount Rate; „RS Official Gazette“ No. 104/2009, 17/2010 and 31/2010; Monetary Board NBS number 27, 14December2009;

2.5. Decision on Submitting Data on Interbank Money Market Loans to the National bank of Serbia, „RS Official Gazette“ No. 28/2018; Decision number 2, 5April2018;

2.6. Decision on Terms and Manner of Issue and sale of short-term Securities; „RS Official Gazette“ No. 45/2011; Executive Board NBS number 52, 16June2011;

2.7. Decision Determining the Main Open Market Operations, „RS Official Gazette“ No. 119/2012; Executive Board NBS 49, 14December2012;

2.8. Decision on the Conditions and Manner of Implementation Open Market Operations; „RS Official Gazette“ No. 45/2011, 34/2013, 74/2020 and 98/2020; EB NBS No.49, 16 Jun 2011;

2.9. Decision on determining calendar of regular auctions of securities for August 2021; Decision number 5759, 26July2021; https://www.nbs.rs/static/nbs_site/gen/latinica/30/kalendari/kalendar.pdf;

2.10. Decision on auction organization (for example 75) for securities; Decision number 7433, 23September2021; https://nbs.rs/static/nbs_site/gen/latinica/20/hov/2_2_1_22_75.pdf;

2.11. Decision on Determining Upward/Downward Haircut to the Nominal Value of Securities;G.No 6642, 30June2020;

https://nbs.rs/export/sites/NBS_site/documents-eng/propisi/propisi-mp/procenat_nom_vrednost_hov_e.pdf;

2.12. Decision on change decision on Determining Upward/Downward Haircut to the Nominal Value of Securities; G.No7500,24July2020; https://nbs.rs/export/sites/NBS_site/documents/propisi/propisi-mp/oot_procenat_umanjenja_uvecanja_i.pdf;

2.13. Decision on the criteria for eligibility of securities issued by domestic companies in monetary operations of the National Bank of Serbia; Decision number 6489, 24Jun2020; https://nbs.rs/export/sites/NBS_site/documents-eng/propisi/propisi-mp/kriterijumi_korporativne_obveznice_e.pdf;

2.14. Decision on change decision about the criteria for eligibility of securities issued by domestic companies in monetary operations of the National Bank of Serbia; Decision number 7499, 24July2020; https://nbs.rs/export/sites/NBS_site/documents/propisi/propisi-mp/kriterijumi_korporativne_obveznice_i.pdf.

3. Guidelines

3.1. Guidelines for Preparation and Electronic Submission of Data on Overnight Interbank Money Market Loans to the National Bank of Serbia; Version 1.0, April 2018.godine;

3.2. Guidelines on Implementing Auction Purchase/Sale of Securities, „RS Official Gazette", No. 46/2011 and 41/2013;EB NBS number 14, 22June2011;

3.3. User Guidelines Central securities depository and clearing house; http://www.crhov.rs/pravnaregulativa/srpski/korisnicko_uputstvo/korisnicko_uputstvo.pdf.

4. Agreements

4.1.Master Repo Agreement; https://nbs.rs/export/sites/NBS_site/documents-eng/propisi/propisi-mp/omo_master_repo_agreement.pdf;

4.2. Framework Agreement on repurchase of securities (Master Repo Agreement), http://www.aci.rs/documents/.

5. Memorandums

5.1.Memorandum on Inflation Targeting as Monetary Strategy; https://nbs.rs/export/sites/NBS_site/documents-eng/monetarna-politika/Memorandum_monetarna_strategija_122008_eng.pdf, December 2008.

6. Rules

6.1. Tariff rate rules of the central securities depository and clearing house (Consolidated text incorporating amendments adopted in March 2020, April 2020, and September 2020); http://www.crhov.rs/pravnaregulativa/english/tariff_rates_rules/EN_CRHoV_Pravilnik_o_tarifi_Final%20_septembar_2020.pdf;

6.2. Operating rules of the central securities depository and clearing house, consolidated text (which includes changes and amendments which got into force on 31March2020; http://www.crhov.rs/pravnaregulativa/english/operating_rules/EN_Pravila_poslovanja_pre%C4%8Di%C5%A1%C4%87en_tekst_25032020.pdf;

6.3. Central securities registry term schedule rulebook (According with changes and amendment which started to be in force on 01January2016); http://www.crhov.rs/pravnaregulativa/english/CSDTermSchedule.pdf.

7. Bulletin

7.1. Statistical bulletin NBS-July2021; https://nbs.rs/export/sites/NBS_site/documents/publikacije/sb/sb_07_21.pdf

8. Report

8.1. Inflation Report-August2021; https://nbs.rs/export/sites/NBS_site/documents/publikacije/ioi/izvestaji/ioi_08_2021.pdf;

8.2. Annual Monetary Policy Report-2020; https://nbs.rs/export/sites/NBS_site/documents/publikacije/mp/monetarna_politika_II_2020.pdf;

8.3. Semi-annual monetary policy report:January-Jun2020; https://nbs.rs/export/sites/NBS_site/documents/publikacije/mp/monetarna_politika_I_2020.pdf;

8.4. Annual Report on Activities and Results in 2020; https://nbs.rs/export/sites/NBS_site/documents/publikacije/godisnji-izvestaj/godisnji_izvestaj_2020.pdf

In accordance with the identified documents which purpose is to regulate repo market in the Republic of Serbia, we can conclude that the following institution in the country have repo market as a relevant subject of interest:

- The National Bank of Serbia;
- Commercial banks in the Republic of Serbia;
- The Central Securities Depository and Clearing House;
- The Republic of Serbia Securities Commission;
- The ACI Serbia;
- In the case of disputes, the court in Belgrade.

The participants in repo market of the Republic of Serbia are only commercial banks and the NBS. The biggest scope and number of repo transactions are realized between the NBS and commercial banks on regular organized auctions.

Repo Instrument

Repurchase agreement, repo, is an agreement about sale and repurchase of financial assets and essentially is transaction in which two counterparties make an agreement to do two transactions (deals) as a package. The first deal is a purchase or sale of financial assets, usually a government bond or other security – for delivery straight away (the exact settlement date will vary according to the market convention for the security involved). The second deal is a reversal to the first deal, for settlement on a determined future date ("ACI Diploma Course", Markets International Ltd., 13 January 2010, Repo Market Chapter).

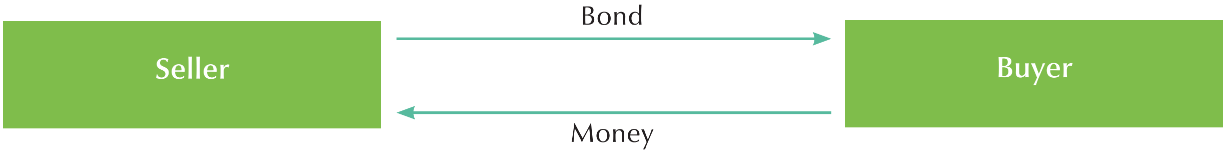
Being known from the beginning that the first repo settlement will be followed with a reversal transaction on a certain date in the future, it is clear that both sides have intention that the transfer of the assets in one direction and the transfer of cash in the other is to be temporary rather than permanent. The transaction is therefore equivalent to lending financial assets in the one direction and lending money in the other direction. Every repo transaction is motivated by the need to lend or borrow money collateralized with financial assets. However, repo transactions can be motivated by a need to borrow a specific security. The prices for both, the original sale and subsequent repurchase, are agreed at the outset. The difference between the two prices is obtained to be equivalent to the costs of borrowing collateralized money. Consequently, therefore the financial asset involved is considered as collateral.

The legal benefit of the collateral is transferred from the seller to the buyer during the duration of repo transaction, but economic benefit is still on the side of the seller. The buyer is the owner of the collateral, but intention is not that the financial asset be the part of economic calculation of the transaction. The financial reward to the buyer from entering into the transaction is to earn interest from lending the money, which will be received as the amount difference between the first and the second leg of the transaction. If the asset value falls the seller will be exposed because assets will be returned to him at the end of the repo transaction in the second step. Consequently, during the term of repo transaction, the legal benefit is passing from seller to buyer, but economic benefit is staying on the seller's side.

The counterparties involved will undertake a different type of transaction, a repo transaction for one side is a reversal transaction for other side. In repo transactions, the seller or lender is a party who is selling securities at the beginning and repurchasing them on a determined date in the future. The buyer, borrower, or investor is the second party involved in the transaction. It is important to note that the methodology is taken from the viewpoint of the bond market, not money market ("ACI Diploma Course", Markets International Ltd., 13 January 2010, Repo Market Chapter).

The money and financial assets' flows on the start date can be illustrated as per Picture 1. The seller passes the legal title on the securities to the buyer for the period of the repo and the buyer transferring money to the account of the seller.

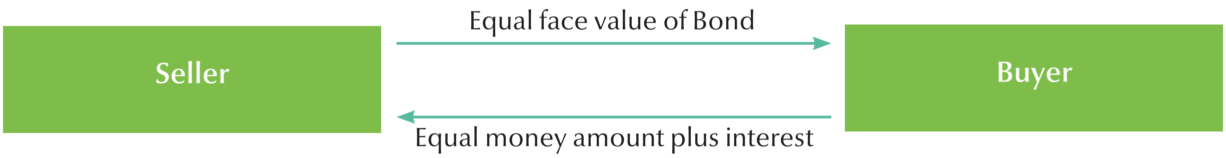
Picture 1: *Repo Transaction Flows on the Start Date*



Source: "ACI Diploma Course", Markets International Ltd., 13 January 2010, Repo Market Chapter

On the repo transaction maturity date, money plus interest will be returned. The flows on the maturity date are shown in Picture 2. The buyer returns to the seller the bond with equal face value. The seller returns to the buyer the equal amount plus interest.

Picture 2: *Repo Transaction Money and Financial Assets' Flows on the End Date*



Source: "ACI Diploma Course", Markets International Ltd., 13 January 2010, Repo Market Chapter

The legal title to the collateral passes to the buyer until repo maturity. If the seller does not return the money with interest, the buyer will not be obliged to prove their right to the collateral. For the party who is lending money, the repo transaction is providing double security. If the other contractual party does not fulfill its obligations, the collateral is the guarantee for a repayment. For the beforehand stated reasons, it is important to consider both the other counterparty's credit rating in repo transactions, as well as that of the issuer of the security credit rating. The previously stated does not mean that the buyer does not need to have credit line for the seller, but that it increases the security of lent money especially if collateral is government bonds, as is common practice. In other words, the counterparty risk still exists, but it is significantly reduced with appropriate repo transaction design. Legal risk is also involved and should be taken into consideration. Repo also involves market risk, as well. As any other lending or borrowing of money that includes market risk, the value of collateral can unexpectedly fall. For the party who is borrowing money, the advantage is the ability to use investments in portfolio in order to borrow money cheaper than in other cases, or to borrow money which could not be borrowed under other conditions.

It is important to notice that "collateral" is not used in its common meaning. Collateral is something which is given temporarily as guarantee, but does not change owners. In repo transaction, the ownership of securities is transferred from one side to the other. The seller preserves economic benefits and market risk related to securities serving as a collateral. Direct transfer of legal rights to the collateral means that the buyer has the right to reuse the collateral during the repo's term of maturity, regardless of the fulfillment obligation from the seller's side. Consequently, the buyer can undertake a new repo or sell the collateral to a third party at any time (the buyer only has to be sure that they are capable of returning the equivalent collateral on the repurchase date to the original seller). From the standpoint of the buyer, the right to use the same collateral again is reducing the liquidity risk exposure because they lent the money in the first step.

Size of the Repo Market in the Republic of Serbia

The data related to the scope of the repo market in the Republic of Serbia can be obtained from website of the National Bank of Serbia and the Central Securities Depository and Clearing House. The websites of the NBS have data related to repo transactions between the NBS and commercial banks, while the website of the Central Securities Depository and Clearing House has data about interbank repo transactions.

Data related to the total scope and frequency of repo transactions between commercial banks can not be precisely determined. The greatest volume of this transactions was realized in 2012 and 2020. Commercial banks usually undertake repo transactions with the NBS at regular weekly auctions where the maturity is 7 days. Those transactions are more than 90 precent of the repo market's scope. In the future, an increase in frequency, volume, and variety of repo transactions between commercial banks can be expected. The acceptance of new eligible collateral in the form of debit securities also can be expected, but also and acceptance of equity securities. Additionally, we can also expect the implementation of new trading platforms and settlement procedures according to risk preferences and cost efficiency. Consequently, this will have an impact on the maturity yield curve in the Republic of Serbia.

Table number 1: *The Repo Market Size when Contractual Parties are the NBS and Commercial Banks*

Year	Type of transaction	Weighted average interest rate on NBS auction (in %)	Sold securities-purchase price	Average currency rate EUR/RSD	Equivalent amount in EUR
2005	repo sale	15.58	217,366,138,481.50	82.9904	2,619,172,078.72
2006	repo sale	18.02	1,083,556,562,660.00	84.1101	12,882,597,484.25
2007	repo sale	10.40	3,873,834,491,773.23	79.9640	48,444,731,276.24
2008	repo sale	14.67	5,239,123,717,415.96	81.4405	64,330,691,945.85
2009	repo sale	12.65	3,121,914,864,042.90	93.9517	33,228,934,272.00
2010	repo sale	8.97	2,510,399,909,487.76	103.0431	24,362,620,199.58
2011	repo sale	11.42	2,136,085,000,000.00	101.9502	20,952,239,426.70
2012	repo sale	9.59	1,273,220,000,000.00	113.1277	11,254,714,804.60
2012	repo purchase	11.00	67,478,314,400.00	113.1277	596,479,150.55
2013	repo sale	8.93	4,247,200,000,000.00	113.1369	37,540,360,395.24
2014	repo sale	6.98	3,585,820,000,000.00	117.3060	30,568,086,883.88
2015	repo sale	3.46	1,504,700,000,000.00	120.7328	12,463,058,920.19
2016	repo sale	2.82	2,343,430,000,000.00	123.1179	19,034,031,607.10
2017	repo sale	2.83	2,701,669,000,000.00	121.3367	22,265,884,930.12
2018	repo sale	2.42	2,488,400,000,000.00	118.2716	21,039,708,602.91
2019	repo sale	1.49	2,521,000,000,000.00	117.8524	21,391,163,862.59
2020	repo sale	0.63	1,748,500,000,000.00	117.5777	14,871,017,208.20
2020	repo purchase	0.54	41,635,451,500.00	117.5777	354,110,103.36

Source: Data source NBS

The Process of Negotiation, Processing and Settlement of Repo Transactions

A commercial bank is in the position to undertake and process repo transaction with the NBS or another commercial bank.

If a commercial bank is doing repo with the NBS, the trading is processed via the web platform titled "Monetary Operation of the National Bank of Serbia". If any technical obstacle arises with the functioning of the NBS' platform, sending offers and their acceptance can be done via e-mail or telefax. Participants could be banks who had fulfilled certain criteria.

Before undertaking repo transaction with the NBS, the decision about certain type of auction must be announced. Auctions can be at fixed or variable interest rate. In the case of fixed rate auctions, securities will be bought or sold at interest rate pre-defined and announced by the NBS. In the case of variable rate auctions the NBS will not pre-define interest rate and buying or selling securities will be executed at interest rate which is formed on the basis of supply and demand of all participants included in the auction. Variable rate auctions may be: a) multiple rate auctions and b) single rate auctions (Decision on the Conditions and Manner of Implementation Open Market Operations; "Official Gazette of the RS" No. 45/2011, 34/2013, 74/2020 and 98/2020; EB NBS No.49, 16 Jun 2011).

In accordance with the following document „Decision on Determining the Calendar of Regular Auctions of Securities for a Given Month", the NBS determines the date, type of operation and maturity of open market operation transaction which usually is the main operation.

In the case of both a main operation or long-term operation, on the date of auction the NBS publishes a document „Decision on Organization a Certain Number of Securities' Auctions" which features the following:

- Auction date;
- Auction number;
- Type of operation: for example main operation or long-term operation;
- Transaction type: for example reverse repo transaction-security sale or repo transaction-security purchase;
- Auction type: for example multiple rate auction or fixed rate auction;
- Repurchase date: number of days from auction date e.g., precise date;
- Determined face value of securities which will be sold on the auction;
- Type of securities-NBS bills;
- ISIN number;
- Emission mark in the situation when the NBS is selling securities;
- NBS bills separate face value, in the situation when the NBS is selling securities;

- Issuing date, in the situation when the NBS is selling securities;
- Maturity date, in the situation when the NBS is selling securities;
- Other provisions depending on transaction type.

The NBS also publishes the "Reports on Auctions of Securities" on their website, which contains the following important data:

- Auction date;
- The cut-off time for receiving the offer: from 12:00 to 12:30;
- Auction number;
- Type of operation;
- Transaction type;
- Minimal offered amount in mill. RSD=1;
- Maximum number of offers on auction 1;
- Transaction maturity in days: number of days;
- Transaction maturity date;
- Interest rate;
- Minimal interest rate;
- Maximal interest rate = RKS;
- Security face value offer in mill. RSD.

In open market operations any bank which has fulfilled the following conditions can participate:

1. Being a member of the Central Securities Depository and Clearing House;

2. Having a signed master repo agreement with the NBS before undertaking repo transactions, or master outright agreement in the case of outright transactions;

3. Must not have been prohibited to engage in certain securities purchase/sale transactions with the NBS.

A bank meeting the condition is buying and selling securities in its own name and for its own account. A commercial bank which wants to participate in an auction will send an offer stating the quantity of securities and repo rate. If a commercial bank sells securities to the NBS via repo transaction, then it is required to state the ISIN numbers of the securities.

It is important to point out that a commercial bank needs to collect the following documentations if it wants to enter into repo transaction with the NBS:

1. Master REPO agreement;

2. Commercial bank exchanges with the NBS for every repo transaction a special agreement which contains the following data: a) transaction type-for example reverse repo transaction-repo sell of securities, b) auction number, c) auction date, d) type of securities: NBS bills, e) Currency of securities, f) Face value per unit: 10,000.00, h) Maturity of transaction in days, i) Repurchasing data, g) Data and time of crediting account during repurchase, k) Transaction value. In special agreement is it also stated: a) face value, b) purchasing value, c) interest rate, d) repurchase value. It also stated security specification: a) Ordinary number, b) Security ISIN, c) Number (quantity) of security, d) Increase percentage, e) Purchase price per unit (it is equal to face value in case of no percentage increase), f) Interest rate (%), g) Repurchase price per unit, h) Face value, i) Purchase value, j) Repurchase value. For every ISIN number it states the: face value, purchase value, repurchase value. Face value, purchasing and repurchasing values are obtained taking into consideration the nominal, purchasing and repurchasing price per unit and the number accepted units of securities. Obligations from this special agreement arising from the decision whose purpose is to regulate conditions and patterns of open market operations' implementation, as well as NBS legislation for processing that decision and master repo agreement. The Court in Belgrade is entitled for resolving potential disputes.

3. The Central Securities Depository and Clearing House will send the commercial bank a verification message which contains the following data: a) Agreement number, ordinary number, message number, b) Broker unique identification number (JMB), Broker's name, c) Type of transaction, Payment type, d) Trading date, calculation date, provision, d) Ticker, currency code, e) Number of securities, market value, discount, f) Account, Client's unique identification number, Client name.

After auction, the NBS, the Monetary and FX Operations Department, on its website will publish the document "Report on Results of Auction Organized by the National Bank of Serbia on Certain a Date". Report data are as follows:

- Type of operation: for example main operation;
- Transaction type: Reverse repo transaction-repo sell of securities;
- Type of auction: for example variable/multiple;
- Type of securities;
- Auction number;
- Auction data;
- Repurchase data;
- Transaction maturity in days;
- The NBS Offer scope (purchase value);
- Bank offer (purchase value);
- Realized: purchase value and repurchase value;

Maximal accepted repo rate p.a.;

• Weighted average interest rate-repo rate p.a.;

• Realization coefficient;

• Coefficient of accepted bank offers with the highest repo rate.

Collateral Eligible for Repo Transaction

The NBS' legal acts contain lists of acceptable securities to be collateral in repo and reverse repo transactions. The National Bank of Serbia can buy and sell securities denominated in RSD without currency protecting clause where the issuer can be:

1. The National Bank of Serbia;

2. The Republic of Serbia;

3. An international financial organization and development bank or financial institution which was founded by a foreign state and whose credit rating was set at "AAA" by Standard and Poor's or Fitch-IBCA, and/or "Aaa" by Moody's;

4. A domestic company with a solvency scoring of a minimum of "(D) acceptable solvency" as assigned by the Serbian Business Registers Agency or with other solvency/creditworthiness assessment, equivalent to "(D) acceptable solvency".

The website of the National Bank of Serbia, in accordance with the "Decision on Amending the Decision on Determining Upward/Downward Haircut to the Nominal Value of Securities; G.No 7500, 24July2020", gives the list of securities appropriate for repo sale and purchase.

Tables 2 and 3 give an overview of acceptable types of securities and maturities which can be collateral in repo transaction.

Table 2: *Repo sale of securities*

Type of securities	Tenor in days	Upward haircut
NBS bills	Up to 371	0,00%

Source: National bank of Serbia

Table number 3: *Repo purchase of securities, Daily liquidity loan, Short-term dinar loan*

Type of securities	Tenor in days	Downward haircut
NBS bills	Up to 371	3.00%
Republic of Serbia discount securities, International financial organisations and International development banks or Financial institutions.	Up to 371	3.00%
	372-731	5.00%
Coupon securities Republic of Serbia and International financial organiza-tions and International development banks or financial institutions.	Up to 371	2.00%
	372-731	2.00%
	732-2,008	2.00%
	Over 2,008	2.00%
Bonds issued by domestic com-panies (corporate bonds) with the basic sol-vency scoring A (excel-lent solvency) and B (very good solvency).	Up to 1830	5.00%
	1,831-3,660	5.50%
Bonds issued by domestic com-panies (corporate bonds) with the basic sol-vency scoring C (good solvency).	Up to 1830	6.00%
	1,831-3,660	6.50%
Bond issued by domestic compa-nies (corporate bonds) with the basic sol-vency scoring D (accept-able solvency)	Up to 1830	7.00%
	1,831-3,660	8.00%

Source: National Bank of Serbia

Costs of Realisation Repo Transactions

Clearing and settlement of repo transactions is executed via the Central Securities Depository and Clearing House in accordance with the DvP (Delivery versus Payment) model. This model is based on a simultaneous transfer of financial instruments and cash. Settlement repo transactions with the NBS should be in accordance with "The Central Securities Depository and Clearing House User Guide". There is determined obligation of paying provision in accordance with "The Tariff rate rules of the central securities depository and clearing house".

In repo transaction, when the NBS sales financial instruments to the commercial banks, and as well as in repurchase transactions when the NBS has obligation to repurchase the financial instruments from commercial banks on the repurchase date, the Central Securities Depository and Clearing House will demand provision from participants in accordance with above stated document.

In repo transaction, when the NBS is buying financial instruments, the Central securities depository and clearing house will demand provision from participants per contract which the NBS, repo buyer, assign with banks as repo seller. The contract can be considered as one ticket in accordance with "The Tariff Rate Rules of the Central Securities Depository and Clearing House" no matter whether more than one financial instrument with different ISIN number is included.

For repurchase transactions when banks are obliged to repurchase financial instruments from the NBS on the agreed date – the repurchase date, the Central Securities Depository and Clearing House will demand provision from participants in the transaction which will be calculated per repo contract. The contract will be treated as one ticket (order) in accordance with "Tariff Rate Rules of the Central Securities Depository and Clearing House" regardless of whether more than one financial instrument with different ISIN number is included.

Table 4 shows the main provisions of the "Tariff Rate Rules of the Central Securities Depository and Clearing House" (consolidated text incorporating amendments that have entered into force on 17.09.2020).

The provision should be paid monthly, on the account of the Central Securities Depository and Clearing House, according to the invoice which will be sent by the 5th of the given month, for the previous month. The term for paying the invoice received from the Central Securities Depository and Clearing House is 15 days from the date the invoice was issued.

Table 4: *Central Securities Depository and Clearing House tariffs, main provisions related to repo transactions*

Item	Amount in RSD	VAT	Basis of calculation	Payment	Fee payer
6.8. Transfer of financial instruments and cash on a DVP basis pursuant to repo/repurchase or outright transactions entered into by the Republic of Serbia or the National Bank of Serbia.	550.00	Exempt	Per transaction	Monthly	Members maintaining cash accounts of purchaser and seller.
6.17. Transfer of financial instruments and cash on a DVP basis under a repo contract	1,250.00	Exempt	Per transaction	Monthly	Members maintaining cash accounts of purchaser and seller.
6.18. Substitution of financial instruments in a repo transaction	1,250.00	Exempt	Per order	Monthly	Party ordering/initiating transfer of financial instruments
6.19. Amendment of information in a repo transaction	550.00	+ VAT	Per application	Monthly	Applicant

Source: The Central Securities Depository and Clearing House

The interest revenue from repo transaction is exempt from taxes.

Conclusion

Repo agreement and repo market have the key role in supporting money and security flow in the financial system and they are crucial for the monetary policy implementation. Repo is the solution for placing money, secured finance or collateral. Additionally, central banks often implement monetary policy by offering banks secured finance. Consequently, commercial banks are in the position to channel liquidity to the interbank market via repo market.

The impact of the monetary policy rate on bank lending and deposit rates is indirect, i.e., it takes place through short-term money market rates, usually used by central banks as the monetary policy operational target. In case of Serbia, the effectiveness of the interest rate channel depends on the robustness of transmission of the NBS one-week repo rate to interest rates in the interbank money market, and their transmission to retail dinar rates (Websites NBS, Inflation report, November 2020).

Approaching the ascension to the European Union, the importance of repo market in Serbia is raising. In a stressful situation such as the coronavirus pandemic, the repo market in the European Union has remained stable. Transaction costs have remained low, and prices adjusted to the market conditions. Having in mind the experience of surrounding countries, collateral is expected to become a more important reason for entering into repo transactions. In other words, the primary motive in numerous cases will be collateral not liquidity. It is to be expected that a dominant type of collateral in repo transactions will still be government bonds. The repo market is connected with the global money market, bond market, futures market and swap market. The advantages of the repo market are numerous and are the reason for this market's increasing development.

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POSLEDNJI KOVANI NOVAC KRALJEVINE JUGOSLAVIJE

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Rezime

Zakonom o povlačenju iz opticaja starog i o vrednosti kovanja novog metalnog novca koji je donet 3. jula 1937. godine predviđeno je kovanje: 50 dinara (u 16 miliona komada nominalne vrednosti od 800 miliona dinara), 20 dinara (25 miliona komada u vrednosti od 500 miliona dinara), 10 dinara (25 miliona komada u vrednosti od 250 miliona dinara), 2 dinara (75 miliona komada u vrednosti od 150 miliona dinara), 1 dinar (100 miliona komada u vrednosti od 100 miliona dinara), 50 para (100 miliona komada u vrednosti od 50 miliona dinara) i 25 para (40 miliona komada u vrednosti od 10 miliona dinara). Kovani novac od 50 para (sastav: bakar 91% i aluminijum 9%, prečnika 18 mm i težine 2 g), 2 dinara (91% bakar i 9% aluminijum, 24,5 mm i 5 g), 20 dinara (srebra 75% i 25% ostalo, 27 mm i 9 g) i 50 dinara (srebro 75% i 25% ostalo, 31 mm i 15 g) pušteni su u opticaj 16. avgusta 1939. godine, 1 dinar (bakar 91% i aluminijum 9%, 21 mm i 3,5 g) je pušten 20. oktobra 1939. godine, 10 dinara (nikl 100%, 23 mm i 5 g) 31. maja 1940. godine i 25 para (bakar 98% i aluminijum 2%, 20 mm i 2,5 g) 21. novembra 1940. god. Kovanica od 25 para koja u centru ima otvor od 4mm prečnika, 50 para, 1 i 2 dinara imale su na sebi krunu, natpis Kraljevina Jugoslavija i oznake nominalne vrednosti. Novac od 10, 20 i 50 dinara osim ovih karakteristika imale su i reljefni lik kralja Petra II Karađorđevića. Iz opticaja su od 19. marta 1942. godine povučeni kovani novčići od 10, 20 i 50 dinara, a od 1. juna iste godine i 25 para, 50 para, 1 i 2 dinara.

Ključne reči: kovani novac; 25 para; 50 para; 1 dinar; 2 dinara; 10 dinara; 20 dinara; 50 dinara; puštanje u opticaj; povlačenje iz opticaja; kralj Petar II Karađorđević; Zavod za izradu novčanica; Narodna banka Kraljevine Jugoslavije; Ministarstvo finansija; 1938. godina.

JEL klasifikacija: N14

Tokom jedanaest i po godina postojanja Kraljevine Jugoslavije iskovan je sledeći metalni novac:

- Srebrni novac od 10 i 20 dinara koji na sebi nose 1931. kao godinu kovanja, a pušteni su u opticaj 18. jula 1932. godine. Kovanica od deset dinara je povlačena iz opticaja od 31. maja do 31. avgusta 1940. god., a od dvadeset dinara od 16. avgusta 1939. god. do 16. avgusta 1940. godine.

- Srebrnjak od 50 dinara na kojem je 1932. godina puštan je u opticaj sukcesivno od 23. januara 1933. god., a povlačen je iz opticaja od 16. avgusta 1939. god. do 16. februara 1940. godine.

- 25 i 50 para, 1, 2, 20 i 50 dinara koji nose na sebi 1938. god., kao godinu kovanja.

U časopisu Bankarstvo objavljeni su prilozi o srebrnim kovanicama od 10, 20 dinara (Bankarstvo 2019. god., br. 4) i 50 dinara (Bankarstvo 2020. god., br. 1) sa 1931. i 1932. kao godinom kovanja, a u ovom broju je dat prikaz poslednjeg metalnog novca iz 1938. godine koji je iskovan u Kraljevini Jugoslaviji. Naime, nakon četiri i po godine od puštanja u opticaj kovanog novca od 50 dinara u srebru, Skupština i Senat Kraljevine Jugoslavije donose Namesništvo, koje u ime maloletnog kralja Petra II Karađorđevića, potvrđuje i proglašava 03. jula 1937. god. Zakon o povlačenju iz opticaja starog i o kovanju novog metalnog novca.

Nove kovanice povodom novog kralja

Zakonom je bilo predviđeno povlačenje iz opticaja kovanog novca:

- Kraljevine Srba, Hrvata i Slovenaca iz 1920. godine od 25 para, iz 1925. godine od 50 para i 1 i 2 dinara,

- Kraljevine Jugoslavije iz 1931. godine od 10 i 20 dinara i iz 1932. godine od 50 dinara.

Svi ovi nabrojani metalni novci iskovani su u nominalnoj vrednosti od 1.212 miliona dinara i trebalo je da se zamene novim u nominalnoj vrednosti od 1.860 miliona dinara. Odluka o kovanju novog metalnog novca nije doneta zbog nedostatka starog kovanog novca u opticaju (u 1937. godini bilo ga je u opticaju za 839,8 miliona dinara i u trezorima za 372,2 miliona dinara) već radi obeležavanja, iako pod Namesništvom, vladavine Petra II Karađorđevića, sina Aleksandra I Karađorđevića, ubijenog u Marseju 09. oktobra 1934. godine. Osim toga, razlog novog kovanja bila je i dobit države (428,4 miliona dinara) koja se ostvaruje razlikom između nominalne vrednosti i troškova kovanja novca.

Pomenutim Zakonom i njegovim dopunama (Uredba o izmenama i dopunama Zakona o povlačenju iz opticaja starog i o kovanju novog metalnog novca) predviđeno je kovanje:

• 50 dinara u 16 miliona komada i u nominalnoj vrednosti od 800 miliona dinara;

• 20 dinara u 25 miliona komada i u nominalnoj vrednosti od 500 miliona dinara;

• 10 dinara u 25 miliona komada i u nominlnoj vrednosti od 250 miliona dinara;

• 2 dinara u 75 miliona komada i u nominalnoj vrednosti od 150 miliona dinara;

• 1 dinara u 100 miliona komada i u nominalnoj vrednosti od 100 miliona dinara;

• 0,50 dinara u 100 miliona komada i u nominalnoj vrednosti od 50 miliona dinara;

• 0,25 dinara u 40 miliona komada i u nominalnoj vrednosti od 10 miliona dinara.

Novi graver, strani dobavljači i domaća izrada

Već u avgustu 1937. godine Ministarstvo finansija raspisalo je konkurs za izbor najboljeg rešenja budućeg metalnog novca. Ishod konkursa je nepoznat, ali se pretpostavlja da je graver svih ovih kovanica bio Frano Menegelo Dinčić (Kotor, 1900 – Beograd, 1986) iako se njegovo ime nalazi samo na komadima od 10, 20 i 50 dinara. Dinčić je poznati autor brojnih medalja, plaketa, skulptura i spomenika. Osnovnu školu je završio u Sinju, strukovnu školu za vajare u Splitu i Akademiju likovnih umetnosti u Pragu. Od 1928. godine živi u Beogradu. Bio je član Udruženja likovnih umetnika Srbije. Njegove najpoznatije plakete su sa likovima: Branka Radičevića, Vuka Karadžića, Jovana Sterije Popovića, Josipa Broza Tita, Svetozara Markovića i biste Nikole Tesle i kralja Petra Karađorđevića. Izradio je i brojne spomenike palim srpskim borcima i žrtvama Balkanskih ratova i Prvog svetskog rata u: Prokuplju, Šapcu, Zaječaru i Jagodini. Autor je i više reljefa, kao što su: Na zgarištu, Pogreb, Mira i dr.

Poslovi oko nabavke potrebnih metalnih pločica, pribora i alata za izradu ovih kovanica preneti su na Narodnu banku Kraljevine Jugoslavije, te je ona sklopila ugovore sa sledećim firmama:

- Deutsche Gold – und Silber – Scheideanstalt iz Frankfurta na Majni za isporuku pločica od aluminijum – bronze za apoene od 25 i 50 para, 1 i 2 dinara. Ugovorena je cena za 100 kg pločica od 389,15 RM (rajhsmaraka). Ugovor je potpisan 25. marta 1938. godine;

- Metallwerk A.G. iz Dornoha, Nemačka i Schweizerische Metallwerk Selve und Cie iz Tuna, Švajcarska za isporuku metalnih pločica od nikla za apoene od 10 dinara. Ugovor nosi isti datum kao i za kupovinu pločica od aluminijum – bronze.

- Hauptmunzamt iz Beča za dopremu modela, pribora i alata u vrednosti od 6.300 RM. Narudžbina je sa datumom 05. april 1938. godina.

Sklapanje ugovora za pločice od legure srebra za kovanje apoena od 20 i 50 dinara bilo je nepotrebno jer su se one izrađivale u kovnici Zavoda za izradu novčanica u Topčideru koja je bila organizacioni deo Narodne banke Kraljevine Jugoslavije. Osim toga, u Zavodu je iskovano i svih sedam apoena ove serije kovanog novca uz saglasnost i odobrenje Ministarstva finansija. Ne čudi što je ovaj obiman posao poveren Zavodu za izradu novčanica, jer je nakon donete Uredbe o instaliranju postrojenja za kovanje metalnog novca i drugih kovina Ministarskog saveta od 13. jula 1936. godine i njegove realizacije, Kovnica počela sa radom 07. septembra 1938. godine. Izgradnja i potpuno opremanje Kovnice u Zavodu koštali su 20,7 miliona dinara i završeni su krajem 1940. godine.

Nastanak ovog metalnog novca i njegovo povlačenje realizovano je kada su ministri finansija u Vladi Kraljevine Jugoslavije bili: Dušan Letica, Juraj Šutej (čije su kratke biografije date u Bankarstvu 2020. god. br. 3) i Vojin Đuričić. U ovom periodu guverneri Narodne banke bili su: Milan Radosavljević, Dragutin Protić i Dobrivoje Lazarević.

Osnovne karakteristike kovanica

25 para

Apoen od 25 para sadrži leguru bakra 98% i aluminijuma 2%, prečnika je 20 mm i težine 2,5 gr. Opis novca od 25 para nalazi se u saopštenju o njegovom puštanju u promet Ministarstva finansija od 12. novembra 1940. godine. Ovaj najsitniji novac u svom centru ima otvor prečnika 4 mm. Na aversu se nalazi iznad otvora kruna, okolo venac i natpis: KRALJEVINA JUGOSLAVIJA. Iznad otvora na reversu je cifra 25, a ispod otvora reč PARA i godina 1938. Revers prema aversu je pod 180 stepeni. Obod je gladak. Ovaj apoen pušten je u opticaj 21. novembra 1940. godine, a povučen na području Srbije za vreme okupacije, počev od 01. juna 1942. godine.

50 para

Novac od 50 para u svom sastavu sadržao je 91% bakra i 9% aluminijuma, prečnika je 18 mm i težine 2gr. Ministarstvo finansija je 31. jula 1939. godine u saopštenju o puštanju ove kovanice u opticaj dalo njen opis. Na licu kovanice nalazi se kruna, a oko nje natpis KRALJEVINA JUGOSLAVIJA. Na naličju je oznaka nominalne vrednosti – 50 PARA. Naličje prema licu je pod 180 stepeni, a obod je gladak. Puštena je u opticaj 16. avgusta 1939. god., a povučena, kao i kovanica od 25 para, počev od 01. juna 1942. godine.

1 dinar

Kovanica od 1 dinara je od legure bakra 91% i aluminijuma 9%, prečnika 21 mm i težine 3,5gr. I za nju opis je dalo Ministarstvo finansija u saopštenju od 13. oktobra 1939. godine povodom njenog puštanja u opticaj. Ovaj apoen ima sve elemente aversa i reverse kovanice od 50 para, jedino se razlikuju u gramaži i veličini. U opticaj je puštena 20. oktobra 1939. godine, a povučena u istom terminu kao i apoeni od 25 i 50 para – počev od 01. juna 1942. godine.

2 dinara

Kao i apoeni od 50 para i 1 dinara, dva dinara ima istu leguru: bakra 91% i aluminijuma 9%. Ministarstvo finansija dalo je opis ovog apoena u saopštenju od 31. jula 1939. godine koje najavljuje njegovo puštanje u opticaj 16. avgusta iste godine. Opis je isti kao i kod 50 para, 20 i 50 dinara, jedino što postoje dva tipa ove kovanice: sa većom i manjom krunom. Prečnik kovanice je 24,5 mm i težina 5gr. Povlačen je iz opticaja kao i kovanice od 25 i 50 para i 1 dinara i to od 01. juna 1942. godine.

10 dinara

Kovanica od 10 dinara iskovana je od nikla 100%, sa prečnikom od 23 mm i težinom od 5gr. Puštena je u opticaj 27. maja 1940. godine. Ministarstvo finansija u saopštenju o njegovom puštanju u opticaj 31.05.1940. god. dalo je opis ovog metalnog novca. Na aversu je reljefni desni profil kralja Petra II Karađorđevića, a oko lika je natpis KRALJEVINA JUGOSLAVIJA. Ispod lika je ime gravera F. Dinčić. Na reversu je poluotvoreni hrastov i lovorov venac. U gornjem otvorenom delu venca je kruna, a unutar venca je cifra 10, a ispod DINAR i godina 1938. Kao i kod ostalih apoena, izuzev 20 i 50 dinara, zadnja strana prema prednjoj je pod 180 stepeni i obod je nazubljen. Povučen je iz opticaja počev od 19. marta 1942. god., kao i apoeni od 20 i 50 dinara.

20 dinara

Ministarstvo finansija izdalo je saopštenje 31. jula 1939. godine o puštanju u opticaj apoena od 20 dinara u kome je dat i njegov opis. Iskovan je od srebra 75% i ostalih legura 25%, prečnika 27 mm i težine 9gr. Na aversu je levi profil kralja Petra II Karađorđevića, a oko lika je latinični natpis PETAR KRALJ JUGOSLAVIJE, a ispod toga ime gravera F. Dinčić. Na reversu je dvoglavi orao sa državnim grbom, levo od toga je cifra 19, a desno 38, što čini godinu kovanja. Ispod grba je oznaka nominalne vrednosti data latinicom: 20 DINARA. Revers je prema aversu pod 180 stepeni. Po obodu kovanice čita se: BOG ČUVA JUGOSLAVIJU. Natpis je dat latiničnim pismom. Dve su vrste ovog apoena, kod jednih se natpis čita kada je gore avers, a kod drugih kada je gore revers. Pušten je u opticaj 16. avgusta 1939. godine, a povučen je od 19. marta 1942. godine, kada i novac od 10 i 50 dinara.

50 dinara

Srebrni novac od 50 dinara sadrži 75% srebra i 25% ostalih legura. Prečnik mu je 31 mm, a težina 15gr. Pušten je u opticaj 16. avgusta 1939. godine nakon saopštenja Ministarstva finansija od 31. jula 1939. godine. U tom saopštenju koji se odnosi i na kovanice od 50 para, 2 i 20 dinara dat je i njegov opis. Na licu kovanice nalazi se desni profil kralja Petra II Karađorđevića, oko glave je ćirilični natpis: PETAR II KRALJ JUGOSLAVIJE, a ispod je ime gravera F. Dinčić. Na reversu je dvoglavi orao sa državnim grbom, levo je cifra 19, a desno 38. Ispod grba je oznaka nominalne vrednosti data ćirilicom: 50 DINARA. Revers prema aversu je pod 180 stepeni. Dva su tipa ove kovanice: 1. kada se ćirilični natpis BOG ČUVA JUGOSLAVIJU čita kad je gore avers i 2. kada je gore revers. Povlačen je iz opticaja počev od 19. marta 1942. godine.

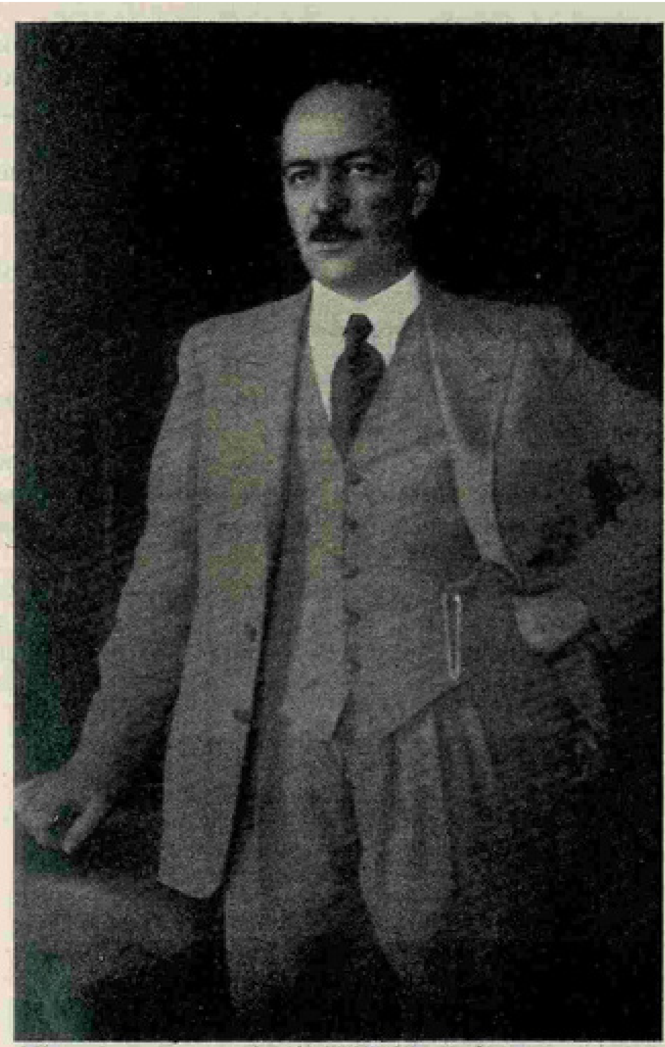
Okupacioni dinari

Svi ovi apoeni koji su povlačeni iz opticaja u 1942. godini zamenjivani su okupacionim dinarima. Kurs ovog okupacionog dinara bio je 20 dinara za jednu rajhmarku ili 50 dinara za jedan američki dolar. Vlada Kraljevine Jugoslavije već je uveliko izbegla u London, a sa njom i predstavnici Narodne banke, te je ova institucija tamo i nastavila svoj rad. S obzirom na to da je guverner Milan Radosavljević ostao u Beogradu, u Londonu je za guvernera imenovan trgovac Dobrivoje Lazarević (rođen 15. novembra 1886. godine u Aleksandrovcu Župskom). Bavio se trgovinom štofova i bio je vlasnik ili jedan od vlasnika firme Popović, Lazarević i kompanija. Kao jedan od prvaka Demokratske stranke uoči rata postaje predsednik Beogradske opštine (Pravda 5.3.1941. god.). Iz Službenih novina Kraljevine Jugoslavije, ratno izdanje iz Londona (6.9.1941. god.) saznajemo da su ukazom kralja od 28.5.1941. godine, na predlog ministra finansija, a uz saglasnost predsednika Ministarskog saveta, razrešeni dosadašnjih dužnosti guverner NB Kraljevine Jugoslavije, Milan Radosavljević, i viceguverner, Ivo Belin, a na njihova mesta se postavljaju Dobrivoje Lazarević, privrednik iz Beograda, za guvernera i Rudolf Bičavič (Rudolf Bićanić) za viceguvernera. Nakon rata provedenog u Londonu, Lazarević je 1945. godine, po podacima iz policijskog kartona, prešao da živi u Italiju.

Likvidacija Narodne banke Kraljevine Jugoslavije i formiranje Srpske narodne banke doneta je u Rajhsbanci već 5. maja 1941. godine. Naime, umesto Narodne banke Kraljevine Jugoslavije osnovane su posebne emisione banke, u svakoj zoni okupirane teritorije, pa je tako u Srbiji osnovana Srpska narodna banka. Ona je sve vreme okupacije poslovala bez Upravnog i Nadzornog odbora i njome je upravljao guverner koga je postavljao i smenjivao generalni poverenik za privredu. Posao generalnog poverenika za privredu u Srbiji obavljao je Franc Nojhauzen, oficir iz I svetskog rata. Njegov štab je imao veliki birokratski aparat sastavljen uglavnom od ljudi koji su pre rata boravili u Jugoslaviji kao privredni stručnjaci. Uputstva o radu Banke davao je komesar koga je postavio generalni poverenik. Komesar je bio u funkciji stručnog konsultanta. U praksi, on je zapravo rukovodio Bankom. Za formalnog guvernera postavljen je dr Milan Radosavljević, a za komesara J. Zongen, nemački finansijski stručnjak koji je u Jugoslaviju došao 1938. godine. On se pitao o imenovanju svih rukovodilaca filijala i o visini njihovih zarada. Posebnom uredbom, Srpskoj narodnoj banci poveren je nadzor nad svim kreditnim ustanovama na teritoriji Srbije.

Vojin Đuričić

Vojin Đuričić je značajna ličnost naše ekonomije i finansija između dva svetska rata. Rođen je 23. februara 1888. godine, u Beogradu, kao sin Milana, profesora i književnika. Vojin je gimnaziju završio u Nišu 1906. god., a studije prava u Monpeljeu, Francuska, 1910. godine. U Srbiju se vraća 1912. godine i počinje sa radom u Ministarstvu finansija, gde od činovnika napreduje do načelnika budžetskog odeljenja i generalnog direktora državnih dugova. Učesnik je u Prvom svetskom ratu i oficir Legije časti. Aprila 1927. godine postaje upravnik Državne hipotekarne banke. Kao izuzetan finansijski stručnjak sa velikim iskustvom učestvovao je više puta kao delegat naše države u finansijskim pregovorima sa predstavnicima stranih država. „Na položaju upravnika Hipotekarne banke proveo je nepunih 12 godina i za to vreme ova ustanova se razvila u novčani zavod svetskog obima i značaja“ (Beogradske opštinske novine, 01.05.1940. god.). Kada je Dragiša Cvetković obrazovao svoju prvu Vladu, 06. februara 1939. godine, u nju je Vojin ušao kao ministar finansija. Na tom položaju ostao je do 26. avgusta 1939. godine kada je obrazovana druga Vlada Dragiše Cvetkovića. Postaje predsednik Beogradske opštine nakon Vlade Ilića, 13. septembra 1939. godine, kraljevim Ukazom. Na ovoj funkciji ostaće do 26.06.1940. godine. Prema nepotvrđenim izvorima, umro je 1944. godine. Nosilac je brojnih domaćih i stranih odlikovanja i priznanja: Orden Svetog Save I reda, Jugoslovenska kruna II reda, orden Belog orla IV reda, orden Legije časti II stepena, počasni građanin Liona, bugarski Orden za građanske zasluge I stepena, čehoslovački Orden belog lava itd.



Г. ВОЈИН ЂУРИЧИЋ,
претседник Београдске општине

Dragutin Protić

Dr Dragutin K. Protić (Beograd, 1866 – Beograd, 1944) po obrazovanju pravnik, bio je sudija, vice guverner Narodne banke Kraljevine SHS i guverner Narodne banke Kraljevine Jugoslavije. Poznato je da je dr Protić, kao viceguverner, bio određen da obavlja funkciju guvernera kada je Đorđe Vajfert 1926. godine prestao to da bude, a do izbora novog prvog čoveka Narodne banke Kraljevine Srba, Hrvata i Slovenaca. Prestanak ove funkcije nastao je imenovanjem Ljubomira Srećkovića za guvernera, koji je na tu funkciju došao marta 1928. god. Dr Protić je bio i cenjeni član Upravnog odbora Narodne banke Kraljevine SHS. Tako je 11. aprila 1928. godine izabran u odbor od četiri člana koga su sem njega činili: Ljuba Srećković, guverner, Ignjat Bajloni, viceguverner i Dragoljub Novaković, generalni direktor Narodne banke. Oni su imali zadatak da „uzmu u pretres celokupno finansijsko pitanje i da rade potrebne solucije utvrdivši sva glavna pitanja prema kojima bi stabilizacija imala da se izvede." (Vreme, 12.04.1938. god.)

Milan Radosavljević

Dr Milan Radosavljević je bio guverner Narodne banke Kraljevine Jugoslavije od januara 1935. do marta 1939. godine, a u drugom mandatu od januara 1941. godine, da bi tu funkciju obavljao i tokom nemačke okupacije. Iz dostupnih podataka (list Pravda od 08. juna 1929. godine) saznajemo da je Radosavljević pre prvog postavljenja za guvernera Narodne banke bio sekretar Beogradske berze. Kada je dr Radosavljević došao po drugi put na čelo Narodne banke, to je tada, kako su navodili tadašnji dnevni listovi, u svim privrednim krugovima primljeno sa velikim odobravanjem i zadovoljstvom. Milan Radosavljević, ističe se, „nesumnjivo uživa nepodeljeno poverenje, kako srpske, tako i hrvatske i slovenačke privrede, ne samo kao monetarni, nego i kao privredni poznavalac svih naših ekonomskih i finansijskih problema. Postavljenjem Milana Radosavljevića na čelo Narodne banke dobijena je garancija da će se problemi rešavati onako kako to diktiraju naši nacionalni, privredni i finansijski interesi". Uz ove komplimente upućene Milanu Radosavljeviću, u listu Vreme od 27. januara 1941. godine, konstatuje se da su iz dosadašnjeg Upravnog odbora Narodne banke ispali isključivo Srbi: Milorad Đorđević, ministar finansija u penziji i predsednik Upravnog odbora Beogradske zadruge, Vlada Marković, predsednik Udruženja banaka u Beogradu, inženjer Ljuba Gođevac, industrijalac iz Beograda i Kosta Mirosavljević, bivši predsednik Trgovinske i industrijske komore. Po završetku rata dr Milan Radosavljević je postavljen za profesora na Pravnom fakultetu u Beogradu.

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LAST MINTED COINS OF THE KINGDOM OF YUGOSLAVIA

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Summary

The Law on Withdrawal from Circulation of Old Coins and on the Value of New Coins, passed on 3 July 1937, provided for the minting of: 50 dinars (in 16 million pieces with a nominal value of 800 million dinars), 20 dinars (25 million pieces in the value of 500 million dinars), 10 dinars (25 million pieces worth 250 million dinars), 2 dinars (75 million pieces worth 150 million dinars), 1 dinar (100 million pieces worth 100 million dinars), 50-para coins (100 million pieces worth 50 million dinars) and 25-para coins (40 million pieces worth 10 million dinars). The 50-para coins (composition: copper 91% and aluminium 9%, diameter 18 mm and weight 2 g), 2 dinars (91% copper and 9% aluminium, 24.5 mm and 5 g), 20 dinars (silver 75% and 25% other, 27 mm and 9 g) and 50 dinars (silver 75% and 25% other, 31 mm and 15 g) were put into circulation on 16 August 1939, 1 dinar (91% copper and 9% aluminium, 21 mm and 3.5 g) was released on October 20, 1939, 10 dinars (nickel 100%, 23 mm and 5 g) on 31 May 1940 and the 25-para coins (copper 98% and aluminium 2%, 20 mm and 2.5 g) on 21 November 1940. The 25-para coin with a 4 mm diameter hole in the centre, the 50-para coin, and the 1 and 2 dinars, featured a crown, the inscription Kingdom of Yugoslavia and their value denominations. In addition to these characteristics, the relief figure of King Petar II Karađorđević were also featured on 10-, 20- and 50-dinar coins. The 10-, 20- and 50-dinar coins have been withdrawn from circulation as of 19 March 1942, and the 25- and 50-para coins, as well as the 1 and 2 dinars were withdrawn on 1 June of the same year.

Keywords: coins; 25-para coin; 50-para coin; 1 dinar; 2 dinars; 10 dinars; 20 dinars; 50 dinars; release into circulation; withdrawal from circulation; King Petar II Karađorđević; Institute for Manufacturing Banknotes and Coins; National Bank of the Kingdom of Yugoslavia; Ministry of Finance; 1938

JEL classification: N14

During the eleven and a half years of the existence of the Kingdom of Yugoslavia, the following coins were minted:

- Silver coins of 10 and 20 dinars, bearing the year 1931 as the year of minting, and which were put into circulation on 18 July 1932. The 10-dinar coin was being withdrawn from circulation from 31 May to 31 August 1940, and the 20-dinar coin from 16 August 1939 until 16 August 1940.

- The 50-dinar silver coin, bearing 1932 as the year of minting, was being put into circulation successively starting on 23 January 1933, and was being withdrawn from circulation from 16 August 1939, until 16 February 1940.

- 25- and 50-para coins, 1, 2, 20 and 50 dinars bearing 1938 as the year of minting.

Bankarstvo Journal has published articles on the 10- and 20-dinar silver coins (Bankarstvo 2019, No. 4) and the 50-dinar coins (Bankarstvo 2020, No. 1) minted in 1931 and 1932, and this issue presents the last metal coin from 1938 minted in the Kingdom of Yugoslavia. Namely, after four and a half years since the release of the silver 50-dinar coins, the Assembly and the Senate of the Kingdom of Yugoslavia passed the Regency, which in the name of the underage King Petar II Karađorđević, confirmed and proclaimed, on 3 July 1937, the Law on Withdrawal of Old Coins and Minting of New Coins.

New Coins for the New King

The Law provided for the withdrawal of the following coins from circulation:

- The Kingdom of Serbs, Croats and Slovenes' 25-para coins from 1920, and the 50-para coins and 1- and 2-dinar coins from 1925,

- The Kingdom of Yugoslavia's 10 and 20 dinars from 1931, and 50 dinars from 1932.

All these listed coins were minted in the nominal value of 1,212 million dinars and should have been replaced with new ones in the nominal value of 1,860 million dinars. The decision to mint new coins was not made due to the lack of old coins in circulation (in 1937 there were 839.8 million dinars in circulation and 372.2 million dinars in vaults) but to mark, regardless of the Regency, the reign of King Petar II Karađorđević, son of Aleksandar I Karađorđević, killed in Marseilles on 9 October 1934. In addition, the reason for minting new coins was state profit (428.4 million dinars), which is realized by the difference between the nominal value and the cost of minting money.

The mentioned Law and its amendments (Decree on Amendments to the Law on Withdrawal from Circulation of Old and Minting of New Coins) defined minting:

• 50-dinar coins in 16 million pieces and in the nominal value of 800 million dinars;

• 20-dinar coins in 25 million pieces and in the nominal value of 500 million dinars;

• 10-dinar coins in 25 million pieces and in the nominal value of 250 million dinars;

• 2-dinar coins in 75 million pieces and in the nominal value of 150 million dinars;

• 1-dinar coins in 100 million pieces and in the nominal value of 100 million dinars;

• 50-para coins in 100 million pieces and in the nominal value of 50 million dinars;

• 25-para coins in 40 million pieces and in the nominal value of 10 million dinars.

New Engraver, Foreign Suppliers, and Local Production

As soon as August 1937, the Ministry of Finance announced an open call for the selection of the best solution for future coins. The outcome is unknown, but it is assumed that the engraver of all these coins was Frano Menegelo Dinčić (Kotor, 1900 - Belgrade, 1986), although his name is only featured on the 10-, 20- and 50-dinar coins. Dinčić is a well-known author of numerous medals, plaques, sculptures, and monuments. He finished primary school in Sinj, vocational school for sculptors in Split and the Academy of Fine Arts in Prague. He moved to Belgrade in 1928. He was a member of the Association of Fine Artists of Serbia. His most famous plaques are those depicting: Branko Radičević, Vuk Karadžić, Jovan Sterija Popović, Josip Broz Tito, Svetozar Marković, and the bust of Nikola Tesla and King Petar Karađorđević. He also made numerous monuments to fallen Serbian fighters and victims of the Balkan Wars and the First World War in: Prokuplje, Šabac, Zaječar and Jagodina. He is the author of several reliefs, such as: “Na zgarištu”, “Pogreb”, “Mira”, etc.

The procurement of the necessary metal plates, instruments, and tools for the production of these coins was transferred to the National Bank of the Kingdom of Yugoslavia, and it, hence, concluded contracts with the following companies:

- Deutsche Gold - und Silber - Scheideanstalt from Frankfurt am Main for the delivery of aluminium-bronze tiles for 25- and 50-para coins, and the 1- and 2-dinar coins. The agreed price for 100 kg of tiles was 389.15 RM (Reichsmark). The treaty was signed on 25 March 1938;

- Metallwerk A.G. from Dornoch, Germany and Schweizerische Metallwerk Selve und Cie from Tuna, Switzerland for the delivery of nickel metal plates for the 10-dinar coins. The contract has the same date as for the purchase of aluminium-bronze tiles.

- Hauptmunzamt from Vienna, for the delivery of models, instruments, and tools worth 6,300 RM. The order was dated 5 April 1938.

The conclusion of contracts for silver alloy tiles for the 20 and 50 dinars was unnecessary because they were made in the Institute for Manufacturing Banknotes and Coins in Topčider, which was an organizational part of the National Bank of the Kingdom of Yugoslavia. In addition, all seven denominations of this series of coins were minted at the Institute, with the consent and approval of the Ministry of Finance. It is not surprising that this extensive work was entrusted to the Institute for Manufacturing Banknotes and Coins, because after the Decree on the Installation of a Plant for Minting Coins and Other Metals of the Council of Ministers as of 13 July 1936, and its realization, the Mint began operating on 7 September 1938. The construction and complete equipping of the Mint at the Institute cost 20.7 million dinars and was completed at the end of 1940.

The creation of these metal coins and their withdrawal was realized when the Ministers of Finance in the Government of the Kingdom of Yugoslavia were: Dušan Letica, Juraj Šutej (whose short biographies are given in Bankarstvo 2020. No. 3) and Vojin Đuričić. During this period, the Governors of the National Bank were: Milan Radosavljević, Dragutin Protić and Dobrivoje Lazarević.

Main Characteristics of the Coins

25-para coins

The 25-para coins contain an alloy of 98% copper and 2% aluminium, are 20 mm in diameter and weigh 2.5 g. A description of the 25-para coin can be found in the announcement of its release into circulation by the Ministry of Finance on 12 November 1940. This smallest coin has a 4 mm diameter hole in its centre. The obverse features a crown above the opening, encircled by a wreath and the inscription: KINGDOM OF YUGOSLAVIA. Above the opening on the reverse is the number 25, and below the opening is the word PARA and the year 1938. The reverse, compared to the obverse is at 180 degrees. The rim is smooth. This denomination was put into circulation on 21 November 1940 and was being withdrawn on the territory of Serbia during the occupation, starting from 1 June 1942.

50-para coins

The 50-para coins contain 91% copper and 9% aluminium, are 18 mm in diameter and weighed 2 g. On 31 July 1939, in a statement on the release of this coin, the Ministry of Finance gave a description of it. There is a crown on the obverse of the coin, and around it is the inscription KINGDOM OF YUGOSLAVIA. On the reverse is the nominal value - 50 PARAS. The reverse is at 180 degrees, compared to the obverse, and the rim is smooth. It was put into circulation on 16 August 1939, and was being withdrawn, together with the 25-para coin, starting from 1 June 1942.

1-dinar coins

The 1-dinar coin was made of 91% copper alloy and 9% aluminium, with a diameter of 21 mm and weighing 3.5 g. The Ministry of Finance also described it in a statement dated 13 October 1939, on the occasion of its release into circulation. This denomination has all the obverse and reverse elements of the 50-para coin, only differing in weight and size. It was put into circulation on 20 October 1939, and was being withdrawn at the same time as the 25- and 50-para coins - starting from 1 June 1942.

2-dinar coins

Like the 50-para and 1-dinar coins, these have the same alloy: 91% copper and 9% aluminium. The Ministry of Finance gave a description of this denomination in a statement dated 31 July 1939, announcing its release into circulation as of 16 August of the same year. The description is the same as with the 50-para, 20-dinar and 50-dinar coins, except that there were two types of this coin: with a larger and smaller crown. The diameter of the coin is 24.5 mm, and its weight is 5 g. It was being withdrawn from circulation at the same time as the 25- and 50-para and 1-dinar coins, from 1 June 1942.

10-dinar coins

The 10-dinar coin was minted from 100% nickel, with a diameter of 23 mm and a weight of 5 g. It was released on 27 May 1940. The Ministry of Finance, in a statement on its release into circulation on 31 May 1940, provided a description of this coin. The obverse features a relief of the right profile of King Petar II Karađorđević, and the relief is encircled by the inscription KINGDOM OF YUGOSLAVIA. Below the figure is the name of the engraver F. Dinčić. The reverse shows a half-open wreath of oak and laurel. In the upper, open part of the wreath is the crown, inside the wreath is the number 10, and below it is the inscription DINAR and the year 1938. As with the other denominations, aside from the 20 and 50 dinars, the reverse is at 180 degrees to the obverse, and the rim is serrated. It was withdrawn from circulation starting from 19 March 1942, as well as the 20 and 50 dinars.

20-dinar coins

The Ministry of Finance issued a statement on 31 July 1939, on the release of the 20-dinar coin, also providing its description. It was minted using 75% silver and 25% other alloys, with a diameter of 27 mm and weighing 9 g. Its obverse features the left profile of King Petar II Karađorđević, encircled by an inscription PETAR KING OF YUGOSLAVIA, in Latin script, and below that the name of the engraver, F. Dinčić. A double-headed eagle is on the reverse, with the state coat of arms, with the number 19 on the left, and the number 38 on the right, marking the year of its minting. Below the coat of arms is the nominal value mark given in Latin script: 20 DINARS. The reverse is at 180 degrees to the obverse. The edge of the coin reads: GOD PROTECTS YUGOSLAVIA. The inscription is in Latin script. There are two types of this coin, some have the inscription legible when the obverse is up, and others when the reverse is up. It was put into circulation on 16 August 1939, and was withdrawn as of 19 March 1942, at the same time as the 10- and 50-dinar coins.

50-dinar coins

The 50-dinar silver coin contains 75% silver and 25% other alloys. Its diameter is 31 mm, and it weighs 15 g. It was put into circulation on 16 August 1939, following the announcement of the Ministry of Finance on 31 July 1939. In that statement, which also mentioned the 50-para, 2- and 20-dinar coins, also provides the description of this coin. The obverse features a right profile of King Petar II Karađorđević, with a Cyrillic inscription around the relief: PETAR II KING OF YUGOSLAVIA, with the name of the engraver, F. Dinčić, bellow the inscription. A double-headed eagle with the state coat of arms is on the reverse, with the number 19 on the left side, and the number 38 on the right. Below the coat of arms is the nominal value given in Cyrillic script: 50 DINARS. Reverse is at 180 degrees to the obverse. There are two types of this coin: 1. when the Cyrillic inscription GOD KEEPS YUGOSLAVIA is read when the obverse side is up and 2. when the reverse side is up. It was withdrawn from circulation starting from 19 March 1942.

Occupation Dinars

All these denominations that were withdrawn from circulation in 1942 were replaced by occupation dinars. The exchange rate of this occupation dinar was 20 dinars for one Reichsmark, or 50 dinars for one US dollar. The Government of the Kingdom of Yugoslavia had already largely fled to London, and with it the representatives of the National Bank, so this institution continued its operations from abroad. Since the governor, Milan Radosavljević, had remained in Belgrade, Dobrivoje Lazarević (a merchant born on 15 November 1886 in Aleksandrovac Župski) was appointed Governor in London. He was engaged in the trade of fabrics and was the owner, or one of the owners, of the company Popović, Lazarević and Co. As one of the leaders of the Democratic Party prior to the war, he became the president of the Belgrade municipality (Pravda, 5 March 1941). From the Official Gazette of the Kingdom of Yugoslavia, the war edition from London 6 (September 1941), we learn that, by the King's Decree as of 28 May 1941, the Governor of the National Bank of Yugoslavia, Milan Radosavljević, and Vice Governor, Ivo Belin, were relieved of their duties, at the proposal of the Minister of Finance, and with the consent of the President of the Council of Ministers. Their positions were taken up by Dobrivoje Lazaravić, an entrepreneur from Belgrade, who was appointed Governor, and Rudolf Bičavič (Rudolf Bićanić), who was appointed Vice Governor. After having spent the war in London, Lazarević moved to Italy in 1945, according to police records.

The liquidation of the National Bank of the Kingdom of Yugoslavia and the formation of the Serbian National Bank was finalised at the Reichsbank on 5 May 1941. Namely, to replace the National Bank of the Kingdom of Yugoslavia, special issuing banks were established in each zone of the occupied territory, and hence the Serbian National Bank was established in Serbia. While the occupation lasted, the Serbian National Bank operated without a Management and Supervisory Board, and was managed by the Governor, appointed and dismissed by the special plenipotentiary for economic affairs. The work of the special plenipotentiary for economic affairs in Serbia was performed by Franz Neuhausen, an officer from World War I. His staff comprised a large bureaucratic apparatus composed mainly of people who had resided in Yugoslavia before the war and worked as economic experts. Instructions on governing the Bank were given by the commissioner appointed by the special plenipotentiary. The commissioner served as an expert consultant. In practice, he actually managed the Bank. Milan Radosavljević, PhD, was appointed formal Governor, and J. Zongen, a German financial expert who came to Yugoslavia in 1938, was appointed commissioner. He was in charge of the appointment of all branch managers and decided on the amount of their salaries. A special decree entrusted the Serbian National Bank with supervision over all credit institutions on the territory of Serbia.

Vojin Đuričić

Vojin Đuričić is an important figure in our economy and finances between the two world wars. He was born on 23 February 1888, in Belgrade, to his father Milan, who was a professor and writer. Vojin finished high school in Niš in 1906, and studied law in Montpellier, France, in 1910. He returned to Serbia in 1912 and started working at the Ministry of Finance, where he was promoted from a clerk to the Head of the Budget Department, and the General Director of State Debts. He fought in the First World War and was an officer of the Legion of Honour. In April 1927, he became the manager of the State Mortgage Bank. As an exceptional financial expert with great experience, he was a delegate of our country in financial negotiations with representatives of foreign countries, several times. “He spent less nearly 12 years as the manager of the Mortgage Bank, and during that time this institution developed into a monetary institution of world-wide scope and importance” (Belgrade Municipal Newspaper, 1 May 1940). When Dragiša Cvetković formed his first government, on 6 February 1939, Vojin joined it as Minister of Finance. He remained in that position until 26 August 1939, when the second government of Dragiša Cvetković was

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претседник Београдске општине

formed. He became President of the Belgrade Municipality on 13 September 1939, by the King's Decree, succeeding Vlada Ilić. He remained President until 26 June 1940. According to unconfirmed sources, he died in 1944. He was awarded numerous domestic and foreign medals and awards: Order of St. Sava 1st Class, Order of the Yugoslav Crown 2nd Class, Order of the White Eagle 4th Class, Order of the Legion of Honour 2nd Class, honorary citizen of Lyon, Bulgarian Order of Civil Merit 1st Class, Czechoslovak Order of the White Lion, etc.

Dragutin Protić

Dragutin K. Protić, PhD, (Belgrade, 1866 - Belgrade, 1944) was a law graduate, a judge, Vice Governor of the National Bank of the Kingdom of Serbs, Croats and Slovenes and Governor of the National Bank of the Kingdom of Yugoslavia. It is known that Protić, as Vice Governor, was appointed to perform the function of Governor when George Weifert ceased to be Governor in 1926, up until the election of the new first man of the National Bank of the Kingdom of Serbs, Croats and Slovenes. The termination of this function came about with the appointment of Ljubomir Srećković as the Governor, in March 1928. Protić was also a respected member of the Board of Directors of the National Bank of the Kingdom of Serbs, Croats and Slovenes. Thus, on 11 April 1928, he was elected to a board of four members, which included: Ljuba Srećković, the Governor, Ignjat Bajloni, the Vice Governor and Dragoljub Novaković, Director General of the National Bank. They had the task of "taking into consideration the entire financial matter and making the necessary solutions, determining all the main issues according to which stabilization should be carried out." (Vreme, 12 April 1938)

Milan Radosavljević

Milan Radosavljević, PhD, was the Governor of the National Bank of the Kingdom of Yugoslavia from January 1935 to March 1939, and in his second term from January 1941, performing this function during the German occupation. From the available data (newspaper Pravda from 8 June 1929), we learn that Radosavljević was the Secretary of the Belgrade Stock Exchange before his first appointment as the Governor of the National Bank. When Radosavljević became Head of the National Bank for the second time, it was, as stated by the daily newspapers at the time, received with great approval and satisfaction in all economic circles. Milan Radosavljevic, it is pointed out, "undoubtedly garners undivided trust, both in the Serbian, Croatian and Slovenian economies, not only as a monetary expert, but also as an economic expert on all our economic and financial problems. By appointing Milan Radosavljević Governor of the National Bank, a guarantee was made that all problems will be solved in line with our national, economic and financial interests." Along with these compliments to Milan Radosavljević, the newspaper Vreme from 27 January 1941, also state that only Serbs dropped out of the current Board of Directors of the National Bank: Milorad Đorđević, retired Minister of Finance and President of the Board of the Belgrade Cooperative, Vlada Marković, President of the Association of Banks in Belgrade, engineer Ljuba Gođevac, an industrialist from Belgrade, and Kosta Mirosavljević, former President of the Chamber of Commerce and Industry. After the end of the war, Milan Radosavljević was appointed professor at the Faculty of Law in Belgrade.

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DOSTAVLJANJE KOPIJE PODATAKA O LIČNOSTI

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Rezime

Pravo na dostavljanje kopije podataka o ličnosti u pravnom sistemu Republike Srbije, po prvi put uređeno je Zakonom o zaštiti podataka o ličnosti (Službeni glasnik RS, broj 87/2018 od 13/11/2018), i to kao deo pravnog instituta ,,Pravo na pristup podacima o ličnosti". Ovaj pravni institut preuzet je iz Evropske Unije, tačnije iz Uredbe (EU) 2016/679 Evropskog parlamenta i saveta od 27. aprila 2016. godine o zaštiti podataka o ličnosti, i o slobodnom kretanju takvih podataka i o stavljanju Direktive 95/46/EZ van snage (Opšta uredba o zaštiti podataka o ličnosti).

Od početka primene pomenutog zakona pa do danas, posebno se nametnulo pitanje forme u kojoj se kopija podataka o ličnosti dostavlja licu na koje se podaci odnose, odnosno da li obaveza dostavljanja kopije podataka o ličnosti nužno znači i obavezu dostavljanja kopije dokumenata u kojima su sadržani podaci o ličnosti.

Ključne reči: Opšta uredba o zaštiti podataka o ličnosti; Zakon o zaštiti podataka o ličnosti; kopija podataka o ličnosti; lice na koje se podaci o ličnosti odnose; Rukovalac.

JEL klasifikacija: K20, L50, D82

Uvod

Danas, nakon više od dve godine od početka primene Zakona o zaštiti podataka o ličnosti, svedoci smo sve veće potrebe da se pravo na dostavljanja kopije podataka o ličnosti u skladu sa članom 26. stav 3. Zakona o zaštiti podataka o ličnosti dodatno razjasni. Naročito imajući u vidu njegovu veoma složenu primenu u praksi, kao i činjenicu da je ovo pravo tokom vremena neretko korišćeno za ostvarivanje nekih drugih interesa koji nisu bili usmereni na zaštitu podataka o ličnosti, kao na primer pribavljanje kopija ugovora o kreditu od banaka u cilju podnošenja tužbi za povraćaj naplaćene naknade za obradu kredita.

Otežavajuća okolnost u pogledu shvatanja suštine prava na dostavljanje kopije poda taka o ličnosti jesu razlike u stavovima na nivou Evropske Unije i Poverenika za informacije od javnog značaja i zaštitu podataka o ličnosti Republike Srbije. Dok na nivou Evropske Unije iz koje je ovo pravo i preuzeto, postoje stavovi da Rukovaoci podacima o ličnosti nisu dužni da dostavljaju kopije dokumenata u kojima su sadržani pojedini podaci o ličnosti, Poverenik za informacije od javnog značaja i zaštitu podataka o ličnosti Republike Srbije zauzeo je stav da su Rukovaoci ipak dužni da na zahtev lica na koje se podaci odnose izdaju kopije dokumenata u kojima se nalaze pojedini podaci o ličnosti, prilikom postupanja po zahtevu lica za dostavljanje kopije podataka o ličnosti.

Stav koji ide u prilog obavezi da su Rukovaoci dužni da na zahtev lica na koje se podaci odnose, dostave kopije dokumenata, omogućio je da se ovo pravo koristi i za svrhe koje ne služe zaštiti podataka o ličnosti. Tako danas, u praksi, kao što je već prethodno pomenuto, imamo zahteve upućene bankama za pribavljanje kopije ugovora o kreditu, koje su zatim korišćene za ostvarenje tužbenih zahteva obligaciono pravne prirode, a u vezi sa naplaćenom naknadom za obradu kredita, što nije u skladu sa predmetom Zakona o zaštiti podataka o ličnosti.

Pored navedenog, stav koji govori u prilog obavezi dostavljanja kopija dokumenata, doprinosi i određenom stepenu pravne nesigurnosti, kako u pogledu obaveza koje Rukovaoci podataka o ličnosti imaju prema licima čije podatke obrađuju, tako i u pogledu obima prava koje lica na koje sa podaci odnose mogu da očekuju, odnosno ostvare kod Rukovaoca.

Smisao prava na dostavljanje kopije podataka o ličnosti

Da krenemo od samog predmeta Zakona o zaštiti podataka o ličnosti. Članom 1. navedenog zakona propisano je da se tim zakonom uređuje pravo na zaštitu fizičkih lica u vezi sa obradom podataka o ličnosti i slobodni protok takvih podataka, načela obrade, prava lica na koje se podaci odnose, obaveze rukovalaca i obrađivača podataka o ličnosti, kodeks postupanja, prenos podataka o ličnosti u druge države i međunarodne organizacije, nadzor nad sprovođenjem ovog zakona, pravna sredstva, odgovornost i kazne u slučaju povrede prava fizičkih lica u vezi sa obradom podataka o ličnosti, kao i posebni slučajevi obrade.

Iz prethodno navedenog, nedvosmisleno se može zaključiti da ovaj zakon za svoj cilj ima isključivo zaštitu podataka o ličnosti fizičkih lica, a ne bilo koju drugu svrhu kao što je na primer pribavljanje dokumentacije za ostvarivanje tužbenih zahteva obligaciono pravne prirode ili na primer dostavljanje kopije dokumenata za neke druge birokratsko – administrativne potrebe fizičkih lica.

Ako pogledamo tačku 4. preambule Opšte uredbe o zaštiti podataka o ličnosti, takođe možemo da vidimo da je istom propisano da se zaštita podataka o ličnosti posmatra u vezi s funkcijom koju ima u društvu, što svakako nije obezbeđivanje mogućnosti fizičkim licima da preko Rukovaoca pribavljaju dokumente koji su im neophodni za ostvarivanje nekih drugih prava koja nisu u vezi sa zaštitom podataka o ličnosti.

Dalje, sam Zakon o zaštiti podataka o ličnosti u članu 26. stav 3. propisuje da je Rukovalac dužan da licu na koje se podaci odnose na njegov zahtev dostavi kopiju podataka koje obrađuje. Kao što možemo da vidimo, ni sam zakon nije predvideo obavezu dostavljanja kopije dokumenata, već obavezu dostavljanja kopije podatka o ličnosti. Ovo verovatno iz razloga što predmet zaštite ovog zakona nisu dokumenti, već podaci o ličnosti, što svakako predstavlja veliku suštinsku razliku imajući u vidu da su terminološki u pravnom sistemu Republike Srbije posebno regulisani pojam podatka o ličnosti i to Zakonom o zaštiti podataka o ličnosti, a posebno pojam dokumenta Zakonom o arhivskoj građi i arhivskoj delatnosti.

Pa tako, članom 4. stav 1. podtačka 1) Zakona o zaštiti podataka o ličnosti propisano je da je podatak o ličnosti svaki podatak koji se odnosi na fizičko lice čiji je identitet određen ili odrediv, neposredno ili posredno, posebno na osnovu oznake identiteta, kao što je ime i identifikacioni broj, podataka o lokaciji, identifikatora u elektronskim komunikacionim mrežama ili jednog, odnosno više obeležja njegovog fizičkog, fiziološkog, genetskog, mentalnog, ekonomskog, kulturnog i društvenog identiteta.

Dalje, Zakonom o arhivskoj građi i arhivskoj delatnosti („Sl. glasnik RS“, br. 6/2020) čiji su obaveznici između ostalog i banke, propisano je da se pod dokumentom smatra zapis bilo koje vrste, oblika i tehnike izrade, koji sadržajem, kontekstom i strukturom pruža dokaz o aktivnosti koju pravno ili fizičko lice preduzima, obavlja ili zaključuje tokom svoje delatnosti ili lične aktivnosti i kao takav u svojoj celini predstavlja dokumentarni materijal.

U smislu navedene definicije, nesporno je da se na osnovu nekih vrsta dokumenata mogu identifikovati fizička lica, ali svakako dokumenti, imajući u vidu njihovu prirodu i svrhu nastanka kao i formu, imaju znatno šire značenje od samog pojma podatka o ličnosti i mogu predstavljati nosač, zapis ili izvor podatka o ličnosti, ali ih ne bi trebalo poistovećivati sa vrstom podatka o ličnosti, a posebno imajući u vidu da je sistem zaštite podataka o ličnosti uređen jednim posebnim zakonom, a sistem zaštite dokumentarnog materijala drugim posebnim zakonom.

Dakle, trebalo bi jasno razgraničiti pojam podataka o ličnosti od pojma dokumenta, te odredbu člana 26. stav 3. Zakona posmatrati u smislu izdavanja kopije podataka, u razumljivom obliku, odnosno u obliku koji je dovoljan da lice na koje se podaci odnose može da se upozna sa podacima koje Rukovalac obrađuje, da može proveriti tačnost tih podataka kako bi mogao da ostvari svoje pravo na ispravku podataka, kao i da proveri da li su njegovi podaci o ličnosti prikupljeni i obrađeni u skladu sa odredbama Zakona o zaštiti podataka o ličnosti.

Insistiranjem na stavu, da je opravdano zahtevati izdavanje kopije dokumenata pozivajući se na odredbe Zakona o zaštiti podataka o ličnosti, odnosno obavezivanjem Rukovalaca da su dužni da po navedenim zahtevima postupaju, dovodi se u pitanje i načelo minimizacije podataka o ličnosti jer bi u tom slučaju predmet otkrivanja bili i podaci o ličnosti nekih trećih lica koji nisu predmet zahteva, a koji su sadržani u nekom dokumentu čija se kopija dostavlja.

Veliki broj dokumenata poput na primer ugovora o kreditu ne predstavljaju isključivo dokument koji se odnosi na jedno lice, a najmanje njegovu svojinu da bi se posmatrao kao apsolutno pravo. Pored podataka o ličnosti klijenta, ugovor o kreditu sadrži i podatke drugih lica kao što su zaposleni banke i davaoci sredstava obezbeđenja.

S druge strane, depersonalizacijom određenih podataka o ličnosti trećih lica, kao merom očuvanja načela minimizacije podataka o ličnosti, narušila bi se izvorna forma dokumenta i njegova upotrebna vrednost pa se postavlja pitanje zašto insistirati na izdavanju kopije dokumenta ako je njegova dokazna snaga ili upotrebna vrednost izgubljena.

U prilog stanovištu da Rukovaoci nisu dužni dostavljati kopije dokumenta, već kopiju podataka o ličnosti govori i presuda doneta od strane The Court of Appeal of Ireland (žalbenog suda u Irskoj) usvojena 01. jula 2020. godine, u postupku po sporu između Peter Nowak i Irish Data Protection Commissioner.

Sličan stav iznela je Information Commissioner's Office (Kancelarija poverenika za informacije) u svojim smernicama za Opštu uredbu o zaštiti podataka o ličnosti Ujedinjenog Kraljevstva (Guide to the UK General Data Protection Regulation) kojima je između ostalog propisano da Rukovalac podacima o ličnosti može izdati kopiju dokumenta prilikom ostvarivanja prava na pristup podacima o ličnosti, ukoliko je tako lakše dostaviti kopiju podataka o ličnosti, ali da nije obavezan da to uradi.

Dakle, nesumnjivo je da bi pravo na dostavljanje kopije podataka o ličnosti, trebalo posmatrati u kontekstu prava na pristup podacima o ličnosti, s obzirom da je isto upravo regulisano u sklopu člana 26. Zakona o zaštiti podataka o ličnosti, koji reguliše pravo na pristup podacima o ličnosti.

Smisao prava na dostavljanje kopije podataka o ličnosti trebalo bi da bude u tome da lice na koje se podaci odnose razume zašto Rukovalac koristi njihove podatke o ličnosti, na koji način koristi te podatke i proveri da li se podaci koriste na zakonit način.

Nije opravdano očekivati da je zakonodavac želeo da istim postigne nešto više od prethodno navedenog, niti je opravdano očekivati da se zaštita podataka ličnosti može narušiti time što se podaci o ličnosti dostavljaju licu na koje se odnose u nekoj drugom obliku, drugačijem od dokumenta u kojem su sadržani, a još manje da se kopija podataka obezbeđuje za dalje ostvarivanje bilo koje druge svrhe osim same zaštite podataka o ličnosti.

Moguće posledice obaveze izdavanja kopije dokumenata

Pored prethodno navedene opasnosti da se pravo na dostavljanje kopije podataka o ličnosti široko koristi za neke druge ciljeve koji nisu usmereni na zaštitu podataka o ličnosti, kao što su različiti birokratski i administrativni ciljevi, shvatanje koje ide u prilog obavezi dostavljanja kopije dokumenata može da proizvede i neke druge negativne posledice.

Na primer, ovo bi moglo da znači da nijedno fizičko lice ne mora čuvati nijedan dokument koji ga povezuje sa nekim rukovaocem podataka o ličnosti jer će biti siguran da na svoj zahtev uvek može dobiti kopiju dokumenta koji želi, sve dok Rukovalac ima zakonsku ili drugu obavezu da taj dokument čuva, a time se Rukovalac poistovećuje sa arhivom svakog fizičkog lica pojedinačno, što zasigurno nije bila namera zakonodavca.

Naročito je potrebno imati u vidu da je obaveza izdavanja pojedinih dokumenata od strane privrednih subjekata, fizičkim licima, u zavisnosti od vrste dokumenata, propisana posebnim zakonima.

Pa tako na primer, Banke kao privredni subjekti i pružaoci finansijskih usluga, dužne su u skladu sa Zakonom o zaštiti korisnika finansijskih usluga („Sl. glasnik RS“, br. 36/2011 i 139/2014) prilikom zaključenja poslovnog odnosa, korisniku uruče ugovornu dokumentaciju, kao što je ugovor o kreditu, plan otplate kredita, pregled obaveznih elemenata ili u slučaju depozita, ugovor o depozitu, plan ispate depozita i pregled obaveznih elemenata depozita. Takođe možemo navesti i primer radnog odnosa, gde svaki poslodavac, u skladu sa Zakonom o radu (“Sl. glasnik RS”, br. 24/2005, 61/2005, 54/2009, 32/2013, 75/2014, 13/2017 - odluka US, 113/2017 i 95/2018 - autentično tumačenje) ima obavezu da zaposlenom uruči primerak ugovora o radu ili obavezu da prilikom svake isplate zarade i naknade zarade dostavi zaposlenom obračun zarade. Takođe postoji još puno primera gde su određeni subjekti koji obrađuju podatke o ličnosti dužni da izdaju dokumente u skladu sa posebnim zakonima.

Obavezivanjem Rukovalaca da postupajući po zahtevima za izdavanje kopije podataka o ličnosti obavezno dostavljaju dokumente, Zakonom o zaštiti podataka o ličnosti bi se praktično proširilo pravno dejstvo odredbi posebnih zakona koji na primer obavezu dostavljanja određenih dokumenata vezuju za određene momente kao što su zaključenje ugovora, trajanje poslovnog odnosa, trajanje radnog odnosa, isplata zarade i itd..., što takođe zasigurno nije bila intencija zakonodavca, niti Zakon o zaštiti podataka o ličnosti u bilo kom smislu možemo da posmatramo kao pravni akt više pravne snage u odnosu na neke druge posebne zakone.

Ako posmatramo banke odvojeno o drugih rukovalaca, važno je istaći činjenicu da banke, dokumentaciju u vezi sa poslovnim odnosom sa svojim klijentom čuvaju u periodu od najmanje 10 godina nakon prestanaka poslovnog odnosa, a sve u skladu sa svojim ovlašćenjima i obavezama propisanim Zakonom o sprečavanju pranja novca i finansiranja terorizma („Sl. glasnik RS“, br. 113/2017, 91/2019 i 153/2020), te da nemaju obavezu čuvanja ove dokumentacije u skladu sa nekim drugim posebnim propisima, kao ni u skladu sa Zakonom o zaštiti podataka o ličnosti.

S tim u vezi, može se zaključiti da je obaveza čuvanja prethodno navedene dokumentacije isključivo utvrđena samo u svrhu otkrivanja izvršenja krivičnog dela pranja novca i finansiranja terorizma, te da bi se obavezivanjem Banaka na dostavljanje ove dokumentacije u skladu sa odredbom člana 26. stav 3. Zakona o zaštiti podataka o ličnosti i nakon prestanka poslovnog odnosa, suštinski narušila i svrha i osnov obrade podataka o ličnosti koju Banke sprovode u skladu sa Zakonom o sprečavanju pranja novca i finansiranja terorizma, odnosno da se dokumentacija u vezi sa poslovnim odnosom sa klijentom nakon prestanka poslovnog odnosa može koristiti samo u svrhe propisane Zakonom o sprečavanju pranja novca i finansiranja terorizma.

Zaključak

Na osnovu prethodno navedenog, može se zaključiti da previše ekstenzivno tumačenje odredbe člana 26. stav 3. Zakona o zaštiti podataka o ličnosti koje obuhvata i dostavljanje kopije dokumenata može dovesti do zloupotrebe samog prava na dostavljanje kopije dokumenata, kao i da isto nije u skladu sa svrhom koje bi ovo pravo bi trebalo da ima u društvu.

Pravo na izdavanje kopije podataka o ličnosti, kao što je prethodno navedeno, trebalo bi posmatrati isključivo u vezi sa svrhom koju ima u društvu, pa bi iz tog razloga svako lice na koje se podaci o ličnosti odnose trebalo da ima mogućnost, da kopiju svojih podataka o ličnosti dobije u vidu jednog strukturiranog i lako čitljivog pregleda podataka o ličnosti, koji licu na koje se podaci o ličnosti odnose, omogućava jasan pregled svih podataka koje Rukovalac o tom licu obrađuje, sa naznakom svrha i osnova u skladu sa kojima Rukovalac obrađuje te vrste podataka o ličnosti. Takođe, u cilju postizanja potpune transparentnosti prema licu čiji se podaci o ličnosti obrađuju, ovaj pregled podataka o ličnosti bi trebalo da sadrži i rokove čuvanja podataka o ličnosti ili kriterijume za njihove određivanje. Samo na osnovu ovakvog pregleda, lice na koje se podaci o ličnosti odnose bi moglo dalje, nakon pristupa svojim podacima o ličnosti, da ostvari i druga prava zagarantovana Zakonom o zaštiti podataka o ličnosti, kao što su pravo na ispravku, dopunu i brisanje podataka o ličnosti, kao i pravo na prigovor, naravno pod uslovom da se to lice na neki drugi način, pre samog pristupa podacima već nije upoznalo sa podacima o ličnosti koje rukovalac obrađuje. U prilog ovom stavu govori i činjenica da je članom 21. stav 1. Zakona o zaštiti podataka o ličnosti, između ostalog propisano da se informacije u vezi sa ostvarivanjem prava iz člana 26. pružaju na sažet, transparentan, razumljiv i lako dostupan način, korišćenjem jasnih i jednostavnih reči. U pogledu forme u kojoj se kopija podataka o ličnosti obezbeđuje licu na koje se podaci o ličnosti odnose, trebalo bi uzeti u obzir da je istim članom 21. stav 1. Zakona o zaštiti podataka o ličnosti, propisano da se informacije u vezi sa ostvarivanjem prava iz člana 26. u kojem je upravo i propisano pravo na izdavanje kopije podataka o ličnosti, pružaju u pismenom ili drugom obliku, uključujući i elektronski oblik, ako je to pogodno. Dakle, može se zaključiti da zakonodavac nije ograničavao formu u kojoj se prava zagarantovana Zakonom o zaštiti podataka ličnosti mogu ostvariti, već na prvo mesto stavlja transparentnost, razumljivost, jednostavnost i sažetost.

Sve prethodno navedene dileme i činjenice govore u prilog potrebi za autentičnim tumačenjima navedene odredbe člana 26. stav 3. Zakona o zaštiti podataka o ličnosti, odnosno potrebi da se navedena odredba dodatno precizira ili dopuni.

Pre svega toga, stiče se utisak da je prvo potrebno razrešiti dilemu oko same definicije podatka o ličnosti koja ja u Zakonu o zaštiti podataka o ličnosti veoma široko postavljena, da bi zaštita podataka o ličnosti koja uključuje i pravo na pristup podacima mogla efikasnije da se ostvari, a samim tim i pravo na dostavljanje kopije podataka o ličnosti.

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SUBMISSION OF A COPY OF PERSONAL DATA

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Summary

The right to submit a copy of personal data was regulated for the first time in the legal system of the Republic of Serbia by the Law on Personal Data Protection (Official Gazette of the Republic of Serbia, Nos. 87/2018 of 13/11/2018), as part of the legal institute "Right to Access Personal Data". This legal institute was assumed from the European Union, namely from Regulation (EU) 2016/679 of the European Parliament and of the Council as of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC (General Data Protection Regulation).

From the beginning of implementation of the above law until today, the question of the form in which a copy of personal data is delivered to the data subject has been raised, i.e., whether the obligation to submit a copy of personal data necessarily means the obligation to submit a copy of documents containing personal data.

Keywords: General Data Protection Regulation; Law on Personal Data Protection; copy of personal data; person to whom personal data refers; controller

JEL classification: K20, L50, D82

Introduction

Today, after more than two years since the implementation of the Law on Personal Data Protection, we are witness to a growing need to further clarify the right to submit copies of personal data in accordance with Article 26, Paragraph 3 of the Law on Personal Data Protection. Especially bearing in mind its very complex application in practice, as well as the fact that over time this right has often been used to pursue some other interests that have not been aimed at protecting personal data, such as obtaining copies of loan agreements from banks for the purpose of pursuing lawsuits to recover the charged loan processing fee.

An aggravating circumstance regarding the understanding of the essence of the right to submit a copy of personal data is the difference in attitudes at the level of the European Union and the Commissioner for Information of Public Importance and Personal Data Protection of the Republic of Serbia. While at the level of the European Union, from which this law was assumed, there are views that personal data controllers are not required to submit copies of documents containing certain personal data, the Commissioner for Information of Public Importance and Personal Data Protection of the Republic of Serbia is of the position that controllers are still required to issue copies of documents containing certain personal data at the request of the data subject, when acting on the request of the person for the submission of a copy of personal data.

The position that supports the obligation that the controllers are required to submit copies of documents at the request of the data subject, has enabled this right to be used for purposes that do not serve to protect personal data. That is why today, in practice, as already mentioned, we have requests addressed to banks for a copy of loan agreements, which are then used to pursue lawsuits of a legal nature in connection with the fee charged for loan processing, which is not in line with the subject to the Law on Personal Data Protection.

In addition to the above, the position in favor of the obligation to provide copies of documents contributes to a certain degree of legal uncertainty both in terms of obligations that personal data controllers have towards data subjects and in terms of the scope of rights that data subjects can expect, i.e., achieve with the controller.

The Essence of the Right to Submit a Copy of Personal Data

Starting with the subject of the Law on Personal Data Protection. Article 1 of the said Law stipulates that this Law regulates the right to protection of natural persons in connection with the processing of personal data and the free flow of such data, principles of processing, rights of data subjects, obligations of data controllers and processors, code of action, transfer of personal data to other states and international organizations, supervision over the implementation of this Law, legal remedies, liability and penalties in case of violation of the rights of natural persons in connection with the processing of personal data, as well as special cases of processing.

From the above, it can be unequivocally concluded that this Law is aimed solely at the protection of personal data of individuals, and not for any other purpose such as obtaining documentation for the implementation of lawsuits of a legal nature or for example providing a copy of documents for some other bureaucratic - administrative needs of natural persons.

If we look at Item 4 of the preamble of the General Data Protection Regulation, we can also see that it stipulates that personal data protection is observed in relation to the function it has in society, which is certainly not providing opportunities for individuals to obtain documents through the controller which are necessary for them to exercise some other rights that are not related to the protection of personal data.

Furthermore, the Law on Personal Data Protection under Article 26, Paragraph 3 stipulates that the controller is required to provide the data subject, at their request, with a copy of the data they are processing. As we can see, the Law itself did not foresee the obligation to submit a copy of documents, but the obligation to submit a copy of personal data. This is probably due to the fact that the subject of protection of this Law are not documents but personal data, which is certainly a major difference, bearing in mind that terminologically the legal system of the Republic of Serbia has separately defined the concept of personal data, with the Law on Personal Data Protection, and the concept of a document with the Law on Archive Material and Archiving Activity.

Thus, Article 4, Paragraph 1, sub-item 1) of the Law on Personal Data Protection stipulates that personal data is any data relating to a natural person whose identity is determined or identifiable, directly or indirectly, especially on the basis of identity, such as name and identification number, location data, identifiers in electronic communications networks or one or more features of his physical, physiological, genetic, mental, economic, cultural and social identity.

Furthermore, by the Law on Archive Material and Archiving Activity (Official Gazette of the Republic of Serbia, No. 6/2020), whose obligors are, inter alia, banks, stipulates that a document is a record of any type, form and technique of production, which with its content, context and structure provides evidence of the activity that a legal or natural person assumes, performs or concludes during its activities or personal activities and as such represents documentary material in its entirety.

In terms of this definition, it is indisputable that a natural persons can be identified on the basis of some types of documents, but certainly documents, given their nature and purpose and form, have a much broader meaning than the concept of personal data and can be a carrier, record or source of personal data, but they should not be equated with the type of personal data, especially bearing in mind that the system of personal data protection is regulated by one special law, and the system of protection of documentary material by another special law.

Therefore, a clear distinction should be made between the notion of personal data and the notion of a document, and the provision of Article 26, Paragraph 3, of the law should be observed in terms of issuing a copy of the data, in an understandable form, i.e., in a form sufficient for the data subject to become acquainted with the data processed by the controller, to be able to verify the accuracy of such data in order to exercise his right to data correction, as well as to check whether his personal data has been collected and processed in accordance with the provisions of the Law on Personal Data Protection.

Insisting on the position that it is justified to request the issuance of a copy of documents and referring to the provisions of the Law on Personal Data Protection, i.e., obliging the controller to act on these requests, calls into question the principle of minimizing personal data as in that case the subject of disclosure could also be data on the identity of some third parties who are not the subject of the request, and which are contained in a document whose copy is submitted.

A large number of documents, such as loan agreements, are not exclusively documents relating to one person, and at least their property, in order to be considered an absolute right. In addition to the client's personal data, the loan agreement also contains data on other persons such as bank employees and collateral providers.

On the other hand, depersonalization of certain personal data belonging to third parties, as a measure of preserving the principle of minimizing personal data, would violate the original form of the document and its use value, so the question arises why insist on issuing a copy of the document if its probative value or use value is lost.

A ruling of The Court of Appeal of Ireland, adopted on July 01, 2020, in a dispute between Peter Nowak and Irish Data Protection Commissioner, speaks in favor of the view that the controllers are not required to submit copies of the document, but a copy of personal data.

A similar view was expressed by the Information Commissioner's Office in its guidelines for the UK General Data Protection Regulation, which stipulated, inter alia, that a Personal Data Controller may issue a copy of a document when exercising the right to access personal data, if it is easier to provide a copy of personal data but is not required to do so.

Thus, there is no doubt that the right to provide a copy of personal data should be viewed in the context of the right to access personal data, given that it is currently regulated under Article 26 of the Law on Personal Data Protection, which regulates the right to access personal data.

The meaning of the right to submit a copy of personal data should be that the data subject understands why the controller uses their personal data, how they use that data and check whether the data is used legally.

It is not justified to expect that the legislator wanted to achieve something more than the above, nor is it reasonable to expect that the protection of personal data may be violated by providing personal data to the person concerned in a form other than the document in which they are contained, much less that a copy of the data is provided for the further realization of any other purpose than the protection of personal data itself.

Possible Consequences of the Obligation to Issue a Copy of Documents

In addition to the aforementioned danger that the right to provide a copy of personal data may be widely used for other purposes not aimed at protecting personal data, such as various bureaucratic and administrative purposes an understanding in favor of the obligation to provide a copy of documents may cause some other negative consequences.

For example, this could mean that no natural person needs to keep any document linking them to a personal data controller because they will be sure that they can always get a copy of the document they want, as long as the controller has a legal or other obligation to keep that document, and thus the controller identifies themselves with the archives of each natural person individually, which was certainly not the intention of the legislator.

It is especially necessary to keep in mind that the obligation to issue certain documents by economic entities, natural persons, depending on the type of documents, is prescribed by separate laws.

Thus, for example, banks, as economic entities and providers of financial services, are required to, in accordance with the Law on Protection of Users of Financial Services (Official Gazette of the Republic of Serbia, Nos. 36/2011 and 139/2014), when concluding a business relationship, hand over to the user contractual documentation, such as loan agreements, loan repayment plans, review of mandatory elements or in case of deposit, deposit agreements, deposit payout plans and reviews of mandatory deposit elements. We can also give an example of an employment relationship, where each employer, in accordance with the Labor Law (Official Gazette of the Republic of Serbia, Nos. 24/2005, 61/2005, 54/2009, 32/2013, 75/2014, 13/2017 - decision of the Constitutional Court, 113/2017 and 95/2018 - authentic interpretation) has an obligation to provide an employee with a copy of the employment contract or an obligation to upon each disbursement of salary and fringe benefits, provide a payroll slip to the employee. There are also many other examples where specific subjects that process personal data are required to issue documents in accordance with separate laws.

Obliging the controller to, upon receipt of requests for the issuance of a copy of personal data, submit documents, the Law on Personal Data Protection would practically expand the legal effect of provisions of separate laws which, for example, refer the obligation to submit certain documents to certain time-periods such as conclusion of contracts, duration of a business relationship, duration of employment, payment of wages, etc., which was certainly not the intention of the legislator, nor the Law on Personal Data Protection, which can be seen as a legal act of higher legal force than some other special laws.

If we look at banks separately from other controllers, it is important to point to the fact that banks keep documentation related to business relations with their clients for at least 10 years after the termination of business relations, all in accordance with their powers and obligations under the Law on Prevention of Money Laundering and Terrorism Financing (Official Gazette of the Republic of Serbia, Nos. 113/2017, 91/2019 and 153/2020), and that they do not have the obligation to keep this documentation in accordance with some other separate regulations, as well as in accordance with the Law on Personal Data Protection.

In this respect, it can be concluded that the obligation to keep the above documentation is determined solely for the purpose of detecting the crime of money laundering and terrorism financing, and that obliging banks to submit this documentation in accordance with Article 26, Paragraph 3 of the Law on Personal Data Protection after the termination of the business relationship, substantially violates the purpose and basis of processing personal data conducted by banks in accordance with the Law on Prevention of Money Laundering and Terrorist Financing, i.e., that the documentation related to the business relationship with the client after the termination of the business relationship can be used only for the purposes prescribed by the Law on Prevention of Money Laundering and Terrorism Financing.

Conclusion

Based on the above, it can be concluded that too extensive an interpretation of the provision from Article 26, Paragraph 3, of the Law on Personal Data Protection, which includes the submission of a copy of documents, may lead to the abuse of the right to submit a copy of documents, as well as that it is not in accordance with the purpose that this right should have in society.

The right to issue a copy of personal data, as mentioned above, should be considered exclusively in relation to the purpose it has in society, and for that reason every person to whom personal data relates should be able to copy his personal data in the form of a structured and easy-to-read overview of personal data, which allows the person to whom personal data relates a clear overview of all data processed by the controller about that person, indicating the purposes and grounds according to which the controller processes these types of personal data. Also, in order to achieve full transparency towards the person whose personal data is being processed, this overview of personal data should also include deadlines for keeping personal data or criteria for its determination. Only on the basis of such an examination, the person to whom the personal data relates could further, after access to his personal data, exercise other rights guaranteed by the Law on Personal Data Protection such as the right to correct, supplement and delete data, as well as the right to object, of course, provided that the person has not already been acquainted with the personal data processed by the controller before accessing the data. This paragraph is supported by the fact that Article 21, Paragraph 1 of the Law on Personal Data Protection stipulates, inter alia, that information related to the exercise of rights referred to under Article 26 be provided in a concise, transparent, understandable and easily accessible manner, using clear and simple words. With regard to the form in which a copy of personal data is provided to the person to whom the data relates, it should be taken into account that the same Article 21, Paragraph 1 of the Law on Personal Data Protection stipulates that information related to the exercise of the right referred to under Article 26, which precisely prescribes the right to issue a copy of personal data, shall be provided in writing or other form, including electronic form, if appropriate. Thus, it can be concluded that the legislator did not limit the form in which the rights guaranteed by the Law on Personal Data Protection can be exercised, but put transparency, comprehensibility, simplicity, and conciseness in first place.

All the above dilemmas and facts speak in favor of the need for authentic interpretations of the above provision of Article 26, Paragraph 3, of the Law on Personal Data Protection, i.e., the need to further specify or supplement the said provision.

First of all, one gets the impression that it is first necessary to resolve the dilemma about the very definition of personal data, which is very broad in the Law on Personal Data Protection, so that the protection of personal data, which includes the right to access data, can be achieved more efficiently, and consequently the right to provide a copy of personal data.

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SVE ŠTO STE ODUVEK ŽELELI DA ZNATE O INKASU

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Rezime:

Inkaso je instrument platnog prometa sa inostranstvom namenjen pravnim licima i preduzetnicima. Globalno posmatrano, posle bankarske doznake, inkaso je najčešće korišćeni instrument naplate po osnovu spoljnotrgovinskih transakcija.

Poslovanje sa ovim instrumentom je regulisano Jednoobraznim pravilima Međunarodne trgovinske komore – MTK (eng. International Chamber of Commerce - ICC) za inkaso - u daljem tekstu Jednoobrazna pravila, (eng. „The Uniform Rules for Collections, 1995 Revision, ICC Publication No. 522-URC“). Prva verzija ovih Pravila objavljena je 1956. godine, posle čega su usledile odgovarajuće izmene.

Prednosti inkasa se ogledaju u tome što ovaj instrument omogućava jednostavnu i relativno brzu proceduru naplate, koja nije praćena značajnijim troškovima. Rizik pružanja usluge po osnovu inkaso transakcija za banku je isključivo reputacioni, jer nastaje u slučaju izostanka ili neblagovremenog reagovanja banke na instrukciju nalogodavca.

Ključne reči: inkaso; izvoz; banka; dokumenta; menica; protest zbog neplaćanja

JEL klasifikacija: E42, G21

Platni promet s inostranstvom obuhvata sva plaćanja i naplate između domaćih pravnih lica, preduzetnika, fizičkih osoba, kao i države, s jedne strane, i stranih lica s druge strane. Prema Odluci o uslovima i načinu obavljanja platnog prometa s inostranstvom („Službeni glasnik RS", br. 24/2007, 31/2007, 38/2010 i 111/2015), platni promet s inostranstvom se obavlja preko banke.

Instrumenti međunarodnog platnog prometa su: doznaka, dokumentarna naplata - inkaso, ček, menica, poštanska uputnica i platna kartica.

Inkaso (eng. Collection) označava dokumentarnu naplatu potraživanja od strane jednog pravnog lica kome je drugo pravno lice izdalo fakturu za isporučenu robu.

Korišćenje inkasa kao instrumenta naplate je regulisano je Jednoobraznim pravilima. U korespondenciji s drugim bankama, kao i sa klijentima, banke se redovno pozivaju na tačno određene odredbe Jednoobraznih pravila, čime se najefikasnije obezbeđuje podudarnost u razumevanju postupaka koji prate inkaso transakcije.

Strane učesnice u inkasu su:

1. Prodavac/izvoznik (eng. Principal) koji banci poverava posao naplate potraživanja za obavljeni izvoz, uz prezentaciju odgovarajućih dokumenata,

2. Banka prodavca/izvoznika (eng. Remiting bank) je banka kojoj prodavac poverava inkaso transakciju,

3. Inkaso banka (eng. Collecting bank) može biti svaka banka, osim banke prodavca, i ona obavlja konkretne aktivnosti u vezi sa naplatom potraživanja,

4. Banka kupca/uvoznika (eng. Presenting bank) je banka koja uručuje dokumenta trasatu, po ispunjenju ugovorenih uslova plaćanja,

5. Kupac/uvoznik odn. trasat (eng. Drawee) koji ima obvezu plaćanja prema prodavcu ili obavezu akceptiranja menice prodavca, te izvršenja plaćanja po istoj, kao uslova za preuzimanje robe.

U praksi se veoma često događa da je inkaso banka istovremeno i banka kupca, što smanjuje broj učesnika, kao i troškove koji prate takvu transakciju.

Shodno članu 1 stav B i stav C Jednoobraznih pravila, banka nije u obavezi da automatski postupi po inkasu ili bilo kojoj inkaso instrukciji ili naknadnoj instrukciji banke inicijatora. Ako banka odluči da ne prihvati instrukciju druge banke, o tome mora bez odlaganja obavestiti stranu od koje je primila instrukciju, bez obaveze navođenja razloga za neprihvatanje inicijative.

Razlozi neprihvatanja inicijative mogu biti prvenstveno sledeći:

- kupac nema otvoren račun kod banke kojoj je upućena inkaso inicijativa,

- kupac ima račun u banci kojoj je upućena inicijativa, ali isti retko koristi,

- i neki drugi.

Inkaso se smatra posebno prihvatljivim instrumentom naplate ako prodavac i kupac neguju saradnju praćenu međusobnim poverenjem, a nema naznaka da kupac neće biti spreman da ispuni svoju obavezu plaćanja. Dodatni faktor sigurnosti za prodavca su stabilni politički i ekonomski uslovi u zemlji u kojoj se nalazi sedište kupca.

Inkaso transakcija uključuje sledeće radnje:

- kupac i prodavac zaključuju ugovor o prodaji robe kojim se, između ostalog, utvrđuje inkaso kao instrument naplate izvoza,

- prodavac predaje robu špediteru radi isporuke u skladu sa instrukcijama kupca,

- prodavac dostavlja svojoj banci dokumenta o izvršenom izvozu, kao i instrukciju za postupanje s dokumentima,

Zahtev za dokumentarni inkaso

red. br.	naziv dokumenta	br. komada
1.	menica br.	
2.	faktura	
3.	kamion. tovarni list	
4.	železn. tovarni list	
5.	avionski tov. List	
6.	brodski konosman	
7.	špediterska potvrda	
8.	polisa osiguranja	
9.	certifikat o poreklu	
10.	certifikat o osiguranju	
11.	ostala dokumenta	

Pun naziv i adresa kupca u inostranstvu: ___________________________
Broj računa kupca kod banke kupca:_______________________________
Pun naziv, adresa i SWIFT banke kupca:___________________________
Ukupna vrednost isporuke:______________________________________
Instrukcije u vezi sa dokumentima:

1) Uručiti dokumenta uz plaćanje____________________________
   ili
2) Uručiti dokumenta uz akcept menice_______________________
   - rok plaćanja po menici ___________________________
   - protest po menici ________________________________
   - troškovi po inkasu na teret_________________________

*nepotrebno precrtati

- banka prodavca prosleđuje dokumenta inkaso banci ili direktno banci kupca, ako je takav dogovor postignut između ugovornih partnera,

- inkaso banka/banka kupca kontaktira kupca u vezi sa primljenim dokumentima i instrukcijama za naplatu, te zahteva stav kupca u vezi plaćanja, odnosno akceptiranja menice kao uslova za preuzimanje dokumenata,

- posle izvršenog plaćanja inkaso banka/banka kupca izveštava banku prodavca o učinjenom, i vrši transfer sredstava po nalogu kupca na račun prodavca kod njegove banke,

- u slučaju kada se kupac odluči za akceptiranje menice izdate od strane prodavca, inkaso banka/banka kupca prati dinamiku izmirenja obaveze kupca po akceptiranoj menici, te izveštava banku prodavca o učinjenom,

- po prijemu uplaćenih sredstava u korist prodavca, banka prodavca upućuje saglasnost za uručenje dokumenata kupcu, kao uslova za preuzimanje robe.

Inkaso transakciju po pravilu prate sledeća dokumenta: trgovačka/komercijalna faktura, certifikat o poreklu, polisa osiguranja, lista pakovanja robe, kao i menica izdata od strane prodavca, koja predstavlja formalni zahtev za plaćanje koji se upućuje kupcu.

Banka koja je primila inkaso dokumenta, zajedno s instrukcijom, ima obavezu da utvrdi da li su primljena dokumenta po svom izgledu, odnosno nazivu i standardnim elementima za te dokumente, u skladu sa navodima iz instrukcije za naplatu. Ako to nije slučaj, banka je dužna da na najbrži mogući način obavesti stranu od koje je primila instrukciju o svim uočenim odstupanjima.

Sledi pregled najvažnijih tipova SWIFT poruka vezanih za korišćenje dokumentarnog inkasa.

Tabela 4: *Inkaso i čekovi*

SWIFT Tip poruke	Opis
MT 400	Obaveštenje o plaćanju
MT 405	Čist inkaso
MT 410	Potvrda
MT 412	Obaveštenje o prihvatanju
MT 416	Obaveštenje o neplaćanju/neprihvatanju
MT 420	Tragač
MT 422	Obaveštenje o status i zahtev za instrukcijama
MT 430	Izmena/dopuna instrukcija
MT 499	Poruka u slobodnom format

Što se tiče dokumenata, svakako treba obratiti pažnju na jednu specifičnost, koja se javlja isključivo u inkasu. Naime, kod dostave robe avionom svaka pojedinačna pošiljka mora biti praćena dokumentom pod nazivom Air Waybill (AWB). Avioprevoznik ovim dokumentom potvrđuje da je predmetna roba ukrcana u avion, pri čemu takav dokument ne može biti predmet iskupa. Drugim rečima, uvozniku nije potreban AWB za preuzimanje robe, što praktično znači da uvoznik može preuzeti robu, bez da je istu prethodno platio.

Kako bi se izbegla takva situacija, potrebno je da AWB uvek i isključivo bude naslovljen na banku uvoznika. Time se isključuje mogućnost da uvoznik preuzme robu pre nego što banka uvoznika izda avioprevozniku potvrdu da može osloboditi robu pod uslovom da je uvoznik izvršio plaćanje u korist prodavca ili akceptirao njegovu menicu.

Posebno treba napomenuti da se roba koja podleže naplati inkasom ne šalje na adresu banke. Isto tako, pošiljka robe ne bi treba da bude upućena određenoj banci bez prethodne suglasnosti dotične banke. Odgovornost i rizike za robu isporučenu suprotno gore navedenom snosi strana koja je takvu isporuku izvršila.

Banka koja je primila urednu inkaso dokumentacije ima izričitu obavezu pridržavanja instrukcija banke prodavca u smislu obaveštavanja kupca o izvršenoj isporuci, te zahtevima u pogledu plaćanja ili akcepta menice, kao uslova za uručenje dokumenata kupcu.

Postoje dve uobičajene vrste inkaso plaćanja:

1. Dokumenta uz akcept (eng. Document against Accept - D/A Collection) - Kupac potvrđuje spremnost da izvrši plaćanje sa rokom dospeća u budućnosti (Time Draft). Banka kupca će osloboditi dokumenta uz akcept, odnosno obećanje da će plaćanje biti izvršeno na određeni dan, što znači da bi kupac već mogao biti u posedu robe u vreme dospeća plaćanja. U tom slučaju prodavac će biti u riziku neplaćanja od strane kupca.

2. Dokumenta uz plaćanje (eng. Documents against Payment - D/P Collection) - U slučaju kada je kupac potvrdio svoju spremnost za plaćanje po osnovu menice po viđenju na određeni datum, banka oslobađa dokumenta, što kupcu omogućava preuzimanje robe.

Postupanje banke kupca u vezi sa zahtevom za akceptiranje menice zaslužuje pažnju. Naime, članom 22. Jednoobraznih pravila propisano je da je banka kupca odgovorna za utvrđivanje da li je obrazac akcepta na menici potpun. Međutim, banka kupca nije odgovorna za proveru i overu bilo kog potpisa na menici, niti za autentičnost ovlašćenja bilo kojeg potpisnika menice.

Za pravilno razumevanje inkasa potrebno je ukazati na specifičnosti vezane uz pojam pravne radnje protesta. Naime, članom 24. Jednoobraznih pravila propisano je da prodavac u instrukcijama za postupanje s dokumentima umesto prigovora u slučaju neplaćanja ili neprihvatanja od strane kupca navede posebne instrukcije u vezi s protestom, odnosno drugim postupkom. U nedostatku takvih instrukcija, inkaso banka nema obavezu protesta zbog neplaćanja ili neprihvatanja menice od strane kupca.

Ako kupac odugovlači s plaćanjem ili izričito odbija da ispuni obavezu plaćanja, prodavac je ovlašćen da preduzme određene radnje radi zaštite sopstvenih interesa, a to su prvenstveno:

- pronalaženje drugog kupca - idealno u istoj državi kao i kupac s kojim je sklopljen postojeći ugovor, budući da je isporučena roba već pod carinskim nadzorom u dotičnoj zemlji,

- alternativno rešenje: pronalaženje kupca u matičnoj zemlji prodavca i davanje instrukcija špediteru da robu vrati u zemlju, što će biti propraćeno određenim troškovima, kao što su troškovi skladištenja robe na carini ili drugim skladištima u zemlji prvog kupca, te troškovi prevoza do odredišta po izboru prodavca,

- pokretanje sudskog ili arbitražnog postupka za naknadu štete, u zavisnosti od ugovornih odredbi.

Osim standardnog modela korišćenja inkasa, ovaj instrument se može koristiti i kao instrument za naplatu izvoza, za šta postoji otvoreni dokumentarni akreditiv. Naime, kada prilikom pregleda prezentiranih izvoznih dokumenata akreditivna banka utvrdi odstupanja u odnosu na uslove akreditiva, kao što su neispunjavanje roka isporuke, isporuka manje količine robe od ugovorene i neka druga, ta banka ima obavezu da na prezentirana dokumenta stavi tzv. rezervu, što predstavlja prepreku za isplatu sredstava po osnovu akreditiva.

Prodavac može uputiti predlog ili instrukciju akreditivnoj banci da ta dokumenta prosledi nadležnoj službi za inkaso u istoj banci na naplatu . U slučaju da akreditivna banka ne prihvati takav angažman, prodavac mora kontaktirati drugu banku u istoj zemlji. Ovaj model naplate izvršenog izvoza je od posebnog značaja ukoliko uskoro ističe zakonski rok za naplatu izvezene robe i odobrenje računa izvoznika za protivvrednost izvezene robe kod banke u zemlji.

Osim banaka kao institucija koje pružaju usluge inkasa širom sveta, u nekim zemljama usluge inkasa pružaju i specijalizovane firme.

Primer će biti Nemačka u kojoj je naplata dospelih potraživanja od trećih osoba u korist pravnih lica i preduzetnika regulisana članom 1. stavkom 1. br. 9. Zakona o bankama (nem. Kreditwesengesetz). Kada se naplata finansijskih potraživanja obavlja u svoje ime i za svoj račun, odnosno u svoje ime i za račun trećih osoba kao samostalna delatnost, takva se delatnost tretira kao pružanje pravnih usluga. Firme koje se bave naplatom potraživanja od izvoza robe nazivaju se inkaso firme (nem. Inkassounternehmen) i moraju biti upisane u Registar pružalaca pravnih usluga shodno Zakonu o pružanju pravnih usluga (nem. Rechtsdienstleistungsgesetz - RDG).

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EVERYTHING YOU HAVE ALWAYS WANTED TO KNOW ABOUT DOCUMENTARY COLLECTION

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Summary:

Collection is an instrument of foreign payment transactions intended for legal entities and entrepreneurs. Globally observed, after the bank remittances, collection is the most frequently used payment instrument based on foreign trade transactions.

Utilization of this instrument is regulated by the Uniform Rules of the International Chamber of Commerce - ICC for collection – hereinafter the Text Uniform Rules, the first version of which was published in 1956, to be followed by some revisions.

The advantages of collection are reflected in the fact that this instrument enables a simple and relatively fast collection proceedings, which is not accompanied by significant costs. The risk of providing a service based on collection transactions for the bank is exclusively reputational, since it arises in the event of a lack of response or untimely response of the bank to the instructions of the principal.

Keywords: documentary collection; export; bank; documents; bill of exchange; protest against non-payment

JEL classification: E42, G21

International payment transactions include all payments transactions between domestic legal entities, entrepreneurs, individuals, as well as the state, on the one hand, and foreign persons on the other. Pursuant to the Decision on the Conditions and Manner of Conducting International Payment Transactions ("Official Gazette of the Republic of Serbia", No. 24/2007, 31/2007, 38/2010 and 111/2015), international payment transactions are performed through banks.

Instruments of international payment transactions are: remittance, documentary collection, check, bill of exchange, postal order and payment card.

Collection is a transaction in which the bank undertakes to collect the money receivable that it has as a seller against a third party as a buyer, with the delivery of certain documents to the buyer as a condition for taking over the goods.

The use of collection as a payment instrument is regulated by the Uniform Rules. In their correspondence with other banks, as well as with clients, banks regularly refer to precisely defined provisions of the Uniform Rules, which most effectively ensures consistency in the understanding of the procedures that accompany collection transactions.

Participants in the collection are:

1. The seller/exporter, i.e., principal, who entrusts the bank with the task of collecting receivables for the performed export, with the presentation of appropriate documents,

2. The remitting bank is a bank to which the seller entrusts a collection transaction,

3. The collecting bank can be any bank, except the seller's bank, and it performs specific activities related to the collection of receivables,

4. The presenting bank is authorized to deliver the documents to the drawee, once the payment for the goods has been conducted.

5. The drawee who has an obligation to pay the seller or an obligation to accept the seller's bill of exchange, as a condition for taking over the goods.

In practice, it often happens that the buyer's bank is also a collection bank, which reduces the number of participants, as well as the costs that accompany such a transaction.

Pursuant to Article 1, paragraph B and paragraph C of the Uniform Rules, the bank is not automatically obliged to act upon collection or any collection instruction or subsequent instruction of the initiator's bank. If a bank decides not to accept the collection instruction of another bank, it must immediately inform the party from which it received the instruction, without the obligation to state the reasons.

The reasons for not accepting the initiative may be primarily the following:

- the buyer does not have an account with the bank to which the collection initiative was sent,

- the buyer has an account with the bank to which the initiative was sent, but rarely uses it,

- and some others.

Collection is considered a particularly acceptable collection instrument if the seller and the buyer nurture a cooperation followed by mutual trust, and there are no indications that the buyer will not be ready to fulfil their payment obligation. An additional factor of security for the seller is the stable political and economic conditions in the country where the buyer is based.

The collection transaction includes the following actions:

- the buyer and the seller conclude a contract on the sale of goods, which, among other things, determines the collection as an instrument for the collection of exports,

- the seller delivers the goods to the freight forwarder for delivery according to the buyer's instructions,

- the seller submits to their bank the documents on the performed export, as well as the instruction for handling the documents, as follows:

The request for the Documentary Collection

Ord. No.	Document's Name	No. of pieces
1.	Bill of Exchange No.	
2.	Invoice	
3.	CMR	
4.	Railway Bill	
5.	Airway Bill	
6.	Bill of Lading	
7.	Freight Forwarding Document	
8.	Insurance Policy	
9.	Certificate of Origin	
10.	Insurance Certificate	
11.	Other Documents	

Full name and address of the foreign buyer: ______________________
Buyer's bank account number: ________________________________
Full name, address and SWIFT of the buyer's bank: _________________
Total Value of the Documentary Collection:_______________________
Instructions regarding documents:
1)The documents are to be delivered by payment _____________________
or
2)The documents are to be delivered by the bill of exchange's acceptance_____
- payment deadline according to the bill of exchange __________
- protest of the bill of exchange _________________________
- collection's costs to be borne by _________________________

* strike out the unnecessary

- the seller's bank forwards the documents to the collection bank or directly to the buyer's bank, if such an agreement has been reached between the contractual partners,

- the collection bank contacts the buyer in connection with the received documents and instructions for payment, and requests the buyer's position regarding payment or the acceptance of the bill of exchange as a condition for taking over the documents,

- after the payment has been made, the collection bank reports to the seller's bank on what has been done, and transfers the funds collected from the buyer to the seller's account with their bank,

- in case the buyer decides to accept the bill of exchange issued by the seller, the collection bank monitors the dynamics of settlement of the buyer's obligation under the bill, and reports to the seller's bank on what has been done,

- upon receipt of funds in favour of the seller, the seller's bank sends to the buyer's bank consent for the delivery of documents to the buyer, as a condition for taking over the goods.

The bank that received the collection documents, together with the instruction, has the obligation to determine whether the received documents are in appearance, i.e., by name and standard elements for such documents, in accordance with the statements from the collection instructions. If this is not the case, the bank is obliged to inform the party from which it received the instruction on all observed deviations in the fastest possible way.

The following is an overview of the most important types of SWIFT messages related to the implementation of the export's collection.

Table 4: *Collection and Cheques*

SWIFT Tip poruke	Opis
MT 400	Obaveštenje o plaćanju
MT 405	Čist inkaso
MT 410	Potvrda
MT 412	Obaveštenje o prihvatanju
MT 416	Obaveštenje o neplaćanju/neprihvatanju
MT 420	Tragač
MT 422	Obaveštenje o status i zahtev za instrukcijama
MT 430	Izmena/dopuna instrukcija
MT 499	Poruka u slobodnom format

Regarding the documents, one should definitely pay attention to one specificity, which is found exclusively in collections. Namely, when delivering goods by plane, each individual shipment must be accompanied by a document called Air Waybill (AWB). With this document, the airline confirms that the goods in question have been loaded on the plane, and such a document cannot be the subject of redemption. In other words, the importer does not need an AWB to take over the goods, which practically means that the importer can take over the goods without having previously paid for them.

In order to avoid such a situation, it is necessary that the AWB is always and exclusively addressed to the importer's bank. This excludes the possibility for the importer to take over the goods before the importer's bank issues a certificate to the airline that it can release the goods, provided that the importer has made a payment in favour of the seller or accepted his bill of exchange.

It should be especially noted that the goods, which are subject to collection by way of documentary collection, are not to be sent to the address of the bank. Likewise, a consignment of goods should not be addressed to a specific bank without the prior consent of the bank concerned. Liability and risks for goods delivered contrary to the above shall be borne by the party who made such a delivery.

The bank that received the proper documentary collection has an explicit obligation to comply with the instructions of the seller's bank in terms of notifying the buyer of the delivery, and requests for payment or acceptance of the bill of exchange, as a condition for delivery of documents to the buyer.

There are two common types of documentary collection payments:

1. Documents against Accept (D/A Collection) - The buyer confirms their readiness to make a payment with a due date in the future (Time Draft). The buyer's bank will release the documents with acceptance, i.e., the promise that the payment will be made on a certain day, which means that the buyer could already be in possession of the goods at the time of payment. In that case, the seller will be at risk of non-payment by the buyer.

2. Documents against Payment (D/P Collection) - In the case when the buyer has confirmed their readiness to pay on the basis of a promissory note, on a certain date, the bank releases the documents, which allows the buyer to take over the goods.

The actions of the buyer's bank in connection with the request for acceptance of the bill of exchange deserve attention. Namely, Article 22 of the Uniform Rules stipulates that the buyer's bank is responsible for determining whether the form of acceptance on the bill of exchange appears to be complete. However, the buyer's bank is not responsible for verifying and authenticating any signature on the bill of exchange, nor for the authenticity of the authorization of any signatory of the bill of exchange.

In order to properly understand the collection, it is necessary to point out the specifics related to the notion of the legal action of the protest. Namely, Article 24 of the Uniform Rules stipulates that in its instructions for handling documents, the seller should state special instructions regarding the protest, or other procedure instead of a protest in case of non-payment or non-acceptance by the buyer. In the absence of such instructions, the collection bank has no obligation to protest against non-payment or non-acceptance of the bill of exchange by the buyer.

If the buyer delays the payment or explicitly refuses to fulfil the obligation to pay, the seller is authorized to take certain actions to protect their own interests, and these are primarily:

- finding another buyer - ideally in the same country as the buyer with whom the existing contract is concluded, as the delivered goods are already under customs control in the given country,

- alternative solution: finding a buyer in the seller's home country and instructing the freight forwarder to return the goods to the country, which will be accompanied by certain costs, such as storage for goods in customs or other warehouses in the first buyer's country, and transport costs to destination at the choice of the seller,

- initiating court or arbitration proceedings for damages, depending on the contractual provisions.

In addition to the standard model of using documentary collection, this instrument can also be used as an instrument for the collection of exports, for which there is an open documentary letter of credit. Namely, when, during the review of the presented export documents, the letter of credit bank finds deviations in relation to the letter of credit conditions, such as non-fulfilment of the delivery deadline, delivery of a smaller quantity of goods than agreed and some others, that bank has an obligation to place a so-called reserve on the relevant documents, which is an obstacle to the payment of funds on the basis of letters of credit.

The seller may send a proposal or instruction to the letter of credit bank to forward such documents to the competent service in the same bank for collection. In the event that a letter of credit bank does not accept such an engagement, the seller must contact another bank in the same country. This model of collection of performed exports is of special importance in the case of an imminent expiration of the legal deadline for collection of exported goods and the payment of these funds to the exporter's account kept with the bank in the country.

In addition to banks as institutions that provide collection services around the world, in some countries the services of collection of receivables from the export of goods are also provided by specialized companies.

An example can be found in Germany, where the collection of due receivables from third parties in favour of legal entities and entrepreneurs is regulated by Article 1, Section 1 No. 9 of the Banking Act (ger. Kreditwesengesetz). When the collection of financial claims is performed in one's own name and for one's own account, or in one's own name and for the account of third parties as an independent business, such activity is treated as the provision of legal services. Companies engaged in the collection of receivables from the export of goods are called Inkassounternehmen and must be entered in the Register of Legal Service Providers in accordance with the Law on the Provision of Legal Services (ger. Rechtsdienstleistungsgesetz - RDG).

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OSMIJUM - NAJNOVIJI PLEMENITI METAL U USPONU

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Rezime

Svaki investitor zna za plemenite metale – oni su godinama bili pouzdana investicija, vekovima su bili sredstvo plaćanja. Najpopularniji i nadaleko poznati su zlato, srebro, platina i paladijum. Zapravo postoji ukupno osam plemenitih metala. Sada ćemo vas upoznati sa najnovijim i najređim plemenitim metalom, osmijumom. Njegove izvanredne karakteristike su ga lansirale iz senke njegove poznate "braće i sestara" pravo u centar pažnje. I to iz dobrih razloga: osmijum je najgušći od svih neradioaktivnih elemenata na zemlji i apsolutno je nemoguće napraviti njegovu imitaciju. Kombinacija sa njegovom neverovatnom retkosti i lepotom povećava njegovu popularnost na tržištu investitora. Ako je ikada bio dobar trenutak da obezbedimo naš novac i ako je ikada bilo savršeno vreme za ulaganje u poslednji plemeniti metal, to je sada.

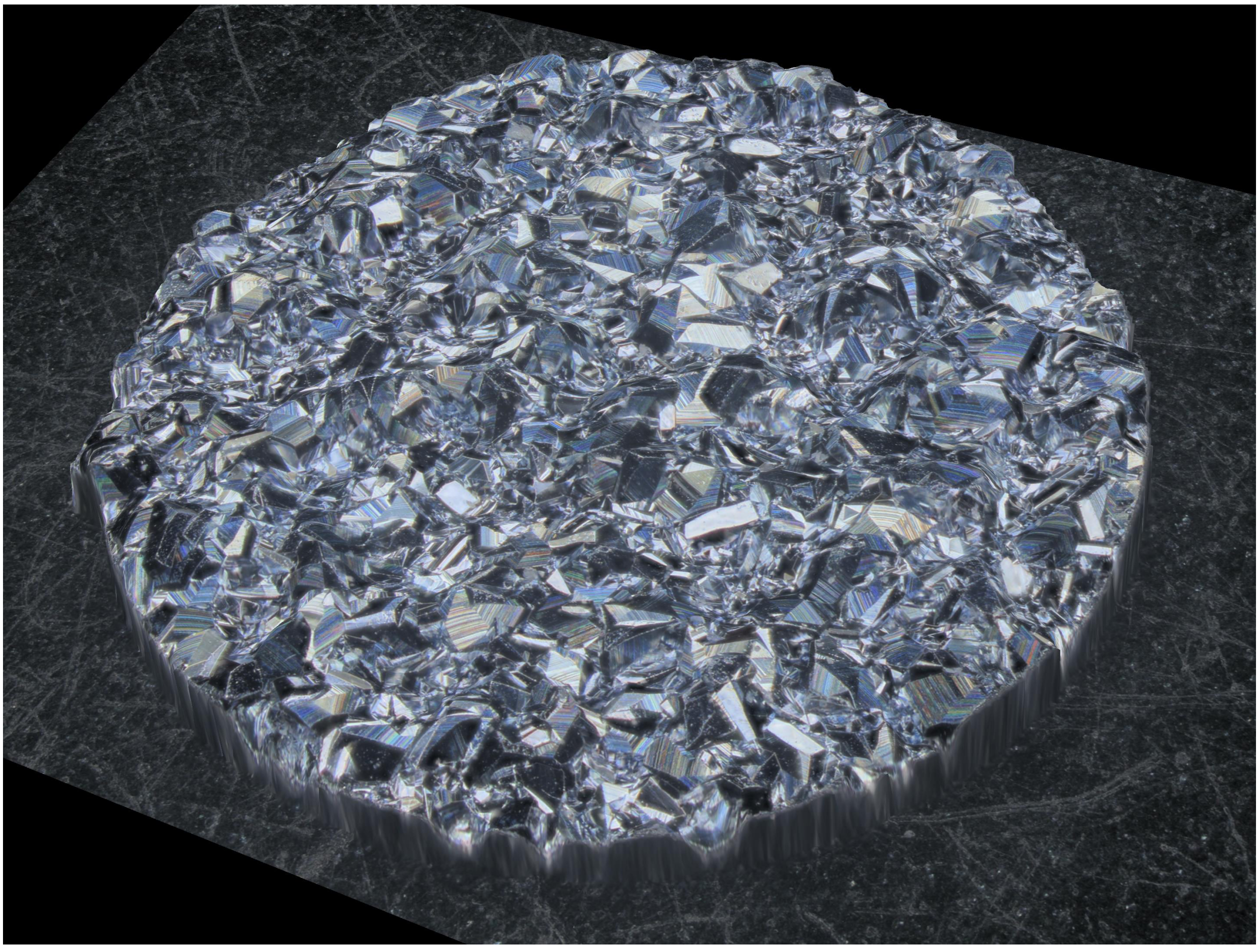
Ključne reči: Osmijum; plemeniti metali; investicija; materijalna imovina; retkost; sigurnost; nemogućno falsifikovanje; portfolio; osmijum - identifikacioni kod; osmijum - institut

JEL klasifikacija: G11, E21, E22

Šta je osmijum?

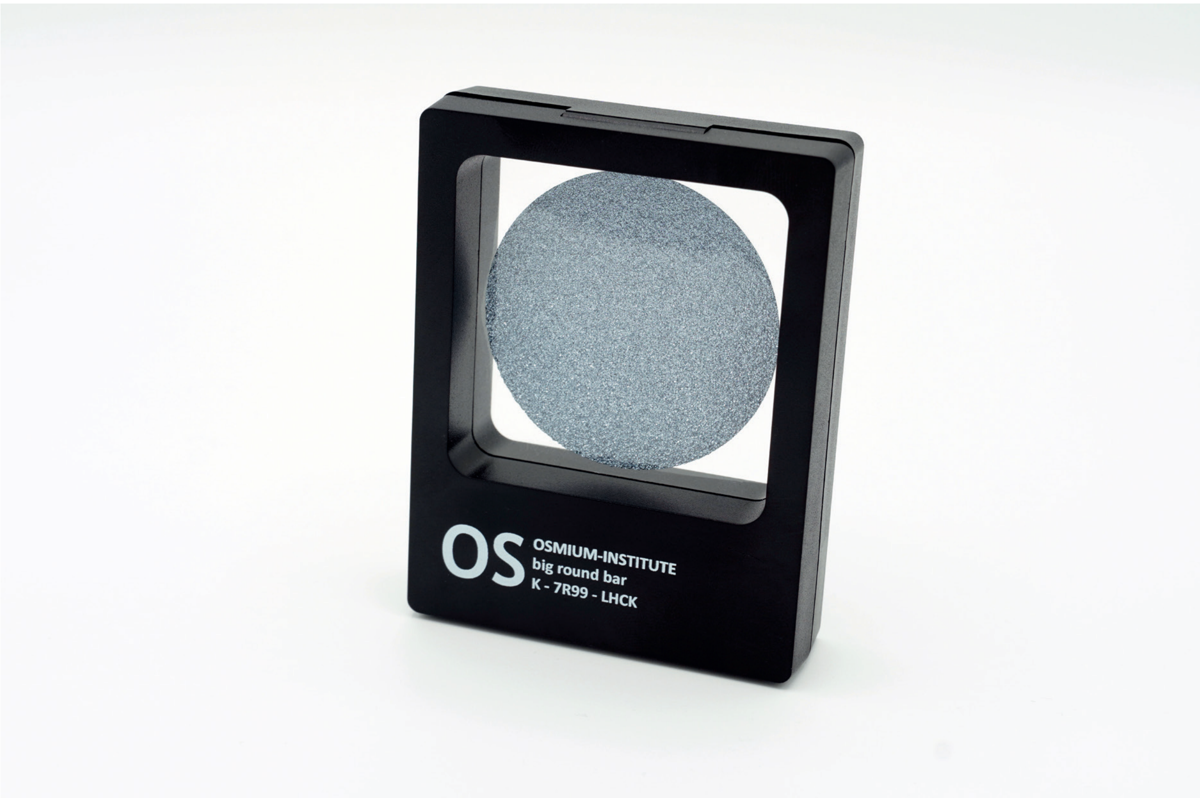
Osmijum je poznat više od dve stotine godina, ali je tek u poslednjih nekoliko godina došao u fokus investitora širom sveta. To je zbog jednostavne činjenice koja je promenila situaciju, naime u svom osnovnom obliku kao takozvani "sunđer", osmijum je toksičan. Crno - plavkasti prah se koristio u prošlosti u pojedinim medicinskim i tehnološkim oblastima, ali nikada nije stekao veliku popularnost. Sve do 2013. godine, kada je tim švajcarskih naučnika usavršio proces kristalizacije osmijuma. Ovaj proces je promenio ne samo fizičku već i hemijsku strukturu ovog metala, i doveo do toga da u kristalnom obliku osmijum bude potpuno bezopasan po zdravlje pa se sada njime može trgovati. Nije samo izuzetna lepota kristalizovanih delova ono što privlači pažnju - u njegovom kristalnom obliku sva neverovatna svojstva ovog plemenitog metala zaista izlaze na videlo.

Prvo, osmijum je neradioaktivni element sa najvećom gustinom. Nijedan drugi metal se ne može pretopiti u njegovo jezgro jer na zemlji nema gušćeg metala. Povrh toga, struktura svakog kristalizovanog komada osmijuma je apsolutno jedinstvena i mnogo preciznije prepoznatljiva od biološkog otiska prsta. Ovo omogućava dodeljivanje šifre generisane za svaki komad, identifikacionog koda osmijuma ("Osmium Identification Code"). Ovaj osmocifreni alfa-numerički kod se dodeljuje svakom komadu nakon sertifikacije i unosi u "Osmijum-svetsku bazu podataka". Carinske vlasti u mnogim zemljama širom sveta imaju već pristup tim podacima, uključujući SAD i Australiju.



Zbog velike gustine i svoje jedinstvene kristalne strukture osmijum je apsolutno nemoguće falsifikovati, što je nenadmašno svojstvo u nesigurnim vremenima u kojima danas živimo. Sa najvećom gustinom dolazi i najveća koncetracija vrednosti - vrednost potpuno novog sportskog automobila može se lako uskladištiti i transportovati u najmanjoj fizičkoj zapremini od nekoliko kubnih centimetara. Ista vrednost u zlatu ili srebru zauzimala bi znatno više prostora u vašem sefu.

Tržište osmijuma je regulisano kroz četiri stavke o ekskluzivnosti koje obezbeđuju sigurnost ulaganja u „Element Sunca" i njegovo sigurno uvođenje na tržište. Prvo, tu je prirodna ekskluzivnost švajcarske laboratorije za kristalizaciju, jer je ona jedina na svetu u stanju da izvrši proces kristalizacije. Ova ekskluzivnost je povezana sa drugom sigurnošću, ekonomskom: svaki komad kristalnog osmijuma koji napusti švajcarsku laboratoriju za kristalizaciju je sertifikovan, izmeren, i skeniran u nemačkom institutu za osmijum u južnoj Nemačkoj. Ovaj ugovor nije oročen, i predstavlja treći ekskluzivitet ovog metala. Visoki standardi kontrole kvaliteta osiguravaju da svaki komad odgovara kriterijumima ne samo tržišta investitora, već i industrije nakita. Komadi koji ne odgovaraju ovim kriterijumima vraćaju se u reciklažu i treba ih ponovo kristalizovati. Skenirani rezultati visoke rezolucije u 2D i 3D unose se u bazu podataka sa svim pratećim podacima. Korišćenjem šifre za identifikaciju (www.osmium-identification-code.com) svaki vlasnik može pristupiti ovim podacima u bilo koje vreme i bilo gde, kako bi dokazao vlasništvo, na primer kada prelazi granice ili preprodaje svoj komad osmijuma. Fotografija stvarnog dela se može uporediti sa skeniranim jer je kristalna struktura jasno vidljiva na fotografiji. Osmium-world-base, svetska baza podataka obezbeđuje autentičnost svakog komada kristalnog osmijuma koji ulazi na tržište. Poslednja tačka sigurnosti odnosi se na ekskluzivna prava nabavke koja su instituti za osmijum obezbedili sa mnogim svetskim izvorima sirovog osmijuma, što dovodi do sledeće izuzetne karakteristike jedinstvenog plemenitog metala: njegove retkosti.



Šanse sa osmijumom

Prema ekspertima sa sajta www.osmium-world-council.com, u zemljinoj kori postoji oko 17 kubnih metara sirovog osmijuma. Osmijum je nusproizvod platine - činjenica koja omogućava pronalaženje tačne lokacije sirovog osmijuma. Za dobijanje jedne unce osmijuma potrebno je oko 10.000 tona rude platine. Količina osmijuma koja se može iskopati u budućnosti stoga 100% zavisi od razvoja tržišta platine i tu i tamo drugih, ali manjih tržišta. Čim se potražnja za platinom smanji i rudarenje na velikim dubinama više neće biti pristupačno - na primer, kada elektromobilnost uđe na tržište - to će takođe imati veliki uticaj na tržište osmijuma. Zbog svoje retkosti, nikada neće postojati rudnik samo radi osmijuma. S obzirom na razvoj tržišta platine, stručnjaci pretpostavljaju da će od raspoloživih 17 kubnih metara biti samo jedan kubni metar zaista iskopan. Ovo odgovara količini od oko 22 tone. A onda, u nekom trenutku, u ne tako dalekoj budućnosti, možda više neće biti sirovog osmijuma za proces dalje kristalizacije. Do ovog trenutka će potražnja za kristalnim osmijumom vrlo verovatno mnogo premašiti ponudu sirovog osmijuma i nije potrebno mnogo da se zamisli šta bi se onda moglo dogoditi sa njegovom vrednošću i cenom.

Ovaj zadivljujući fenomen - element koji zapravo nestaje - dobio je nadimak „Osmium Big Bang“ u SAD, što se odnosi na procenjeno uvećanje njegove vrednosti. To je, naravno, ono u šta investitori veruju i zašto je osmijum takođe dobio nadimak metala „sledeće generacije“: Oni koji iskoriste šansu tržišta koje se još uvek razvija i investiraju biće u prilici da zadrže svoj osmijum na period od 15 do 20 godina, a zatim ga prenesu svojoj deci koja će imati ogromnu korist zbog mogućnosti dugoročnih povraćaja.

Postoje i drugi faktori koji ubrzavaju pojavu „velikog praska“: ne samo investitori već i industrija nakita vidi potencijal u očaravajuće lepom metalu. Njegov sjaj daleko nadmašuje dijamante, ne prelama sunčevu svetlost, već je reflektuje kao hiljade sitnih ogledala. Prelepi komadi luksuznog nakita nastajali su i nastaju sa osmijumom. Ali osmijum koji je ubačen u nakit u većini slučajeva neće se vratiti na tržište investitora. Kao komad nakita, on već ima fiksni oblik koji bi morao da ide na reciklažu ako se izvadi iz metala omotača - skup i opasan postupak koji bi takođe uništio jedinstveni „otisak prsta“ komada. Osmijum ugrađen u nakit je stoga u gotovo svakom slučaju izgubljen za tržište investitora. Ovo ne samo da ubrzava potražnju za kristalnim osmijumom, već takođe rađa još jedan fenomen koji će se vrlo verovatno desiti nakon „velikog praska“: „thin out“ osmijuma. Takvo proređivanje se odnosi na činjenicu da će, od svog kristalnog osmijuma koji će postojati na tržištu širom sveta, njegovi delovi svake godine ići u tržište nakita i druge tehnološke oblasti. Dakle, količina osmijuma dostupna za tržište investitora stalno opada, dok u isto vreme postaje sve popularnije za ulaganje.

„Element Sunca“ se pokazao veoma stabilnim. Njegova niska volatilnost i činjenica da nije u korelaciji sa drugim plemenitim metalima ili materijalnim sredstvima uopšte, čine ga savršenom diversifikacijom kao opipljivom imovinom, ako verujete modernoj teoriji portfolija. Plemeniti metal koji podiže vaš portfolio na viši nivo i suočava se sa uzbudljivim razvojem.

Osmijum se može kupiti u obliku velikih okruglih pločica (tzv. diskova), pravougaonih pločica, dijamanata, zvezda, kvadrata i skoro bilo kojeg oblika. Diskovi i pločice se kupuju bez doplate za sečenje jer se seku laserom i prikazuju jedinstvenu dnevnu cenu. Osmijumom se još ne trguje na berzi, njegova cena je spot cena koja se generiše svaki dan u Švajcarskoj, uzimajući u obzir ponudu sirovog osmijuma, potražnju za kristalnim osmijumom i druge faktore.

Osmijum je opipljivo vlasništvo za svačiji džep - najmanji osmijum dijamanti se mogu kupiti već od 100

€, dok su velike investicione kutije sa diskovima savršene za značajnije investiranje. A tu je, naravno, i sve ostalo između navedenih vrednosti, čineći osmijum privlačnim za ljude svih uzrasta.

Naravno, tržište osmijuma trenutno nije tako likvidno kao tržišta zlata, srebra ili platine, i dalje je prilično novo. Ali u tome postoji i velika šansa za sve koji se sada odluče da investiraju jer je tržište još u razvoju.

Osmijum se ne može samo kupiti, već se može i preprodati. Ovo je omogućeno kodom za promenu vlasnika (OCC) generisanim za svaki komad. Korišćenjem ovog koda u kombinaciji sa vlasništvom OIC-a može se preneti onlajn između dve strane, obezbeđujući autentičnost dela i dokaz o vlasništvu. Osmijum instituti takođe uvek rado podrže i provere autentičnost Osmijuma.

Postoji 30 instituta za osmijum širom sveta, među kojima je i Srbija, koji obezbeđuju sigurno uvođenje najnovijeg plemenitog metala na tržište. Vodeći institut je Nemački institut za osmijum u južnoj Nemačkoj, kojim rukovodi dr Ingo Volf. Njegovi glavni zadaci kao naučnog direktora Osmijum-Instituta su pružanje usluga korisnicima i dalje naučno istraživanje, kao i pisanje knjiga, svakodnevna komunikacija sa prodajom, partnerima, razgovori sa novinarima i obezbeđenje da se svi koji su uključeni u svet osmijuma pridržavaju etičkih principa i smernica za prodaju.

Radom Osmijum-instituta upravlja „Osmium-World-Council", nezavisna grupa različitih partnera sa ekspertizom u finansijskim tržištima. Posvećena je tome da bude autoritet od poverenja koji razjašnjava pitanja u vezi sa lansiranjem osmijuma. Redovne i nasumične provere svetske baze podataka osmijuma obezbeđuju doslednost i tačnost podataka. Neki od primarnih zadataka saveta su povezivanje sa udruženjima u oblasti plemenitih metala i rudarskim kompanijama, širenje znanja o osmijumu putem interneta i drugih medija i podrška naučnim platformama sa ekspertizom o osmijumu. Njegov cilj je da izbegne prebrze i promenljive promene cene osmijuma, kako bi ona ostala pristupačna svakom investitoru.

Godišnji međunarodni osmijum simpozijum organizuje „Osmium-World-Council". Ovogodišnji simpozijum je održan u Dubaiju i okupili su se lideri sveta osmijuma da razgovaraju o carinskim propisima, novim zakonima u vezi sa regulativom, novim pristupima i ciljevima za budućnost.

Osmijum se može kupiti preko globalne onlajn prodavnice www.buy-osmium.com. Partnere državnog instituta i veleprodajne partnere u različitim zemljama snabdeva Nemački institut za osmijum, a oni su direktna prodajna mesta lokalnim klijentima.

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OSMIUM – THE LATEST PRECIOUS METAL ON THE RISE

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Summary

Every investor knows of precious metals – they have been reliable asset classes for years and have been a means of payment for centuries. Most popular and widely known are gold, silver, platinum, and palladium. But there are in fact eight precious metals. Today we will introduce you to the latest and rarest of the precious metals, osmium. Its outstanding characteristics have catapulted it from out of the shadows of its famous siblings right into the spotlight. And for good reasons: being the densest of all non-radioactive elements on earth, osmium is absolutely unforgeable. This, combined with its incredible rarity and beauty, increases its popularity on the investors' market. If there ever was a good time to secure our money it is now. And if there ever was the perfect time to invest in the last precious metal, it is now.

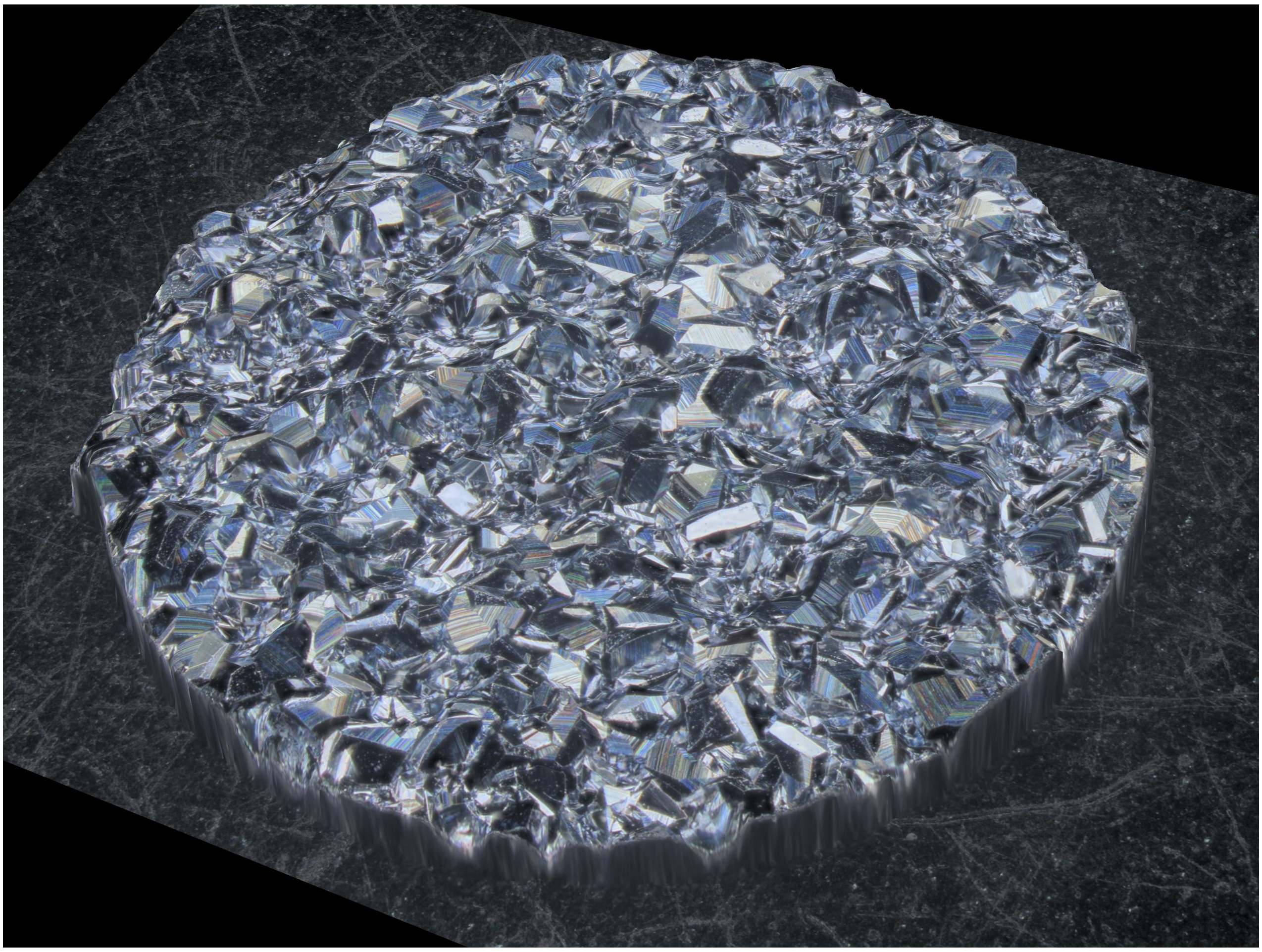
Keywords: Osmium; precious metals; investment; tangible asset; rarity; security; unforgeability; portfolio; osmium-identification-code; osmium-institute

JEL classification: G11, E21, E22

What is Osmium?

Osmium has been known for over two hundred years, but only in the last few years has it come into focus of investors around the world. This is due to a simple and yet game changing fact: in its raw form as a so-called sponge, osmium is toxic. The black-blueish powder was used in the past in some medical and technological areas but never gained much popularity. Until 2013, when a team of Swiss scientists finalized the crystallization process. This process changed not only the physical but also the chemical structure of the metal. In crystalline form it is completely harmless to health and can be traded. And it's not only the outstanding beauty of the crystallized pieces that draws attention – in its crystalline form all of the precious metal's amazing properties really come to light.

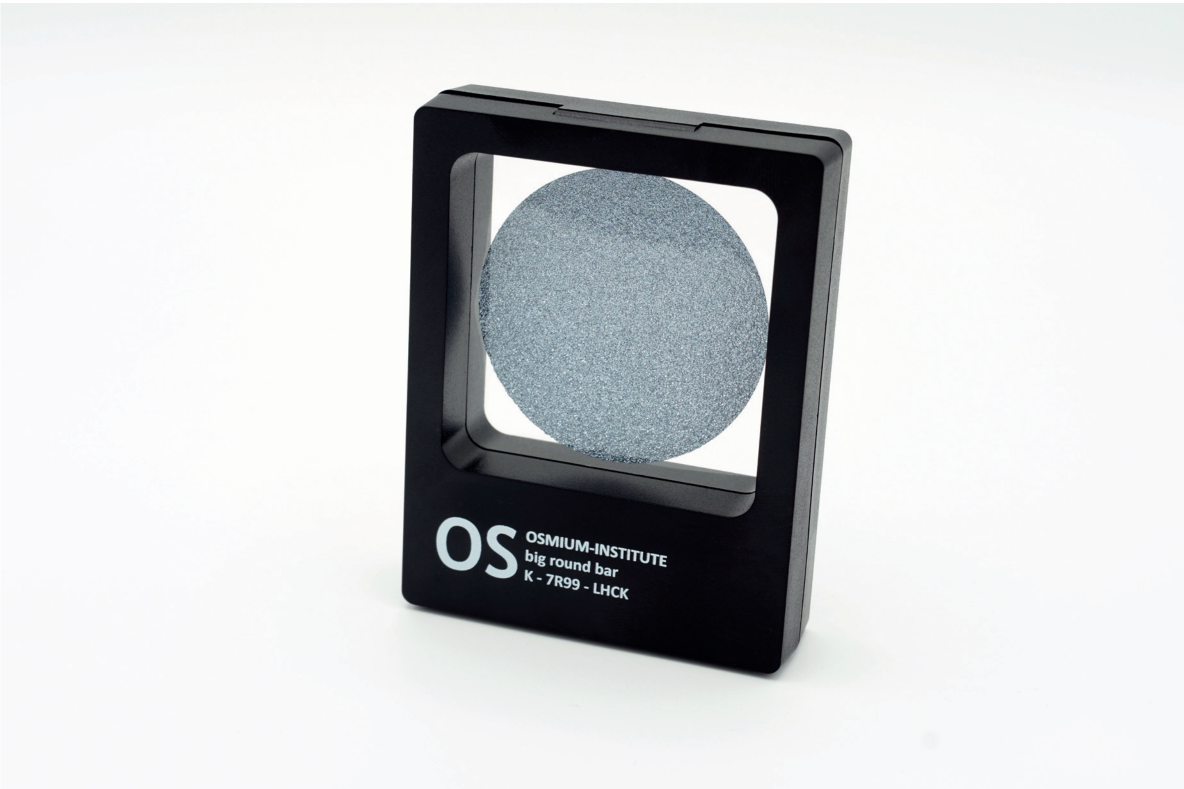
Firstly, osmium is a non-radioactive element with the highest density. No other metal can be melted into its core because there is no denser metal on earth. On top of that, the structure of each crystallized piece of osmium is absolutely unique and much more precisely identifiable than a biological fingerprint. This allows for the assignment of a code generated for each piece, the osmium-identification-code (OIC). This eight-digit alpha-numerical code is assigned to each piece after certification and is then entered into the osmium-world-database. Customs authorities in many countries around the world have access to those data, including the US and Australia.



Due to its high density and unique crystal structure, osmium is absolutely unforgeable, an unbeatable property in the insecure times we live in today.

With the highest density also comes the highest value density – the value of a brand-new sports car can easily be stored and transported in the smallest physical volume of a couple of cubic centimeters. The same value in gold would occupy quite a lot of space in your safe.

The osmium market is governed by four exclusivity clauses that ensure the security of an investment in the "Sunshine Element" and its safe market introduction. First, there is the natural exclusivity of the Swiss crystallization laboratory, as it is the only one in the world that knows the secret of crystallization. This exclusivity is linked to a second safety, an economical one: each piece of crystalline osmium that leaves the Swiss crystallization laboratory is certified, weighed, measured, and scanned at the German Osmium-Institute in Southern Germany. This contract is without expiry, and the metal's third exclusivity. The high standards of quality control make sure that every piece fits the criteria of not only the investors' market, but also the jewelry industry. Pieces that do not fit these criteria go back into recycling and need to be re-crystallized. High resolution scans in 2D and 3D are entered into the database with all the accompanying data. By using the osmium-identification-code (www.osmium-identification-code.com) every owner can access these data, at any time, anywhere, to prove ownership, for example when crossing borders or reselling their osmium. A photo of the actual piece can be compared with the scans, as the crystal structure is clearly visible on a photo. The osmium-world-database secures the authenticity of every piece of crystalline osmium that enters the market. The last point of security relates to the exclusive rights of procurement that the Osmium-Institutes have secured with many of the world's sources of raw osmium. Which leads to the next outstanding characteristic of the unique precious metal: its rarity.



Chances with Osmium

According to experts from www.osmium-world-council.com, there are about 17 cubic meters of raw osmium in the Earth's crust. Osmium is a by-product of platinum – a fact that enables the exact localization of where to find raw osmium. It takes about 10,000 tons of platinum ore to gain one ounce of osmium. The amount of osmium that can be mined in the future is therefore 100% dependent on the development of the platinum market and, here and there, other smaller markets. As soon as the demand for platinum decreases, mining at great depths will also no longer be affordable – for example, when electro-mobility enters the market – this will hugely affect the osmium market as well. Due to its rarity, there will never be mines solely for osmium. Considering the development of the platinum market, experts assume that of the 17 cubic meters available, only one cubic meter will actually be mined. This corresponds to about 22 tons. And then, at some point in the not so far away future, there might be no raw osmium left to find its way into the crystallization process. By this time, the demand for crystalline osmium will quite possibly very much exceed the supply of raw osmium and it does not take much to imagine what may happen then to its worth and price.

This astounding phenomenon – an element actually running out – has been nicknamed the "Osmium Big Bang" in the US, referring to the estimated rise of its worth.

This is, of course, what investors hope for and why osmium is also nicknamed the "next generation" metal: those who take the chance of the still developing market and invest now will be able to hold their osmium for a period of 15 – 20 years and then give it to their kids who will benefit from the possible long-term returns.

There are other factors accelerating the occurrence of the "Big Bang": aside from investors, the jewelry industry also sees the potential in the mesmerizingly beautiful metal. Its sparkle outshines diamonds by far, not refracting the sunlight but reflecting it, like thousands of tiny mirrors. Beautiful pieces of luxurious jewelry have been and are being created with osmium. But osmium that has been inserted into jewelry will, in most cases, not find its way back into the investors' market. As a piece of jewelry, it already has a fixed shape that would need to go into recycling if it was taken out of the sheathing metal – an expensive and dangerous procedure that would also destroy the unique "fingerprint" of the piece. Osmium built into jewelry is, therefore, in almost every case, lost to the investors' market. This does not only expedite the demand for crystalline osmium, but it also gives rise to another phenomenon that will very likely take place after the "Big Bang": the osmium "thin out". The thin out refers to the fact that, of all the crystalline osmium that will be on the market worldwide, parts of it will go into the jewelry market and other areas like osmium tech, a procedure to veneer technology with osmium, every year. Thus, the amount of osmium available for the investors' market decreases steadily, while simultaneously becoming more and more popular to invest in.

The "Sunshine Element" has proven to be very stable on the scale. Its low volatility and the fact that it does not correlate with other precious metals, or asset classes in general, make it the perfect diversification as a tangible asset, if you trust the modern portfolio theory. A precious metal that smooths your portfolio and is facing an exciting development.

Osmium can be purchased in the form of big round bars (so-called disks), rectangular bars, diamonds, stars, squares and pretty much any shape that can be cut with wire EDM. Disks and bars are purchased with no extra charge for cutting, as they are cut with a laser and display the daily price per gram. Osmium is not traded at a stock exchange yet, its price is a spot price generated every day in Switzerland, taking the supply of raw osmium, the demand for crystalline osmium and many other factors into consideration.

Osmium is a tangible asset for every purse – the smallest osmium diamonds can be purchased for around 100€, while Family Office Disk Boxes are perfect for an investment of 1 million euros and onwards. And there is, of course, everything in between, making osmium attractive for people of all ages, and all along the income scale.

Of course, the osmium market right now is not as liquid as the gold, silver, or platinum markets are, it is still fairly new as a tangible asset. But there is also a great chance in this for everyone who decides to invest now, as the market is still in its development.

Osmium can not only be bought but also resold. This is made possible by the owner-change-code (OCC) generated for each piece. Using this code, in combination with the OIC, ownership can be transferred online between private parties, securing authenticity of a piece and proof of ownership. Osmium-Institutes are also always happy to support and verify a piece's authenticity.

There are 30 Osmium-Institutes around the world, securing the safe market introduction of the last precious metal. The governing institute is the German Osmium-Institute in southern Germany, managed by Ingo Wolf. His main tasks, as scientific director of the Osmium-Institute, are providing customer service and preforming scientific research, as well as writing books, daily communication with sales partners, wholesale partners and state institute partners, building partner institutes, talking to the press, and making sure that the Ethical Sales and Ethical Sourcing Guidelines are adhered to by everyone involved in the osmium world.

The work of the Osmium-Institutes is governed by the Osmium-World-Council, an independent group of diverse partners with expertise in the financial and PGM markets. It is committed to being a trusted authority that clarifies issues surrounding the launch of osmium. Regular and random checks of the osmium-world-database ensure the data is consistency and accuracy.

Some of the council's primary tasks are liaising with associations in the precious metals sector and mining companies, the dissemination of knowledge about osmium via the internet and other media and the support of scientific platforms with expertise on osmium. Its goal is to avoid too fast and volatile changes in the osmium price, so that it remains affordable for every investor.

The annual International Osmium Symposia are also hosted by the Osmium-World-Council. This year's symposium took place in Dubai and the heads of the osmium world came together to talk about new regularities regarding customs, new approaches and goals for the future.

Osmium can be purchased through the global online shop www.buy-osmium.com. State Institute Partners and Wholesale Partners in different countries are supplied by the German Osmium-Institute and are direct points of sale to local clients.

BAROMETAR/BAROMETER

Mart 2021 - februar 2022. / March 2021 – February 2022

1. Promet / Turnover

Mesec/Month	Listing	Open Market	Regulisano tržište/Regulated market	MTP/MTF	Ukupno/Total	Broj transakcija/ Number of transactions
Februar 2022	1.959.662.678	11.539.264,00	1.971.201.942	48.167.269,00	2.019.369.211	1.137,00
Januar 2022	2.749.265.371	30.937.162,00	2.780.202.533	18.277.405,00	2.798.479.938	808,00
Decembar 2021	4.001.970.725	79.976.538,00	4.081.947.263	232.917.610,00	4.314.864.873	1.429,00
Novembar 2021	2.972.330.624	37.088.592,00	3.009.419.216	60.560.485,00	3.069.979.701	1.669,00
Oktobar 2021	5.741.634.936	42.180.961,00	5.783.815.897	1.806.541.872,00	7.590.357.769	1.455,00
Septembar 2021	4.317.271.039	61.870.838,00	4.379.141.877	20.831.970,00	4.399.973.847	1.375,00
Avgust 2021	1.170.804.576	38.939.053,00	1.209.743.629	477.848.321,00	1.687.591.950	1.484,00
Jul 2021	1.613.119.599	41.696.072,00	1.654.815.671	46.265.397,00	1.701.081.068	1.148,00
Jun 2021	3.621.882.419	565.050.460,00	4.186.932.879	105.562.078,00	4.292.494.957	1.770,00
Maj 2021	364.708.913	181.873.825,00	546.582.738	164.023.381,00	710.606.119	1.657,00
April 2021	4.741.499.773	95.863.461,00	4.837.363.234	219.210.473,00	5.056.573.707	2.051,00
Mart 2021	1.384.264.827	144.884.876,00	1.529.149.703	198.744.779,00	1.727.894.482	1.810,00
	34.638.415.480	1.331.901.102,00	35.970.316.582	3.398.951.040,00	39.369.267.622	17.793,00

2. Indeksi / Indices

Januar/January 2022. Februar/February 2022		BELEX15	BELEXline
	Poslednja vrednost / Last value	834,64	1.713,41
	Promena (abs) / Change (abs)	13,86	1,84
	Promena (%) / Change (%)	1,69%	0,11%
	Najviša vrednost / Maximum value	865,33	1.789,15
	Najniža vrednost / Minimum value	804,74	1.713,41
	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	87.029.567	121.938.029

3. Tržišna kapitalizacija / Market Capitalisation

	NOVEMBAR 2021	DECEMBAR 2021	JANUAR 2022	FEBRUAR 2022
Ukupna tržišna kapitalizacija/ Total market capitalisation	509.821.537	533.342.335	552.294.779	540.400.346
Regulisano tržište/Regulated Market	297.142.981	320.795.506	340.017.754	329.079.333
Listing	233.031.076	237.136.750	249.865.576	246.094.758
Prime Listing - akcije/ Prime Listing - shares	159.893.134	161.614.679	160.588.081	157.118.306
Standard Listing - akcije/ Standard Listing - shares	73.137.942	75.522.071	89.277.495	88.976.452
Open Market	64.111.905	83.658.756	90.152.179	82.984.575
MTP/MTF	212.678.555	212.546.829	212.277.025	211.321.013
BELEX15	266.431.783	289.777.000	308.569.155	299.281.084
BELEXline	278.029.464	301.886.536	321.102.903	311.457.991

*u hiljadama RSD / in RSD thousands

4. Učešće stranih investitora / Foreign Investors Participation

Januar/January 2022. Februar/February 2022	Učešće stranih investitora / Foreign Investors Participation		
	FIS	total	16,38%
		b-FIS	13,92%
		s-FIS	18,84%
	FIB		5,86%
	FIT		6,27%

Indeks_Belex15	Indeks_BELEXLine	Datum	BELEX15	BELEXLine
BELEX15	BELEXLine	3/1/2021	744.97	1,575.17
BELEX15	BELEXLine	3/2/2021	746.40	1,577.23
BELEX15	BELEXLine	3/3/2021	743.56	1,567.63
BELEX15	BELEXLine	3/4/2021	744.49	1,565.95
BELEX15	BELEXLine	3/5/2021	743.80	1,564.81
BELEX15	BELEXLine	3/8/2021	748.58	1,565.64
BELEX15	BELEXLine	3/9/2021	747.54	1,567.68
BELEX15	BELEXLine	3/10/2021	748.03	1,568.14
BELEX15	BELEXLine	3/11/2021	747.00	1,571.85
BELEX15	BELEXLine	3/12/2021	747.00	1,571.96
BELEX15	BELEXLine	3/15/2021	749.21	1,580.30
BELEX15	BELEXLine	3/16/2021	756.76	1,593.56
BELEX15	BELEXLine	3/17/2021	758.92	1,596.10
BELEX15	BELEXLine	3/18/2021	760.35	1,596.65
BELEX15	BELEXLine	3/19/2021	757.93	1,591.41
BELEX15	BELEXLine	3/22/2021	758.49	1,591.47
BELEX15	BELEXLine	3/23/2021	739.09	1,571.05
BELEX15	BELEXLine	3/24/2021	737.22	1,568.00
BELEX15	BELEXLine	3/25/2021	746.14	1,577.20
BELEX15	BELEXLine	3/26/2021	751.83	1,583.60
BELEX15	BELEXLine	3/29/2021	757.10	1,589.84
BELEX15	BELEXLine	3/30/2021	755.33	1,588.37
BELEX15	BELEXLine	3/31/2021	754.40	1,585.54
BELEX15	BELEXLine	4/1/2021	748.84	1,580.43
BELEX15	BELEXLine	4/2/2021	744.43	1,573.46
BELEX15	BELEXLine	4/5/2021	751.95	1,583.73
BELEX15	BELEXLine	4/6/2021	742.26	1,569.62
BELEX15	BELEXLine	4/7/2021	744.44	1,579.73
BELEX15	BELEXLine	4/8/2021	746.28	1,589.08
BELEX15	BELEXLine	4/9/2021	751.24	1,609.48
BELEX15	BELEXLine	4/12/2021	756.13	1,622.81
BELEX15	BELEXLine	4/13/2021	758.87	1,625.15
BELEX15	BELEXLine	4/14/2021	752.56	1,619.57
BELEX15	BELEXLine	4/15/2021	750.72	1,617.01

BELEX15	BELEXLine	4/16/2021	761.70	1,628.88
BELEX15	BELEXLine	4/19/2021	768.60	1,636.92
BELEX15	BELEXLine	4/20/2021	768.42	1,629.84
BELEX15	BELEXLine	4/21/2021	776.87	1,636.51
BELEX15	BELEXLine	4/22/2021	777.13	1,636.43
BELEX15	BELEXLine	4/23/2021	769.62	1,620.33
BELEX15	BELEXLine	4/26/2021	770.34	1,621.10
BELEX15	BELEXLine	4/27/2021	770.28	1,621.03
BELEX15	BELEXLine	4/28/2021	770.56	1,627.37
BELEX15	BELEXLine	4/29/2021	757.31	1,623.75
BELEX15	BELEXLine	5/5/2021	756.92	1,622.33
BELEX15	BELEXLine	5/6/2021	755.89	1,617.47
BELEX15	BELEXLine	5/7/2021	755.92	1,625.52
BELEX15	BELEXLine	5/10/2021	755.32	1,624.15
BELEX15	BELEXLine	5/11/2021	755.94	1,625.22
BELEX15	BELEXLine	5/12/2021	762.24	1,635.67
BELEX15	BELEXLine	5/13/2021	758.45	1,630.95
BELEX15	BELEXLine	5/14/2021	759.38	1,633.52
BELEX15	BELEXLine	5/17/2021	759.6	1,630.45
BELEX15	BELEXLine	5/18/2021	757.23	1,630.70
BELEX15	BELEXLine	5/19/2021	764.61	1,638.12
BELEX15	BELEXLine	5/20/2021	776.55	1,652.87
BELEX15	BELEXLine	5/21/2021	776.09	1,651.38
BELEX15	BELEXLine	5/24/2021	782.83	1,654.74
BELEX15	BELEXLine	5/25/2021	779.24	1,649.20
BELEX15	BELEXLine	5/26/2021	778.16	1,646.44
BELEX15	BELEXLine	5/27/2021	778.88	1,647.54
BELEX15	BELEXLine	5/28/2021	778.88	1,649.83
BELEX15	BELEXLine	5/31/2021	768.56	1,633.04
BELEX15	BELEXLine	6/1/2021	781.64	1,654.03
BELEX15	BELEXLine	6/2/2021	779.23	1,652.76
BELEX15	BELEXLine	6/3/2021	779.94	1,652.78
BELEX15	BELEXLine	6/4/2021	781.97	1,659.45
BELEX15	BELEXLine	6/7/2021	781.86	1,662.48
BELEX15	BELEXLine	6/8/2021	780.08	1,657.85

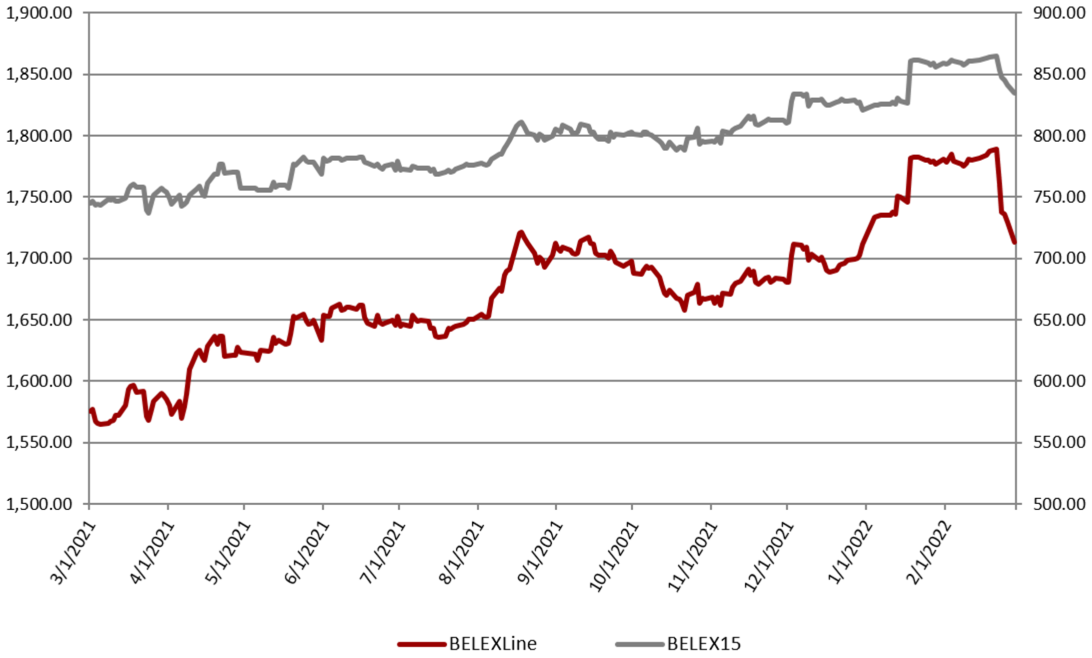
BELEX15	BELEXLine	6/9/2021	781.06	1,658.75
BELEX15	BELEXLine	6/10/2021	781.87	1,660.29
BELEX15	BELEXLine	6/11/2021	782.16	1,660.05
BELEX15	BELEXLine	6/14/2021	781.71	1,658.79
BELEX15	BELEXLine	6/15/2021	782.32	1,661.81
BELEX15	BELEXLine	6/16/2021	782.32	1,661.82
BELEX15	BELEXLine	6/17/2021	778.79	1,652.40
BELEX15	BELEXLine	6/18/2021	777.37	1,647.60
BELEX15	BELEXLine	6/21/2021	775.57	1,644.98
BELEX15	BELEXLine	6/22/2021	776.74	1,653.44
BELEX15	BELEXLine	6/23/2021	774.21	1,648.43
BELEX15	BELEXLine	6/24/2021	772.63	1,646.46
BELEX15	BELEXLine	6/25/2021	775.37	1,647.57
BELEX15	BELEXLine	6/28/2021	776.94	1,649.62
BELEX15	BELEXLine	6/29/2021	771.77	1,645.31
BELEX15	BELEXLine	6/30/2021	779.45	1,653.08
BELEX15	BELEXLine	7/1/2021	771.88	1,645.15
BELEX15	BELEXLine	7/2/2021	772.39	1,646.63
BELEX15	BELEXLine	7/5/2021	771.62	1,645.07
BELEX15	BELEXLine	7/6/2021	775.28	1,653.51
BELEX15	BELEXLine	7/7/2021	774.44	1,650.20
BELEX15	BELEXLine	7/8/2021	773.97	1,648.72
BELEX15	BELEXLine	7/9/2021	773.58	1,649.31
BELEX15	BELEXLine	7/12/2021	773.56	1,649.00
BELEX15	BELEXLine	7/13/2021	771.41	1,643.49
BELEX15	BELEXLine	7/14/2021	772.92	1,643.36
BELEX15	BELEXLine	7/15/2021	769.02	1,636.81
BELEX15	BELEXLine	7/16/2021	768.43	1,635.76
BELEX15	BELEXLine	7/19/2021	769.94	1,636.40
BELEX15	BELEXLine	7/20/2021	771.64	1,643.24
BELEX15	BELEXLine	7/21/2021	770.59	1,642.06
BELEX15	BELEXLine	7/22/2021	771.16	1,643.67
BELEX15	BELEXLine	7/23/2021	772.93	1,644.54
BELEX15	BELEXLine	7/26/2021	775.00	1,646.81
BELEX15	BELEXLine	7/27/2021	776.52	1,648.42
BELEX15	BELEXLine	7/28/2021	775.66	1,650.38
BELEX15	BELEXLine	7/29/2021	775.66	1,650.38

BELEX15	BELEXLine	7/30/2021	775.66	1,650.42
BELEX15	BELEXLine	8/2/2021	777.61	1,654.40
BELEX15	BELEXLine	8/3/2021	776.98	1,652.90
BELEX15	BELEXLine	8/4/2021	776.11	1,651.97
BELEX15	BELEXLine	8/5/2021	776.62	1,653.14
BELEX15	BELEXLine	8/6/2021	781.24	1,667.35
BELEX15	BELEXLine	8/9/2021	785.10	1,675.86
BELEX15	BELEXLine	8/10/2021	785.10	1,673.34
BELEX15	BELEXLine	8/11/2021	789.71	1,686.70
BELEX15	BELEXLine	8/12/2021	792.14	1,689.47
BELEX15	BELEXLine	8/13/2021	796.33	1,690.87
BELEX15	BELEXLine	8/16/2021	807.83	1,711.91
BELEX15	BELEXLine	8/17/2021	810.34	1,720.31
BELEX15	BELEXLine	8/18/2021	810.87	1,721.16
BELEX15	BELEXLine	8/19/2021	806.66	1,716.80
BELEX15	BELEXLine	8/20/2021	802.34	1,712.22
BELEX15	BELEXLine	8/23/2021	800.12	1,704.68
BELEX15	BELEXLine	8/24/2021	796.46	1,695.89
BELEX15	BELEXLine	8/25/2021	800.95	1,700.66
BELEX15	BELEXLine	8/26/2021	799.91	1,698.29
BELEX15	BELEXLine	8/27/2021	796.15	1,692.88
BELEX15	BELEXLine	8/30/2021	799.73	1,702.43
BELEX15	BELEXLine	8/31/2021	805.01	1,712.12
BELEX15	BELEXLine	9/1/2021	804.83	1,708.51
BELEX15	BELEXLine	9/2/2021	803.24	1,705.98
BELEX15	BELEXLine	9/3/2021	808.73	1,708.92
BELEX15	BELEXLine	9/6/2021	805.19	1,707.14
BELEX15	BELEXLine	9/7/2021	802.38	1,704.15
BELEX15	BELEXLine	9/8/2021	802.38	1,703.47
BELEX15	BELEXLine	9/9/2021	803.25	1,704.39
BELEX15	BELEXLine	9/10/2021	809.63	1,713.92
BELEX15	BELEXLine	9/13/2021	808.25	1,717.48
BELEX15	BELEXLine	9/14/2021	802.60	1,712.44
BELEX15	BELEXLine	9/15/2021	802.75	1,711.87
BELEX15	BELEXLine	9/16/2021	799.44	1,704.59
BELEX15	BELEXLine	9/17/2021	797.61	1,702.65
BELEX15	BELEXLine	9/20/2021	797.46	1,702.56

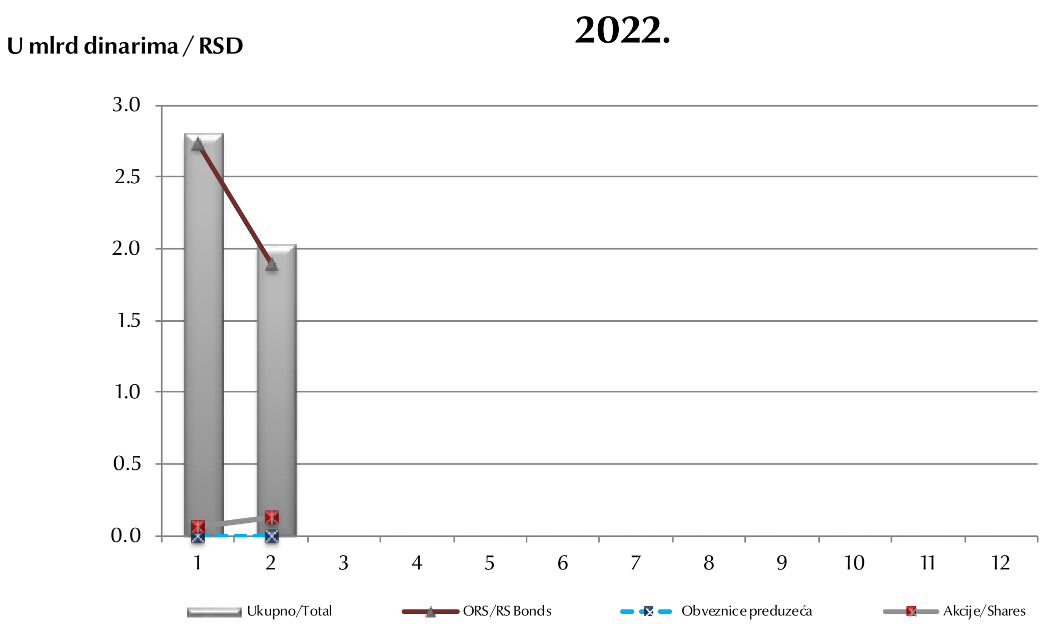
BELEX15	BELEXLine	9/21/2021	795.74	1,700.32
BELEX15	BELEXLine	9/22/2021	802.61	1,706.25
BELEX15	BELEXLine	9/23/2021	798.71	1,701.83
BELEX15	BELEXLine	9/24/2021	801.20	1,697.10
BELEX15	BELEXLine	9/27/2021	800.86	1,694.08
BELEX15	BELEXLine	9/28/2021	801.35	1,694.97
BELEX15	BELEXLine	9/29/2021	802.37	1,696.06
BELEX15	BELEXLine	9/30/2021	802.81	1,697.72
BELEX15	BELEXLine	10/1/2021	801.40	1,687.79
BELEX15	BELEXLine	10/4/2021	800.88	1,687.24
BELEX15	BELEXLine	10/5/2021	802.65	1,690.11
BELEX15	BELEXLine	10/6/2021	802.70	1,694.06
BELEX15	BELEXLine	10/7/2021	801.42	1,692.01
BELEX15	BELEXLine	10/8/2021	800.82	1,692.73
BELEX15	BELEXLine	10/11/2021	795.94	1,684.98
BELEX15	BELEXLine	10/12/2021	794.09	1,679.35
BELEX15	BELEXLine	10/13/2021	789.67	1,671.68
BELEX15	BELEXLine	10/14/2021	790.20	1,669.79
BELEX15	BELEXLine	10/15/2021	794.88	1,673.96
BELEX15	BELEXLine	10/18/2021	788.52	1,667.32
BELEX15	BELEXLine	10/19/2021	791.08	1,667.06
BELEX15	BELEXLine	10/20/2021	791.01	1,664.31
BELEX15	BELEXLine	10/21/2021	788.13	1,657.84
BELEX15	BELEXLine	10/22/2021	798.08	1,670.12
BELEX15	BELEXLine	10/25/2021	798.56	1,672.86
BELEX15	BELEXLine	10/26/2021	805.85	1,678.99
BELEX15	BELEXLine	10/27/2021	793.49	1,663.94
BELEX15	BELEXLine	10/28/2021	795.41	1,667.59
BELEX15	BELEXLine	10/29/2021	795.15	1,667.11
BELEX15	BELEXLine	11/1/2021	795.91	1,668.63
BELEX15	BELEXLine	11/2/2021	794.82	1,663.83
BELEX15	BELEXLine	11/3/2021	798.25	1,668.24
BELEX15	BELEXLine	11/4/2021	793.73	1,662.03
BELEX15	BELEXLine	11/5/2021	803.42	1,671.66
BELEX15	BELEXLine	11/8/2021	801.84	1,670.80
BELEX15	BELEXLine	11/9/2021	804.82	1,676.56
BELEX15	BELEXLine	11/10/2021	806.30	1,680.14

BELEX15	BELEXLine	11/12/2021	807.68	1,681.60
BELEX15	BELEXLine	11/15/2021	815.81	1,690.98
BELEX15	BELEXLine	11/16/2021	813.65	1,686.61
BELEX15	BELEXLine	11/17/2021	816.03	1,689.29
BELEX15	BELEXLine	11/18/2021	809.26	1,680.90
BELEX15	BELEXLine	11/19/2021	808.70	1,679.36
BELEX15	BELEXLine	11/22/2021	812.07	1,683.59
BELEX15	BELEXLine	11/23/2021	813.83	1,685.11
BELEX15	BELEXLine	11/24/2021	812.47	1,680.54
BELEX15	BELEXLine	11/25/2021	812.33	1,682.48
BELEX15	BELEXLine	11/26/2021	812.38	1,683.70
BELEX15	BELEXLine	11/29/2021	812.37	1,683.48
BELEX15	BELEXLine	11/30/2021	810.12	1,680.71
BELEX15	BELEXLine	12/1/2021	810.76	1,680.95
BELEX15	BELEXLine	12/2/2021	828.46	1,702.79
BELEX15	BELEXLine	12/3/2021	833.64	1,711.37
BELEX15	BELEXLine	12/6/2021	833.81	1,711.16
BELEX15	BELEXLine	12/7/2021	832.66	1,707.24
BELEX15	BELEXLine	12/8/2021	833.75	1,708.89
BELEX15	BELEXLine	12/9/2021	823.95	1,698.90
BELEX15	BELEXLine	12/10/2021	828.99	1,703.41
BELEX15	BELEXLine	12/13/2021	829.18	1,698.49
BELEX15	BELEXLine	12/14/2021	829.55	1,700.83
BELEX15	BELEXLine	12/15/2021	826.36	1,695.17
BELEX15	BELEXLine	12/16/2021	824.70	1,690.07
BELEX15	BELEXLine	12/17/2021	824.85	1,688.75
BELEX15	BELEXLine	12/20/2021	827.02	1,690.51
BELEX15	BELEXLine	12/21/2021	828.43	1,694.29
BELEX15	BELEXLine	12/22/2021	829.54	1,695.56
BELEX15	BELEXLine	12/23/2021	828.00	1,696.22
BELEX15	BELEXLine	12/24/2021	828.20	1,698.76
BELEX15	BELEXLine	12/27/2021	828.99	1,699.60
BELEX15	BELEXLine	12/28/2021	826.21	1,700.41
BELEX15	BELEXLine	12/29/2021	827.63	1,703.03
BELEX15	BELEXLine	12/30/2021	820.78	1,711.57
BELEX15	BELEXLine	1/4/2022	825.04	1,734.07
BELEX15	BELEXLine	1/5/2022	825.18	1,734.22

BELEX15	BELEXLine	1/6/2022	826.04	1,735.57
BELEX15	BELEXLine	1/10/2022	825.64	1,735.14
BELEX15	BELEXLine	1/11/2022	827.10	1,737.55
BELEX15	BELEXLine	1/12/2022	826.04	1,736.15
BELEX15	BELEXLine	1/13/2022	830.41	1,750.73
BELEX15	BELEXLine	1/14/2022	828.50	1,749.83
BELEX15	BELEXLine	1/17/2022	826.20	1,745.55
BELEX15	BELEXLine	1/18/2022	860.67	1,781.50
BELEX15	BELEXLine	1/19/2022	861.71	1,782.63
BELEX15	BELEXLine	1/20/2022	861.71	1,782.63
BELEX15	BELEXLine	1/21/2022	861.69	1,782.60
BELEX15	BELEXLine	1/24/2022	859.71	1,780.38
BELEX15	BELEXLine	1/25/2022	859.33	1,779.98
BELEX15	BELEXLine	1/26/2022	857.95	1,778.55
BELEX15	BELEXLine	1/27/2022	858.83	1,779.20
BELEX15	BELEXLine	1/28/2022	856.22	1,776.47
BELEX15	BELEXLine	1/31/2022	858.86	1,781.04
BELEX15	BELEXLine	2/1/2022	858.06	1,778.40
BELEX15	BELEXLine	2/2/2022	859.09	1,781.18
BELEX15	BELEXLine	2/3/2022	861.91	1,784.82
BELEX15	BELEXLine	2/4/2022	860.80	1,779.19
BELEX15	BELEXLine	2/7/2022	858.96	1,777.27
BELEX15	BELEXLine	2/8/2022	857.19	1,775.42
BELEX15	BELEXLine	2/9/2022	858.82	1,777.45
BELEX15	BELEXLine	2/10/2022	860.95	1,781.25
BELEX15	BELEXLine	2/11/2022	860.91	1,780.28
BELEX15	BELEXLine	2/14/2022	862.05	1,781.47
BELEX15	BELEXLine	2/17/2022	863.00	1,784.23
BELEX15	BELEXLine	2/18/2022	864.27	1,787.79
BELEX15	BELEXLine	2/21/2022	865.06	1,789.15
BELEX15	BELEXLine	2/22/2022	853.69	1,760.44
BELEX15	BELEXLine	2/23/2022	847.49	1,738.10
BELEX15	BELEXLine	2/24/2022	845.56	1,736.03
BELEX15	BELEXLine	2/25/2022	841.05	1,729.92
BELEX16	BELEXLine	2/28/2022	834.64	1,713.41



2022	Ukuptno/Total	ORS/RS Bonds	Obveznice preduzeća	Akcije/Shares
1	2,798,479,938	2,736,693,452	0	61,786,486
2	2,019,369,211	1,894,745,001	0	124,624,210



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- Ispraviti sve gramatičke i greške u kucanju.
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- Text boxes are not to be used either in the text or in the tables.
- Websites are to be typed as a text, not as a hyperlink.
- Please, correct all grammatical or typing errors.
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