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Association of Serbian Insurers

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***Prof.dr.sc. Jasenko Marin*[1]**

NOVINE U ZAKONSKOM UREĐENJU OSIGURANJA OD AUTOMOBILSKE ODGOVORNOSTI U REPUBLICI HRVATSKOJ

ORIGINALNI NAUČNI RAD

Apstrakt:

Posljednja novela hrvatskog Zakona o obveznim osiguranjima u prometu iz 2023. unosi značajne promjene u pogledu osiguranja od automobilske odgovornosti. Značajnim dijelom te su izmjene bile nužne zbog preuzimanja u hrvatsko pravo odredaba Direktive (EU) 2021/2118 Europskog parlamenta i Vijeća od 24.11.2021 o izmjeni Direktive 2009/103/EZ u odnosu na osiguranje od građanskopravne odgovornosti u pogledu upotrebe motornih vozila i izvršenje obveze osiguranja od takve odgovornosti. Međutim, neke druge izmjene i dopune u okviru ove novele, koje nisu motivirane usklađivanjem s europskim pravom, također su vrlo značajne. Po prvi puta se uređuje obvezno osiguranje odgovornosti za štetu nastalu upotrebom automatiziranih vozila. Promjene su prisutne i u pogledu pitanja isključenja iz osiguranja i gubitka prava iz osiguranja. Konačno, preciznije se uređuje i postupak rješavanja odštetnog zahtjeva oštećene osobe. **Sve promjene imaju za cilj poboljšanje zaštite oštećenih osoba i samih osiguranika. Nakon uvodnog dijela u kojem pojašnjava svrhu postojanja obveznog osiguranja od automobil**ske odgovornosti i pravne izvore kojima je ono uređeno na međunarodnoj, europskoj i nacionalnoj hrvatskoj razini, autor sustavno analizira sve važnije elemente posljednje zakonske novele. U zaključku iznosi svoju ocjenu o tome u kojoj mjeri su tom novelom ostvareni zadani ciljevi, a iznosi i svoja predviđanja o daljnjem uređenju najvažnijih pitanja iz ovog područja.

Ključne reči: *osiguranje od automobilske odgovornosti, Direktiva (EU) 2021/2118, Zakon o obveznim osiguranjima u prometu, izmjene i dopune, automatizirana vozila*

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I Uvodna razmatranja – svrha obveznog osiguranja od automobilske odgovornosti i njegovo pravno uređenje

Osiguranje od odgovornosti za štetu nastalu upotrebom motornog vozila, uobičajeno zvano i osiguranje od automobilske odgovornosti ili, kraće, AO osiguranje, u gotovo svim državama normirano je kao obvezno osiguranje. To znači da je vlasnicima, odnosno korisnicima vozila zakonskim propisom nametnuta obveza da s osigurateljem sklope ugovor o osiguranju svoje odgovornosti za štetu prouzročenu upotrebom tih vozila. Postojanje takvog ugovora o osiguranju od odgovornosti sklapa se u pogledu svakog vozila i neophodan je uvjet za dopustivost registracije vozila u evidencijama nadležnih tijela, odnosno za mogućnost da to vozilo, na pravno dopušten način, sudjeluje u prometu. Nepoštivanje te obveze rezultira mogućom građanskopravnom i prekršajnom odgovornošću vlasnika, odnosno korisnika vozila.

Već sama činjenica da pravni poredak bilo koje osiguranje normira obveznim, samo po sebi govori o velikom društvenom i ekonomskom značaju toga osiguranja. U pravilu, nacionalni i/ili međunarodni pravni poreci propisuju neko osiguranje kao obvezno kada smatraju da je subjektima nekih pravnih odnosa potrebno dati posebnu pravnu zaštitu. U tom kontekstu, osiguranje od automobilske odgovornosti štiti oštećenike, dakle osobe koje su, uslijed upotrebe vozila, pretrpile štetu zbog smrti ili tjelesne ozljede, odnosno imovinsku štetu. Oštećenici imaju pravo da naknadu štete potražuju ne samo od osobe koju pravni poredak utvrđuje kao odgovornu za štetu (vlasnika ili korisnika vozila kojim je prouzročena šteta) nego i od osiguratelja koji je s vlasnikom, odnosno korisnikom toga vozila sklopio ugovor o osiguranju odgovornosti. Time se mogućnost da oštećenoj osobi šteta bude nadoknađena čini izvjesnijom i u situacijama kada je osoba odgovorna za prouzročenje štete slabijeg imovinskog stanja. Oštećena osoba dobiva još jednog subjekta od kojeg može potraživati naknadu štete. Taj subjekt je osiguravajuće društvo (osiguratelj), u pogledu kojeg je, općenito govoreći, rizik nedovoljne vrijednosti imovine iz koje bi se nadoknadila šteta (do zakonom ili ugovorom predviđenog maksimalnog iznosa) znatno manji nego što je to u pogledu štetnika, odnosno osobe koja odgovara za štetu, a osobito ako je to fizička osoba.[2] S druge strane, ovim osiguranjem štiti se

[2] Pritom valja istaknuti da obaveza odgovorne osobe (štetnika) da nadoknadi štetu koju je neka osoba pretrpila uslijed upotrebe tog vozila, nema isti pravni temelj kao i obaveza osiguratelja štetnikove odgovornosti da učini to isto. Štetnik to mora učiniti zato što je odgovoran za nastanak štetnog događaja iz kojeg je proizašla šteta što, načelno, ima za posljedicu njegovu obavezu da tu štetu nadoknadi oštećeniku. Osiguratelj nije odgovoran za nastanak štetnog događaja, ali njegova obaveza da nadoknadi štetu slijedi iz činjenice da je sa odgovornom osobom (osiguranikom) sklopio ugovor o osiguranju odgovornosti kojim se obvezao da će, u granicama ugovora i prisilnih propisa, umjesto štetnika nadoknaditi štetu oštećenoj osobi. Dakle, osigurateljeva obveza temelji se na ugovoru o osiguranju. U velikom broju država, u koje se ubraja i Hrvatska, oštećena osoba ima, već u relevantnim zakonskim propisima utvrđeno pravo da štetu potražuje izravno od osiguratelja štetnikove odgovornosti (pravno na direktan zahtjev, odnosno, u okviru

i imovinski interes osobe koja je odgovorna za štetu. Naime, njegova imovina će, načelno govoreći, usprkos njegovoj odštetnoj odgovornosti i obvezi naknade štete, ostati neumanjena jer će osiguratelj s kojim je odgovorna osoba ranije sklopila ugovor o osiguranju od automobilske odgovornosti, u granicama predviđenim prisilnim propisima i ugovorom o osiguranju, umjesto osobe odgovorne za štetu, nadoknaditi oštećenoj osobi štetu koju je ona pretrpila.[3]

Ideja osiguranja od odgovornosti za štete nastale upotrebom vozila javila se u Sjedinjenim Američkim Državama potkraj 19. stoljeća. Ono je tada još bilo dragovoljno. Početkom 20. stoljeća dolazi do uvođenja zakonske obveze ove vrste osiguranja od odgovornosti u pravima ponajprije europskih država.[4]

S razvitkom tehnologije i ekonomike međunarodnog robnog i putničkog transporta, uz porast broja samih vozila, javila se i potreba da se pitanje osiguranja od ove vrste odgovornosti ujednači na kontinentalnoj (europskoj) pa i međunarodnoj razini.[5] Cilj je bio dvojak. S jedne strane, omogućiti oštećenim osobama istu pravnu poziciju u pogledu mogućnosti naknade štete bez obzira je li im šteta prouzročena vozilom registriranim u zemlji njihovog uobičajenog boravišta ili u nekoj drugoj zemlji. S druge strane, zaštititi štetnika, odnosno odgovornu osobu (vlasnika, odnosno korisnika vozila) tako da on, nakon sklapanja jednog ugovora o osiguranju od ove vrste odgovornosti, ima osiguranjeljno pokriće bez obzira je li vozilom prouzročio štetu u zemlji svojeg uobičajenog boravišta ili u inozemstvu.

U pravnom smislu, metode kojima se ovaj cilj pokušavao ostvariti, i još uvijek se ostvaruje, su različite, ali istovremeno i međusobno povezane. U tom kontekstu valja izdvojiti:

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sudskog postupka, pravo na direktnu tužbu – actio directa). To znači da obveza konkretnog osiguratelja, iako ne bi postojala da nema ranije sklopljenog ugovora o osiguranju od automobilske odgovornosti, nije definirana samo tim ugovorom, nego i relevantnim zakonskim propisom. Taj zakonski propis mora biti usklađen s relevantnim izvorima prava Europske unije, kada je riječ o zakonskom propisu države članice, primjerice Republike Hrvatske.

[3] Od navedenog postoje stanoviti izuzeci koji ograničavaju obvezu osiguratelja u smislu maksimalne i unaprijed utvrđene visine štete koju je dužan nadoknaditi na temelju prisilnog propisa i ugovora. U izuzetke valja ubrojiti i one koji isključuju obvezu osiguratelja zbog određenih propisom predviđenih okolnosti koje su postojale pri nastanku štete, primjerice zbog određenog postupanja same oštećene osobe u kontekstu nastanka štete, ili zbog činjenice da je oštećena osoba bila vozač vozila kojim je prouzročena šteta itd. Ovome valja dodati i određene situacije osobito teškog kršenja relevantnih propisa od strane osiguranika-štetnika pri prouzročenju štete, kada će osiguratelj najprije morati nadoknaditi štetu oštećeniku, ali će potom imati na zakonu utemeljeno pravo tražiti od svojeg osiguranika djelomično ili potpuno obeštećenje (pravo na cjeloviti ili djelomični povrat iznosa prethodno plaćenog oštećeniku). Tada govorimo o potpunom ili djelomičnom osiguranikovom (štetnikovom) gubitku prava iz osiguranja, infra, t. 3.

[4] Prva država koja je uvela zakonsku obvezu osiguranja od automobilske odgovornosti bila je Danska 1912. Podrobnije: Marijan Ćurković, Komentar Zakona o obveznim osiguranjima u prometu, Inženjerski biro, Zagreb, 2013., str. 10-11.

[5] Jelena Kočović, Tatjana Rakonjac Antić, Marija Koprivica, Kristina Bradić, „Pravci razvoja tržišta osiguranja", Tokovi osiguranja, br. 3/2024, str. 536-548.

a) Međunarodni sustav zelene karte osiguranja motornog vozila

Riječ je o sustavu koji je ustanovljen Preporukom br. 5. Odbora za cestovni prometu Ekonomske komisije Ujedinjenih naroda za Europu (UNECE), iz 1949. godine, a koji je stupio na snagu 1.1.1953. Tom Preporukom vlade država članica pozvane su da zatraže od osiguratelja svoje zemlje da sklope sporazume koji bi omogućili vozačima osiguranje pokriće od odgovornosti za štete koje vozilom prouzroče u drugoj (posjećenoj) zemlji. Osiguratelji su u Londonu osnovali centralno tijelo koje će upravljati Sustavom zelene karte – Savjet ureda zelene karte. Sustav zelene karte ne temelji se na sporazumu država, nego na sporazumu nacionalnih ureda (biroa) pojedinih država koji svoje članove – osiguratelje opskrbljuju ispravama o osiguranju (tzv. zelenom kartom), koje ti osiguratelji, prilikom sklapanja ugovora o osiguranju, uručuju svojim klijentima – ugovarateljima osiguranja (vlasnicima/korisnicima vozila). Takvo osiguranje vrijedi u svim drugim državama čiji su nacionalni uredi ugovorom postali članovi Sustava zelene karte.[6]

b) Europsku konvenciju o obveznom osiguranju od odgovornosti za štete uzrokovane uporabom motornih vozila – Strazburška konvencija, iz 1959.

Strazburška konvencija donesena je pod okriljem Vijeća Europe. Stupila je na snagu 22.9.1969. Države stranke se obvezuju da u svome nacionalnom pravu propišu obvezno osiguranje od odgovornosti za štete uzrokovane upotrebom motornih vozila, i to u skladu s Konvencijom. Iako su njome obvezane samo četiri države (Austrija, Danska, Njemačka i Grčka), Strazburška konvencija postala je svojevrsni model (uzor) za uređenje ovog pitanja ne samo u nacionalnim pravima čitavog niza europskih država, nego i za uređenje ovoga pitanja izvorima prava na razini same Europske unije.[7]

c) Direktive Europske unije o obveznom osiguranju od automobilske odgovornosti

Pravno uređenje obveznog osiguranja od automobilske odgovornosti na razini Europske unije izgrađivalo se desetljećima, kroz tzv. direktive o osiguranju od automobilske odgovornosti. Doneseno je (do sada) sedam takvih direktiva. Prva je donesena još 1972., a za potrebe ovoga rada svakako valja izdvojiti šestu i sedmu:

[6] Vremenom je Sustav zelene karte evoluirao, na temelju daljnjih sporazuma između nacionalnih ureda. Tako danas sama registarska pločica vozila iz države čiji je nacionalni ured član Sustava predstavlja dokaz da u pogledu upotrebe dotičnog vozila postoji odgovarajuće osiguranje od odgovornosti koje će priznati druga država, članica Sustava, u koje to vozilo ulazi. Detaljnije o povijesno-pravnom razvitku Sustava zelene karte: Šime Savić, Obvezno osiguranje od automobilske odgovornosti kao sredstvo zaštite potrošača, Vizura, Zagreb, 2022., str. 190-200.

[7] Tekst Strazburške konvencije, kao i svi podaci vezani uz popis država stranaka dostupan je na https://www.coe.int/en/web/Conventions/full-list?module=treaty-detail&treatynum=029, pristupljeno: 1.7.2024. O značaju i najvažnijim sadržajnim odrednicama Strazburške konvencije detaljnije: Slobodan N. Ilijić, „European Convention on Compulsory Insurance against Civil Liability in Respect of Motor Vehicles and European Union Law", Tokovi osiguranja, br. 2/2020, str. 82.-84.

- Direktivu Europskog parlamenta i Vijeća 2009/103/EZ od 16. rujna 2009. u odnosu na osiguranje od građanskopravne odgovornosti u pogledu upotrebe motornih vozila i izvršenje obveze osiguranja od takve odgovornosti (u daljnjem tekstu: Šesta direktiva)[8] i
- Direktivu (EU) 2021/2118 Europskog parlamenta i Vijeća od 24. studenoga 2021. o izmjeni Direktive 2009/103/EZ u odnosu na osiguranje od građanskopravne odgovornosti u pogledu upotrebe motornih vozila i izvršenje obveze osiguranja od takve odgovornosti (u daljnjem tekstu: Direktiva iz 2021.).[9]

Šesta direktiva ne donosi nikakve originalne sadržajne izmjene u odnosu na prethodnih pet nego, u suštini, predstavlja izvor prava koji kodificira odredbe ranijih direktiva, zbog čega se često naziva i Kodificirajuća direktiva. Ipak, ona formalno-pravno predstavlja zaseban izvor prava Europske unije, koji od trenutka njenog stupanja na snagu stavlja van snage prethodnih pet direktiva.

Šesta direktiva, kao kodificirajuća, normira sva važna pitanja vezana uz osiguranje od automobilske odgovornosti kao što su pitanje opsega i visine osigurateljnoga pokrića, pitanje osoba koje ulaze u krug mogućih „korisnika osiguranja", definicija osiguranoga slučaja, razlozi za isključenje osigurateljnoga pokrića itd. U osnovi, temeljna obveza država članica prema Šestoj direktivi je da poduzme mjere kako bi građanskopravna odgovornost u pogledu upotrebe vozila koja se uobičajeno nalaze na njenome području bila pokrivena osiguranjem kako ga ta Direktiva propisuje. Osiguranje mora pokrivati naknadu štete zbog smrti, odnosno tjelesne ozljede žrtava prometa, kao i zbog oštećenja stvari i to u minimalnom iznosu koji je utvrđen u Šestoj Direktivi.[10]

Šesta direktiva isključuje vozača (ne i članove vozačeve obitelji u pogledu njihovih tjelesnih šteta) koji je odgovoran za nastalu štetu od mogućnosti da bude korisnik tog osiguranja, dakle da mu se nadoknadi šteta koju je pretrpio. Osim vozaču, osigurateljno pokriće je uskraćeno i osobama koje za uporabu vozila nemaju izričito ili implicitno odobrenje (slučaj ukradenog vozila, kada osigurateljno pokriće gube i suputnici koji dobrovoljno uđu u vozilo koje je prouzročilo štetu znajući da je ono ukradeno), osobama koje upravljaju vozilom vez vozačke dozvole i osobama koje krše zakonske tehničke zahtjeve u pogledu stanja i sigurnosti dotičnog vozila. Premija koju plaća ugovaratelj osiguranja mora biti jedinstvena i vrijedi za cijelo vrijeme trajanja ugovora na čitavom području EU.

[8] Službeni list Europske unije L 263, 7. 10. 2009.

[9] Službeni list Europske unije L 430, 2. 12. 2021. Neslužbeni (konsolidirani) tekst Šeste direktive koji uključuje i izmjene i dopune napravljene Direktivom iz 2021. Dostupan je na https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02009L0103-20231223, pristupljeno 1.7.2024.

[10] Članci 3. i 9. Šeste direktive. Šesta direktiva je propisivala i postupak automatske prilagodbe osigurateljnog pokrića sukladno Europskom indeksu potrošačkih cijena, koji provodi Komisija.

Svaka oštećena osoba može uputiti izravni zahtjev osiguratelju odgovornosti vlasnika vozila kojim je prouzročena šteta, radi naknade te štete (direktna tužba, *actio directa*, čl. 18. Šeste direktive).[11] Osiguratelj mora u roku od najviše tri mjeseca od dana podnošenja zahtjeva na njega dati odgovor (države članice mogu propisati i kraći rok). Ako smatra da osnova i visina odštetnog zahtjeva nisu sporni, osiguratelj mora dati korisniku osiguranja – oštećeniku obrazloženu ponudu. Ako je sporna odgovornost i/ili visina, moraju dati obrazložen (u cijelosti ili djelomičan) odbijajući odgovor na odštetni zahtjev. Sve su ovo odredbe privatnopravnog karaktera, kojima se uređuju prava i obveze između dva privatnopravna subjekta – oštećenika kao korisnika osiguranja i osiguratelja.[12]

Međutim, i nakon donošenja Šeste direktive, ostao je značajan broj pitanja koji se u praksi osiguranja od automobilske odgovornosti javio kao sporan. Komisija je 2017. provela evaluaciju Šeste direktive i utvrdila neka važna područja u kojima bi tu Direktivu valjalo izmijeniti i nadopuniti.[13] To je i učinjeno Direktivom iz 2021. Države članice bile su dužne svoje nacionalno pravo uskladiti s Direktivom iz 2021. najkasnije do 23.12.2023.

U Republici Hrvatskoj obvezno osiguranje od automobilske odgovornosti na zakonskoj razini uređeno je u Zakonu o obveznim osiguranjima u prometu (u daljnjem tekstu: ZOOP).[14] On je prvi puta donesen 2005. godine.[15] Već pri donošenju

[11] Zapravo se kreira na zakonu (direktivi) izvanugovorni odnos između osiguratelja odgovornosti vlasnika motornog vozila i osobe koja je pretrpjela štetu. Oštećenik se može obratiti izravno osiguratelju sa zahtjevom za naknadu štete zato što mu je to pravo propisano direktivom. Isti izvor prava uređuje i pitanje sadržaja njegovog prava prema osiguratelju, uključujući i granice visine osigurateljeve obveze prema njemu.

[12] Jasenko Marin, „Pravo osiguranja", Privatno pravo Europske unije - posebni dio (urednica Tatjana Josipović), Narodne novine, Zagreb, 2022., str. 1007.-1010.

[13] Riječ je o čitavom nizu pitanja koja su zahtijevala novelu kao što su naknada štete u slučaju insolventnosti osiguratelja koji bi trebao nadoknaditi štetu oštećenoj osobi, utvrđenje ujednačenih minimalnih iznosa osigurateljnog pokrića, provjera osiguranja vozila, korištenje potvrde o odštetnim zahtjevima ugovaratelja osiguranja od strane novog društva za osiguranje, informiranje oštećenih osoba. Komisija je zauzela i stajalište da bi u tekst nove, Sedme direktive trebalo pretočiti i stajališta Suda Europske unije iskazana u presudama u nekim važnim predmetima, osobito u pogledu definiranja pojma „upotreba vozila" koji ni u Šestoj direktivi uopće nije bio definiran, a u praksi se javio kao sporan. Konačno, Komisija je smatrala i da bi novelirana Direktiva morala uzeti u obzir tehnološki napredak u prometu i pojavu novih vozila i utvrditi eventualnu potrebu prilagodbe pravnog uređenja osiguranja od odgovornosti za štetu i u pogledu njihove upotrebe, v. recitale 1-6 preambule Direktive iz 2021. Podrobnije o novinama koje donosi Direktiva iz 2021.: Caroline Van Schoubroek, „European harmonised rules on motor vehicles liability insurance reviewed", https://doi.fil.bg.ac.rs/pdf/eb_ser/aida/2022/aida-2022-23-ch11.pdf, pristupljeno 1.7.2024.

[14] Narodne novine, Službeni list Republike Hrvatske, br. 151/05, 36/09, 75/09, 76/13, 152/14, 155/23. Pored osiguranje vlasnika, odnosno korisnika vozila od odgovornosti za štete nanesene trećim osobama (osiguranje od automobilske odgovornosti), ZOOP u čl. 2. st. 1. utvrđuje kao obvezna još neka osiguranja iz djelatnosti prometa: osiguranje putnika u javnom prometu od posljedica nesretnog slučaja, osiguranje zračnog prijevoznika, odnosno operatora zrakoplova od odgovornosti za štete nanesene trećim osobama i putnicima i osiguranje vlasnika, odnosno korisnika brodice na motorni pogon , odnosno jahte od odgovornosti za štete nanesene trećim osobama. Naravno, brojna pitanja riješena su i podzakonskim propisima koje donosi nadležno nacionalno nadzorno tijelo – Hrvatska agencija za nadzor financijskih usluga (HANFA). Konačno, uvjeti osiguranja od automobilske odgovornosti koje donose osigurateljni sastavni su dio svakog ugovora o obveznom osiguranju od automobilske odgovornosti pa su, dakle, važan izvor prava.

[15] U razdoblju u kojem je Republika Hrvatska bila u sastavu Socijalističke Federativne Republike Jugoslavije, kao i nakon osamostaljenja Hrvatske pa sve do 2005. materija obveznih osiguranja u prometu

izvornog teksta ZOOP-a, kao i pri usvajanju kasnijih novela, u segmentu obveznog osiguranja od automobilske odgovornosti osnovni zadatak zakonodavca je bilo kontinuirano usklađivanje s pravnom stečevinom Europske unije na tome području. To vrijedi i za posljednju novelu ZOOP iz 2023. kojom je, između ostaloga, u hrvatsko unutarnje pravo preuzeta Direktiva iz 2021. godine. Međutim, okolnost da je bilo nužno novelirati ZOOP zbog njegovog usklađivanja s Direktivom iz 2021. iskorištena je i za dodatne izmjene i dopune, koje su se odnosile na neka druga važna pitanja povezana s ovom vrstom osiguranja, o čemu će više riječi biti u daljnjem tekstu.

II Novela Zakona o obveznim osiguranjima u prometu iz 2023. - najvažnije izmjene i dopune

Četiri su glavna predmeta noveliranja hrvatskog pravnog uređenja obveznog osiguranja od automobilske odgovornosti koje je provedeno donošenjem i stupanjem na snagu Zakona o izmjenama i dopunama ZOOP iz 2023.[16] To su:

a) Preuzimanje Direktive iz 2021. u hrvatsko unutarnje pravo;
b) Uređenje pitanja osiguranja od odgovornosti za štetu prouzročenu automatiziranim vozilima;
c) Noveliranje pitanja isključenja iz osiguranja i gubitka prava na osiguranje;
d) Detaljnije normiranje postupka rješavanja odštetnih zahtjeva koje oštećene osobe podnose osigurateljima.

O najvažnijim odrednicama sadržaja novele po naznačenim glavnim predmetima bit će više riječi u nastavku teksta.

1.1. Preuzimanje Direktive iz 2021. u hrvatsko unutarnje pravo

U okviru ovog predmeta novele ZOOP svakako valja izdvojiti najvažnija pitanja u pogledu kojih i sama Direktiva iz 2021. bitno mijenja Šestu direktivu, što ima za logičnu posljedicu i izmjene, odnosno dopune uređenja tih pitanja u odnosu na rješenja kakva su postojala u ZOOP do novele iz 2023. godine. Riječ je o (re)definiranju ključnih pojmova važnih za pravno uređenje osiguranja od automobilske odgovornosti, promjenama minimalnih iznosa osigurateljnog pokrića, pretpostavkama i postupku provjere valjanosti osiguranja određenog vozila u državi članici koju to

bila je uređena u sklopu propisa koji su uređivali djelatnost osiguranja općenito. Detaljnije: M. Ćurković, str. 12-13.

[16] Zakon o izmjenama i dopunama Zakona o obveznim osiguranjima u prometu, Narodne novine, Službeni list Republike Hrvatske, br. 155/2023 od 22.12.2023 . Taj je Zakon stupio na snagu 30.12.2023. U ovome radu će se, gdje je to potrebno, u pogledu pozivanja na sadržaj određenih odredbi ZOOP nakon njihove posljednje izmjene/dopune iz 2023. koristiti izraz „novelirani ZOOP" u odgovarajućem padežu. U tom kontekstu se čitatelja, radi lakšeg i preglednijeg čitanja daljnjeg teksta ovoga rada, upućuje na Neslužbeni (pročišćeni) tekst noveliranog ZOOP dostupan na: https://www.zakon.hr/z/370/Zakon-o-obveznim-osiguranjima-u-promet, pristupljeno 1.7.2024.

vozilo „posjećuje" i zaštiti oštećenih osoba u slučaju nesolventnosti osiguratelja koji je pružilo osiguranjeno pokriće odgovornosti za štetu prouzročenu tim vozilom.

1.1.1.(Re)definiranje ključnih pojmova

Imajući u vidu da se radi o pravnom uređenju materije obveznog osiguranja od odgovornosti za štetu prouzročenu upotrebom motornih vozila, od velike je važnosti postojanje preciznih definicija temeljnih pojmova: „vozilo" i „upotreba vozila".

Tehnološki napredak s jedne strane, s kojim se svaki dan susrećemo, uvjetuje pojavu novih motornih vozila, manjih dimenzija i/ili manje snage motora te manjih maksimalno mogućih brzina, ali koja mogu prouzročiti štetu. Stoga se javlja pitanje potrebe osiguranja od odgovornosti za štetu prouzročenu (i) njihovom upotrebom.

I prije novele iz 2023. ZOOP je imao drugačiju definiciju vozila na koja se odnosi obveza osiguranja od odgovornosti u usporedbi sa izvornim tekstom Šeste direktive (dakle, tekstom prije stupanja na snagu Direktive iz 2021). Temeljna razlika bila je u tome što tadašnja definicija vozila iz ZOOP je pod vozilom smatrala svako motorno vozilo namijenjeno za promet na kopnu koje se kreće snagom vlastita motora, ali se ne kreće po tračnicama, i svako priključno vozilo, priključeno ili ne, *koje podliježe obvezi registracije te po propisima o registraciji mora imati prometnu dozvolu* (naglasio J.M). Za razliku od toga, tekst Šeste direktive (ni prije, a niti poslije stupanja na snagu Direktive iz 2021.) ne sadržava elemente obvezne registracije i prometne dozvole kao bitne za definiranje vozila u svrhe primjene te Direktive.[17]

Okolnost da je došlo do izmjene definicije pojma „vozilo" u Direktivi iz 2021. bila je prilika da se nova definicija unese i u ZOOP te da se tako otkloni svaka razlika u definiranju tog pojma između izvora prava na razini Europske unije i hrvatskog unutarnjeg prava.[18] U skladu s time, nakon novele iz 2023. čl. 3. st.1. t. 35 ZOOP definira vozilo kao:

a) svako motorno vozilo koje pokreće isključivo mehanička snaga na kopnu, ali koje se ne kreće po tračnicama s najvećom konstrukcijskom brzinom

[17] Usp. čl.3. st. 1. t. 9. ZOOP (tekst prije stupanja na snagu novele iz 2023.) i čl. 1. t. 1. Šeste direktive. U literaturi je izraženo stajalište da je tadašnja definicija iz ZOOP preciznija jer otklanja zabunu i proširivanje obveznosti osiguranja od odgovornosti na svako motorno vozilo, primjerice na invalidska motorna kolica, M. Ćurković, str. 26. Jasno je da je rješenje hrvatskog zakonodavca bilo motivirano i činjenicom da se u pogledu vozila koja ne podliježu registraciji i izdavanju prometne dozvole (npr. električni romobili) vrlo teško može ostvariti prethodna (prije upotrebe tog vozila u prometu) kontrola postojanja obveznog osiguranja. Ipak, ostaje dvojbeno je li bilo dopušteno u nacionalnom pravu države članice suziti definiciju sadržanu u Šestoj direktivi kao izvoru prava Europske unije ili je trebalo iznaći neko drugo nomotehničko rješenje kojim bi se postigla ista ili slična svrha.

[18] Promjena definicije pojma „vozilo" u Direktivi iz 2021. provedena je upravo zbog toga što je europski zakonodavac ocijenio da bi uključivanje obveze osiguranja od odgovornosti za štetu nastalu upotrebom nekih motornih vozila manje snage i manje vjerojatnosti nanošenja znatnije štete, bilo nesrazmjerno i neodrživo u budućnosti. Osim toga, time bi se narušilo prihvaćanje novijih vozila, kao što su električni bicikli koji nisu isključivo pogonjeni mehaničkim pogonom pa ti se obeshrabrile inovacije, v. recital 6. preambule Direktive iz 2021.

većom od 25 km/h ili najvećom neto masom većom od 25 kg i najvećom konstrukcijskom brzinom većom od 14 km/h, odnosno kao

b) svako priključno vozilo koje se upotrebljava s vozilom navedenim pod a), bilo ono spojeno ili ne.

ZOOP sada izrijekom navodi da se invalidska kolica isključivo namijenjena osobama s tjelesnim invaliditetom ne smatraju vozilom.

Navedena definicija noveliranog ZOOP identična je definiciji iz čl. 1. t. 1. Šeste Direktive kako je novelirana Direktivom iz 2021.

Što se tiče definiranja pojma "upotreba vozila", važno je istaknuti da taj pojam uopće nije bio definiran u Šestoj direktivi. Pokazalo se u praksi da je on iznimno važan jer i sama Šesta direktiva u čl. 3. st. 1. propisuje da svaka država članica poduzima sve odgovarajuće mjere kako bi osigurala da je građanskopravna odgovornost u pogledu *upotrebe vozila* (naglasio J.M.), koja se uobičajeno nalaze na njezinu području, pokrivena osiguranjem.

Prema tome, termin "upotreba vozila" sadržan je u Šestoj direktivi (i direktivama koje su joj prethodile), ali nikada nije bio definiran. Istodobno, praksa je pokazala da je upravo taj pojam iznimno važan za primjenu nacionalnih propisa kojima je Šesta direktiva prenesena u prava država članica. To je i razumljivo jer osiguranje od odgovornosti mora pokriti štete do kojih dođe upravo upotrebom vozila. Može se tvrditi da je riječ o pravnoj praznini u tekstu same Šeste direktive, ali i nužnosti da se taj pojam protumači. Jedino ovlašteno tijelo za to je Sud Europske unije. Pred njime se našlo nekoliko predmeta, iniciranih od strane nadležnih sudova, u kojima je Sud Europske unije morao dati odgovor na prethodno pitanje je li u konkretnom slučaju šteta nastala od upotrebe vozila. Na temelju toga nacionalni sud može odlučiti o postojanju obveze osiguratelja, budući da osiguratelj no pokriće obuhvaća štetu nastalu upravo upotrebom vozila.

Najvažnije presude Suda Europske unije u kojima je on u konkretnim slučajevima odlučivao o obuhvatu pojma "upotreba vozila" su one iz predmeta *Vnuk*[19],

[19] Presuda Suda Europske unije od 4.12.2014., Vnuk, C-162/13, ECLI:EU:C:2014:2146. U ovome predmetu šteta se dogodila na način da je gospodin Vnuk pretrpio ozljedu za vrijeme dok je traktor s prikolicom korišten u dvorištu farme tijekom skladištenja bala sijena u skladištu, i to u trenutku kada je traktor s prikolicom poduzimao radnju vožnje unatrag radi parkiranja u isto skladište. Postavilo se pitanje primjene odredbe članka 3., st. 1. Prve direktive o osiguranju od automobilske odgovornosti, odnosno obuhvaća li pojam „uporaba vozila" iz te odredbe situaciju kao u konkretnom slučaju u kojem je osiguranik tuženika traktorom s prikolicom udario tužitelja koji se nalazio na ljestvama i obavljao radnju skladištenja sijena, a imajući u vidu da se ne radi o situaciji u cestovnom prometu. Bilo je to prethodno pitanje koje je Sudu uputio slovenski Vrhovni sud. Nakon što je utvrdio da Slovenija iz područja primjene obveze osiguranja nije isključila niti jednu vrstu vozila i zaključio da se konkretni traktor uobičajeno nalazi na teritoriju Slovenije, Sud je izveo konačan zaključak da se radi o nesreći koja je uzrokovana uporabom vozila koje je izvršavalo svoju normalnu funkciju vozila – funkciju prometovanja radnjom vožnje unatrag u opisanom prostoru s namjerom parkiranja. Sud je utvrdio da se na okolnosti konkretnog slučaja, zbog vremena kada se sporni slučaj dogodio, primjenjuje odredba članka 3., st. 1. Prve direktive, što znači da obvezno osiguranje

Rodrigues de Andrade[20] i *Torreiro*.[21] O njihovoj važnosti svjedoči i činjenica da je u preambuli Direktive iz 2021. navedeno da bi se, u interesu pravne sigurnosti, morala uvesti definicija pojma "upotreba vozila" koja bi odražavala navedenu sudsku praksu.[22] To je u Direktivi iz 2021. i učinjeno, a hrvatski zakonodavac tu je definiciju prenio u nacionalno pravo, i to u čl. 1. st.1. t. 33. noveliranog ZOOP, tako da se

odgovornosti, a time i obveza osiguratelja, postoji i u pogledu ovakvih slučajeva. Važno je istaknuti da je Sud Europske unije u t. 91. obrazloženja presude naglasio da se tumačenje pojma „upotreba vozila" u smislu okolnosti konkretnog slučaja ne može prepustiti shvaćanju svake pojedine države članice. Na taj način Sud Europske unije jasno je dao do znanja da jedino on ima autoritet ostvarivati jedinstvenu primjenu i tumačenje prava Unije na području prava osiguranja od automobilske odgovornosti, v. Danijela Šaban., „Pojam uporabe motornog vozila u pravu osiguranja od automobilske odgovornosti", Anali Pravnog fakulteta u Zenici br. 17., str. 277.-298. Vezano uz posljedice odluke Suda Europske unije u presudi Vnuk na sudsku praksu u Republici Sloveniji detaljnije: Miloš Radovanović, „Pojam upotrebe motornog vozila u slovenačkoj sudskoj praksi", Strani pravni život, 2018., br. 1, str. 101-120.

[20] Presuda Suda Europske unije od 28.11.2017., *Rodrigues de Andrade*, C-514/16, ECLI:EU:C:2017:908. U ovome predmetu, u činjeničnom pogledu, radilo se o tome da je gđa Alves nanosila herbicid u vinogradu u vlasništvu gospođe i gospodina Rodriguesa. Herbicid se nanosio iz uređaja koji se nalazio na stražnjem dijelu traktora. Traktor je bio u mirovanju, ali je motor radio kako bi davao pogon i omogućio da radi i uređaj iz koje se izbacivao herbicid. Tijekom tog postupka, traktor, koji je bio u blatu, se prevrnuo i ozlijedio gđu Alves koja je od posljedica nesreće preminula. Odgovarajući na pitanje koje mu je postavio portugalski Vrhovni sud, Sud Europske unije je u presudi zauzeo stajalište da pojam „upotreba vozila" iz članka 3., st. 1. mora biti protumačen tako da ne obuhvaća situaciju u kojoj je poljoprivredni traktor uključen u nesreću u kojoj njegova primarna funkcija nije bila da služi kao prijevozno sredstvo nego kao pogonski uređaj, kao stroj za izvođenje radova bez kojih se takvi radovi ne bi mogli izvršiti.

[21] Presuda Suda Europske unije od 20.12.2017., *Torreiro* C-334/16, ECLI:EU:C:2017:1007. . Radilo se radilo se o tome da je španjolsko vojno terensko vozilo, u pogledu kojega je postojalo osiguranje od odgovornosti, prevrnulo tijekom noćne vojne vježbe, nanijevši tjelesne ozljede putniku u tome vozilu (tužitelju u postupku pred španjolskim sudom). Vojno vozilo pritom se nije kretalo na području određenom za vozila s kotačima nego na području za vozila s gusjenicama. Tuženi osiguratelj se usprotivio isplati osigurnine smatrajući da se nesreća nije zbila tijekom „uporabe vozila" u smislu Šeste direktive, odnosno u smislu španjolskog zakonskog propisa kojim je ta direktiva implementirana. kojemu je riječ u glavnom postupku, a koji omogućuje da se iz pokrića obveznog osiguranja isključe štete nastale prilikom upravljanja motornim vozilima na putovima i terenima koji nisu „prikladni za prometovanje" uz iznimku onih koji se, iako nisu prikladni za tu svrhu, ipak „često upotrebljavaju" . Odlučujući u povodu pitanja koje mu je postavio Vrhovni sud Španjolske, Sud Europske unije je stao na stajalište da se predmetna odredba Šeste direktive treba tumačiti na način da mu se protivi nacionalni propis koji omogućuje da se iz pokrića osiguranja isključi šteta nastala prilikom upravljanja motornim vozilima na putovima i terenima koji nisu „prikladni za prometovanje", uz iznimku onih koji se, iako nisu prikladni za tu svrhu, ipak „često upotrebljavaju".

[22] Recital 5. preambule Direktive iz 2021. Međutim, i druge presude Suda Europske unije važne su za tumačenje pojma „upotreba vozila" , primjerice u predmetu Linea Directa, presuda od 20.6.2019., C-100/18, ECLI:EU:C:2019:517. U ovome slučaju došlo je do samozapaljenja električnih instalacija vozila koje je dulje od 24 sata bilo parkirano u privatnoj garaži. Kao posljedica takvog požara oštećena je garaža (koja je u vlasništvu druge osobe u odnosu na vlasnika vozila i vozača). Vrhovni sud Španjolske uputio je prethodno pitanje Sudu EU treba li se pojam „upotreba vozila" iz čl. 3., st. 1. Šeste direktive tumačiti tako da je tim pojmom obuhvaćena situacija u kojoj se vozilo parkirano dulje od 24 sata zapalilo (zapalili su se nužno potrebni mehanizmi tog vozila) i prouzročilo štetu na garaži (nekretnini). Sud EU je odgovorio potvrdno, naglašavajući da su parkiranje i razdoblje mirovanja vozila prirodne i nužne faze koje su dio uporabe vozila kao prijevoznog sredstva. Dakle, vozilo je bilo upotrjebljeno u skladu s njegovom funkcijom prijevoznog

upotreba vozila definira kao svaka upotreba vozila koja je u skladu s funkcijom vozila kao prijevoznog sredstva u trenutku prometne nesreće, neovisno o značajkama vozila i neovisno o terenu na kojem se motorno vozilo upotrebljava te o tome je li ono u stanju mirovanja ili u pokretu.[23]

Radi jasnoće, novelom ZOOP jasno je propisano da su, između ostaloga, iz osiguranja isključene štete nastale upotrebom vozila koje u trenutku prometne nesreće nije bilo u funkciji prijevoznog sredstva, već u industrijskoj, poljoprivrednoj ili nekoj drugoj funkciji.[24]

Opisano (re)definiranje pojmova "vozilo" i "upotreba vozila" nužno je imalo za posljedicu da se novelom ZOOP iz 2023. mora brisati odredba čl. 22 st. 3. toga zakonskog propisa, a prema kojoj su ugovorom o osiguranju iz automobilske odgovornosti bile pokrivene štete nastale od vozila koja se kreću javnim cestama i ostalim površinama na kojima se odvija promet, a koja podliježu obvezi registracije te po propisima o registraciji moraju imati prometnu dozvolu. To je učinjeno u sklopu šireg zakonodavnog zahvata u članak 22. Ona je bila nužna da bi se redefinirali i precizirali slučajevi kada postoji obveza osiguranja od automobilske odgovornosti, uključujući i izuzetke od te obaveze. Pritom, jasno, mora se osigurati prijenos korespondirajućih odredaba Direktive iz 2021.[25]

U skladu s time, novelirani čl. 22. ZOOP propisuje da je vlasnik vozila dužan sklopiti ugovor o osiguranju od odgovornosti za štetu koju upotrebom vozila može nanijeti trećim osobama zbog smrti, tjelesne ozljede, narušavanja zdravlja, uništenja ili oštećenja stvari, u skladu s odredbama ovoga Zakona, osim u slučaju upotrebe vozila koja nisu razvrstana ni u jednu kategoriju vozila sukladno posebnim propisima, bez sjedećeg mjesta, koja ne podliježu obvezi tehničkog pregleda i izdavanja

sredstva. I ovo stajalište Suda Europske unije imat će vrlo značajnog utjecaja na sadržaj definicije pojma „upotreba vozila" u Direktivi iz 2021 i posljedično, u noveliranom hrvatskom ZOOP.

[23] Ta definicija pojma „upotreba vozila" sadržajno je podudarna s definicijom tog pojma u čl. 1. t. 1.a. Šeste direktive, kako je novelirana Direktivom iz 2021.

[24] Čl. 23 st. 1. t. 6., alineja treća noveliranog ZOOP, infra. poglavlje 3.

[25] Pritom valja naglasiti da novelirani ZOOP, u čl. 22. st. 8.-14. propisuje obvezu osiguratelja da osiguraniku, na njegov zahtjev, izda potvrdu o eventualno postavljenim odštetnim zahtjevima trećih osoba na temelju osiguranja od automobilske odgovornosti toga osiguranika ili potvrdu o nepostojanju takvih zahtjeva. Potvrda mora pokrivati razdoblje od najmanje posljednjih pet godina postojanja osiguranja pokrića, a društvo za osiguranje dužno ju je izdati u roku od 15 dana od dana podnošenja zahtjeva. Obrazac potvrde je sačinjen od strane Europske komisije. Ove potvrde mogu biti značajne kad neka osoba sklapa novi ugovor o osiguranju od automobilske odgovornosti s osiguranjem koji je različit od onog s kojim je ta osoba sklopila takav ugovor za prethodno razdoblje. Naime, broj odštetnih zahtjeva, odnosno činjenica da ih nema, mogu biti jedan od osiguranjevih kriterija za definiranje premije osiguranja. Ako pojedini osiguratelj to doista uzima u obzir, mora to navesti na svojim mrežnim stranicama. Prije posljednje novele, ZOOP je u čl. 22. St. 7. I 8. Imalo propisanu obvezu osiguratelja da na zahtjev osiguranika izda potvrdu o eventualno postavljenim odštetnim zahtjevima, ali nije bilo izričitog navoda da mora izdati potvrdu o tome da takvih zahtjeva nema. Novelirane odredbe preciznije uređuju ovo pitanje, po uzoru na odredbe sadržane u čl. 16. Šeste direktive kako je izmijenjena Direktivom iz 2021.

prometne dozvole, i to: vozilo koje se može samo uravnotežiti, monocikl s motornim ili električnim pogonom te romobil s motornim ili električnim pogonom.[26]

Međutim, osobe koje pretrpe štetu upotrebom navedenih vozila u pogledu kojih njihov vlasnik nije dužan sklopiti ugovor o obveznom osiguranju od odgovornosti, ipak imaju (pored vlasnika) još jednu "metu" od koje mogu tražiti naknadu štete nastale upotrebom tih vozila. Šteta koju pretrpe nadoknadit će im se iz sredstava Garancijskog fonda pri Hrvatskom uredu za osiguranje.[27]

Dakle, (re)definicija pojmova "vozilo" i "upotreba vozila" u noveliranom ZOOP, a po uzoru na rješenja Direktive iz 2021., proširuje slučajeve u pogledu kojih mora postojati osiguranje pokriće. Međutim, ujedno se i preciziraju mogućnosti isključenja obveze osiguranja za određene kategorije vozila. Pritom se vodilo računa da oštećenici ipak imaju mogućnost neke vrste supstitucijskog jamstva da će im šteta koju pretrpe (i) od takvih vozila biti nadoknađena. Pritom je vrlo značajna uloga Garancijskog fonda.

1.1.2. Minimalni iznosi osiguranja pokrića

Posljednjom novelom ZOOP je u cijelosti usklađen s odredbama Direktive iz 2021. i u pogledu najnižih osiguranih svota u ugovorima o osiguranju od automobilske odgovornosti (minimalnih iznosa osiguranja pokrića).[28]

[26] U pogledu spomenutih vozila važno je istaknuti da je, zapravo, riječ o prijevoznim sredstvima koja zbog svoje snage ili maksimalne brzine, ne spadaju u definiciju vozila sadržane u Direktivi iz 2021., odnosno u noveliranom ZOOP. Međutim, kako je izrijekom navedeno u recitalu 4 preambule Direktive iz 2021., država članica slobodna je da i u pogledu vozila koje nisu obuhvaćena definicijom vozila iz te Direktive., svojim nacionalnim pravom propišu obvezu osiguranja od odgovornosti za štetu prouzročenu i tim prijevoznim sredstvima. Republika Hrvatska nije se odlučila za tu opciju, ali neke druge države, poput Njemačke i Francuske, jesu. Praktičan pregled uređenja pretpostavki za vožnju električnim skuterima (električnim romobilima) u pojedinim državama dostupan je na https://www.evz.de/en/reisen-verkehr/e-mobilitaet/zweiraeder/e-scooter-regulations-in-europe.html, pristupljeno 1.7.2024.

[27] Čl. 44 st. 1. t. 12 noveliranog ZOOP. Riječ je o tome da Direktiva iz 2021. zahtijeva od država članica da čim određena vozila izuzmu iz režima obveznog osiguranja od odgovornosti, uspostave drugi, jednako efikasan način naknade štete oštećenim osobama. Upravo zbog toga se iz sredstava Garancijskog fonda nadoknađuje šteta prouzročena tijekom sportskih priredbi (utrke, treninzi i sl.). Naime, novelirani ZOOP, krećući se u okvirima koje dopušta Direktiva iz 2021., oslobađa vlasnike/korisnike tih vozila od obveze sklapanja osiguranja od automobilske odgovornosti ako je organizator takve priredbe sklopio osiguranje od odgovornosti za štetu nastalu tijekom održavanja te priredbe. Međutim, ako se ispostavi da ni organizator priredbe, a niti vlasnik/korisnik automobila koji je sudjelovao u priredbi, nisu imali sklopljen ugovor o osiguranju od odgovornosti, tada će oštećenoj osobi šteta biti nadoknađena iz sredstava Garancijskog fonda (uz, naravno, pravo regresa Hrvatskog ureda za osiguranje prema osobama koje nisu ispoštovale svoju obvezu osiguranja odgovornosti). Usp. odredbe čl. 2 st. 5, čl. 22. st. 4. i čl. 44. st. 1. t. 13. noveliranog ZOOP.

[28] Usp. čl. 9. st. 1. Šeste direktive kako je izmijenjena Direktivom iz 2021. i čl. 26. st. 8. t. 1. i 2. noveliranog ZOOP. Direktivom iz 2021. provedena je harmonizacija minimalnih iznosa na razini cijele Europske unije, kao i jedinstvena metodologija periodičkog povišenja tiha iznosa. Naime, Šesta direktiva utvrđivala je

Noveliranim ZOOP najniža je osigurana svota određena u sljedećim iznosima:
a) u slučaju štete zbog smrti, tjelesne ozljede i oštećenja zdravlja - u iznosu od 6.450.000,00 eura po štetnom događaju bez obzira na broj oštećenih osoba, ili 1.300.000,00 eura po oštećenoj osobi;
b) u slučaju uništenja ili oštećenja stvari - u iznosu od 1.300.000,00 eura po štetnom događaju bez obzira na broj oštećenih osoba.[29]

U suštini, moglo bi se reći da novelirani ZOOP ne povisuje minimalne iznose osigurateljnog pokrića koji su u hrvatskom pravu bili i ranije propisani. Naime, minimalni iznos osigurateljnog pokrića u pogledu šteta zbog smrti, tjelesne ozljede i oštećenja zdravlja od 6.450.000,00 eura po štetnom događaju bio je i ranije primjenjiv na temelju Odluke Vlade Republike Hrvatske iz 2022. o povećanju najniže osigurane svote temeljem ugovora o osiguranju od automobilske odgovornosti.[30] Međutim, u navedenoj Odluci, iz nepoznatih razloga, nije bilo propisano alternativno minimalno osigurateljno pokriće za ove vrste šteta kakvo postoji u Direktivi iz 2021. (1.300.000,00 eura po oštećenoj osobi). Novelirani ZOOP predviđa takvu alternativu. U pogledu minimalne osigurane svote za štete na stvarima, novelirani ZOOP je istovjetan spomenutoj Odluci Vlade Republike Hrvatske (kao i Direktivi iz 2021.).

1.1.3. Provjera osiguranja

Jednako kao prije posljednje novele, tako i novelirani ZOOP poštuje načelo koje je postojalo u Šestoj direktivi, kao i u Direktivi iz 2021., a prema kojem se države članice suzdržavaju od provjere osiguranja od automobilske odgovornosti u pogledu vozila koja se uobičajeno nalaze na području druge države članice kao i u pogledu vozila koja se uobičajeno nalaze na području treće zemlje, a koja na područje jedne države članice dolaze s područja neke druge države članice.[31]

Međutim, imajući u vidu da Direktiva iz 2021., u odnosu na Šestu direktivu, znatno preciznije uređuje ovlasti država članica da odstupe od opisanog načela, bilo je nužno novelirati ZOOP i u tom segmentu.[32]

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različite referentne datume za periodički ponovni izračun minimalnih iznosa pokrića u različitim državama članicama, zbog čega su se minimalni iznosi pokrića razlikovali, ovisno o državi članici, v. recital 19. preambule Direktive iz 2021. Vezano uz prijenos navedenih minimalnih iznosa pokrića propisanih novelom ZOOP, valja ukazati na taj zakonski propis daje ovlast Vladi Republike Hrvatske da donosi odluke o promjeni tih minimalnih osiguranih svota, sukladno iznosima utvrđenim u delegiranim aktima Europske komisije o usklađenosti iznosa najniže osigurane svote s harmoniziranim indeksom potrošačkih cijena (HIPC) utvrđenim na temelju Uredbe (EU) 2016/792 Europskog parlamenta i Vijeća od 11. 5. 2016. o harmoniziranim indeksima potrošačkih cijena i indeksu cijena stambenih objekata i stavljanju izvan snage Uredbe Vijeća (EZ) br. 2494/98 (Službeni list Europske unije L 135, od 24. 5. 2016.).

[29] Pod „oštećenom osobom" podrazumijeva se svaka osoba koja ima pravo na naknadu štete (bilo da je riječ o šteti zbog oštećenja stvari ili šteti zbog smrti, odnosno tjelesne ozljede) prouzročene upotrebom vozila.

[30] Narodne novine, Službeni list Republike Hrvatske, br. 45/2022 od 13.4.2022.

[31] Čl. 4. Šeste direktive, odnosno čl. 4. st. 1. Direktive iz 2021.

[32] Čl. 4. Šeste direktive imao je u izvornom tekstu samo jedan stavak na temelju kojega su dane ovlasti državama članicama da odstupe od opisanog načela suzdržavanja od kontrolu, i to kroz tzv. nesustavne

Policija i nadalje ima ovlasti provoditi kontrole ima li svako inozemno vozilo koje ulazi na teritorij Republike Hrvatske valjani dokaz o obveznom osiguranju od automobilske odgovornosti.

Međutim, kada je riječ o vozilima koja se uobičajeno nalaze na području druge države članice ili vozilima koja se uobičajeno nalaze na području treće zemlje, a ulaze na teritorij Republike Hrvatske s teritorija druge države članice, spomenute (široke) ovlasti policije su u određenoj mjeri sužene. Ona je ovlaštena obavljati nesustavne kontrole ako one nisu usmjerene na provjeru postojanja osiguranja iz stavka 1. ovoga članka već su potrebne, nediskriminirajuće i razmjerne s obzirom na cilj koji se nastoji ostvariti, a:

a) provode se u okviru nadzora koji nije usmjeren isključivo na provjeru osiguranja ili
b) dio su općeg sustava provjera koje se provode i u pogledu vozila koja se uobičajeno nalaze na području Republike Hrvatske i za njihovu provedbu nije nužno zaustavljanje vozila.

Pod opisanim dvjema pretpostavkama, kontrole se moraju provoditi na temelju propisa o zaštiti osobnih podataka, a osobni podaci se mogu obrađivati ako je po potrebno u svrhu borbe protiv vožnje neosiguranim vozilima koja nije država članica u kojoj se ta vozila uobičajeno nalaze. Spomenuti propis mora biti u skladu s tzv. Uredbom GDPR[33] i mora sadržavati odgovarajuće mjere zaštita prava i sloboda te legitimnih interesa ispitanika.[34]

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provjere osiguranja, ali pod uvjetom da te provjere nisu diskriminirajuće i da se vrše u sklopu nadzora koji nije usmjeren isključivo na provjeru osiguranja. Međutim, nakon donošenja Šeste direktive je došlo do vrlo opsežnog i preciznog reguliranja pitanja zaštite prava pojedinaca u vezi s obradom osobnih podataka, povećanja nezakonitih migracija (gdje vozila često služe kao prijevozno sredstvo za počinjenje takvih djela), potrebe pojačane borbe protiv upotrebe neosiguranih vozila u prometu itd. Sve je to ukazivalo na činjenicu da se pitanje normiranja opravdanih slučajeva, pretpostavki i procedura pod kojima države članice ipak mogu provoditi kontrole osiguranja mora detaljnije urediti. To je i učinjeno u Direktivi iz 2021. i to uvođenjem posve novog, znatno opsežnijeg i preciznijeg teksta čl. 4.. Taj je članak Direktive iz 2021. u hrvatsko pravo, u okviru novele ZOOP, preuzet izmjenom čl. 32. st. 3. ZOOP i dodavanjem posve novih st. 4. i 5.

[33] Uredba (EU) 2016/679 Europskog parlamenta i Vijeća od 27. travnja 2016. o zaštiti pojedinaca u vezi s obradom osobnih podataka i o slobodnom kretanju takvih podataka te o stavljanju izvan snage Direktive 95/46/EZ (Službeni list Europske unije L 119, od 4. 5. 2016.). U hrvatski pravni sustav GDPR je preuzet Zakonom o provedbi Opće uredbe o zaštiti podataka, Narodne novine, Službeni list Republike Hrvatske, br. 42/18. Važan bi, u određenim okolnostima, mogao biti i Zakon o zaštiti fizičkih osoba u vezi s obradom i razmjenom osobnih podataka u svrhe sprječavanja, istraživanja, otkrivanja ili progona kaznenih djela ili izvršavanja kaznenih sankcija, Narodne novine, Službeni list Republike Hrvatske, br. 68/18. Oba propisa su relevantna za djelovanje policije u kontekstu zaštite osobnih podataka.

[34] Te mjere moraju biti takve da navode točnu svrhu obrade podataka, upućuju na relevantnu pravnu osnovu, moraju poštivati relevantne sigurnosne zahtjeve i načela nužnosti, proporcionalnosti i ograničavanja svrhe uz utvrđivanje proporcionalnog razdoblja čuvanja podataka. Kada podaci koji se pri kontroli prikupe od ispitanika više nisu potrebni za svrhu radi koje se prikupljaju, moraju se odmah obrisati.

1.1.4. Zaštita oštećenih osoba u slučaju nesolventnosti društva za osiguranje

Materija prava oštećenih osoba u slučaju otvaranja postupka likvidacije ili stečaja,[35] odnosno nesolventnosti osiguratelja koji bi, na temelju sklopljenog ugovora o osiguranju od automobilske odgovornosti, bio obvezan toj osobi isplatiti naknadu štete, znatno je detaljnije uređena nakon stupanja na snagu noveliranog ZOOP. To je logična posljedica činjenice da je Direktiva iz 2021. u pogledu uređenja te materije podosta izmijenila odredbe Šeste direktive.[36]

Novela ZOOP (po uzoru na Direktivu iz 2021.) u ovome pogledu zasebno uređuje dvije moguće situacije:

a) Prava oštećene osobe u slučaju otvaranja postupka likvidacije ili stečaja nad odgovornim osiguratelјem sa sjedištem u Republici Hrvatskoj[37] i
b) Zaštita oštećenih osoba s prebivalištem u Republici Hrvatskoj kada je odgovorni osiguratelj nesolventno društvo za osiguranje iz druge države članice, bez obzira je li šteta prouzročena vozilom u vezi s kojim je osiguranje odgovornosti sklopljeno u Hrvatskoj i bez obzira nalazi li se to vozilo uobičajeno u Republici Hrvatskoj ili u nekoj drugoj državi.[38]

Prema tome, jedini razlikovni kriterij između slučajeva a) i b), koji su regulirani zasebnim člancima noveliranog ZOOP, jest država u kojoj je sjedište osiguratelja koji je sa štetnikom sklopio ugovor o osiguranju od automobilske odgovornosti, a nad kojim je otvoren stečajni postupak ili postupak likvidacije (je li to Republika Hrvatski ili neka druga država članica).

U situaciji navedenoj pod a) riječ je o tome da je šteta (zbog oštećenja stvari ili zbog smrti, odnosno tjelesne ozljede) prouzročena vozilom u pogledu koje je osiguranje od odgovornosti za štetu pružio osiguratelj sa sjedištem u Republici Hrvatskoj. Oštećena osoba može zahtjev za isplatu naknade štete uputiti Hrvatskom

Ako se utvrdi da u pogledu kontroliranog vozila postoji osiguranje, ti se podaci odmah brišu. Ako se ne može utvrditi postoji li u pogledu kontroliranog vozila valjano osiguranje, podaci se čuvaju samo tijekom ograničenog, što manjeg broja dana. Ako se utvrdi da u pogledu kontroliranog vozila ne postoji dokaz o valjanom osiguranju, podaci se čuvaju dok se ne dovrše odgovarajući upravni ili sudski postupci i dok vozilo ne bude obuhvaćeno važećom policom osiguranja.

[35] Više o specifičnostima postupka nesolventnosti društava za osiguranje: Jelena Lepetić, „Poseban režim stečaja društava za osiguranje", Tokovi osiguranja, br. 3/2024, str. 595-613.

[36] U tome dijelu novela ZOOP u hrvatsko nacionalno pravo prenosi odredbe Direktive iz 2021. kojima se u Šestu direktivu umeću novi, sadržajno vrlo opsežni članci 10.a. (Zaštita oštećenih osoba u pogledu štete nastale kao posljedica nezgoda koje su se dogodile u njihovoj državi članici boravišta u slučaju nesolventnosti društva za osiguranje, v. čl.1. t. 8. Direktive iz 2021.) i 25.a (Zaštita oštećenih osoba u pogledu štete nastale kao posljedica nezgoda koje su se dogodile u državi članici koja nije njihova država članica boravišta u slučaju nesolventnosti društva za osiguranje, v. čl. 1. t. 18. Direktive iz 2021).

[37] Čl. 31. noveliranog ZOOP. ZOOP je i prije novele iz 2023. u čl. 31. uređivao pitanje naknade štete u slučaju nastanka razloga za prestanak društva za osiguranje odnosno stečaja, ali je nakon novele ta materija, kao i na razini Europske unije, znatno preciznije uređena.

[38] Čl. 61.a noveliranog ZOOP. Riječ je o potpuno novom članku koji nije postojao u ZOOP prije novele iz 2023.

uredu za osiguranje, i to od trenutka kada je nad osigurateljem koji je u obvezi isplatiti naknadu štete otvoren:

- stečajni postupak (rješenjem nadležnost suda koje se objavljuje u Narodnim novinama, Službenom listu Republike Hrvatske), odnosno
- postupak likvidacije (rješenjem Hrvatske agencije za nadzor financijskih usluga kao nadzornog nacionalnog tijela, a koje se također objavljuje u Narodnim novinama, Službenom listu Republike Hrvatske).

Dodatno, i bez obzira na javnu objavu odluka o pokretanju stečajnog, odnosno likvidacijskog postupka, Hrvatski ured za osiguranje o tome obavještava sva ekvivalentna tijela u drugim državama članicama, koja su u ovakvim situacijama ovlaštena i obvezna na naknadu štete oštećenim osobama.

O primitku odštetnog zahtjeva Hrvatski ured za osiguranje odmah obavještava osiguratelja koji je u stečajnom postupku ili postupku likvidacije, njegovog stečajnog upravitelja ili likvidatora. Tijekom cijelog postupka ovlašten je i dužan surađivati s tijelima koja su osnovana ili ovlaštena za naknadu štete oštećenim osobama u slučajevima otvaranja stečaja ili likvidacije, kao i sa samim osigurateljem u pogledu kojega je otvoren neki od tih postupaka, sve s ciljem da se što efikasnije odluči o osnovanosti odštetnog zahtjeva. I tijela u navedenim postupcima moraju surađivati s Hrvatski uredom za osiguranje.[39]

U vezi s odštetnim zahtjevom, a u roku od tri mjeseca od njegova zaprimanja, Hrvatski ured za osiguranje mora oštećenoj osobi dostaviti:

- obrazloženu ponudu za naknadu štete (ako utvrdi da postoji njegova obveza zbog okolnosti otvaranja stečajnog ili likvidacijskog postupka nad osigurateljem automobilske odgovornosti štetnika, da odštetni zahtjev nije osporen i da je visina štete djelomično ili u potpunosti procijenjena), odnosno
- utemeljen odgovor na pojedine točke odštetnog zahtjeva (ako utvrdi da ne postoji njegova obveza zbog nepostojanja opisanih okolnosti otvaranja stečajnog odnosno likvidacijskog postupka, ako je odgovornost sporna ili nije jasno utvrđena ili pak visina štete nije u potpunosti procijenjena).[40]

[39] Hrvatski ured za osiguranje ima pravo na nadoknadu isplaćenog iznosa naknade štete, kamata i troškova od osobe koje su odgovorne za prometnu nesreću, od drugih osiguravatelja ili tijela za socijalno osiguranje koji su dužni nadoknaditi štetu oštećenoj osobi u vez s istom prometnom nesrećom. Ako do isplate dođe tijekom provođenja likvidacijskog postupka ima pravo na naknadu od osiguratelja nad kojim se provodi taj postupak. U slučaju stečaja nad osigurateljem, Hrvatski ured za osiguranje ima pravo na naknadu tih iznosa iz stečajne mase.

[40] U obrazloženoj ponudi odnosno utemeljenom prigovoru Hrvatski ured za osiguranje mora uputiti oštećenu osobu na mogućnost podnošenja prigovora Hrvatskom uredu na danu odluku. Ako prigovor bude podnesen, Hrvatski ured za osiguranje dužen je odgovoriti u roku od 30 dana od njegovog zaprimanja. Također, mora upoznati oštećenu osobu i s mogućnošću izvansudskog rješavanja spora i s pravom na podnošenje tužbe.

Ako Hrvatski ured za osiguranje utvrdi postojanje svoje obveze na naknadu štete, ona se mora provesti bez odgode, a najkasnije u roku od tri mjeseca od kada oštećena osoba pisano prihvati obrazloženu ponudu.[41]

U pogledu situacije opisane pod b), novelirani ZOOP propisuje da, od trenutka kada se nad osiguratelјem koji je u obvezi nadoknaditi tu štetu počne provoditi stečajni postupak ili postupak likvidacije prema propisima njegove matične države članice, oštećena osoba s prebivalištem u Republici Hrvatskoj može podnijeti odštetni zahtjev Hrvatskom uredu za osiguranje O zaprimanju odštetnog zahtjeva Hrvatski ured za osiguranje obavještava ekvivalentno tijelo u matičnoj državi članici osiguratelja nad kojim se provodi stečajni ili likvidacijski postupak, samog osiguratelja i njegovog stečajnog upravitelja/likvidatora.

S obzirom da je moguće da isti odštetni zahtjev bude podnesen i Hrvatskom uredu za osiguranje, ali i osiguratelju nad kojim je otvoren stečajni ili likvidacijski postupak, taj osiguratelj, njegov stečajni upravitelj ili likvidator moraju obavijestiti Hrvatski ured za osiguranje o zaprimanju tog zahtjeva i o odluci u povodu tog zahtjeva (prihvaćanje i posljedična isplata naknade štete ili odbijanje zahtjeva). S druge strane, i Hrvatski ured za osiguranje mora u cijelom postupku aktivno surađivati, osobito u pogledu razmjene informacija, sa svim nadležnim tijelima koja sudjeluju u postupku likvidacije, odnosno stečaja osiguratelja u drugoj državi članici, a i sa samim osiguratelјem.

Prava i obveze Hrvatskog ureda za osiguranje u mnogim elementima propisani su analogno situaciji opisanoj pod a), dakle analogno situaciji kada je stečajni postupak, odnosno postupak likvidacije otvoren nad osiguratelјem sa sjedištem u Republici Hrvatskoj. To osobito vrijedi u pogledu istovjetnih rokova za donošenje odluke i eventualnu isplatu po odštetnom zahtjevu, informiranju oštećene osobe o podnošenju prigovora Hrvatskom uredu za osiguranje, informiranje oštećenih osoba o mogućnostima izvansudskog i sudskog rješavanja spora, prava Hrvatskog ureda za osiguranje na nadoknadu isplaćenog iznosa od osoba odgovornih za prometnu nesreću, drugih osiguratelja ili tijela za socijalno osiguranje koji su dužni nadoknaditi štetu oštećenoj osobi u vez s istom prometnom nesrećom itd.

[41] U istom roku Hrvatski ured mora isplatiti i nesporni dio štete, u slučaju kada utvrdi da postoji njegova obaveza naknade štete ali je sporna samo visina tražene naknade štete. Nakon isplate, Hrvatski ured za osiguranje ima pravo na naknadu isplaćenog iznosa naknade štete, kamata i troškova od osobe ili osoba koje su odgovorne za prometnu nesreću i drugih osiguravatelja ili tijela za socijalno osiguranje koji su dužni nadoknaditi štetu oštećenoj osobi u vezi s istom prometnom nesrećom. Ako je isplata izvršena tijekom likvidacijskog postupka, on ima pravo na naknadu od osiguratelja nad kojim se taj postupak provodi i to do isplaćenog iznosa štete, kamata i troškova. Ako je nad osiguratelјem otvoren stečaj, Hrvatski ured za osiguranje ima pravo na naknadu isplaćenog iznosa iz stečajne mase. Nakon što je izvršio isplatu, a još nije zaprimio nadoknadu, na Hrvatski ured za osiguranje prelaze sva prava oštećene osobe prema štetniku i njegovom odgovornom osiguratelju. No, prava oštećene osobe prema ugovaratelju osiguranja ili drugoj osiguranoj osobi koja je prouzročila nesreću ne prenose se na Hrvatski ured za osiguranje, ako bi odgovornost ugovaratelja osiguranja ili osigurane osobe pokrio odgovorni osiguratelj u skladu s propisima koji se primjenjuju na postupak stečaja ili likvidacije društva za osiguranje.

Specifičnost situacije pod b) je u tome što, nakon što isplati naknadu štete, Hrvatski ured za osiguranje ima pravo od ekvivalentnog tijela (ureda druge države članice u kojoj je sjedište insolventnog osiguratelja) zahtijevati potpunu nadoknadu isplaćenog iznosa.[42]

1.1. Osiguranje od odgovornosti za štetu prouzročenu upotrebom automatiziranog vozila

Vrlo dinamičan tehnološki napredak, koji je doveo do pojave automatiziranih vozila u prometu, otvara brojna pitanja kao što su ona iz domena prometne sigurnosti, razvitka prometne infrastrukture prilagođene takvim vozilima, interakcije između automatiziranih i neautomatiziranih vozila, ekonomske isplativosti, etike itd. Naravno, neminovno je da uvođenje takve tehnologije, koja djelomično ili u cijelosti isključuje potrebu za vozačem kao osobom koja je do sada bila ključna u kontekstu upotrebe vozila, donosi i brojne pravne izazove. O njima se kontinuirano raspravlja (i) u stručnoj javnosti.[43] Pritom treba imati u vidu činjenicu da se upotreba čak i potpuno automatiziranih (autonomnih) vozila počinje funkcionalno mijenjati. Takva vozila nisu više u upotrebi isključivo u testnoj fazi – javljaju se i prvi slučajevi ponude usluga prijevoza autonomnim vozilima u svakodnevnom prometu.[44]

Sustavna analiza svih pravnih pitanja koja se vežu uz upotrebu automatiziranih vozila prelazi okvire ovoga rada i svrhu koja se njime želi postići.[45]

U ovome poglavlju analizirat će se sadržaj onog dijela noveliranog ZOOP koji se odnosi na osiguranje od odgovornosti u slučaju kada je šteta prouzročena

[42] Ekvivalentno tijelo mora izvršiti nadoknadu Hrvatskom uredu za osiguranje u razumnom roku nakon zaprimanja zahtjeva za nadoknadu, ali najduže šest mjeseci, osim ako su se ta tijela drukčije dogovorila u pisanom obliku. Nakon što ekvivalentno tijelo isplati nadoknadu Hrvatskom društvu za osiguranje, na to tijelo prelaze sva prava oštećene osobe prema osobi koja je prouzročila nesreću ili njezinom društvu za osiguranje, osim prema ugovaratelju osiguranja ili drugoj osiguranoj osobi koja je prouzročila nesreću, ako bi odgovornost ugovaratelja osiguranja ili osigurane osobe pokrilo nesolventno društvo za osiguranje u skladu s primjenjivim nacionalnim pravom. Valja dodati da bi istovjetnu obavezu imao i Hrvatski ured za osiguranje u situaciji kada bi stečaj/likvidacija bili otvoreni nad osiguriteljem štetnikove automobilske odgovornosti sa sjedištem u Republici Hrvatskoj, a nadoknadu bi pod opisanim pretpostavkama tražilo ekvivalentno tijelo iz druge države članice.

[43] Mihael Mudrić, „Polu-automatizirana motorna vozila i predstojeća regulacija (1. dio)", https://www.bug.hr/zakonodavstvo/polu-automatizirana-motorna-vozila-i-predstojeca-regulacija-1-dio-37727, pristupljeno 1.7.2024.

[44] „Povijesni trenutak za robotaksije: Waymo usluge, nakon testne faze, sada dostupne svima", https://www.bug.hr/transport/povijesni-trenutak-za-robotaksije-waymo-usluge-nakon-testne-faze-sada-41845, pristupljeno 1.7.2024.

[45] Za detaljnu analizu svih pravnih aspekata upotrebe automatiziranih, uključivo i autonomnih vozila u svim granama transporta, v. Kyriaki Noussia, Matthew Channon (ed.), The Regulation of Automated and Autonomous Transport, Springer Nature Switzerland AG, Chaim, 2023.

automatiziranim vozilom.[46] Pritom valja naglasiti da Direktiva iz 2021. nema posebnih odredaba koje bi se odnosile na osiguranje od odgovornosti za štetu nastalu upotrebom automatiziranih vozila.[47] Stoga se može zaključiti da, za sada, europski zakonodavac smatra da se odredbe Šeste direktive mogu primijeniti i na automatizirana vozila, jednako kao i na ona „tradicionalna". [48]

Međutim, u recitalu 39 preambule Direktive iz 2021. navedeno je da bi Komisija trebala pratiti i preispitivati sadržaj Šeste direktive s obzirom na tehnološki razvoj, uključujući povećanu upotrebu autonomnih i poluautonomnnih vozila. Taj recital je „pretočen" u obvezujuću odredbu novoga čl. 28.c st. 2. t. (a) Šeste direktive. U toj odredbi sadržana je obaveza Komisije da najkasnije do 24.12.2030. podnese izvješće Europskom parlamentu, Vijeću i Europskom gospodarskom i socijalnom odboru, u kojem mora evaluirati provedbu Šeste direktive, među ostalim i u pogledu njene primjene u kontekstu tehnološkog razvoja, posebno s obzirom na autonomna i poluatonomna vozila. Prema potrebi, Komisija tom izvješću mora priložiti i zakonodavni prijedlog. Zbog toga se može reći da je Direktiva iz 2021. dala ovlast, ali i obavezu Komisiji da u budućnosti inicira daljnje postupke izmjene Šeste direktive, ako bi se utvrdilo da je to nužno radi poboljšanja razine zaštite osoba oštećenih upotrebom spomenutih vrsta vozila, kao i samih osiguranika (vlasnika, odnosno korisnika takvih vozila).

Sukladno navedenome, posljednje izmjene i dopune ZOOP, u pogledu odredaba koje se odnose na osiguranje od odgovornosti za štetu prouzročenu automatiziranim vozilima, nisu posljedica usklađivanja s Direktivom iz 2021. One su iskaz potrebe prakse, ali i činjenice da su u Republici Hrvatskoj doneseni, ili su

[46] Iz sadržaja tih odredaba moglo bi se zaključiti da su one koncipirane, u određenoj mjeri, po uzoru na neka komparativna nacionalna pravna rješenja. Komparativan prikaz legislativnog uređenja vožnje automatiziranim vozilima velikog broja zemalja (ali i na razini međunarodnih te EU izvora prava) dostupan je na https://www.connectedautomateddriving.eu/regulation-and-policies/national-level/ , pristupljeno 1.7.2024. Za znanstveni sustavan prikaz uređenja u njemačkom pravu, kao jednom od prvih pravnih sustava koji je sustavno uredio vožnju vozilima visokih razina automatizacije, uključujući i pitanje osiguranja od odgovornosti, v. Martin Ebes, „Civil Liability for Autonomous Vehicles in Germany", https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4027594, pristupljeno 1.7.2024.

[47] Međutim, pitanje odgovornosti za štetu nastalu upotrebom automatiziranih vozila, kao i pitanje osiguranja od te odgovornosti, već je dugi niz godina predmet zanimanja na razini prava i politike EU, još od vrlo opsežne studije Europskog parlamenta na tu temu „A common EU approach to liability rules and insurance for connected and autonomous vehicles", https://www.europarl.europa.eu/RegData/etudes/STUD/2018/615635/EPRS_STU(2018)615635_EN.pdf, pristupljeno 1.7.2024. No, treba imati na umu da je i danas uređenje pitanja odgovornosti za štetu prouzročenu motornim vozilom još uvijek u nadležnosti država članica, dok je pitanje osiguranja te odgovornosti u nadležnosti Europske unije. No, države članice pri normiranju odgovornosti za štetu prouzročenu motornim vozilom ne smiju ugroziti efikasnost europskih direktiva o osiguranju od te odgovornosti.

[48] U tom kontekstu bi se moglo reći da je europski zakonodavac bio suglasan s istovjetnim stajalištem koje je tijekom savjetovanja sa zainteresiranom javnošću u postupku kreiranja teksta prijedloga Direktive iz 2021. izrazio Insurance Europe (federacija europskih osiguratelja), v. https://www.insuranceeurope.eu/news/302/motor-insurance-directive-fit-for-purpose-for-connected-and-automated-vehicles/, pristupljeno 1.7.2024.

u postupku donošenja, neki drugi propisi kojima se uređuje upotreba tih vozila. Dakle, novelirani ZOOP u tom je dijelu dio općeg nacionalnog pravnog okvira vezanog uz spomenuta vozila, a koji nije potpuno definiran nego je u nastajanju.

Da bi se sadržaj i smisao novele ZOOP u dijelu koji se odnosi na automatizirana vozila mogao razumjeti, nužno je ukratko objasniti pojam automatiziranog vozila, kao i ukratko pojasniti koji su to utvrđeni stupnjevi automatizacije vozila (sve do stupnja potpuno automatiziranoga – autonomnog vozila), a koji su relevantni i za pravno uređenje svih aspekata upotrebe tih vozila.

Dakle, automatizirano vozilo je novelom ZOOP definirano kao vozilo kako je uređeno zakonom kojim se uređuje sigurnost prometa na cestama, a koje ispunjava uvjete iz definicije vozila u smislu samog ZOOP. Prema Zakonu o sigurnosti prometa na cestama, automatizirano vozilo je "vozilo koje koristi hardver i softver za kontinuiranu potpunu dinamičku kontrolu vozila (potpuno automatizirano vozilo bez upravljača)".[49]

Navedena definicija nije najjasnija. Čini se da Zakon o sigurnosti prometa na cestama pod pojmom kojeg naziva "automatizirano vozilo" podrazumijeva samo vozila s potpunim stupnjem automatizacije (potpuna automatizirana vozila, često zvana i autonomna vozila).

Automatizacija vozila nije jednoznačan pojam. Različita vozila mogu imati različite stupnjeve (razine) automatizacije. Za potrebe tehnologije, odnosno izrade takvih vozila, ali i za potrebe pravnog uređenja njihove upotrebe, s obzirom na kriterij razine automatizacije, danas je općeprihvaćena diferencijacija vozila kakvu je utvrdilo međunarodno Društvo automobilskih inženjera (*Society of Automotive Engineers*).[50] Prema toj diferencijaciji, postoji šest razina automatizacije u pojedinim vozilima s time da se započinje s tzv. nultom razinom a završava s petom.

Kod prve tri razine (razine 0-2) automatizacije smatra se da vozač ima obvezu i odgovornosti upravljati vozilom, bez obzira je li uključena neka od funkcija pomoći vozaču u vožnji (dakle, kod razina 0-2 ne postoje automatizirane funkcije nego postoje funkcije pomoći vozaču u vožnji). Vozač takvog vozila mora konstantno nadzirati rad tih sustava i mora upravljati vozilom, ubrzavati i kočiti, kako bi zadržao sigurnost vožnje. Detaljnije, riječ je o sljedećim funkcijama pomoći pri vožnji, po pojedinim razinama:

Razina 0: Funkcije pomoći vozaču u vožnji ograničene su na upozorenja i trenutačnu pomoć (primjerice, automatsko kočenje u nuždi, upozorenje na tzv. „mrtvi kut" ili upozorenje zbog prelaska u drugu prometnu traku).

Razina 1: Funkcije pomoći vozaču omogućuju ubrzavanje prilikom upravljanja *ili* kočenja (npr. adaptivni tempomat *ili* održavanje vozila u sredini prometne trake tijekom vožnje):

[49] Zakon o sigurnosti prometa na cestama, Narodne novine, Službeni list Republike Hrvatske, br. 67/08, 48/10, 74/11, 80/13, 158/13, 92/14, 64/15, 108/17, 70/19, 42/20, 85/22, 114/22, 133/23, čl. 2. st. 1. t. 107.

[50] Diferencijaciju Društva automobilskih inženjera prihvatila je i Međunarodna organizacija za standardizaciju (ISO) pa ona danas službeno predstavlja ISO/SAE standard.

Razina 2: Funkcije pomoći vozaču omogućuju ubrzavanje prilikom upravljanja *i* kočenja (npr. istovremena upotreba adaptivnog tempomata *i* funkcije održavanja vozila u sredini prometne trake tijekom vožnje).

Vozila koja se mogu svrstati u neku od narednih, viših razina (razine 3-5) imaju automatizirane funkcije. Kod tih razina smatra se da vozač ne vozi, odnosno ne upravlja vozilom u razdoblju kada su uključene automatizirane funkcije, i to bez obzira nalazi li se vozač na „vozačkom sjedalu" ili ne. Međutim, kao svojevrsni izuzetak valja spomenuti da kod razine 3 vozač mora preuzeti upravljanje vozilom kada to od njega zahtijeva samo vozilo, odnosno automatizirana funkcija u vozilu, ili kada razumnom pažnjom može uočiti da je nužno da preuzme upravljanje. Kod razina 4 i 5 sustav u vozilu nikada ne zahtijeva od vozača da preuzme upravljanje vozilom.

Detaljnije, riječ je o sljedećim karakteristikama automatiziranih funkcija po razinama:

Razine 3 i 4: vožnja, odnosno upravljanje vozilom u cijelosti se ostvaruje automatiziranim funkcijama (bez potrebe bilo kakvog vozačevog upravljanja), ali samo u ograničenim situacijama, odnosno okolnostima odvijanja prometa. Automatizirana vožnja kod ovih razina nije moguća ako nisu ispunjeni svi nužni preduvjeti. Primjerice, kod razine 3 moguća je potpuno automatizirana vožnja kada se vozi u koloni na cesti. Kod razine 4 kao primjer može poslužiti potpuno automatizirana (autonomna) vožnja na geografski točno određenom području, što može biti slučaj kod pružanja geografski ograničene usluge taksi prijevoza. Vozila razine 4 mogu, ali i ne moraju imati ugrađene „papučice" („pedale") ni upravljač.

Razina 5: Kod vozila ove razine automatizacije, potpuno automatizirana (autonomna) vožnja moguća je u svim uvjetima, dakle bez geografskih ili bilo kakvih drugih ograničenja. Kao i kod razine 4, vozila ne moraju imati ugrađene papučice (pedale) ni upravljač.[51]

Može se, u kontekstu osiguranja od automobilske odgovornosti i primjene odredaba noveliranog ZOOP, postaviti pitanje u kojim slučajevima će se smatrati da je šteta prouzročena automatiziranim vozilom. Odgovor bi bio da je riječ o šteti prouzročenoj automatiziranim vozilom onda kada je štetni događaj nastao u razdoblju upotrebe takvog vozila u kojem vozač nije upravljao takvim vozilom (razina 5 automatizacije, kao i razina 4, uz pretpostavku poštivanja ograničenja u pogledu primjena automatiziranih funkcija vezanih uz ovu razinu), niti je bio obavezan upravljati takvim vozilom (vozilo razine automatizacije 3, ako sustav u takvom vozilu nije zahtijevao da vozač preuzme upravljanje, i to dovoljno prije nastanka štetnog događaja kako bi vozač imao razumno dovoljno vremena preuzeti upravljanje, a niti je vozač razumno mogao uočiti potrebu da preuzme upravljanje).

Novelirani ZOOP stoji na načelu da se njegove odredbe koje se odnose na vlasnika, odnosno („klasičnog") vozila primjenjuju i na vlasnika, odnosno korisnika

[51] https://www.sae.org/blog/sae-j3016-update, pristupljeno 1.7.2024.

automatiziranog vozila, osim ako sam taj propis na posebnim mjestima ne propisuje nešto drugo.[52]

Međutim, zbog specifičnih pitanja koja se javljaju samo u pogledu nastanka štetnog događaja upotrebom automatiziranog vozila, jasno je bilo da pitanje osiguranja od odgovornosti za štetu pri upotrebi takvog vozila ne može biti adekvatno uređeno pukim pozivanjem na analognu primjenu uređenja koje vrijedi za „klasična" vozila. Nužno je bilo tu načelnu odredbu nadopuniti dodatnim, posebnim odredbama, primjenjivima isključivo u pogledu automatskih vozila.

Jedno od tih pitanja je obveza sklapanja ugovora o osiguranju od automobilske odgovornosti, uzimajući u obzir specifičnosti u pogledu osoba koje mogu biti odgovorne za sigurnost pri upotrebi takvih vozila u prometu.

Novelirani ZOOP propisuje da je vlasnik automatiziranog vozila dužan sklopiti ugovor o obveznom osiguranju od automobilske odgovornosti, a navedeno osiguranje uključuje i odštetnu odgovornost sigurnosnog operatera tog vozila i sigurnosnog vozača u testnoj fazi.[53] Sigurnosni operater je osoba izvan automatiziranog vozila kojeg prati telekomunikacijskom vezom te je dužan odobriti ili odabrati alternativni vozački manevar. Sigurnosni vozač je osoba unutar automatiziranog vozila koja je odgovorna za njegov nadzor tijekom testiranja i u mogućnosti je preuzeti dinamičku kontrolu.[54]

[52] Čl. 2 st. 4. noveliranog ZOOP.

[53] ČL. 4. st. 6. noveliranog ZOOP. U hrvatskom pravu nema specijalnog propisa kojima se utvrđuje pravni temelj odgovornosti sigurnosnog operatera, odnosno sigurnosnog vozača. Čini se da bi se njihova odgovornost, bar u ovome trenutku, trebala prosuđivati prema odredbama propisa o odgovornosti vlasnika/odnosno korisnika motornog vozila, dakle sukladno Zakonu o obveznim odnosima, Narodne novine, Službeni list Republike Hrvatske, br. 35/05, 41/08, 125/11, 78/15, 29/18, 126/21, 114/22, 156/22, 155/23., prvenstveno čl. 1069.-1072. Iako pitanje uređenja same odgovornosti za štetu prouzročenu automatiziranim vozilom prelazi okvire teme ovoga rada, možda bi valjalo razmotriti da se sigurnosnog operatera smatra svojevrsnim „vanjskim vozačem" automatiziranog vozila. Inače, istovjetna obveza vlasnika, odnosno korisnika automatiziranog vozila postoji i u pogledu obveznog osiguranja putnika u javnom prijevozu. Naime, u Republici Hrvatskoj je upravo u tijeku postupak izmjena i dopuna Zakona o prijevozu u cestovnom prometu (ZPCP), koji normira mogućnost i pretpostavke za obavljanje javnog prijevoza putnika automatiziranim vozilima. Očito je da su tvorci novele ZOOP, u vrijeme kreiranja njegovog teksta, imali na umu i činjenicu postupka predstojećih izmjena i dopuna ZPCP pa su anticipirali potrebu usklađivanja ta dva propisa i u pogledu budućeg vremena. Prijedlog izmjena i dopuna ZPCP nedavno je, „prošao prvo čitanje" u Hrvatskom saboru, a eventualno usvajanje uslijedit će nakon drugog čitanja v. https://www.sabor.hr/prijedlog-zakona-o-izmjenama-i-dopunama-zakona-o-prijevozu-u-cestovnom--prometu-prvo-citanje-pze-0?t=146878&tid=212707, pristupljeno 1.7.2024.

[54] Definicije tih osoba sadržane su u čl. 3. t. 29. i 30. ZOOP. Definicije sadržava i Prijedlog Zakona o izmjenama i dopunama ZPCP (novopredložene točke 49.a i 49.b u čl. 4. st. 1.), ibidem. Osigurateljnim pokrićem pokrivene su i štete prouzročene radnjama osoba koje su neovlašteno, dakle bez suglasnosti vlasnika, obavljale funkciju sigurnosnog operatera, odnosno sigurnosnog vozača automatiziranog vozila, a osiguratelj će od tih osoba imati pravo tražiti nadoknadu cjelokupnog isplaćenog iznosa naknade štete. To je izričito propisano odredbama čl. 25. st. 4. i 5. noveliranog ZOOP. Konačno, osigurateljno pokriće obuhvaća i slučajeve kada je šteta prouzročena ukradenim automatiziranim vozilom (čl. 25 st. 3. noveliranog ZOOP).

Vezano uz navedeno, postavlja se i pitanje provjerljivosti ispunjenja ove obveze, odnosno obveze da se u vozilu nalazi polica ili drugi dokaz o sklopljenom ugovoru o automobilskoj odgovornosti. U pogledu "klasičnih" vozila to je obveza vozača koji takav dokaz mora predočiti službenoj osobi na njen zahtjev, ali se postavlja pitanje na koji način provjeriti postojanje osiguranja kod automatskih vozila kod kojih postoji mogućnost da vozača nema u vozilu. Novelirani ZOOP propisuje da provjeru postojanja osiguranja u pogledu automatiziranih vozila obavlja službena osoba provjerom u informatičkom sustavu. U slučaju prometne nesreće, vlasnik automatiziranog vozila dužan je, osobne podatke i podatke o obveznom automobilskom osiguranju te relevantne podatke o vožnji koje bilježi automatizirano vozilo dati svim sudionicima prometne nesreće, koji na osnovi tih osiguranja imaju pravo podnositi odštetne zahtjeve. Najdulji rok za ispunjenje te obveze je tri dana od dana kada se prometna nesreća dogodila. Sve te podatke vlasnik automatiziranog vozila dužan je dati i na zahtjev odgovornog osiguratelja za potrebe rješavanja odštetnog zahtjeva, kao i na zahtjev tijela ovlaštenog za nadzor u prometu, pravosudnih tijela te drugih tijela koja vode postupak u povodu prometne nesreće, a vezano za izvršenje njihovih prava i obveza utvrđenih odredbama ZOOP.[55]

Posebno bi valjalo razmotriti odredbu noveliranog ZOOP vezanoj uz odredbu st. 1. čl. 23. u kojoj se propisuju slučajevi kada osiguratelj nije u obvezi isplatiti naknadu štete po osnovi osiguranja od automobilske odgovornosti. Jedan od tih slučajeva je naknada štete koju pretrpi vozač vozila kojim je prouzročena šteta te njegovi srodnici i druge fizičke ili pravne osobe, a u pogledu štete zbog smrti ili tjelesne ozljede vozača.

Naime, u st. 2. čl. 23. noveliranog ZOOP propisano je da se odredbe st. 1. toga članka primjenjuju i na vlasnika, odnosno putnika u automatiziranom vozilu. U pogledu opisanog specifičnog slučaja izuzetka vezanog uz štetu koju trpi vozač, problem nije ako je riječ o automatiziranom vozilu razine 4 i 5 jer kod takvih vozila nema, odnosno neće biti vozača. Međutim, nejasnoća može nastati u pogledu automatiziranog vozila razine 3 kod kojeg vozač može biti u vozilu i mora preuzeti vožnju, ali samo ako to od njega zahtijeva automatizirani sustav toga vozila ili kada je razumno (upotrebom pažnje prosječnog vozača) mogao zaključiti da je potrebno preuzeti upravljanje.. Ako do nesreće i posljedične štete koju trpi vozač (i/ili njegovi srodnici te druge osobe) zbog tjelesne ozljede, odnosno smrti vozača dođe za vrijeme

[55] Čl. 6., st. 3. i 4. noveliranog ZOOP. U st. 5. istog članka propisana je i obveza proizvođača automatiziranog vozila da dostavi relevantne podatke i informacije potrebne za rješavanje odštetnog zahtjeva, na zahtjev vlasnika tog vozila, osiguratelja, oštećene osobe, tijela ovlaštenog za nadzor u prometu, pravosudnih tijela te drugih tijela koja vode postupak u povodu prometne nesreće. Inače, u slučaju kada je u nesreći sudjelovalo automatizirano vozilu, obvezu razmjene osobnih podataka i podataka o vozilu između vlasnika automatiziranog vozila i sudionika u nesreći propisuje odredba čl. 38. st. 4. noveliranog ZOOP. U tom kontekstu se obaveza svakodobnog držanja Europskog izvješća o nezgodi u vozilu ne odnosi na automatizirana vozila.

dok taj vozač nije upravljao vozilom, niti je od njega sustav prethodno zahtijeva da preuzme upravljanje, a nije bilo razloga da on sam utvrdi potrebu preuzimanja upravljanja, postavlja se pitanje opravdanosti opisanog isključenja iz osigurateljnog pokrića. Naime, u opisanim okolnostima vozačeva pozicija je vrlo bliska poziciji putnika. Naravno, ovo rješenje noveliranog ZOOP ima opravdanje ako se pod automatiziranim vozilom podrazumijeva samo potpuno automatizirano vozilo (razina 5 i, ako su ispunjene određene pretpostavke, razina 4 automatizacije). No, to bi značilo da je ostala "praznina" u pogledu njegove primjene na vozila razine automatizacije 3 kod kojih vozač u vozilu postoji kako bi mogao, kada se to od njega zahtijeva ili kad uoči potrebu za tim, preuzeti upravljanje.[56] Jedino logično tumačenje ove odredbe je da se, u kontekstu osigurateljnog pokrića i (ne) isključenja obveze osiguratelja, ne pravi razlika između razina automatizacije. Štete zbog smrti i tjelesne ozljede vozača treba isključiti iz osigurateljnog pokrića onda kada je u trenutku štetnog događaja vozač doista upravljao vozilom, ili je bio dužan njime upravljati. Ako ta pretpostavka nije ispunjena, vozača automatiziranog vozila trebalo bi smatrati putnikom i, ako ne postoji neki drugi razlog za isključenje, trebalo bi i navedene štete uključiti u osigurateljno pokriće.[57]

Uz automatizirana vozila vežu se specifični mogući uzroci štetnog događaja i posljedične štete. Riječ je o uzrocima vezanima uz obilježja softvera takvog vozila i njegovog instaliranja, odnosno ažuriranja. Novelirani ZOOP uređuje i pitanje osigurateljnog pokrića kod takvih uzroka štete.

Osigurateljnim pokrićem obuhvaćene su:

a) štete koje su prouzročene neovlaštenim ili nepravilnim softverom za kontinuiranu potpunu dinamičku kontrolu automatiziranog vozila i
b) štete koje su prouzročene neovlašteno ili nepravilno izmijenjenim softverom za kontinuiranu potpunu dinamičku kontrolu automatiziranog vozila.

[56] Dodajmo ovome da Provedbena uredba Komisije (EU) 2022/1426 od 5. kolovoza 2022. o utvrđivanju pravila za primjenu Uredbe (EU) 2019/2144 Europskog parlamenta i Vijeća u pogledu jedinstvenih postupaka i tehničkih specifikacija za homologaciju tipa sustava za automatiziranu vožnju (ADS) potpuno automatiziranih vozila, Službeni list Europske unije L 221 od 26.8.2022. pod pojmom „potpuno automatiziranog vozila" podrazumijeva vozila s dvostrukim načinom rada, konstruirana i izrađena za prijevoz putnika ili prijevoz robe na unaprijed određenom području. Vozila s dvostrukim načinom rada su u toj Uredbi definirana kao potpuno automatizirana vozila sa sjedalom za vozača projektirana i konstruirana sa sljedećim načinima rada: (a) „ručna vožnja", koju obavlja vozač; i (b) „potpuno automatizirana vožnja", koju obavlja sustav za automatiziranu vožnju bez nadzora vozača, čl. 1. t. a) i čl. 2. t. 34 Uredbe. Dakle, ova Uredba u pojam potpuno automatiziranih vozila uključuje i vozila koja bi pripadala razini 3 (ona imaju mogućnost dvostrukog načina rada).

[57] U pogledu gubitka prava na osiguranje, prema st. 6. čl. 24. noveliranog ZOOP, sve okolnosti zbog kojih će osigurana osoba izgubiti osigurateljno pokriće vrijede jednako i u pogledu „klasičnog" kao i u pogledu automatiziranog vozila. Za razliku od slučajeva isključenja iz osiguranja, kod nekog od slučajeva koji imaju za posljedicu gubitak osiguranikovog prava na osigurateljno pokriće, oštećenoj osobi će osiguratelj, ako su za to ispunjene potrebne pretpostavke, naknaditi štetu. No, u daljnjem koraku osiguratelj će imati pravo potpune ili djelomične nadoknade isplaćenog iznosa od osobe odgovorne za štetu.

U slučaju pod a) riječ je o softveru koji nije odobren od strane proizvođača automatiziranog vozila ili nije verzija čiju upotrebu preporuča proizvođač automatiziranog vozila. U slučaju pod b) riječ je o softveru (moguće i pravilnim) koji je primijenjen protivno uputama proizvođača automatiziranog vozila ili od strane osobe koja nije proizvođač automatiziranog vozila ili osoba koju je on za to ovlastio.

Ako osiguratelj dokaže da je uzrok štetnog događaja i posljedične štete neki od slučajeva navedenih pod a) ili b), imat će pravo na povrat cjelokupnog isplaćenog iznosa od strane osobe koja je odgovorna za štetu (od osobe koja je primijenila neovlašten ili nepravilan softver, odnosno od osobe koja je primijenila softver protivno uputama proizvođača, odnosno koja nije ovlaštena za primjenu softvera)[58]

Novelirani ZOOP ne tretira posebno situacije kada je vlasnik automatiziranog vozila ona osoba koja je primijenila neovlašten, odnosno nepravilan softver, odnosno kada je on osoba koja je primijenila softver suprotno uputama proizvođača vozila. Zbog toga valja smatrati da se opisana pravila primjenjuju i na njega. U suštini, tada bi se radilo o specifičnim slučajevima kada vlasnik motornog vozila gubi prava iz osiguranja.[59]

1.2. Slučajevi isključenja iz osigurateljnog pokrića i gubitka prava iz osiguranja

Novela ZOOP obuhvaća uvođenje jednog novog slučaja isključenja iz osigurateljnog pokrića i izmjene u pogledu normiranja jednog od ranije postojećih slučajeva.[60]

U tom smislu, novi slučaj isključenja iz osigurateljnog pokrića je situacija kada je šteta nastala od vozila koje u trenutku prometne nesreće nije bilo u funkciji prijevoznog sredstva, nego u industrijskoj, poljoprivrednoj ili nekoj drugoj funkciji. Ovo isključenje posljedica je uvođenja, odnosno definiranja pojma „upotreba vozila" u Direktivu iz 2021. i, posljedično, u samu novelu ZOOP.[61]

Izmjene u pogledu normiranja jednog od ranije postojećih slučajeva odnosi se na štetu nastalu u aktivnostima povezanim s motornim sportom (utrke, natjecanja, treniranje, testiranje, demonstracije na ograničenom i označenom području). Uz precizniji izričaj, koji slijedi Direktivu iz 2021., jasno je navedeno da su iz osigurateljnog pokrića isključeni samo vlasnik i vozač vozila koje sudjeluje u tim aktivnostima. Prije novele ZOOP, ovo isključenje vrijedilo je za sve potencijalne oštećene osobe.[62]

[58] Čl. 25. st. 4., 6., 7. i 8. noveliranog ZOOP.

[59] Slučajevi gubitka prava iz osiguranja normirani su u čl. 24. noveliranog ZOOP i analogno se primjenjuju na vlasnika automatiziranog vozila, sigurnosnog vozača i sigurnosnog operatera.

[60] Novelirani čl. 23. st. 1. t. 6. alineja treća i t. 7. ZOOP. Sva isključenja iz osigurateljnog pokrića, propisana čl. 23. noveliranog ZOOP, na odgovarajući način se primjenjuju na vlasnika automatiziranog vozila i putnika u automatiziranom vozilu, kako je propisano u st. 2. toga članka.

[61] Supra, poglavlje 1.1.

[62] Isključenje vezano za upotrebu vozila u aktivnostima vezanima s motornim sportom posljedica je izuzeća takve upotrebe općenito od primjene noveliranog ZOOP, pod uvjetom da je organizator te aktivnosti sklopio

Govoreći općenito o razlozima gubitka prava iz osiguranja, novelirani ZOOP u čl. 24., uz one od ranije postojeće, dodaje jedan potpuno novi slučaj koji ima za posljedicu da osiguranik gubi osigurateljno pokriće. Riječ je o situaciji kada vozač, nakon prometne nesreće u kojoj je nastala imovinska šteta, napusti mjesto te nesreće prije nego što je popunio Europsko izvješće o prometnoj nesreći ili na drugi način razmijenio osobne podatke i podatke o vozilima, ili prije nego što o nesreći u kojoj je netko izgubio život ili je ozlijeđen ne obavijesti ne obavijesti nadležna policijska tijela. Do gubitka prava iz osiguranja ipak neće doći ako je osigurana osoba privremeno napustila mjesto nesreće sukladno ZSPC (npr. ako je njoj samoj bila potrebna hitna medicinska pomoć u zdravstvenoj ustanovi, ili ako je osigurana osoba pomogla drugoj osobi pri odlasku u zdravstvenu ustanovu radi pružanja pomoći, odnosno ako se udaljila s ciljem da obavijesti policiju o nesreći). Riječ je, u suštini, o još jednoj sankciji za kršenje odredaba čl. 176. ZSPC. Naime, u navedenom članku ZSPC predviđena je i prekršajna sankcija za neopravdano napuštanje mjesta nesreće i nedavanje podataka, uključujući i nepopunjavanje Europskog izvješća o nesreći. Očito je da je zakonodavac smatrao da je ova (dodatna) sankcija gubitka osigurateljnog pokrića u slučaju protuzakonitog napuštanja mjesta nesreće proporcionalna zaštiti javnog interesa koji se sastoji u suzbijanju takvih događaja čiji broj nije zanemariv, nego upravo suprotno..[63]

Ovome valja dodati da novelirani ZOOP proširuje odranije propisani slučaj kada vozač gubi pravo iz osiguranja ako je upravljao vozilom pod utjecajem alkohola (iznad ugovorene razine), droga, psihoaktivnih lijekova ili drugih psihoaktivnih tvari, u smislu da on to pravo gubi i u situaciji ako se nakon nesreće odbio podvrgnuti ispitivanju alkoholiziranosti, prisustva droga, psihoaktivnih tvari i psihoaktivnih lijekova.[64] Treba skrenuti pažnju da, ni nakon novele ZOOP, nije dužnost vozača (koju mora izvršiti pod prijetnjom sankcije gubitka osigurateljnog pokrića) da samoinicijativno organizira ispitivanje prisustva navedenih supstanci u svojem organizmu, nego je njegova obaveza da se podvrgne tom ispitivanju kada netko drugi (policijski službenik na mjestu nesreće, odnosno zdravstvena ustanova po nalogu policije) to od njega zatraži.[65]

1.3. Postupak i način rješavanja odštetnih zahtjeva

Pitanje postupka i načina rješavanja odštetnih zahtjeva uvijek je (i) s pravne strane interesantno jer se u tom postupku oslikava razina efikasnosti ostvarenja

(inače dobrovoljno) osiguranje od svoje profesionalne odgovornosti priređivanja takvih aktivnosti (čl. 2. st. 5. noveliranog ZOOP). U širem smislu, određene štete su izvan osigurateljnog pokrića ustanovljenog kroz osiguranje od automobilske odgovornosti i zbog toga što za naknadu takvih šteta jamči Republika Hrvatska. To su štete koje su prouzročene prijevoznim sredstvima Oružanih snaga Republike Hrvatske i štete koje su nastale kao posljedica terorističkog čina upotrebom vozila (čl. 2 st. 3. noveliranog ZOOP).

[63] https://www.jutarnji.hr/autoklub/aktualno/tko-se-udalji-je-nadrapao-evo-zasto-bijeg-s-mjesta-nesrece-sad-vodi-ravno-u-bankrot-15429477, pristupljeno 1.7.2024.

[64] ČL. 24 st. 1. t. 4. noveliranog ZOOP.

[65] Čl. 181. ZSPC.

primarnog cilja koji se želi ostvariti propisima o osiguranju od automobilske odgovornosti – zaštita oštećenih osoba i osiguranika. Pritom, međutim, treba uzeti u obzir i činjenicu da je djelatnost osiguranja visoko uređena financijska djelatnost. Postupanje osiguratelja kod rješavanja odštetnih zahtjeva mora biti usuglašeno s propisima koji uređuju njihovo poslovanje općenito, kako bi ono bilo kontinuirano stabilno, odnosno održivo. Drugim riječima, postupak i način rješavanja odštetnih zahtjeva bi morao biti takav da, uzimajući u obzir sve primjenjive pravne propise (a ne samo ZOOP), ostvaruje najvišu moguću razinu zaštite oštećenih osoba i osiguranika. To načelo mora se poštovati kada je riječ o supstanci rješavanja odštetnog zahtjeva (odlučivanje o osnovanosti traženja iz zahtjeva, uključujući i visinu zatraženog iznosa naknade štete), ali i o samoj proceduri (rokovi, komunikacija s podnositeljem odštetnog zahtjeva, komunikacija s drugim fizičkim i pravnim osobama kada je to potrebno za rješavanje supstance rješavanja zahtjeva itd.).

Činjenica je da oštećene osobe, ali i druge osobe involvirane u postupak i načine naknade štete, primjerice automehaničarske, odnosno autoservisne radionice, nisu uvijek bile zadovoljne postupanjima osiguratelja u povodu odštetnih zahtjeva pa su i javno zagovarali promjenu regulative radi profesionalnijeg postupanja osiguratelja. Osiguratelji su, s druge strane, smatrali da su takvi prigovori u većem dijelu neutemeljeni, iako su također bili suglasni da se provedu zakonodavne izmjene kako bi se postupak odvijao efikasnije.[66]

To pitanje također je bilo na dnevnom redu najnovijih izmjena i dopuna ZOOP, preciznije noveliranja njegovog članka 12. Kao korak dalje, upravo posljednja novela ZOOP propisuje ovlast i dužnost nadzornom tijelu (Hrvatska agencija za financijske usluge – HANFA) da donese pravilnik kojim će detaljnije propisati način rješavanja odštetnog zahtjeva, sadržaj obrazložene ponude i utemeljenog odgovora, evidentiranja odštetnih zahtjeva te informiranje oštećene osobe o obvezama odgovornog osiguratelja i potrebnim podacima u postupku rješavanja odštetnog zahtjeva sukladno spomenutom članku 12. noveliranog ZOOP. HANFA je doista donijela takav propis.[67] U nastavku će se pitanje postupka i načina rješavanja odštetnih zahtjeva razmatrati uzimajući u obzir i tekst noveliranog čl. 12. ZOOP i tekst Pravilnika.

Što se tiče vrsta odluka koje osiguratelj može i donijeti u smislu očitovanja o podnesenom odštetnom zahtjevu, tu novelirani ZOOP ne donosi suštinske izmjene. Osiguratelj treba donijeti:

- obrazloženu ponudu za naknadu štete, kada odgovornost odgovornom osiguratelju nije sporna i kada je utvrdio visinu štete, ili
- utemeljen odgovor na sve točke iz odštetnog zahtjeva, kada je odgovornom osiguratelju sporna odgovornost ili kada visinu štete nije u potpunosti utvrdio.

[66] https://osiguranje.hr/ClanakDetalji.aspx?22185, pristupljeno 1.7.2024.

[67] Pravilnik o postupku rješavanja odštetnih zahtjeva oštećenih osoba u prometu, Narodne novine, Službeni list Republike Hrvatske, br. 79/2024 od 3.7.2024. u daljnjem tekstu: Pravilnik.

Nepromijenjen je i rok u kojem osiguratelj mora dostaviti podnositelju zahtjeva neku od navedenih odluka – najkasnije 60 dana od zaprimanja odštetnog zahtjeva. Odluka mora najmanje sadržavati razloge na temelju kojih je donesena i uputu o pravu na podnošenje prigovora protiv te odluke.[68] S obzirom da novelirani ZOOP određuje tek minimalne elemente koji moraju postojati kod obje odluke, Pravilnik je vrlo detaljno razradio minimalne elemente svake od ovih odluka, uz dodatnu diferencijaciju obveznih elemenata utemeljenog odgovora, posebno u slučajevima:

- kada je osiguratelj utvrdio da uopće nije odgovoran naknaditi štetu;
- kada je osiguratelj utvrdio da je odgovoran samo za dio naknade štete;
- kada je osiguratelj utvrdio da nije u mogućnosti u potpunosti utvrditi visinu štete.[69]

Analizom tih elemenata može se zaključiti da je sada općim propisom nadzornog tijela propisana obveza osiguratelja da dade detaljno obrazloženje zašto smatra da, kod utemeljenog odgovora (u cijelosti ili djelomično) nije odgovoran za nastalu štetu, pri čemu se mora detaljno očitovati o svakoj točki zahtjeva i priloga tom zahtjevu (npr. o svakoj točki nalaza i mišljenja neovisnog vještaka ili pružatelja usluge popravka kojeg je odabrala oštećena osoba). U pogledu utvrđivanja visine štete, osiguratelj mora u odluci (obrazloženoj ponudi ili utemeljenom odgovoru) specificirati tu štetu (dijelove za zamjenu, cijenu radnog sata itd.) i jasno te nedvosmisleno utvrditi kako je došao do iznosa visine štete. Sve to mora učiniti na jasan i nedvosmislen način koji će oštećenoj osobi biti lako razumljiv.

Prema tome, od osiguratelja se, u pogledu sadržaja spomenutih odluka, traži preciznost, argumentiranost, potpunost u očitovanju na sve elemente odštetnog zahtjeva (uključivo i priloge tom zahtjevu) kao i jasnoća, odnosno razumljivost u komuniciranju prema oštećenoj osobi.

Od osiguratelja se traži i pravovremenost. Osim dostavljanja odluke u roku od 60 dana od dana podnošenja odštetnog zahtjeva, novelom ZOOP preciziran je i rok u kojem osiguratelj mora izvršiti (potpunu ili djelomičnu) isplatu, kada donese obrazloženu ponudu, odnosno kada u utemeljenom odgovoru utvrdi da je odgovoran samo za dio naknade štete ii da nije u mogućnosti u potpunosti utvrditi visinu štete. Naime, osiguratelj u ovim slučajevima mora isplatiti naknadu štete (ili nesporni dio

[68] Čl. 12 st. 1. i 2. noveliranog ZOOP.

[69] Čl. 3 st. 1.-3. Pravilnika. U st. 5. propisano je i što bilo koja odluka ne smije sadržavati: navode koji su netočni, nejasni ili koji oštećenu osobu mogu dovesti u zabludu, kao što su navod o prekluzivnom karakteru roka za podnošenje prigovora na odluku o odštetnom zahtjevu, navod kojim se isplata (nespornog) iznosa naknade štete uvjetuje poduzimanjem nepotrebnih radnji od strane oštećene osobe (primjerice suglasnost za isplatu kada je takvu isplatu osiguratelj već na temelju ZOOP i Pravilnika obvezan izvršiti, potpisivanje sporazuma ili izjave o nagodbi ili namirenju, dostavljanje broja računa na koji se ima izvršiti isplata (ako je ona već ranije dana osiguratelju), navod osiguratelja da ne može utvrditi svoju odgovornost zbog nedostajuće izjave svojeg osiguranika itd.

te naknade) u roku od 15 dana od slanja neke od navedenih odluka, ali u svakom slučaju ne kasnije od 60 dana od dana podnošenja odštetnog zahtjeva.[70]

Novelirani ZOOP propisuje i obveze u pogledu postupanja osiguratelja u razdoblju nakon podnošenja odštetnog zahtjeva, a prije donošenja odluke u kojem se očituje o tom zahtjevu. Osiguratelj mora, po primitku odštetnog zahtjeva, bez odgode upoznati oštećenu osobu s njezinim pravima i obvezama, kao i s obvezama samog osiguratelja te aktivno i bez odugovlačenja poduzimati potrebne radnje radi ispunjavanja obveza iz ovoga članka (princip aktivne likvidacije štete).[71] Pravilnik tu obvezu razrađuje vrlo detaljno, zahtijevajući, između ostaloga, od osiguratelja da već od trenutka zaprimanja odštetnog zahtjeva postup s pažnjom dobrog stručnjaka i dobrim poslovnim običajima te sukladno načelu savjesnosti i poštenja. Ono što je potpuna novina je obveza osiguratelja da na svojim mrežnim stranicama ima dokument s ključnim informacijama o obvezama osiguratelja i potrebnim podacima u sklopu rješavanja odštetnog zahtjeva. Osiguratelj te ključne informacije mora uručiti oštećenoj osobi, kada ona to zahtijeva, prilikom podnošenja odštetnog zahtjeva. Pravilnik propisuje formalni izgled (obrazac) dokumenta s ključnim informacijama, sastavne dijelove obrasca i pitanja koja moraju biti sastavni dio obrasca (a na koje mora biti u obrascu dan jasan i precizan odgovor), rokove postupanja osiguratelja te informacije o odlukama koje osiguratelj može donijeti s uputama o pravu na prigovor.[72]

Novelirani ZOOP, po prvi puta, izrijekom propisuje da oštećena osoba, u postupku pred osigurateljem iniciranim podnošenjem odštetnog zahtjeva, može priložiti nalaz i mišljenje neovisnog vještaka (u pogledu svih vrsta šteta) i ponudu za popravak štete ovlaštenog pružatelja usluga (primjerice autoservisera), koje je osobno izabrala.[73]

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[70] Čl. 12. st. 5. noveliranog ZOOP. Kao i prije stupanja na snagu noveliranog ZOOP, u slučaju nepoštivanja roka za isplatu, sankcija je plaćanje kamata oštećenoj osobi, i to od trenutka podnošenja odštetnog zahtjeva. Nepoštivanje roka za dostavljanje odluke daje pravo oštećenoj osobi da podnese tužbu protiv osiguratelja (ako tužba protiv osiguratelja ili protiv odgovorne osobe bude podnesena prije proteka spomenutog roka, smatrat će se preuranjenom).

[71] Čl. 12. st. 3. noveliranog ZOOP. Odredba ovoga sadržaja nije postojala do ove posljednje novele.

[72] Čl. 5. Pravilnika. Obrazac je dan u prilogu Pravilnika. Osiguratelji moraju obrazac prije primjene obrasca dostaviti HANFI. Također, Pravilnik propisuje da osiguratelji, najkasnije 6 mjeseci nakon stupanja na snagu Pravilnika (Pravilnik je stupio na snagu osmog dana od dana službene objave, dakle 12.7.2024.) moraju donijeti i početi primjenjivati interni akt u kojem će propisati cjelokupnu proceduru načina postupanja s odštetnim zahtjevima, od zaprimanja do arhiviranja. Naravno, taj interni akt mora biti u skladu s noveliranim ZOOP i Pravilnikom. Pravilnik također propisuje i obvezu osiguratelja da vode evidenciju odštetnih zahtjeva s točno utvrđenim sadržajem te evidencije. Osigurateljima je ostavljen rok do 1.6.2025. da svoju postojeću evidenciju usklade sa zahtjevima Pravilnika.

[73] Čl. 12. st. 7. noveliranog ZOOP. Prije novele, a na temelju odredbe bivšeg čl. 12. st. 5., oštećena osoba imala je pravo priložiti nalaz i mišljenje neovisnog vještaka samo u slučaju neimovinske štete, dok pravo na podnošenje ponude za popravak ovlaštenog pružatelja usluga uopće nije bilo normirano.. Sada se nalaz i mišljenje može priložiti vezano za bilo koju vrstu štete, a mogućnost prilaganja ponude za popravak ovlaštenog pružatelja usluga se izrijekom normira.

Pravilnik određuje da osiguratelj, prilikom rješavanja odštetnog zahtjeva, mora "uzeti u obzir" dostavljeni nalaz i mišljenje neovisnog vještaka, odnosno ponudu ili račun za popravak štete ovlaštenog pružatelja usluga, kojeg je oštećena osoba osobno izabrala te obrazložiti eventualno ne prihvaćanje istog nalaza i mišljenja odnosno ponude/računa popravka u odgovarajućem dijelu ili u cijelosti, pri čemu se osiguratelj mora detaljno očitovati na svaku stavku nalaza i mišljenja, odnosno ponude.[74] Dakle, nalaz i mišljenje ovlaštenog neovisnog vještaka, kao i ponuda ili račun za popravak štete ovlaštenog pružatelja usluga kojeg je oštećena osoba izabrala, nisu obvezujući za osiguratelja. No, ako se s njihovim nalazom i mišljenjem, odnosno ponudom ili računom ne slaže, mora to detaljno obrazložiti.[75]

I prije stupanja na snagu noveliranog ZOOP oštećenoj osobi nije bilo zabranjeno odštetnom zahtjevu, u svrhu njegovog argumentiranja, priložiti bilo koji dokument za koji ona smatra da joj može ići u prilog. Stoga je bilo i ranije dopušteno odštetnom zahtjevu priložiti i nalaz ili mišljenje ovlaštenog neovisnog vještaka[76] ili ponudu, odnosno račun ovlaštenog pružatelja usluge koji bi trebao obaviti popravak oštećene stvari. Ni u tom razdoblju (prije novele ZOOP) ti prilozi nisu bili obvezujući za osiguratelja, ali ih je on, sukladno pravilima struke i na temelju valjanog tumačenja i primjene odredaba Kodeksa poslovne osiguravateljne i reosiguravateljne etike, trebao i morao uzeti u obzir i o njima se očitovati.[77]

Novelom ZOOP, kao i Pravilnikom došlo je u ovom segmentu do vrlo malog pomaka u samom proširenju sadržaja prava koje je ima oštećena osoba. Može se reći da su ta prava sada (samo) izričito navedena i opisana u noveliranom ZOOP i Pravilniku. Napredak je značajniji u postupovnom smislu, upravo zahvaljujući detaljnom navođenju obveza osiguratelja u svakoj fazi rješavanja odštetnog zahtjeva, kako je normirano u Pravilniku. Ne treba pritom zaboraviti da se, zbog preciznijeg i detaljnijeg (pod)zakonskog normiranja ovog pitanja može očekivati i efikasniji nadzor postupanja osiguratelja od strane HANFE.

[74] Čl. 2. i 3. Pravilnika.

[75] S obzirom na spomenutu neobvezanost nalazom/mišljenjem ovlaštenog vještaka, odnosno ponudom/računom pružatelja usluge, osiguratelj može, tijekom rješavanja odštetnog zahtjeva, angažirati druge ovlaštene vještake da daju nalaz/mišljenje, odnosno zatražiti ponudu/račun i drugih pružatelja usluge različitih od onih koje je angažirala oštećena osoba (ili opunomoćenik oštećene osobe, u kojoj funkciji se može javiti, primjerice, i autoservisna radionica čija se ponuda prilaže odštetnom zahtjevu, a koju je oštećena osoba opunomoćila da je zastupa u postupku rješavanja odštetnog zahtjeva).

[76] Doduše, kako je već navedeno, ZOOP je ograničavao tu mogućnost samo na neimovinske štete, dok novela ZOOP takvog ograničenja nema.

[77] „Kodeks poslovne osiguravateljne i reosiguravateljne etike", Udruženje osiguratelja pri Hrvatskoj gospodarskoj komori, https://huo.hr/upload_data/site_files/kodeks-poslovne-osiguravateljne-i-reosiguravateljne-etike-1-.pdf, pristupljeno 1.7.2024.

III Zaključak

Novela ZOOP iz 2023. općenito se može ocijeniti kao značajan korak naprijed u smislu povećanja efikasnosti zaštite oštećenih osoba i samih osiguranika. Veliki dio novele bio je za hrvatskog zakonodavca nužan jer se odnosi na prijenos odredaba Direktive iz 2021. u hrvatsko unutrašnje pravo. U tome dijelu svakako valja ukazati na proširenje slučajeva šteta prouzročenih upotrebom vozila koje moraju biti obuhvaćene osigurateljnim pokrićem, što je rezultat (širokog) definiranja pojma upotreba vozila. S druge strane, valja ukazati i na preciznije normiranje nekih specifičnih okolnosti u kojima dođe do nesreća prouzročenih motornim vozilima, a osigurateljno pokriće po osnovi osiguranja od automobilske odgovornosti za takve štete ne mora biti ugovoreno, ili mora biti ugovoreno samo uvjetno (primjerice, štete vezane uz motosport priredbe i štete kada vozilo nije bilo upotrebljavano u svojoj uobičajenoj, prijevoznoj namjeni).

Europski, a posljedično i hrvatski zakonodavac, ostvario je napredak i u reguliranju zaštite oštećene osobe kada dođe do nesolventnosti društva za osiguranje koje je sa štetnikom sklopilo ugovor o osiguranju od automobilske odgovornosti. Ranije odredbe, uglavnom načelnog karaktera, zamijenjene su ili nadopunjene preciznijim, a time i opsežnijim materijalnopravnim i procesnopravnim odredbama. Uređenje toga pitanja na razini Europske unije značajna je normativna pomoć i za Hrvatski ured za osiguranje, odnosno za ekvivalentna tijela u drugim državama članicama. Ne treba zaboraviti da su oni do postupanja u ovakvim situacijama, u brojnim pitanjima, temeljili u dobrom dijelu i na međusobnim sporazumima. Sada je temeljna regulativa brojnih pitanja dignuta na višu razinu.

Hrabar iskorak hrvatski zakonodavac je učinio normiranjem osiguranja od odgovornosti za štetu prouzročenu upotrebom automatiziranog vozila. Riječ je o noveli koja nije bila nužna u smislu prijenosa prava Europske unije u hrvatsko nacionalno zakonodavstvo. Zakonodavac je bio motiviran tehnološkim napretkom i stvaranjem pravnog okvira za vozila koja još nisu, ali sigurno s vremenom hoće, postupno biti prisutna na hrvatskim prometnicama. Uz načelo da se osiguranje od šteta prouzročenih automatiziranim vozilima normira, koliko god je to moguće, po uzoru na takvo osiguranje kod „klasičnih" vozila, novelirani ZOOP sadržava i značajan broj „specijalnih odredbi", koje su morale biti usklađene s važećim propisima koji uređuju neke aspekte upotrebe automatiziranih vozila, ali i s propisima u nastajanju. Naravno da će ocjenu kvalitete tih odredaba noveliranog ZOOP dati buduća poslovna i sudska praksa. Već sada se čini da će neke odredbe morati biti u budućnosti pojašnjene da bi se mogle kvalitetnije primjenjivati (npr. osigurateljno pokriće u pogledu vozača koji u trenutku nesreće nije upravljao, niti je bio dužan upravljati vozilom, nego je to činilo automatizirano vozilo). Svakako će trebati razmatrati efikasnost ovih odredaba i s obzirom na razvitak pravne regulative na drugim područjima, kao što su

osiguranje od štete prouzročene neispravnim proizvodom, a prije svega preciznom uređenju samih propisa o onome što je predmet (i/ili rizik) koji se osigurava, a to je odgovornost za štete prouzročene upravo autonomnim vozilima. To će biti zadaća hrvatskog zakonodavca, kao što je i sam europski zakonodavac u Direktivi iz 2021. predvidio nužnost naknadne evaluacije kvalitete i primjenjivosti njenih odredaba već u relativno bliskoj budućnosti.

Pozitivno se može ocijeniti i detaljnije uređenje pitanja postupka i načina rješavanja odštetnih zahtjeva. U tom kontekstu treba uzeti u obzir ne samo odredbe noveliranog ZOOP, nego i odredbe na njemu utemeljenog Pravilnika. Iako se na prvi pogled može činiti da je došlo do „revolucionarnih" promjena u pogledu kreiranja novih prava oštećenih osoba u tom postupku, malo pažljivijim čitanjem dolazi se do zaključka da takvoj ocjeni ipak nema mjesta i da se u tome smislu radi o tome da su od ranije postojeće mogućnosti koje je imala oštećena osoba sada eksplicitno utvrđene u odredbama specijalnog zakonskog, odnosno podzakonskog propisa. Međutim, svakako je pozitivno da su neka pitanja vezana uz način i postupak rješavanja odštetnog zahtjeva znatno preciznije riješena, gotovo na razini uniformnosti. Od osiguratelja se sada izričitim odredbama noveliranog ZOOP, a osobito provedbenog Pravilnika, očekuje strogo propisano postupanje i donošenje odluka vrlo precizno utvrđenog (relativno opsežnog) sadržaja. To je jako važno ne samo zbog harmoniziranog postupanja svih osiguratelja i efikasnije obrade odštetnih zahtjeva. To je važno i zbog nekoliko dodatnih razina zaštite oštećenih osoba. S jedne strane, one će točno znati što je osiguratelj dužan učiniti u određenoj fazi obrade njihovog odštetnog zahtjeva, osobito koje informacije i u kojem roku im osiguratelj mora priopćiti, od zaprimanja odštetnog zahtjeva do donošenja odluke o tom zahtjevu. Normirani sadržaj obaveznih elemenata odluke osiguratelja, koji zahtijeva visoku razinu potpunosti i argumentiranosti, bit će za oštećenu osobu osobito značajan kada ona tom odlukom nije zadovoljna. Tada će joj biti lakše pripremiti kvalitetniji prigovor (u fazi internog izravnog rješavanja spora s osiguratelјem vezanim uz spornu odluku). No, pozicija osigurane osobe bit će lakša i kasnije, ako se dođe u fazu rješavanja spora pred drugim tijelima – izvansudskim i/ili sudskim. Iako će to biti značajno i ako se spor bude rješavao izvansudskim mehanizmima, čini se da će značaj takvih argumentiranih i specificiranih odluka biti značajan osobito u sporovima koji će se rješavati pred sudom. Naime, oštećena osoba (odnosno, njezin odvjetnik) imat će pred sobom vrlo iscrpno obrazloženo stajalište osiguratelja, što bi mu moglo pomoći da tužbu protiv osiguratelja koncipira na način da, već u tom podnesku, iznese sudu protuargumente u odnosu na ono što je osiguratelj iznio u odluci (i u postupku u povodu prigovora koju osiguratelj također mora precizno argumentirati). Stvara se prostor da se prevenira situacija kada se potpuno i precizno stajalište osiguratelja, zbog kojeg je donio odluku (utemeljeni odgovor) kojom u cijelosti ili djelomično odbija odštetni zahtjev, doznaje tek u sudskom postupku, dok je u prethodnim

stadijima rješavanja spora to stajalište bilo samo načelno iskazano oštećenoj osobi. Sada bi oštećena osoba takvo precizno argumentirano stajalište osiguratelja, morala i trebala saznati i prije eventualnog iniciranja sudskog postupka. To bi moglo ubrzati i sam taj sudski postupak te ga učiniti efikasnijim. A što veći broj sudskih brzih i efikasnih sudskih postupaka opći je interes.

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AMENDMENTS IN THE LEGISLATIVE FRAMEWORK FOR MOTOR LIABILITY INSURANCE IN THE REPUBLIC OF CROATIA

Abstract

The latest amendment to the Croatian Compulsory Traffic Insurance Law from 2023 introduces significant changes regarding motor liability insurance. A substantial part of these amendments was necessary due to the incorporation into Croatian law of provisions from Directive (EU) 2021/2118 of the European Parliament and the Council of November 24, 2021, amending Directive 2009/103/EC on motor vehicle civil liability insurance and the implementation of the obligation to insure against such liability. However, some other amendments within this legislative change, which are not motivated by alignment with EU law, are also very significant. For the first time, compulsory liability insurance for damage caused by the use of automated vehicles is regulated. Changes are also evident regarding exclusions from insurance and the loss of insurance rights. Finally, the procedure for resolving the compensation claim of the injured party is more precisely regulated. All of these changes aim to improve the protection of injured parties and the policyholders themselves. After the introductory section, which explains the purpose of compulsory motor liability insurance and the legal sources governing it at the international, European, and national Croatian levels, the author systematically analyzes all significant elements of the latest legislative amendment. In conclusion, the author evaluates to what extent the goals set by this amendment have been achieved and provides predictions for the future regulation of the most important issues in this field.

Keywords: *Motor liability insurance – Directive (EU) 2021/2118 – Law on Compulsory Traffic Insurance, Amendments – Automated vehicles*

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I Introductory Considerations – The Purpose of Compulsory Motor Liability Insurance and Its Legal Framework

Liability insurance for damages caused by the use of a motor vehicle, commonly known as motor liability insurance or, simply, ML insurance, is regulated as mandatory insurance in almost all countries. This means that vehicle owners or users are legally required to enter into a contract with an insurer to cover their liability for damages caused by the use of these vehicles. The existence of such a liability insurance contract must be established for each vehicle and is a necessary condition for the vehicle's registration in the records of the competent bodies, as well as for the vehicle's legal participation in traffic. Failure to comply with this obligation results in potential civil and misdemeanor liability for the vehicle owner or user.

The very fact that any legal system mandates insurance as compulsory highlights its significant social and economic importance. In general, national and/or international legal systems prescribe certain insurance as compulsory when they consider that parties to certain legal relationships need special legal protection. In this context, motor liability insurance protects the injured parties, i.e. those who have suffered damage due to death or bodily injury, or property damage as a result of vehicle use. The injured parties have the right to seek compensation not only from the person legally identified as liable for the damage (the owner or user of the vehicle that caused the damage) but also from the insurer with whom the owner or user of that vehicle has contracted liability insurance. This makes the likelihood of compensation for the injured party more certain, even in situations where the person liable for the damage has limited financial resources. The injured party gains another entity from which they can seek compensation. This entity is the insurance company (insurer), for which, generally speaking, the risk of insufficient asset value from which the damage can be compensated (up to the maximum amount provided by law or contract) is much lower than that of the party liable for the damage, especially if that party is an individual.[2]

[2] It should be noted that the obligation of the liable party (the tortfeasor) to compensate for the damage caused to an individual due to the use of the vehicle does not have the same legal basis as the obligation of the insurer of the tortfeasor's liability to do the same. The tortfeasor is required to do so because they are liable for the occurrence of the harmful event that caused the damage, which generally results in the obligation to compensate the damage to the injured party. The insurer is not liable for the harmful event, but their obligation to compensate the damage arises from the fact that they have entered into a liability insurance contract with the liable party, committing to compensate the injured party's damage instead of the tortfeasor, within the limits set by the contract and mandatory regulations. Therefore, the insurer's obligation is based on the insurance contract.In many countries, including Croatia, the injured party is already entitled, according to relevant legal provisions, to directly seek compensation from the insurer of the tortfeasor's liability (legally, this is known as a direct claim or, within court proceedings, a direct action – *actio directa*). This means that the specific insurer's obligation, although it would not exist

On the other hand, this insurance also protects the financial interest of the person liable for the damage. Namely, their property will, generally speaking, remain unreduced despite their liability for the damage, as the insurer with whom the liable party has previously contracted motor liability insurance will, within the limits prescribed by mandatory regulations and the insurance contract, compensate the injured party for the damage they suffered, instead of the liable individual.[3]

The idea of liability insurance for damages caused by the use of vehicles emerged in the United States in the late 19th century. At that time, it was still voluntary. At the beginning of the 20th century, the introduction of the legal obligation for this type of liability insurance primarily occurred in European countries.[4]

With the development of technology and the economy of international goods and passenger transport, alongside the increase in the number of vehicles, the need arose to standardize the issue of liability insurance on a continental (European) and even international level.[5] The goal was twofold. On one hand, it aimed to provide injured parties with the same legal position regarding their ability to claim compensation for damages, regardless of whether the damage was caused by a vehicle registered in their country of usual place of residence or in another country. On the other hand, it aimed to protect the liable party (the owner or user of the vehicle) so that, after entering into a liability insurance contract, they would have coverage regardless of whether the damage was caused in their country of usual place of residence or abroad.

In legal terms, the methods used to achieve this goal, which are still being implemented, are diverse, but at the same time interconnected. In this context, the following should be highlighted:

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without a prior liability insurance contract, is not defined solely by that contract, but also by the relevant legal provision. This legal provision must be in compliance with the applicable sources of European Union law, especially when it comes to the national legislation of a member state, such as the Republic of Croatia.

[3] There are certain exceptions to the above, which limit the insurer's obligation in terms of the maximum and predetermined amount of damage they are required to compensate based on mandatory regulations and the contract. These exceptions include those that exclude the insurer's obligation due to specific circumstances stipulated by law that existed at the time the damage occurred, for example, due to the actions of the injured party in the context of the damage's occurrence, or because the injured party was the driver of the vehicle that caused the damage, etc. Additionally, certain situations involving particularly severe violations of relevant regulations by the insured tortfeasor when causing the damage must be considered. In such cases, the insurer will first have to compensate the injured party, but then will have the legal right to seek partial or full reimbursement from their insured (the tortfeasor) for the amount previously paid to the injured party. This is referred to as the complete or partial loss of the insured's (tortfeasor's) rights under the insurance, *infra,* t. 3.

[4] The first country to introduce the legal obligation for motor liability insurance was Denmark in 1912. For more details: Marijan Ćurković, *Komentar Zakona o obveznim osiguranjima u prometu*, Engineering Bureau, Zagreb, November 2013, pp. 10-11.

[5] Jelena Kočović, Tatjana Rakonjac Antić, Marija Koprivica, Kristina Bradić, „Pravci razvoja tržišta osiguranja", *Tokovi osiguranja*, br. 3/2024, str. 536-548.

a) The international motor vehicle green card insurance system

This system was established by Recommendation No. 5 of the UN Economic Commission for Europe (UNECE) Inland Transport Committee in 1949, which came into effect on January 1, 1953. This recommendation called upon governments of member states to urge insurers in their countries to enter into agreements that would allow drivers to obtain liability coverage for damages caused by their vehicles in another (visited) country. Insurers in London established a central body to manage the Green Card System - the Green Card Bureau. The Green Card System is not based on agreements between states but rather on agreements between national bureaus of individual countries, which supply their members (insurers) with insurance documents (the so-called green cards). These insurers, when entering into insurance contracts, issue these green cards to their clients - policyholders (vehicle owners/users). Such insurance is valid in all other countries whose national bureaus have become members of the Green Card System.[6]

b) The European Convention on compulsory liability insurance for damage caused by the use of motor vehicles – The Strasbourg Convention, 1959.

The Strasbourg Convention was adopted under the auspices of the Council of Europe and entered into force on September 22, 1969. The contracting states are obligated to enact national law mandating compulsory liability insurance for damage caused by the use of motor vehicles, in accordance with the Convention. Although only four countries were initially bound by it (Austria, Denmark, Germany, and Greece), the Strasbourg Convention became a model for regulating this issue, not only in the national laws of many European countries but also for the regulation of this legal issue at the European Union level.[7]

c) European Union directives on compulsory motor liability insurance

The legal framework for compulsory motor liability insurance at the European Union level has been developed over decades through a series of directives on motor liability insurance. Seven such directives have been issued to date. The

[6] Over time, the Green Card System has evolved based on further agreements between national bureaus. Today, the vehicle's license plate from a country whose national bureau is a member of the system serves as proof that the vehicle in question has the appropriate liability insurance, which will be recognized by other member countries of the system in which the vehicle operates. For a more detailed historical and legal development of the Green Card System, see: Šime Savić, *Obvezno osiguranje od automobilske odgovornosti kao sredstvo zaštite potrošača*, Vizura, Zagreb, 2022, pp. 190-200.

[7] The text of the Strasbourg Convention, as well as all related information regarding the list of contracting states, is available at https://www.coe.int/en/web/Conventions/full-list?module=treaty-detail&treatynum=029, accessed: 1.7.2024. For more details on the significance and key provisions of the Strasbourg Convention, see: Slobodan N. Ilijić, "European Convention on Compulsory Insurance against Civil Liability in Respect of Motor Vehicles and European Union Law", *Insurance Trends*, No. 2/2020, pp. 82-84.

first was adopted in 1972, but for the purposes of this work, the sixth and seventh directives are particularly noteworthy:

- Directive 2009/103/EC of the European Parliament and Council of September 16, 2009, regarding insurance for civil liability in the use of motor vehicles and the enforcement of insurance obligations related to such liability (hereinafter: Sixth Directive)[8], and
- Directive (EU) 2021/2118 of the European Parliament and Council of November 24, 2021, amending Directive 2009/103/EC regarding insurance for civil liability in the use of motor vehicles and the enforcement of insurance obligations related to such liability (hereinafter: the 2021 Directive).[9]

The Sixth Directive does not introduce any original substantive changes compared to the previous five, but essentially serves as a legal source that codifies the provisions of the earlier directives, which is why it is often referred to as the Codifying Directive. However, it formally represents a separate source of European Union law, which, from the moment it comes into force, replaces the previous five directives.

As a codifying directive, the Sixth Directive regulates all important issues related to insurance against motor vehicle liability, such as the scope and amount of coverage, the persons who fall under the category of potential "insurance beneficiaries", the definition of an insured event, the reasons for coverage exclusion etc. Fundamentally, the core obligation of member states under the Sixth Directive is to take measures ensuring that civil liability for the use of vehicles regularly present in their territory is covered by insurance as prescribed by the Directive. The insurance must cover compensation for damages due to death or bodily injury of traffic victims, as well as damage to property, in at least the minimum amount specified in the Sixth Directive.[10]

The Sixth Directive excludes the driver (but not members of the driver's family regarding their bodily injuries) who is liable for the damage from the possibility of being a beneficiary of this insurance, i.e. having the damage they suffered compensated. In addition to the driver, insurance coverage is also denied to persons who do not have explicit or implicit approval for the use of the vehicle (e.g. in the case of a stolen vehicle, when passengers who voluntarily enter a vehicle that caused the damage, knowing it was stolen, lose their insurance coverage), persons who drive a vehicle without a driver's license, and persons who violate the legal

[8] *Official Journal of the European Union* L 263, 7.10. 2009.

[9] *Official Journal of the European Union* L 430, 2 December 2021. Unofficial (consolidated) version of the Sixth Directive, which includes amendments made by the 2021 Directive. Available at *https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02009L0103-20231223*, accessed: 1.7. 2024.

[10] Articles 3 and 9 of the Sixth Directive. The Sixth Directive also prescribed the procedure for the automatic adjustment of insurance coverage in accordance with the European Consumer Price Index, which is implemented by the Commission.

technical requirements regarding the condition and safety of the vehicle in question. The premium paid by the policyholder must be consistent and valid for the entire duration of the contract throughout the EU.

Each injured party can submit a direct claim to the insurer of the vehicle owner liable for the damage, seeking compensation (direct lawsuit, *actio directa*, Article 18 of the Sixth Directive).[11] The insurer must respond to the claim within a maximum of three months from the submission of the claim (member states may prescribe a shorter period). If the insurer finds that the basis and amount of the claim are not disputed, they must provide the policyholder – the injured party – with a reasoned offer. If liability and/or the amount are disputed, the insurer must provide a reasoned (full or partial) rejection of the claim. All of these provisions are of a private law nature, regulating the rights and obligations between two private law entities – the injured party as the beneficiary of the insurance and the insurer.[12]

However, even after the adoption of the Sixth Directive, there remained a significant number of issues that emerged as contentious in the practice of motor vehicle liability insurance. In 2017, the Commission conducted an evaluation of the Sixth Directive and identified important areas in which the Directive should be amended and supplemented.[13] This was done with the 2021 Directive. member states were required to align their national laws with the 2021 Directive by 23 December 2023 at the latest.

In the Republic of Croatia, compulsory insurance for motor vehicle liability is regulated at the legal level by the Law on Compulsory Traffic Insurance (hereinafter:

[11] In fact, a non-contractual relationship is created by law (directive) between the liability insurer of the owner of a motor vehicle and the person who has suffered damage. The injured party can directly approach the insurer with a claim for compensation because this right is prescribed by the directive. The same source of law also regulates the content of their right towards the insurer, including the limits of the insurer's liability towards them.

[12] Jasenko Marin, „Pravo osiguranja", *Privatno pravo Europske unije - posebni dio* (editor Tatjana Josipović), Narodne Novine, Zagreb, 2022, pp. 1007-1010.

[13] This refers to a series of issues that required an amendment, such as compensation for damages in the case of the insolvency of the insurer who should compensate the harmed individual, the establishment of equal minimum amounts of insurance coverage, vehicle insurance verification, the use of claims certificates by the policyholder from the new insurance company, and the provision of information to the harmed individuals. The Commission also took the position that the text of the new Seventh Directive should incorporate the views of the Court of Justice of the European Union expressed in rulings on some important cases, particularly regarding the definition of the term "use of a vehicle," which was not defined in the Sixth Directive and had become contentious in practice. Finally, the Commission believed that the amended Directive should take into account technological advances in traffic, the emergence of new vehicles, and determine the potential need to adjust the legal framework for liability insurance to reflect their use, as outlined in recitals 1-6 of the preamble of the Directive from 2021. For a detailed review of the changes introduced by the 2021 Directive, see: Caroline Van Schoubroek, "European Harmonised Rules on Motor Vehicles Liability Insurance Reviewed", *https://doi.fil.bg.ac.rs/pdf/eb_ser/aida/2022/aida-2022-23-ch11.pdf*, accessed: 1.7.2024.

ZOOP).[14] It was first adopted in 2005.[15] Even at the time of adopting the original text of ZOOP, as well as when passing following amendments, the primary task of the legislator in the segment of compulsory motor vehicle liability insurance was to continuously align with the legal acquis of the European Union in this area. This also applies to the latest amendment of ZOOP in 2023, which, among other things, incorporated the 2021 Directive into Croatian domestic law. However, the fact that it was necessary to amend ZOOP for alignment with the 2021 Directive was also used as an opportunity for additional changes and amendments that addressed other important issues related to this type of insurance, which will be discussed further in the text.

II Amendment to the Law on Compulsory Traffic Insurance from 2023 - Key Changes and Additions

There are four main subjects of the amendments to Croatian legal regulation of compulsory motor liability insurance, carried out through the adoption and entry into force of the Law on Amendments to the Law on Compulsory Traffic Insurance (ZOOP) in 2023.[16] These are:

a) Transposition of the 2021 Directive into Croatian national law;
b) Regulation of liability insurance for damage caused by automated vehicles;
c) Amendment of the provisions on exclusions from insurance and the loss of insurance rights; d) More detailed regulation of the procedure for handling compensation claims submitted by injured parties to insurers.

[14] *Narodne novine, the Official Gazette of the Republic of Croatia*, No. 151/05, 36/09, 75/09, 76/13, 152/14, 155/23. In addition to the insurance of the owner or user of a vehicle for liability for damages caused to third parties (motor vehicle liability insurance), ZOOP in Article 2, paragraph 1, also establishes other compulsory insurance policies in the transportation sector: passenger insurance in public transport against the consequences of accidents, liability insurance for air carriers or aircraft operators for damages caused to third parties and passengers, and liability insurance for owners or users of motor-powered boats or yachts for damages caused to third parties. Of course, many issues are also addressed by secondary regulations issued by the relevant national supervisory body – the Croatian Financial Services Supervisory Agency (HANFA). Finally, the terms of motor vehicle liability insurance provided by insurers are an integral part of every contract for compulsory motor vehicle liability insurance and, therefore, an important source of law.

[15] In the period when the Republic of Croatia was part of the Socialist Federal Republic of Yugoslavia, as well as after Croatia's independence until 2005, the issue of compulsory traffic insurance was regulated as part of the regulations governing the insurance activity in general. For more details: M. Ćurković, p. 12-13.

[16] The Law on Amendments to the Law on Compulsory Traffic Insurance, *Narodne novine*, *Official Gazette of the Republic of Croatia*, No. 155/2023, from 22.12.2023. This law entered into force on December 30, 2023. In this paper, where necessary, references to the content of specific provisions of the ZOOP after their latest amendment/addition in 2023 will be made using the term "amended ZOOP" in the appropriate case. In this context, for easier and clearer reading of the following text, the reader is referred to the Unofficial (consolidated) text of the amended ZOOP available at: *https://www.zakon.hr/z/370/Zakon-o--obveznim-osiguranjima-u-promet*, accessed: 1.7. 2024.

Further details on the most important provisions of the amendment regarding these key subjects will be discussed in the following text.

1. Transposition of the 2021 Directive into Croatian National Law

In the context of the amendment to the ZOOP, it is important to highlight the key issues where the 2021 Directive significantly alters the Sixth Directive, which logically leads to changes or amendments in the regulation of these issues compared to the previous solutions in ZOOP before the 2023 amendment. These include (re) defining key terms important for the legal regulation of compulsory motor vehicle liability insurance, changes to the minimum amounts of insurance coverage, assumptions and procedures for verifying the validity of insurance for a vehicle in a member state the vehicle "visits," and protecting injured parties in the case of insolvency of the insurer that provided the insurance coverage for the damage caused by the vehicle.

1.1. (Re)definition of Key Terms

Given that this concerns the legal regulation of compulsory liability insurance for damage caused by the use of motor vehicles, the existence of precise definitions for key terms such as "vehicle" and "use of a vehicle" is of great importance.

On the one hand, technological progress, which we encounter daily, leads to the emergence of new motor vehicles with smaller dimensions and/or less powerful engines and lower maximum speeds, but still capable of causing damage. Therefore, the question arises about the need for liability insurance for damage caused (and) by the use of these vehicles.

Even before the 2023 amendment, ZOOP had a different definition of a vehicle subject to liability insurance than the original text of the Sixth Directive (i.e. the text before the 2021 Directive came into force). The key difference was that the previous ZOOP definition considered any motor vehicle intended for land traffic that moves by its own engine power but does not move on rails, and any attached vehicle (whether attached or not) *that is subject to registration and must have a traffic permit as per the registration regulations* (emphasized by J.M). In contrast, the text of the Sixth Directive (both before and after the 2021 Directive) did not include compulsory registration or traffic permit elements as relevant for defining a vehicle for the purposes of applying the Directive.[17]

[17] Compare Article 3, Paragraph 1, Item 9 of the ZOOP (text prior to the 2023 amendment) and Article 1, Item 1 of the Sixth Directive. The literature expresses the view that the previous definition in the ZOOP was more precise because it removed ambiguity and prevented the expansion of liability insurance obligations to cover every motor vehicle, such as electric wheelchairs, M. Ćurković, p. 26. It is clear that the Croatian legislator's solution was also motivated by the fact that it is very difficult to carry out a prior

The fact that the definition of the term "vehicle" was amended in the 2021 Directive presented an opportunity to incorporate the new definition into ZOOP, thereby eliminating any discrepancies between the definition of this term in EU law and Croatian domestic law.[18] In accordance with this, after the 2023 amendment, Article 3, paragraph 1, item 35 of ZOOP defines a vehicle as:

a) any motor vehicle that is powered exclusively by mechanical force on land, but not moving on rails, with a maximum design speed greater than 25 km/h, or with a maximum net weight greater than 25 kg and a maximum design speed greater than 14 km/h; and

b) any trailer used with the vehicle defined under a), whether attached or not.

ZOOP now explicitly states that wheelchairs intended exclusively for persons with physical disabilities are not considered vehicles.

This definition in the amended ZOOP mirrors the definition in Article 1, item 1 of the Sixth Directive, as amended by the 2021 Directive.

As for defining the term "use of a vehicle", it is important to note that this term was not defined in the Sixth Directive. In practice, however, it proved to be extremely important because the Sixth Directive in Article 3, paragraph 1 stipulates that each member state must take all appropriate measures to ensure that civil liability for the *use of vehicles* (emphasized by J.M.) commonly present in its territory is covered by insurance.

Therefore, while the term "use of a vehicle" is included in the Sixth Directive (and the preceding directives), it was never defined. At the same time, practice showed that this term is crucial for the application of national regulations transposing the Sixth Directive into the laws of member states. This is understandable because liability insurance must cover damages caused by the use of vehicles. One could argue that there was a legal gap in the text of the Sixth Directive, but also a necessity to interpret this term. The only authorized body to do so is the Court of Justice of the European Union. Several cases have been brought before the Court, initiated by national courts, where the Court of Justice had to decide on the question of whether, in a particular case, the damage was caused by the use of a vehicle. Based on this,

check (before the use of such vehicles in traffic) for mandatory insurance existence in relation to vehicles that are not subject to registration or issuance of a traffic permit (e.g., electric scooters). However, it remains questionable whether it was permissible under the national law of the Member State to narrow the definition contained in the Sixth Directive as a source of European Union law or whether some other legislative solution should have been found to achieve the same or similar purpose.

[18] The change in the definition of the term "vehicle" in the 2021 Directive was implemented precisely because the European legislator deemed that including the obligation for liability insurance for damage caused by the use of certain motor vehicles with lower power and less likelihood of causing significant damage would be disproportionate and unsustainable in the future. Moreover, this would undermine the acceptance of newer vehicles, such as electric bicycles, which are not exclusively powered by mechanical propulsion, thus discouraging innovation, as stated in recital 6 of the preamble to the 2021 Directive.

the national court can decide on the insurer's obligation, as insurance coverage includes damage caused precisely by the use of the vehicle.

The most important rulings of the Court of Justice of the European Union, in which it specifically decided on the scope of the term "use of the vehicle," are those in the cases of *Vnuk*[19], *Rodrigues de Andrade*[20], and *Torreiro*[21]. Their significance is

[19] Judgment of the Court of the European Union of December 4, 2014, *Vnuk*, C-162/13, ECLI:EU:C:2014:2146. In this case, the damage occurred when Mr. Vnuk was injured while a tractor with a trailer was being used in the yard of a farm during the storage of hay bales in a warehouse, at a time when the tractor was reversing to park in the same warehouse. The question arose regarding the application of Article 3(1) of the First Directive on motor vehicle liability insurance, specifically whether the term "use of the vehicle" in that provision includes situations like the one in this case, where the defendant's insured, while driving a tractor with a trailer, hit the plaintiff who was on a ladder performing the task of storing hay, even though this was not in the context of road traffic. This was a preliminary question referred to the Court by the Supreme Court of Slovenia. After determining that Slovenia had not excluded any type of vehicle from the scope of the obligation to provide insurance, and after concluding that the specific tractor was customarily found on Slovenian territory, the Court reached the final conclusion that the accident resulted from the use of a vehicle carrying out its normal function — the function of moving backwards within the described area with the intent of parking. The Court concluded that the provisions of Article 3(1) of the First Directive apply to the circumstances of the specific case, meaning that compulsory liability insurance, and thus the insurer's obligation, also applies in such cases. It is important to highlight that in paragraph 91 of the reasoning of the judgment, the Court of the European Union emphasized that the interpretation of the term "use of the vehicle" in the context of the specific case cannot be left to the discretion of each individual member state. In this way, the Court clearly indicated that only it has the authority to ensure the uniform application and interpretation of Union law in the area of motor vehicle liability insurance law. For more details regarding the implications of the Court's decision in the Vnuk case on case law in Slovenia, see: Danijela Šaban, "Pojam uporabe motornog vozila u pravu osiguranja od automobilske odgovornost", *Annals of the Faculty of Law in Zenica,* No. 17, pp. 277-298. For further analysis related to the consequences of the Court's ruling in Slovenia's judicial practice, see: Miloš Radovanović, "Pojam upotrebe motornog vozila u slovenačkoj sudskoj praksi", *Foreign Legal Life*, 2018, No. 1, pp. 101-120.

[20] Judgment of the Court of the European Union of November 28, 2017, *Rodrigues de Andrade*, C-514/16, ECLI:EU:C:2017:908. In this case, the facts were as follows: Mrs. Alves was applying herbicide in a vineyard owned by Mr. and Mrs. Rodrigues. The herbicide was being sprayed from a device located on the rear part of a tractor. The tractor was stationary, but its engine was running to provide power and enable the device to spray the herbicide. During this process, the tractor, which was in mud, overturned and injured Mrs. Alves, who later died from the consequences of the accident. In response to a question from the Supreme Court of Portugal, the Court of the European Union held that the term "use of the vehicle" in Article 3(1) must be interpreted in such a way that it does not cover a situation where an agricultural tractor is involved in an accident, and its primary function was not to serve as a means of transport but as a power unit, a machine for carrying out tasks that could not be performed without it.

[21] Judgment of the Court of the European Union of December 20, 2017, *Torreiro*, C-334/16, ECLI:EU-:C:2017:1007. In this case, a Spanish military vehicle, for which liability insurance existed, overturned during a nighttime military exercise, injuring a passenger in the vehicle (the plaintiff in the case before the Spanish court). The military vehicle was not operating on roads designated for wheeled vehicles, but rather on terrain meant for tracked vehicles. The defendant insurer opposed the insurance payout, arguing that the accident did not occur during the "use of the vehicle" as defined by the Sixth Directive, and therefore should not be covered under the Spanish law implementing that directive. The Spanish law allowed for exclusion from coverage for damages caused while operating motor vehicles on roads or terrains that were not "suitable for traffic," with an exception for those that, although not suitable for

pointed out by the fact that the preamble of the 2021 Directive states that, in the interest of legal certainty, a definition of the term "use of the vehicle" should be introduced that reflects the aforementioned case law.[22]This has indeed been done in the 2021 Directive, and the Croatian legislator has incorporated this definition into national law, specifically in Article 1, paragraph 1, item 33 of the amended ZOOP. According to this definition*, the use of a vehicle is understood as any use of the vehicle in accordance with its function as a means of transport at the time of the traffic accident, regardless of the vehicle's characteristics, the terrain on which the motor vehicle is used, or whether it is stationary or in motion.*[23]

For clarity, the 2023 amendment to the ZOOP clearly stipulates that damages resulting from the use of vehicles that, at the time of the accident, were not functioning as means of transport, but rather in an industrial, agricultural, or other function, are excluded from insurance coverage.[24]

This (re)definition of the terms "vehicle" and "use of a vehicle" necessarily led to the removal of Article 22, paragraph 3, from the previous version of the ZOOP. This provision previously stated that damages caused by vehicles moving on public roads or other surfaces where traffic occurs and which are subject to registration requirements (and must have a traffic permit) were covered by automobile liability insurance. The removal of this provision was part of a broader legislative effort to clarify and redefine cases when automobile liability insurance is required, including

such purposes, were "frequently used." In response to the question referred by the Supreme Court of Spain, the Court of the European Union ruled that the relevant provision of the Sixth Directive should be interpreted as being opposed to a national regulation that allows the exclusion from insurance coverage for damages caused by operating motor vehicles on roads or terrains that are not "suitable for traffic," with the exception of those that, despite being unsuitable for that purpose, are "frequently used". This ruling clarifies that the scope of insurance coverage under the Sixth Directive should not be restricted based on the suitability of the terrain for vehicular traffic, as long as the vehicle is being used as intended.

[22] Recital 5 of the preamble of the Directive from 2021. However, other judgments of the Court of Justice of the European Union are also important for the interpretation of the term "use of a vehicle", for example, in the case of *Linea Directa*, judgment of 20 June 2019, C-100/18, ECLI:EU:C:2019:517. In this case, the vehicle's electrical installations spontaneously caught fire after being parked for more than 24 hours in a private garage. As a result of the fire, the garage (which was owned by a person other than the vehicle's owner and driver) was damaged. The Supreme Court of Spain referred a preliminary question to the CJEU asking whether the term "use of a vehicle" in Article 3(1) of the Sixth Directive should be interpreted to include the situation in which a vehicle, parked for more than 24 hours, catches fire (due to the necessary mechanisms of the vehicle) and causes damage to the garage (real property). The CJEU answered affirmatively, emphasizing that parking and the period of inactivity of the vehicle are natural and necessary phases that are part of the use of the vehicle as a means of transport. Therefore, the vehicle was used in accordance with its function as a means of transport. This position of the CJEU will have a significant impact on the content of the definition of the term "use of a vehicle" in the Directive from 2021, and consequently, in the amended Croatian ZOOP.

[23] This definition of the term "use of a vehicle" is substantively identical to the definition of this term in Article 1, paragraph 1(a) of the Sixth Directive, as amended by the Directive from 2021.

[24] Article 23, para. 1, item 6, third indent of the amended ZOOP, *infra.* Chapter 3.

the exceptions to that obligation. It is essential that the corresponding provisions of the 2021 Directive are properly transposed into national law.[25]

In accordance with this, the amended Article 22 of the ZOOP now stipulates that vehicle owners are required to take out insurance for damages caused by the use of their vehicles that may harm third parties, resulting in death, injury, health impairment, or damage to property. This insurance requirement applies in accordance with the provisions of the law, except in the case of vehicles that do not fall into any category under special regulations, lack seats, and are not subject to mandatory technical inspection or registration. These include vehicles that can balance themselves, monocycles with motorized or electric propulsion, and electric or motorized scooters.[26]

However, individuals who suffer damage from the use of these specific vehicles, for which the owner is not required to have compulsory liability insurance, still have another "target" from whom they can claim compensation. In the case of damage caused by these vehicles, victims can seek compensation from the Guarantee Fund at the Croatian Insurance Bureau.[27]

[25] It should be emphasized that the amended ZOOP, in Articles 22, paragraphs 8-14, prescribes the insurer's obligation to issue a certificate to the policyholder, upon their request, regarding any compensation claims made by third parties based on the policyholder's motor vehicle liability insurance, or a certificate stating that no such claims exist. The certificate must cover a period of at least the last five years of the insurance coverage's existence, and the insurance company is required to issue it within 15 days from the date of the request. The form of the certificate is provided by the European Commission. These certificates may be important when an individual enters into a new motor vehicle liability insurance contract with an insurer different from the one with whom they had such a contract for the previous period. Specifically, the number of compensation claims, or the absence thereof, can be one of the insurer's criteria for determining the insurance premium. If a particular insurer takes this into account, it must be stated on their website. Prior to the last amendment, the ZOOP in Articles 22, paragraphs 7 and 8, required insurers to issue a certificate upon the policyholder's request regarding any compensation claims, but there was no explicit mention that a certificate must be issued confirming the absence of such claims. The amended provisions more precisely regulate this issue, following the provisions in Article 16 of the Sixth Directive as amended by the Directive of 2021.

[26] Regarding the aforementioned vehicles, it is important to emphasize that they are actually means of transportation which, due to their power or maximum speed, do not fall under the definition of "vehicle" contained in the 2021 Directive, nor in the amended ZOOP. However, as explicitly stated in recital 4 of the preamble to the 2021 Directive, member states are free to impose a liability insurance requirement for damage caused by such means of transport, even if they are not included in the definition of "vehicle" in that Directive, through their national laws. The Republic of Croatia has not opted for this option, but some other countries, such as Germany and France, have. A practical overview of the regulations regarding the use of electric scooters (electric kick scooters) in various countries can be found at *https://www.evz.de/en/reisen-verkehr/e-mobilitaet/zweiraeder/e-scooter-regulations-in-europe.html,* accessed: 1.7. 2024.

[27] Article 44, paragraph 1, item 12 of the amended ZOOP. This provision reflects the requirement of the 2021 Directive for member states to establish an equally effective method of compensating injured persons whenever certain vehicles are excluded from the mandatory liability insurance regime. For this reason, damage caused during sporting events (races, training sessions, etc.) is compensated from the funds of the Guarantee Fund. Specifically, the amended ZOOP, within the framework allowed by the 2021

Therefore, the (re)definition of the terms "vehicle" and "use of a vehicle" in the amended ZOOP, in accordance with the 2021 Directive, expands the range of cases where insurance coverage is required. At the same time, it specifies the exclusions for certain categories of vehicles. Importantly, it ensures that victims of damage caused (and) by such vehicles still have some form of substitute guarantee that their losses will be compensated. The role of the Guarantee Fund in this context is crucial.

1.2. Minimum insurance coverage amount

With the latest amendment, the ZOOP has been fully harmonized with the provisions of the 2021 Directive regarding the minimum amounts of coverage in motor liability insurance contracts (minimum amounts of insurance coverage).[28]

The amended ZOOP specifies the minimum insured amounts as follows:

a) in the case of damage due to death, bodily injury, and health impairment – the amount of €6.450.000,00 per accident, regardless of the number of injured parties, or €1.300.000,00 per injured party;
b) in the case of destruction or damage to property – the amount of €1.300.000,00 per accident, regardless of the number of injured parties.[29]

Essentially, it could be said that the amended ZOOP does not increase the minimum amounts of insurance coverage that were previously established under

Directive, exempts the owners/users of such vehicles from the obligation to conclude liability insurance for vehicles if the organizer of the event has concluded liability insurance for damages incurred during the event. However, if it is found that neither the event organizer nor the owner/user of the vehicle involved in the event had liability insurance, the injured party will be compensated from the Guarantee Fund (with, of course, the right of recourse for the Croatian Insurance Bureau against those who failed to fulfill their insurance obligations). Cf. the provisions of Article 2, paragraph 5, Article 22, paragraph 4, and Article 44, paragraph 1, item 13 of the amended ZOOP.

[28] Cf. Article 9, paragraph 1 of the Sixth Directive as amended by the 2021 Directive and Article 26, paragraph 8, items 1 and 2 of the amended ZOOP. The 2021 Directive harmonized the minimum amounts across the European Union and established a unified methodology for the periodic increase of these amounts. Specifically, the Sixth Directive set different reference dates for the periodic recalculation of the minimum coverage amounts in different member states, which resulted in variations in the minimum coverage amounts depending on the member state, cf. recital 19 of the preamble to the 2021 Directive. Regarding the transfer of these minimum coverage amounts prescribed by the amendment to the ZOOP, it is important to note that this legal provision authorizes the Government of the Republic of Croatia to issue decisions on changes to these minimum insured amounts, in accordance with the amounts established in delegated acts of the European Commission concerning the alignment of the minimum insured amounts with the harmonized consumer price index (HICP), which is determined based on Regulation (EU) 2016/792 of the European Parliament and the Council of May 11, 2016, on harmonized indices of consumer prices and the house price index, and repealing Council Regulation (EC) No 2494/98 (*Official Journal of the European Union* L 135, May 24, 2016).

[29] The term "injured party" refers to any individual who is entitled to compensation for damage (whether it is damage to property or damage resulting from death or bodily injury) caused by the use of a vehicle.

Croatian law. Specifically, the minimum insured amount for damages due to death, bodily injury, and health impairment of €6,450,000.00 per accident was already applicable based on the Croatian Government's Decision from 2022 regarding the increase of the minimum insured amount under motor liability insurance contracts.[30] However, this Decision did not, for unknown reasons, prescribe an alternative minimum coverage for these types of damages as specified in the 2021 Directive (€1,300,000.00 per injured party). The amended ZOOP provides for such an alternative. As for the minimum insured amount for property damage, the amended ZOOP is identical to the aforementioned Decision of the Croatian Government (as well as to the 2021 Directive).

1.3. Check on Insurance

Just as before the most recent amendment, the amended ZOOP respects the principle that existed in the Sixth Directive, as well as in the Directive from 2021, which stipulates that member states refrain from making checks on insurance against civil liability for vehicles that are typically found in the territory of another member state, as well as for vehicles that are typically found in the territory of a third country and enter the territory of a member state from another member state.[31]

However, considering that the Directive from 2021, compared to the Sixth Directive, significantly more precisely regulates the powers of member states to deviate from the described principle, it was necessary to amend ZOOP in this segment as well.[32]

The police still have the authority to carry out checks to ensure that every foreign vehicle entering the territory of the Republic of Croatia has valid proof of compulsory motor insurance.

However, when it comes to vehicles that are usually found in the territory of another member state or vehicles typically found in a third country and entering the

[30] *Narodne novine, Official Gazette of the Republic of Croatia*, No. 45/2022 of April 13, 2022.

[31] Article 4 of the Sixth Directive, or Article 4, paragraph 1 of the 2021 Directive.

[32] Article 4 of the Sixth Directive originally had only one paragraph, which granted member states the authority to depart from the described principle of refraining from controls, through so-called non-systematic checks of insurance, but under the condition that these checks are not discriminatory and are carried out as part of supervision not specifically aimed at verifying insurance. However, after the adoption of the Sixth Directive, there was extensive and precise regulation of issues concerning the protection of individuals' rights related to the processing of personal data, increased illegal migration (where vehicles are often used as transportation means for committing such acts), the need for stronger measures against the use of uninsured vehicles in traffic, etc. All of this pointed to the fact that the issue of regulating justified cases, conditions, and procedures under which Member States can still carry out insurance checks had to be more thoroughly addressed. This was done in the 2021 Directive by introducing a completely new, much more extensive and precise version of Article 4. This article of the 2021 Directive was incorporated into Croatian law as part of the amendment to the ZOOP by modifying Article 32, paragraph 3, and adding new paragraphs 4 and 5.

territory of the Republic of Croatia from the territory of another member state, the police's broad powers are narrowed to a certain degree. The police are authorized to conduct non-systematic checks if they are not specifically aimed at verifying insurance as stated in paragraph 1 of this article, but are necessary, non-discriminatory, and proportionate to the objective sought, and:

a) conducted as part of monitoring not specifically focused on verifying insurance or
b) part of a general system of checks that also applies to vehicles usually found in the territory of the Republic of Croatia, and for which stopping the vehicle is not necessary.

Under the two conditions described, checks must be conducted based on regulations regarding the protection of personal data, and personal data can be processed if necessary for the purpose of combating driving uninsured vehicles that are not from the member state where they are usually found. The mentioned regulation must comply with the so-called General Data Protection Regulation (GDPR)[33] and must include appropriate measures to protect the rights and freedoms, as well as the legitimate interests of the data subjects.[34]

1.4. Protection of Injured Parties in the Event of Insolvency of the Insurance Company

The matter of the rights of injured parties in the event of the opening of liquidation or bankruptcy proceedings, [35] i.e. insolvency of the insurer who, based on the concluded motor liability insurance contract, would be obligated to compensate the damage to that party, has been significantly more detailed after the entry into

[33] Regulation (EU) 2016/679 of the European Parliament and Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (*Official Journal of the European Union* L 119, 4 May 2016). In the Croatian legal system, the GDPR was incorporated through the Act on the Implementation of the General Data Protection Regulation, *Narodne novine, Official Gazette of the Republic of Croatia*, No. 42/18. Another important piece of legislation, in certain circumstances, could be the Law on the Protection of Natural Persons Regarding the Processing and Exchange of Personal Data for the Purposes of Preventing, Investigating, Detecting, or Prosecuting Criminal Offenses or Enforcing Criminal Sanctions, *Narodne novine, Official Gazette of the Republic of Croatia*, No. 68/18. Both regulations are relevant for the actions of the police in the context of personal data protection.

[34] These measures must be such that they specify the exact purpose of the data processing, refer to the relevant legal basis, and must comply with relevant security requirements as well as the principles of necessity, proportionality, and purpose limitation, while establishing a proportional period for data retention. When the data collected during the inspection is no longer needed for the purpose for which it was collected, it must be immediately erased. If it is determined that the controlled vehicle is insured, the data is immediately deleted. If it is not possible to determine whether the controlled vehicle has valid insurance, the data is retained only for a limited period, as short as possible. If it is determined that there is no proof of valid insurance for the controlled vehicle, the data is retained until the relevant administrative or judicial procedures are completed and until the vehicle is covered by a valid insurance policy.

[35] More about pecularities of the insolvency procedure of insurance companies: Jelena Lepetić, „Poseban režim stečaja društava za osiguranje", *Tokovi osiguranja*, br. 3/2024, str. 595-613.

force of the amended ZOOP. This is a logical consequence of the fact that the 2021 Directive has considerably changed the provisions of the Sixth Directive in relation to this issue.[36]

The amendment to the ZOOP (following the example of the 2021 Directive) separately regulates two possible situations:

a) The rights of the injured party in the event of the opening of liquidation or bankruptcy proceedings against the liable
b) insurer headquartered in the Republic of Croatia,[37] and
c) The protection of injured parties residing in the Republic of Croatia when the liable insurer is an insolvent insurance company from another member state, regardless of whether the damage was caused by a vehicle for which the liability insurance contract was concluded in Croatia and regardless of whether the vehicle is typically located in the Republic of Croatia or another country.[38]

Therefore, the only distinguishing criterion between cases a) and b), which are regulated by separate articles in the amended ZOOP, is the country in which the insurer, who entered into a liability insurance contract with the injured party, is headquartered, and against which bankruptcy or liquidation proceedings have been initiated (whether it is the Republic of Croatia or another member state).

In the situation described under a) the damage (due to property damage or death or bodily injury) is caused by a vehicle for which liability insurance for the damage was provided by an insurer headquartered in the Republic of Croatia. The injured party can submit a claim for compensation to the Croatian Insurance Bureau from the moment bankruptcy or liquidation proceedings are opened against the insurer obligated to pay compensation:

- in the case of bankruptcy (by a court decision published in the Official Gazette of the Republic of Croatia), or

[36] In this part, the amendment to the ZOOP incorporates into Croatian national law the provisions of the 2021 Directive, which introduce new, substantively extensive Articles 10.a (Protection of injured parties in relation to damage resulting from accidents that occurred in their member state of residence in the case of the insolvency of the insurance company, see Article 1, point 8 of the 2021 Directive) and 25.a (Protection of injured parties in relation to damage resulting from accidents that occurred in a member state other than their member state of residence in the case of the insolvency of the insurance company, see Article 1, point 18 of the 2021 Directive).

[37] Article 31 of the amended ZOOP. Even before the 2023 amendment, the ZOOP regulated the issue of compensation in case of the reasons for the termination of the insurance company or bankruptcy. However, after the amendment, this matter has been regulated much more precisely, as is the case at the European Union level.

[38] Article 61.a of the amended ZOOP. This is a completely new article that did not exist in the ZOOP before the 2023 amendment.

- in the case of liquidation (by a decision of the Croatian Financial Services Supervisory Agency, as the national supervisory body, also published in the Official Gazette of the Republic of Croatia).

Additionally, regardless of the public announcement of decisions on the initiation of bankruptcy or liquidation proceedings, the Croatian Insurance Bureau notifies all equivalent bodies in other member states, which are authorized and obligated to compensate injured parties in such situations.

Upon receiving the compensation claim, the Croatian Insurance Bureau immediately informs the insurer in bankruptcy or liquidation, as well as the bankruptcy trustee or liquidator. Throughout the entire process, the Croatian Insurance Bureau is authorized and obliged to cooperate with bodies established or authorized to compensate injured parties in cases of bankruptcy or liquidation, as well as with the insurer in respect to whom such proceedings have been initiated, with the aim of making the most efficient decision regarding the validity of the compensation claim. The bodies in these proceedings must also cooperate with the Croatian Insurance Bureau.[39]

Regarding the compensation claim, within three months of its receipt, the Croatian Insurance Bureau must provide the injured party with:

- a reasoned offer for compensation (if it determines that it is obligated due to the circumstances of the opening of bankruptcy or liquidation proceedings against the motor liability insurer of the injuring party, the claim is uncontested, and the amount of the damage has been partially or fully assessed), or
- a reasoned response to specific points of the compensation claim (if it determines that it is not obligated due to the lack of the described circumstances of the opening of bankruptcy or liquidation proceedings, if liability is disputed or not clearly established, or if the amount of damage has not been fully assessed).[40]

If the Croatian Insurance Bureau determines its obligation to compensate for the damage, the payment must be made without delay, and no later than three months from the date the injured party accepts the reasoned offer in writing.[41]

[39] The Croatian Insurance Bureau has the right to recover the amount of compensation paid, along with interest and costs, from those liable for the traffic accident, from other insurers, or from social security bodies that are liable to compensate the injured party in connection with the same traffic accident. If the payment is made during the liquidation process, the Bureau has the right to recover the amount from the insurer undergoing that process. In the case of bankruptcy proceedings against the insurer, the Croatian Insurance Bureau has the right to recover these amounts from the bankruptcy estate.

[40] In the reasoned offer or substantiated objection, the Croatian Insurance Bureau must inform the injured party about the possibility of filing an objection to the decision made. If an objection is submitted, the Croatian Insurance Bureau is required to respond within 30 days from its receipt. Additionally, the Bureau must inform the injured party about the possibility of extrajudicial dispute resolution and the right to file a lawsuit.

[41] Within the same period, the Croatian Insurance Bureau must pay the undisputed part of the damage if it determines that it has an obligation to compensate for the damage, but only the amount of the requested

In the case described in paragraph b), the amended ZOOP stipulates that, from the moment a bankruptcy or liquidation procedure is initiated against the insurer liable for compensating the damage, the injured party residing in the Republic of Croatia may submit a compensation claim to the Croatian Insurance Bureau. Upon receiving the compensation claim, the Croatian Insurance Bureau informs the equivalent body in the home member state of the insurer undergoing the bankruptcy or liquidation procedure, the insurer itself, and its bankruptcy trustee/liquidator.

Since it is possible for the same compensation claim to be submitted both to the Croatian Insurance Bureau and to the insurer undergoing the bankruptcy or liquidation procedure, the insurer, its bankruptcy trustee, or liquidator must inform the Croatian Insurance Bureau about the receipt of the claim and the decision made regarding it (whether the claim is accepted and compensation is paid, or the claim is rejected). On the other hand, the Croatian Insurance Bureau must actively cooperate throughout the entire process, particularly regarding the exchange of information, with all competent bodies involved in the liquidation or bankruptcy procedure of the insurer in the other member state, as well as with the insurer itself.

The rights and obligations of the Croatian Insurance Bureau in many respects are prescribed analogously to the situation described in paragraph a), that is, analogously to the situation when a bankruptcy or liquidation procedure is initiated against an insurer based in the Republic of Croatia. This applies especially to the same timeframes for making decisions and potential payments for the compensation claim, informing the injured party about the possibility of submitting an objection to the Croatian Insurance Bureau, informing the injured parties about the possibilities of extrajudicial and judicial dispute resolution, the right of the Croatian Insurance Bureau to recover the paid amounts from the parties liable for the traffic accident, other insurers, or social security bodies obligated to compensate the injured party for the same accident, etc.

The specificity of the situation described in paragraph b) is that, after paying the compensation, the Croatian Insurance Bureau has the right to request full reimbursement of the paid amount from the equivalent body (the bureau of the other member state where the insolvent insurer is based).[42]

compensation is disputed. After payment, the Croatian Insurance Bureau is entitled to recover the paid amount of compensation, interest, and costs from the person or persons liable for the traffic accident, as well as from other insurers or social security bodies obligated to compensate the injured party for the same accident. If the payment is made during a liquidation process, the Bureau has the right to recover from the insurer undergoing that process, up to the amount of the paid damage, interest, and costs. If the insurer is under bankruptcy, the Croatian Insurance Bureau has the right to recover the paid amount from the bankruptcy estate. After making the payment, and if it has not yet received the reimbursement, all the rights of the injured party toward the liable party and their liable insurer are transferred to the Croatian Insurance Bureau. However, the rights of the injured party toward the insurance policyholder or another insured person who caused the accident are not transferred to the Croatian Insurance Bureau if the liability of the policyholder or the insured person would be covered by the liable insurer under the regulations applicable to the bankruptcy or liquidation procedure of the insurance company.

[42] The equivalent body must reimburse the Croatian Insurance Bureau within a reasonable time after receiving the reimbursement request, but no later than six months, unless these bodies have agreed

2. Liability Insurance for Damage Caused by the Use of Automated Vehicles

The very dynamic technological advancement, which has led to the emergence of automated vehicles in traffic, raises numerous questions, such as those related to road safety, the development of traffic infrastructure adapted to such vehicles, interaction between automated and non-automated vehicles, economic feasibility, ethics, and so on. Naturally, it is inevitable that the introduction of such technology, which partially or completely eliminates the need for a driver as the person who has been essential in the context of vehicle operation until now, brings about numerous legal challenges. These are continuously discussed (and) in the professional public.[43] It should also be considered that the use of even fully automated (autonomous) vehicles is beginning to change functionally. These vehicles are no longer used exclusively in the testing phase – we are also seeing the first cases of autonomous vehicle transportation services offered in everyday traffic.[44]

A systematic analysis of all the legal issues related to the use of automated vehicles goes beyond the scope of this work and the purpose it aims to achieve.[45]

This chapter will analyze the part of the amended ZOOP that deals with liability insurance in cases where damage is caused by an automated vehicle.[46]

otherwise in writing. Once the equivalent body has paid the reimbursement to the Croatian Insurance Bureau, all rights of the injured party against the person liable for the accident or their insurance company are transferred to that body, except in the case of the policyholder or another insured person who caused the accident, if the liability of the policyholder or insured person would have been covered by the insolvent insurance company in accordance with the applicable national law. It should also be noted that the Croatian Insurance Bureau would have the same obligation in the situation where bankruptcy/liquidation proceedings were initiated against the insurer of the at-fault party's motor vehicle insurance with its headquarters in the Republic of Croatia, and the equivalent body from another member state would seek reimbursement under the described conditions.

[43] Mihael Mudrić, „Polu-automatizirana motorna vozila i predstojeća regulacija (1. dio)", *https://www.bug.hr/zakonodavstvo/polu-automatizirana-motorna-vozila-i-predstojeca-regulacija-1-dio-37727*, accessed: 1.7.2024.

[44] „Povijesni trenutak za robotaksije: Waymo usluge, nakon testne faze, sada dostupne svima", *https://www.bug.hr/transport/povijesni-trenutak-za-robotaksije-waymo-usluge-nakon-testne-faze-sada-41845*, accessed: 1.7.2024.

[45] For a detailed analysis of all legal aspects of the use of automated, including autonomous vehicles in all branches of transport, see Kyriaki Noussia, Matthew Channon (ed.), *The Regulation of Automated and Autonomous Transport*, Springer Nature Switzerland AG, Chaim, 2023.

[46] From the content of these provisions, it could be concluded that they are, to some extent, designed based on certain comparative national legal solutions. A comparative overview of the legislative regulation of automated vehicle operation in a large number of countries (as well as at the level of international and EU legal sources) is available at https://www.connectedautomateddriving.eu/regulation-and-policies/national-level/, accessed: 1.7.2024. For a scientific and systematic overview of the regulation in German law, as one of the first legal systems to systematically regulate the operation of high-level automated vehicles, including the issue of liability insurance, see: Martin Ebes, 'Civil Liability for Autonomous Vehicles in Germany,' https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4027594, accessed: 1.7.2024.

It should be emphasized that the 2021 Directive does not have specific provisions relating to liability insurance for damage caused by the use of automated vehicles.[47] Therefore, it can be concluded that, for now, the European legislator considers that the provisions of the Sixth Directive can be applied to automated vehicles in the same way as to "traditional" vehicles.[48]

However, recital 39 of the preamble to the 2021 Directive states that the Commission should monitor and review the content of the Sixth Directive given the technological developments, including the increased use of autonomous and semi-autonomous vehicles. This recital has been "transformed" into a binding provision in the new Article 28 (c), paragraph 2, point (a) of the Sixth Directive. This provision contains the obligation for the Commission to submit a report to the European Parliament, the Council, and the European Economic and Social Committee by no later than December 24, 2030, in which it must evaluate the implementation of the Sixth Directive, including its application in the context of technological development, particularly regarding autonomous and semi-autonomous vehicles. If necessary, the Commission must attach a legislative proposal to this report. Therefore, it can be said that the 2021 Directive has granted the Commission the authority and the obligation to initiate further amendments to the Sixth Directive in the future if it is determined that this is necessary to improve the level of protection for individuals injured by the use of such vehicles, as well as for the policyholders (owners or users of such vehicles).

In line with the above, the latest amendments to the ZOOP regarding provisions related to liability insurance for damage caused by automated vehicles are not a result of alignment with the 2021 Directive. They reflect the needs of practice, but also the fact that that other regulations concerning the use of these vehicles have been enacted or are in the process of being enacted in the Republic of Croatia. Therefore, the amended ZOOP, in this regard, forms part of the general national legal framework concerning these vehicles, which is not fully defined but is still under development.

[47] However, the issue of liability for damage caused by the use of automated vehicles, as well as the issue of insurance for that liability, has been a subject of interest at the level of EU law and policy for many years, starting with the very comprehensive study by the European Parliament on this topic, 'A common EU approach to liability rules and insurance for connected and autonomous vehicles, *https://www.europarl.europa.eu/RegData/etudes/STUD/2018/615635/EPRS_STU(2018)615635_EN.pdf*, accessed: 1.7.2024. However, it should be noted that the regulation of the issue of liability for damage caused by motor vehicles is still within the competence of the member states, while the issue of insurance for that liability falls under the competence of the European Union. Nevertheless, when regulating liability for damage caused by motor vehicles, member states must not undermine the effectiveness of the European directives on insurance for that liability.

[48] In this context, it could be said that the European legislator agreed with the identical position expressed by Insurance Europe (the federation of European insurers) during the public consultation in the process of drafting the 2021 Directive proposal, see: https://www.insuranceeurope.eu/news/302/motor-insurance-directive-fit-for-purpose-for-connected-and-automated-vehicles/, accessed: 1.7.2024

In order to understand the content and purpose of the amendment to the ZOOP related to automated vehicles, it is necessary to briefly explain the concept of the automated vehicle, as well as to clarify the established levels of vehicle automation (up to the level of fully automated – autonomous vehicles), which are relevant to the legal regulation of all aspects of the use of these vehicles.

Therefore, an automated vehicle, according to the ZOOP amendment, is defined as a vehicle regulated by the law governing road traffic safety, and which meets the conditions of the vehicle definition within the ZOOP itself. According to the Road Traffic Safety Act, an automated vehicle is "a vehicle that uses hardware and software for continuous full dynamic control of the vehicle (a fully automated vehicle without a steering wheel)."[49]

This definition is not entirely clear. It seems that the Road Traffic Safety Act under the term "automated vehicle" refers only to vehicles with full automation (fully automated vehicles, often also called autonomous vehicles).

Vehicle automation is not a clear-cut term. Different vehicles can have different levels of automation. For the purposes of technology and the design of such vehicles, but also for the legal regulation of their use, the international *Society of Automotive Engineers* (SAE) has established a generally accepted differentiation of vehicles according to the level of automation.[50] According to this differentiation, there are six levels of automation in vehicles, starting from the so-called zero level and ending with level five.

At the first three levels (levels 0-2) of automation, the driver is considered to have the obligation and responsibility to operate the vehicle, regardless of whether any driver assistance features are activated (thus, at levels 0-2, there are no automated functions but rather driver assistance features). The driver of such a vehicle must constantly monitor the operation of these systems and must manage the vehicle, accelerate, and brake to maintain driving safety. Specifically, the following driver assistance functions apply at each level:

Level 0: Driver assistance functions are limited to warnings and immediate assistance (e.g. emergency automatic braking, blind-spot warning, or lane departure warning).

Level 1: Driver assistance functions enable acceleration during steering *or* braking (e.g. adaptive cruise control *or* maintaining the vehicle in the center of the lane while driving).

Level 2: Driver assistance functions allow acceleration during steering *and* braking (e.g. simultaneous use of adaptive cruise control *and* lane-centering assistance).

[49] Road Traffic Safety Act, *Narodne novine, Official Gazette of the Republic of Croatia*, Nos. 67/08, 48/10, 74/11, 80/13, 158/13, 92/14, 64/15, 108/17, 70/19, 42/20, 85/22, 114/22, 133/23, Article 2, paragraph 1, item 107.

[50] The differentiation developed by the Society of Automotive Engineers (SAE) has also been adopted by the International Organization for Standardization (ISO), and it is now officially represented as the ISO/SAE standard.

Vehicles that can be classified into the next higher levels (levels 3-5) have automated functions. At these levels, it is considered that the driver is not driving or operating the vehicle during the period when automated functions are activated, regardless of whether the driver is sitting in the "driver's seat" or not. However, as a kind of exception, it should be noted that at level 3, the driver must take control of the vehicle when required by the vehicle itself, i.e. the automated system, or when the driver, using reasonable attention, can recognize that it is necessary to take control. At levels 4 and 5, the system never requires the driver to take over vehicle control.

Specifically, the characteristics of automated functions by levels are as follows:

Levels 3 and 4: Driving, or operating the vehicle, is fully achieved through automated functions (without the need for any driver control), but only in specific situations or traffic conditions. Automated driving at these levels is not possible unless all necessary preconditions are met. For example, at level 3, fully automated driving is possible when driving in a traffic queue. At level 4, a fully automated (autonomous) drive is possible within a geographically predefined area, which can be the case for a geographically limited taxi service. Vehicles at level 4 may or may not have pedals or a steering wheel.

Level 5: At vehicles of this level of automation, fully automated (autonomous) driving is possible under all conditions, without geographical or other restrictions. As with level 4, vehicles do not need to have pedals or a steering wheel.[51]

In the context of motor liability insurance and the application of the amended ZOOP provisions, a question arises as to the circumstances under which damage caused by an automated vehicle would be considered. The answer would be that it is damage caused by an automated vehicle when the harmful event occurred during the period when the driver did not control the vehicle (level 5 automation, as well as level 4, assuming compliance with the limitations on automated functions related to this level), nor was the driver required to control the vehicle (level 3 automation, if the system in the vehicle did not require the driver to take control sufficiently before the harmful event occurred, giving the driver reasonable time to take control, and the driver could not reasonably have noticed the need to take control).

The amended ZOOP operates on the principle that its provisions related to the owner of a "classic" vehicle also apply to the owner or user of an automated vehicle, unless the regulation specifically provides otherwise.[52]

However, due to the specific issues that arise only in relation to the occurrence of a harmful event through the use of an automated vehicle, it was clear that liability insurance for damage caused by the use of such a vehicle cannot be adequately regulated simply by analogy with regulations applicable to "classic" vehicles. It was necessary to supplement this general provision with additional, specific provisions applicable solely to automated vehicles.

[51] *https://www.sae.org/blog/sae-j3016-update*, accessed: 1.7.2024.

[52] Article 2, Paragraph 4 of the amended ZOOP.

One of these issues is the obligation to conclude a motor liability insurance contract, taking into account the specificities regarding individuals who may be liable for the safety of using such vehicles in traffic.

The amended ZOOP stipulates that the owner of an automated vehicle is obliged to conclude a compulsory motor liability insurance contract, which also includes the liability of the vehicle's safety operator and the safety driver during the testing phase.[53] The safety operator is a person outside the automated vehicle who is connected to it via telecommunications and is liable for approving or selecting an alternative driving maneuver. The safety driver is a person inside the automated vehicle liable for monitoring it during testing and is capable of taking dynamic control.[54]

In this context, a question arises regarding the verifiability of this obligation, i.e. the obligation to have a policy or other proof of the motor liability insurance contract in the vehicle. In the case of "classic" vehicles, this is an obligation of the driver, who must present such proof to an official upon request. However, the question arises as to how to verify the existence of insurance for automated vehicles where there may not be a driver in the vehicle. The amended ZOOP stipulates that verification of the existence of insurance for automated vehicles is carried out by an official through a check in the computer system. In the case of a traffic accident, the owner of the

[53] Article 4, Paragraph 6 of the amended ZOOP. In Croatian law, there is no specific regulation establishing the legal basis for the liability of a safety operator or safety driver. It appears that their liability, at least at this point in time, should be assessed according to the provisions governing the liability of the owner or user of a motor vehicle, as set out in the Croatian *Obligations Act* (*Zakon o obveznim odnosima*), *Narodne novine*, *Official Gazette of the Republic of Croatia*, Nos. 35/05, 41/08, 125/11, 78/15, 29/18, 126/21, 114/22, 156/22, and 155/23, particularly Articles 1069–1072. Although the issue of regulating liability for damage caused by automated vehicles goes beyond the scope of this paper, it might be worth considering whether the safety operator could be regarded as a type of "external driver" of the automated vehicle. Similarly, an equivalent obligation applies to the owner or user of an automated vehicle concerning mandatory passenger insurance in public transportation. Notably, Croatia is currently in the process of amending the *Road Transport Act* (*Zakon o prijevozu u cestovnom prometu*, ZPCP), which regulates the conditions and requirements for providing public passenger transport with automated vehicles.
It is evident that the drafters of the amended ZOOP, while preparing its text, were mindful of the ongoing process of amending the ZPCP and anticipated the need to harmonize the two pieces of legislation with future developments. The proposed amendments to the ZPCP recently passed their "first reading" in the Croatian Parliament, and any adoption will follow after second reading see: https://www.sabor.hr/prijedlog-zakona-o-izmjenama-i-dopunama-zakona-o-prijevozu-u-cestovnom-prometu-prvo-citanje-pze-0?t=146878&tid=212707, accessed: 1.7.2024.

[54] The definitions of these persons are contained in Article 3, items 29 and 30 of the amended ZOOP. The definitions are also included in the Draft Amendments to the Road Transport Act (ZPCP) (newly proposed points 49.a and 49.b in Article 4, Paragraph 1), *ibidem*. The insurance coverage also extends to damages caused by actions of individuals who performed the function of safety operator or safety driver of an automated vehicle without authorization, i.e. without the owner's consent. The insurer will have the right to seek reimbursement of the full amount of the compensation paid from these individuals. This is explicitly prescribed by the provisions of Article 25, Paragraphs 4 and 5 of the amended ZOOP. Finally, the insurance coverage also includes cases where the damage was caused by a stolen automated vehicle (Article 25, Paragraph 3 of the amended ZOOP).

automated vehicle is obliged to provide personal data, information about compulsory motor insurance, and relevant driving data recorded by the automated vehicle to all participants in the traffic accident, who may use this information to submit compensation claims. The longest deadline for fulfilling this obligation is three days from the date the accident occurred. The owner of the automated vehicle must also provide this information at the request of the liable insurer for claims settlement, as well as at the request of traffic supervision authorities, judicial authorities, and other authorities involved in the accident investigation and enforcement of their rights and obligations under the provisions of ZOOP.[55]

It is particularly important to consider the provision in the amended ZOOP related to Article 23, paragraph 1, which defines situations in which the insurer is not obliged to pay compensation for damage under motor liability insurance. One of these situations is compensation for damage suffered by the driver of the vehicle that caused the damage, as well as their relatives and other individuals or legal entities, regarding damage due to the death or bodily injury of the driver.

Namely, in paragraph 2 of Article 23 of the amended ZOOP, it is stipulated that the provisions of paragraph 1 of that article apply to the owner or passenger of an automated vehicle. Regarding the specific case of exclusion related to damage suffered by the driver, there is no issue if it concerns a level 4 or 5 automated vehicle, as these vehicles do not have or will not have a driver. However, ambiguity may arise in the case of a level 3 automated vehicle, where a driver may be present in the vehicle and must take control, but only if the automated system requires it, or when the driver, using reasonable attention, can conclude that it is necessary to take control. If an accident occurs and the subsequent damage suffered by the driver (and/or their relatives and others) due to bodily injury or death happens while the driver was not controlling the vehicle, nor was the system previously required the driver to take control, and there was no reason for the driver to conclude the need to take control, the question arises whether the described exclusion from insurance coverage is justified. In such circumstances, the driver's position is very similar to that of a passenger. Of course, this provision in the amended ZOOP is justified if automated vehicles are understood to only mean fully automated vehicles (level 5 and, if certain assumptions are met, level 4 automation). However, this would mean

[55] Article 6, Paragraphs 3 and 4 of the amended ZOOP. Paragraph 5 of the same article also stipulates the obligation of the manufacturer of the automated vehicle to provide relevant data and information necessary to resolve a compensation claim, upon request from the owner of the vehicle, the insurer, the injured party, the authority liable for traffic supervision, judicial authorities, and other bodies involved in proceedings related to the traffic accident. In cases where an automated vehicle is involved in an accident, the obligation to exchange personal data and vehicle information between the owner of the automated vehicle and the participants in the accident is established by the provision of Article 38, Paragraph 4 of the amended ZOOP. In this context, the obligation to keep the European Accident Statement in the vehicle does not apply to automated vehicles.

that there is a "gap" in the application to level 3 vehicles, where the driver is present to take control when required or when he recognizes the need.[56] The only logical interpretation of this provision is that, in the context of insurance coverage and the (non-)exclusion of the insurer's obligation, no distinction should be made between levels of automation. Damages due to the death or bodily injury of the driver should be excluded from insurance coverage only when, at the time of the harmful event, the driver was indeed controlling the vehicle or was obligated to control it. If that assumption is not met, the driver of an automated vehicle should be considered a passenger, and if there is no other reason for exclusion, such damages should be included in the insurance coverage.[57]

Automated vehicles are associated with specific potential causes of harmful events and subsequent damage. These causes are related to the characteristics of the vehicle's software and its installation or updates. The amended ZOOP regulates insurance coverage for such causes of damage.

Insurance coverage includes:

a) damages caused by unauthorized or improper software for continuous dynamic control of an automated vehicle and
b) damages caused by unauthorized or improperly modified software for continuous dynamic control of an automated vehicle.

In case of (a), it refers to software not approved by the manufacturer of the automated vehicle or not a version recommended by the manufacturer. In case of (b), it refers to software (possibly correct) applied contrary to the manufacturer's instructions or by a person who is not the manufacturer of the automated vehicle or someone authorized by them to do so.

[56] Let us add to this that the Commission Implementing Regulation (EU) 2022/1426 of August 5, 2022, on establishing rules for the application of Regulation (EU) 2019/2144 of the European Parliament and the Council regarding common procedures and technical specifications for the type-approval of systems for automated driving (ADS) of fully automated vehicles, *Official Journal of the European Union* L 221 of August 26, 2022, defines the term "fully automated vehicle" as vehicles with dual mode of operation, designed and manufactured for the transportation of passengers or goods within a predefined area. Vehicles with dual mode of operation are defined in this Regulation as fully automated vehicles with a driver seat, designed and constructed with the following modes of operation: (a) "manual driving", performed by a driver; and (b) "fully automated driving", performed by an automated driving system without the supervision of a driver (Article 1, point (a), and Article 2, point 34 of the Regulation). Thus, this Regulation includes vehicles that would belong to level 3 (those with the possibility of dual mode operation) in the category of fully automated vehicles.

[57] Regarding the loss of insurance rights, according to paragraph 6 of Article 24 of the amended ZOOP, all circumstances that lead to the insured person losing their insurance coverage apply equally to both "traditional" and automated vehicles. Unlike cases of exclusion from insurance, in cases that result in the loss of the insured person's right to insurance coverage, the insurer will, if the necessary conditions are met, compensate the damaged party. However, in the next step, the insurer will have the right to full or partial recovery of the paid amount from the person liable for the damage.

If the insurer proves that the cause of the harmful event and resulting damage was one of the cases described in (a) or (b), they will have the right to recover the entire amount paid from the person liable for the damage (from the person who applied unauthorized or improper software or from the person who applied the software contrary to the manufacturer's instructions, or who was not authorized to apply the software).[58]

The amended ZOOP does not specifically address situations where the owner of an automated vehicle is the person who applied unauthorized or improper software, or who applied the software contrary to the manufacturer's instructions. Therefore, it should be considered that the described rules apply to them as well. Essentially, these would be specific cases where the owner of a motor vehicle loses their rights under the insurance policy.[59]

3. Cases of Exclusion from Insurance Coverage and Loss of Insurance Rights

The amendment of the ZOOP introduces a new case of exclusion from insurance coverage and changes regarding the regulation of one of the previously existing cases.[60]

In this sense, the new case of exclusion from insurance coverage refers to a situation where the damage is caused by a vehicle that, at the time of the traffic accident, was not being used as a means of transport but rather for industrial, agricultural, or other purposes. This exclusion is a result of the introduction and definition of the term "vehicle use" in the 2021 Directive and, consequently, in the amended ZOOP.[61]

The amendments regarding the regulation of one of the previously existing cases concerns damage caused during activities related to motorsport (races, competitions, training, testing, demonstrations on limited and marked areas). With a more precise expression, following the 2021 Directive, it is clearly stated that the exclusion from insurance coverage applies only to the owner and driver of the vehicle involved in these activities. Prior to the ZOOP amendment, this exclusion applied to all potential injured parties.[62]

[58] Article 25, Paragraphs 4, 6, 7, and 8 of the amended ZOOP.

[59] The cases of loss of insurance rights are regulated in Article 24 of the amended ZOOP and are applied analogously to the owner of the automated vehicle, the safety driver, and the safety operator.

[60] The amended Article 23, paragraph 1, item 6, third subparagraph, and item 7 of the ZOOP. All exclusions from insurance coverage stipulated in Article 23 of the amended ZOOP apply accordingly to the owner of the automated vehicle and passengers in the automated vehicle, as prescribed in paragraph 2 of that article.

[61] *Supra*, Chapter 1.1.

[62] The exclusion related to the use of vehicles in activities associated with motorsports is a consequence of such use being generally exempt from the application of the amended ZOOP, provided that the organizer of the activity has obtained (otherwise voluntarily) insurance for their professional liability

Speaking generally about the reasons for the loss of insurance rights, the amended ZOOP, in Article 24, adds a completely new case that results in the insured person losing insurance coverage. This concerns a situation where the driver, after a traffic accident resulting in property damage, leaves the scene before completing the European Accident Statement or otherwise exchanging personal details and vehicle information, or before notifying the relevant police authorities in cases where someone has lost their life or been injured. However, insurance rights will not be lost if the insured person temporarily leaves the scene of the accident in accordance with the ZSPC (e.g. if the insured person requires urgent medical assistance in a healthcare facility, or if the insured person assisted another individual in going to a healthcare facility for help, or if they left to inform the police about the accident). In fact, this is another sanction for violating the provisions of Article 176 of the ZSPC. This article of the ZSPC provides for a penalty for unjustified abandonment of the scene of an accident and failure to provide data, including failing to complete the European Accident Statement It is clear that the legislator considered this (additional) sanction of loss of insurance coverage in cases of unlawful abandonment of the accident scene to be proportional to the protection of the public interest, which aims to combat such events, the number of which is not negligible but rather quite the opposite.[63]

Furthermore, it is important to note that the amended ZOOP expands the previously prescribed case in which a driver loses their right to insurance if they were driving under the influence of alcohol (above the agreed level), drugs, psychoactive medications, or other psychoactive substances. The amendment now includes a situation where the driver loses this right if, after the accident, refuses to undergo testing for alcohol, drug, psychoactive substances, and psychoactive medications.[64] It should be noted that, even after the ZOOP amendment, it is not the driver's duty (which must be performed under the threat of losing insurance coverage) to organize the testing for the presence of these substances in his body on his own initiative. Instead, the driver's obligation is to undergo the testing when requested by another party (a police officer at the scene of the accident, or a healthcare facility under the order of the police).[65]

in organizing such activities (Article 2, Paragraph 5 of the amended ZOOP). In a broader sense, certain damages fall outside the insurance coverage established through motor vehicle liability insurance because such damages are covered by the Republic of Croatia. These are damages caused by vehicles of the Croatian Armed Forces and damages resulting from a terrorist act involving the use of a vehicle (Article 2, Paragraph 3 of the amended ZOOP).

[63] *https://www.jutarnji.hr/autoklub/aktualno/tko-se-udalji-je-nadrapao-evo-zasto-bijeg-s-mjesta-nesrece-sad-vodi-ravno-u-bankrot-15429477*, accessed: 1.7.2024.

[64] Article 24, Paragraph 1, Item 4 of the amended ZOOP.

[65] Article 181. ZSPC.

4. Procedure and Methods for Handling Compensation Claims

The issue of procedures and methods for handling compensation claims is always legally significant because it reflects the level of efficiency in achieving the primary goal of the regulations on motor liability insurance – protecting the injured parties and the insured. However, it is also important to consider the fact that insurance is a highly regulated financial activity. Insurers' actions when resolving compensation claims must be aligned with regulations governing their business operations in general to ensure stability and sustainability. In other words, the procedure and method for resolving compensation claims should be such that, taking into account all applicable legal regulations (not just the ZOOP), it achieves the highest possible level of protection for the injured parties and the insured. This principle must be observed when dealing with the substance of the compensation claim (deciding on the validity of the claim, including the amount of damage compensation requested) as well as the procedure itself (deadlines, communication with the claimant, communication with other individuals and legal entities when necessary to resolve the claim, etc.).

The fact is that injured parties, as well as other individuals involved in the process of damage compensation, e.g. auto repair shops, have not always been satisfied with the insurers' handling of compensation claims and have publicly advocated for changes to the regulations to ensure more professional handling by insurers. Insurers, on the other hand, have generally considered such complaints to be largely unfounded, although they have agreed that legislative amendments should be implemented to make the process more efficient.[66]

This issue was also on the agenda for the most recent amendments to the ZOOP, specifically the amendment of Article 12. As a further step, the latest ZOOP amendment grants the supervisory body (the Croatian Financial Services Supervisory Agency – HANFA) the authority and liability to issue a regulation specifying in more detail how compensation claims should be handled, including the content of the reasoned offer and substantiated response, the recording of compensation claims, and the informing of the injured party about the obligations of the liable insurer and the necessary data in the claims process, in accordance with the amended Article 12 of the ZOOP. HANFA has indeed issued such a regulation.[67] The issue of procedures and methods for handling compensation claims will further be discussed with consideration of the text of the amended Article 12 of the ZOOP and the Rulebook.

[66] https://osiguranje.hr/ClanakDetalji.aspx?22185, accessed: 1.7.2024.

[67] The Rulebook on the Procedure for Resolving Compensation Claims of Injured Parties in Traffic Accidents, *Narodne novine, Official Gazette of the Republic of Croatia*, No. 79/2024, of July 3, 2024, hereinafter: the Rulebook**.**

Regarding the types of decisions an insurer can make in response to a submitted compensation claim, the amended ZOOP does not introduce any substantial changes. The insurer is required to make:

- a reasoned offer for damage compensation when liability is not in dispute and the damage amount has been determined, or
- a substantiated response to all points of the compensation claim when liability is disputed or when the amount of damage has not been fully determined.

The deadline for the insurer to deliver one of these decisions to the claimant remains unchanged – no later than 60 days from the receipt of the compensation claim. The decision must at least contain the reasons for its issuance and information on the right to file an objection to that decision.[68] Since the amended ZOOP only specifies the minimal elements that must be included in each decision, the Rulebook provides a much more detailed explanation of the required elements for each of these decisions, with further differentiation of mandatory elements in a substantiated response, especially in cases where:

- the insurer has determined that it is not liable for compensating the damage;
- the insurer has determined that it is only partially liable for the compensation;
- the insurer has determined that it cannot fully determine the amount of damage.[69]

Analysis of these elements suggests that the general regulation issued by the supervisory body now requires insurers to provide a detailed explanation of why they believe, in the case of a reasoned response (either fully or partially), they are not liable for the damage incurred. In doing so, the insurer must respond in detail to each point of the claim and its attachments (e.g. each point of the report and opinion of the independent expert or service provider chosen by the injured party). Regarding the determination of the damage amount, the insurer must specify the damage (replacement parts, labor costs, etc.) in the decision (reasoned offer or substantiated response) and clearly and unambiguously state how the damage amount was calculated. All of this must be done in a clear and unambiguous manner that will be easily understood by the injured party.

[68] Article 12, paragraphs 1 and 2 of the amended ZOOP.

[69] Article 3, Paragraphs 1-3 of the Rulebook. Paragraph 5 also specifies what any decision must not contain: statements that are inaccurate, unclear, or that may mislead the injured party, such as a statement about the preclusive nature of the deadline for filing an objection to the decision on the damage claim, a statement that conditions the payment of the (undisputed) amount of damage compensation on the injured party taking unnecessary actions (e.g. requiring consent for payment when the insurer is already obligated to make the payment based on ZOOP and the Rulebook, requiring the signing of an agreement or declaration of settlement or compensation, requiring the provision of a bank account number for the payment to be made (if it has already been provided to the insurer), a statement by the insurer claiming they cannot establish their liability due to the lack of a statement from their policyholder, etc.

Therefore, insurers are required to be precise, reasoned, and comprehensive in their response to all elements of the compensation claim (including attachments) and to communicate clearly and understandably to the injured party.

Timeliness is also a requirement. In addition to delivering the decision within 60 days of submitting the compensation claim, the amended ZOOP specifies the deadline within which the insurer must make (full or partial) payment when issuing a reasoned offer, or when determining that he is only partially liable for the compensation or cannot fully ascertain the amount of the damage. Namely, in these cases, the insurer must pay the compensation (or the undisputed part of the compensation) within 15 days from sending one of the mentioned decisions, but in any case, no later than 60 days from the submission of the compensation claim.[70]

The amended ZOOP also specifies the insurer's liability in the period after the submission of the compensation claim, and before making a decision on the claim. Upon receipt of the claim, the insurer must immediately inform the injured party of their rights and obligations, as well as the insurer's liability, and actively and promptly take the necessary actions to fulfill the obligations outlined in this article (the principle of active damage settlement).[71] The Rulebook elaborates on this liability in great detail, requiring insurers, among other things, to treat the claim with the care of a good professional and good business practices, in accordance with the principles of diligence and fairness. A completely new requirement is that the insurer must have a document on their website containing key information about the insurer's obligations and the necessary data in the compensation claims process. The insurer must provide this key information to the injured party when requested, at the time of submitting the compensation claim. The Rulebook defines the formal appearance (form) of this document, its components, and the questions that must be included in the form (which must be clearly and precisely answered in the form), as well as the deadlines for the insurer's actions and information about the decisions the insurer can make with instructions on the right to object.[72]

[70] Article 12, paragraph 5 of the amended ZOOP. As before the entry into force of the amended ZOOP, in the case of non-compliance with the deadline for payment, the sanction is the payment of interest to the injured person, starting from the moment the compensation claim is submitted. Failure to comply with the deadline for delivering the decision gives the injured person the right to file a lawsuit against the insurer (if the lawsuit against the insurer or the liable party is filed before the expiration of the mentioned deadline, it will be considered premature).

[71] Article 12, paragraph 3 of the amended ZOOP. A provision of this content did not exist until this latest amendment.

[72] Article 5 of the Rulebook. The form is provided in the appendix to the Rulebook. Insurers must submit the form to HANFA before using it. The Rulebook also stipulates that insurers, no later than 6 months after the Rulebook enters into force (the Rulebook came into force on the eighth day after its official publication, i.e. July 12, 2024), must adopt and begin applying an internal act that will regulate the entire procedure for handling claims, from receipt to archiving. Of course, this internal act must be in accordance with the amended ZOOP and the Rulebook. The Rulebook also mandates insurers to maintain a record of claims

For the first time, the amended ZOOP explicitly stipulates that the injured party, in the process initiated by the submission of a compensation claim, can submit a report and opinion from an independent expert (regarding all types of damage) and an offer for damage repair from an authorized service provider (e.g. auto repair shops) that the injured party has personally chosen.[73]

The Rulebook stipulates that the insurer, when handling a compensation claim, must "take into account" the submitted report and opinion of the independent expert, or the offer or invoice for damage repair from the authorized service provider chosen by the injured party, and explain any rejection of the expert's report or the repair offer/invoice in part or in full. The insurer must provide a detailed explanation for each point of the report and opinion, or offer.[74] Thus, the report and opinion of an authorized independent expert, as well as the offer or invoice from the repair service provider chosen by the injured party, are not binding for the insurer. However, if the insurer disagrees with the report, opinion, offer, or invoice, it must provide a detailed explanation.[75]

Before the amended ZOOP came into effect, it was not prohibited for the injured party to attach any document to the compensation claim that they considered helpful in supporting their claim. Therefore, it was already allowed to attach a report or opinion from an authorized independent expert[76] or an offer or invoice from the authorized service provider who was expected to repair the damaged item. Even prior to the ZOOP amendment, these attachments were not binding for the insurer, but the insurer was required to take them into account and comment on them according to professional rules and based on valid interpretation and application of the provisions of the Code of Insurance and Reinsurance Ethics.[77]

with a precisely defined content of that record. Insurers have until June 1, 2025, to align their existing records with the requirements of the Rulebook.

[73] Article 12, paragraph 7, of the amended ZOOP. Prior to the amendment, under the provisions of the former Article 12, paragraph 5, the injured party was entitled to submit the report and opinion of an independent expert only in the case of non-property damage, while the right to submit an offer for repairs from an authorized service provider was not regulated at all. Now, the report and opinion can be submitted regarding any type of damage, and the possibility of submitting an offer for repairs from an authorized service provider is expressly regulated.

[74] Articles 2 and 3 of the Rulebook.

[75] Given the mentioned non-obligatory nature of the expert's report/opinion from an authorized expert or the offer/invoice from the service provider, the insurer can, during the processing of the compensation claim, engage other authorized experts to provide a report/opinion or request offers/invoices from other service providers different from those engaged by the injured party (or the representative of the injured party, who could be, for example, an auto repair shop authorized to represent the injured party in the claim resolution process, with their offer attached to the compensation claim).

[76] Indeed, as already mentioned, the previous version of the ZOOP limited this possibility to non-property damages only, while the amended ZOOP no longer contains such a limitation.

[77] „Code of Business Insurance and Reinsurance Ethics", Insurance Association of the Croatian Chamber of Economy,*https://huo.hr/upload_data/site_files/kodeks-poslovne-osiguravateljne-i-reosiguravateljne-etike-1-.pdf*, accessed: 1.7.2024."

With the ZOOP amendment and the Rulebook, there has been a slight shift in expanding the injured party's rights in this regard. It can be said that these rights are now (just) explicitly stated and described in the amended ZOOP and the Rulebook. The progress is more significant in procedural terms, thanks to the detailed specification of the insurer's obligations at each stage of handling the compensation claim, as outlined in the Rulebookn. It should also be noted that, due to more precise and detailed (sub)legal regulation of this issue, more efficient supervision of insurers' actions by HANFA can be expected.

III Conclusion

The 2023 amendment to the ZOOP can generally be evaluated as a significant step forward in increasing the efficiency of the protection of injured parties and policyholders. A large portion of the amendment was necessary for Croatian legislation, as it pertains to the transposition of the provisions of the 2021 Directive into Croatian domestic law. In this respect, it is important to highlight the expansion of the cases of damage caused by the use of vehicles that must be covered by insurance, which is the result of the (broad) definition of the term use of vehicles. On the other hand, it is important to point out the more precise regulation of certain specific circumstances in which accidents caused by motor vehicles occur, where insurance coverage under motor liability insurance for such damage does not need to be contracted, or must be contracted only conditionally (for example, damages related to motorsport events and damages where the vehicle was not being used for its usual transportation purpose).

European, and consequently Croatian, legislators have also made progress in regulating the protection of the injured party when insolvency occurs in the insurance company that has concluded a motor liability insurance contract with the liable party. Previous provisions, which were mostly of a general nature, have been replaced or supplemented with more precise and therefore more comprehensive material and procedural provisions. Regulating this issue at the EU level is significant normative support for the Croatian Insurance Office and equivalent bodies in other member states. It should not be forgotten that these bodies, when dealing with such situations, were, to a large extent, relying on mutual agreements. Now, the fundamental regulation of numerous issues has been elevated to a higher level.

A bold step forward has been made by the Croatian legislator by regulating liability insurance for damage caused by the use of automated vehicles. This is an amendment that was not necessary in terms of the transposition of European Union law into Croatian national legislation. The legislator was motivated by technological progress and the creation of a legal framework for vehicles that are not yet, but certainly will be in time, gradually present on Croatian roads. In addition to the

principle that insurance for damages caused by automated vehicles is regulated, as much as possible, in the same manner as for "classic" vehicles, the amended ZOOP contains a significant number of "special provisions" that had to be aligned with applicable regulations governing some aspects of the use of automated vehicles, as well as with emerging regulations. Naturally, the quality of these provisions in the amended ZOOP will be evaluated through future business and judicial practice. It already seems that some provisions will need to be clarified in the future to be more effectively applied (e.g. insurance coverage for a driver who was not operating the vehicle at the time of the accident, nor was required to do so, but the automated vehicle was doing so). It will certainly be necessary to consider the efficiency of these provisions, especially with the development of legal regulations in other areas, such as insurance for damages caused by defective products, and above all, the precise regulation of the provisions about what is covered (and/or the risk) insured, specifically liability for damage caused by autonomous vehicles. This will be the task of the Croatian legislator, as the European legislator also foresaw the need for a subsequent evaluation of the quality and applicability of its provisions in the near future, as stated in the 2021 Directive.

A positive assessment can also be made of the more detailed regulation of the process and manner of resolving claims. In this context, it is necessary to consider not only the provisions of the amended ZOOP but also those of the implementing Rulebook based on it. Although at first glance it may seem that "revolutionary" changes have occurred in terms of creating new rights for injured parties in this process, a more careful reading leads to the conclusion that such an assessment is not entirely accurate, and that in this respect, it is about the explicit determination of previously existing possibilities for the injured party, now codified in the provisions of the special legal and secondary legislation. However, it is certainly positive that some issues related to the method and procedure for resolving claims have been significantly more precisely resolved, almost to the level of uniformity. The legislator now expects insurers to strictly follow the procedures set forth in the amended ZOOP, particularly in the implementing Rulebook, with decisions that have a very precisely defined (relatively extensive) content. This is important not only for the harmonized approach of all insurers and more efficient handling of claims but also for the added layers of protection for the injured party. On one hand, they will clearly know what the insurer is obliged to do at a certain stage of processing their claim, especially which information the insurer must communicate to them and in what time frame, from the moment the claim is received until the decision is made regarding that claim. The mandatory elements of the insurer's decision, which require a high level of completeness and reasoning, will be particularly significant for the injured party when they are dissatisfied with that decision. It will then be easier for them to prepare a better-quality appeal (during the internal dispute resolution

phase with the insurer regarding the disputed decision). Moreover, the position of the insured party will be easier later on, if the dispute reaches the stage of resolution before other bodies – extrajudicial and/or judicial. While this will be important if the dispute is resolved through extrajudicial mechanisms, it seems that the significance of such well-argued and specific decisions will be particularly important in disputes that are resolved before the court. Namely, the injured party (or their lawyer) will have before them the insurer's thoroughly explained stance, which could help them draft a lawsuit against the insurer, presenting counterarguments in relation to what the insurer outlined in the decision (and in the procedure for the appeal, which the insurer must also precisely argue). This creates the opportunity to prevent a situation in which the insurer's fully reasoned position, which led to the decision (justified response) to fully or partially reject the claim, would only be revealed in the court proceedings, while in the earlier stages of the dispute, that position was merely outlined in general terms to the injured party. Now, the injured party must and should know the insurer's precise, reasoned position even before potentially initiating court proceedings. This could speed up and make the court procedure more efficient. And the faster and more efficient the court procedures, the better it is for the general public interest.

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Master pravnik Filip M. Živanović[1]

OSIGURANJE OD AUTO-ODGOVORNOSTI I AUTONOMNA VOZILA

PREGLEDNI RAD

Sažetak

Autor problematizuje pitanje upotrebe autonomnih vozila, to jest „pametnih automobila" u kontekstu postojećeg regulatornog okvira koji uređuje oblast osiguranja za štete nastale upotrebom motornih vozila. S tim u vezi razmatra pitanje adekvatnosti postojećih zakonskih rešenja kada je reč o osiguranju od auto-odgovornosti i autonomnim vozilima i pre svega ukazuje na problematiku koju pojava autonomnih vozila izaziva u odnosu na institut odgovornosti, kao težišni institut ovog tipa osiguranja. U tom pogledu analiziran je aktuelni normativni kontekst na nivou Evropske unije i na nivou domaćeg zakonodavstva i ukazano je na potencijalne pravce unapređenja legislativnih rešenja, pogotovo na planu promene paradigme u shvatanju odgovornosti i odgovornih lica, odnosno na planu zauzimanja jednog novog, specijalizovanog i sveobuhvatnog pristupa uređenju materije koja u širem smislu reguliše osiguranje od šteta nastalih u saobraćaju.

Ključne reči: osiguranje, autonomna vozila, odgovornost, polisa osiguranja.

I UVOD

Koncept osiguranja, kao društvene i poslovne aktivnosti čija je osnovna svrha da spreči ili umanji ekonomsku štetu koja može nastati usled ostvarenja rizika, odnosno „institut koji se razvio iz potrebe čoveka da kontroliše rizike koji ga okružuju"[2]

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[2] Nataša Petrović Tomić, *Pravo osiguranja Sistem – Knjiga I*, Službeni glasnik, Beograd, 2019, str. 41

tokom viševekovnog razvoja doživeo je značajan evolutivni razvoj.[3] Počevši od rudimentarnih oblika osiguranja zabeleženih u Hamurabijevom zakoniku, pa preko prepoznavanja životnog osiguranja kao relevantnog i dopuštenog (što je tada predstavljalo značajnu revoluciju u svetu osiguranja), pa sve do sofisticiranijih polisa koje pokrivaju rizike u kibernetičkom svetu, osiguranje je kroz razvojne skokove u definisanju rizika, pokrića, uslova osiguranja i ostalih instituta prava osiguranja pratilo društveno-ekonomski razvoj društva.

Na toj hronološkoj liniji razvoja osiguranja može se uočiti sledeća zakonomernost – razvoj delatnosti osiguranja zavisi od razvoja ostalih grana privrede. Imajući u vidu da je osnovni pokretač industrije, tehnologija, odnosno tehnološki napredak, nameće se zaključak da i sama delatnost osiguranja zavisi od razvoja tehnologije.

Danas, na pragu 4. industrijske revolucije, „tehnološke revolucije koja će fundamentalno promeniti način na koji živimo, radimo i odnosimo se jedni prema drugima",[4] otvaraju se nova pitanja međusobne sinhronizacije tehnološkog razvoja i tržišta osiguranja. U eri digitalizacije, nanotehnologije, biotehnologije, 3D štampača, „interneta stvari", veštačke inteligencije, kvantnih kompjutera i automatizacije postaviće se pitanje budućnosti određenih grana osiguranja.[5]

Jedna od najznačajnijih grana osiguranja koja će se suočiti s fundamentalnim promenama jeste *conditio sine qua non* svakog nacionalnog zakonodavstva kada je reč o oblasti osiguranja, a to je osiguranje od auto-odgovornosti,[6] odnosno osiguranje vlasnika motornih vozila od odgovornosti za štetu pričinjenu trećim licima.[7]

Usled ogromnog tehnološkog skoka koji čini zamajac 4. industrijske revolucije, neke od najznačajnijih promena nastupiće upravo na tržištu osiguranja od auto-odgovornosti, usled pojave autonomnih vozila, tj. vozila u kojima je uloga čoveka kao vozača svedena na minimum ili je čak apsolutna isključena. Tako se, pojavom „pametnih automobila" kojima upravlja veštačka inteligencija, dovodi u pitanje koncept osiguranja zasnovanog na pokriću rizika koji mogu nastati na osnovu odgovornosti, jer do sada važeća pravila o naknadi štete po principima subjektivne ili objektivne odgovornosti mogu postati upitna.

Stoga će jedno od ključnih pitanja narednih godina u okviru osiguranja od auto-odgovornosti biti redefinisanje postojećih koncepata u pogledu ugovarača

[3] Ivana Soković, „Značaj osiguranja i persoektive razvoja u Srbiji", *Tokovi osiguranja*, br. 2/2024, str. 265-279.

[4] Klaus Schwab, *The Fourth Industrial Revolution – What It Means and How to Respond,* Foreign Affairs, 2015, https://www.foreignaffairs.com/world/fourth-industrial-revolution, posećeno 19. 5. 2024.

[5] Jelena Kočović, Tatjana Rakonjac Antić, Marija Koprivica, Kristina Bradić, „Pravci razvoja tržišta osiguranja", *Tokovi osiguranja*, br. 3/2024, str. 536-548.

[6] Na svetu postoji samo nekoliko zemalja koje nisu uvele obavezno osiguranje za štete prouzrokovane motornim vozilima, vidi više kod Ivica Jankovec, *Obavezno osiguranje za* štete *od motornih vozila*, Savremena administracija, Beograd, 1977, str. 14-16

[7] Zakon o obaveznom osiguranju u saobraćaju – ZOOS, *Sl. glasnik RS*, br. 51/2009 , 78/2011, 101/2011, 93/2012 i 7/2013 - odluka US

osiguranja, izračunavanja premije osiguranja, sagledavanja rizika, odgovornosti i ostalih instituta koji čine ovakvu vrstu osiguranja.

II AUTONOMNA VOZILA

Vest da je u Republici Srbiji izdata prva „dozvola" za autonomno vozilo[8] jeste događaj koji je nesumnjivo obeležio 2023. godinu, kada je reč o autonomnim vozilima i našoj zemlji, s obzirom na to da je ovim korakom načinjena značajna revolucija kada je reč o korišćenju ovakvih vozila na domaćim putevima.

S tim u vezi pre svega treba pojasniti šta su to autonomna vozila i na koji način ona funkcionišu. Ukratko, njihova suština se sastoji u sledećem:[9]

- za funkcionisanje autonomnog vozila nije potreban ljudski operater, tj. vozač;
- dizajn automobila je takav da omogućava softveru da obavlja radnje u saobraćaju – danju, noću, u nepovoljnim vremenskim uslovima itd., slično kao što bi to činio ljudski operater;
- autonomno vozilo je programirano da bude savršen model automobila, koji je u potpunosti usmeren samo na vožnju, koji poštuje saobraćajne propise, koji čuva putnike i pešake i zna kako da reaguje u raznim vanrednim situacijama.

U poslednjih nekoliko godina ubrzano se radi na konstruisanju i proizvodnji takvih vozila koja će potencijalne rizike koje inherentno nosi svaki čovek kao vozač svesti na minimum, upravo oslanjajući se na veštačku inteligenciju i softverske sisteme koji čine srž autonomnih vozila. Shodno tome, proizvođači se nadaju da će autonomna vozila smanjiti broj smrtnih slučajeva u saobraćajnim nesrećama „jer se računari u ovim vozilima nikada neće umoriti, napiti ili na neki drugi način omesti kao ljudski operater".[10] Suštinski, osnovna uloga autonomnih automobila jeste da obezbede „da se automobil ponaša adekvatno čak i kada se vozač tako ne ponaša".[11]

Kada je reč o klasifikaciji autonomnih vozila, opšteprihvaćena standardizacija podrazumeva da se ova vozila dele u rasponu od „nivoa 0" do „nivoa 5", imajući u vidu stepen automatizacije vožnje. Tako npr. američka Nacionalna uprava za bezbednost saobraćaja[12] definiše sledeće:

[8] Vest: „Srbija izdala prvu dozvolu za vozilo bez vozača trećeg stepena", https ://n1info .rs /magazin /scitech /srbija-izdala-prvu-dozvolu -za-vozilo -bez -vozaca -3 -stepena / , poslednji put posećeno: 20. 5. 2024.

[9] Anthony Paolino, *The Ultimate Insurance Policy: Autonomous Vehicles and Artificial Intelligence, A Statutory Proposal for a Complicated Product,* Arizona Law Journal of Emerging Technologies, Arizona, 2018, str. 3

[10] Jeffrey K. Gurney, „Sue My Car Not Me: Products Liability and Accidents Involving Autonomous Vehicles", *JOURNAL OF LAW, TECHNOLOGY & POLICY [Vol. 2013]*, 2013, str. 251

[11] Amar Kumar Moolayilal, The Modern Trolley Problem: Ethical and Economically-Sound Liability Schemes for Autonomous Vehicles, 9 CASE W. RESERVE J.L. TECH. & INTERNET 1, 2-4 (2018).

[12] National Highway Traffic Safety Administration, part of the U.S. Department of Transportation, https ://www .nhtsa .gov /vehicle -safety /automated -vehicles -safety , poslednji put posećeno 19. 5. 2024.

Nivo 0 uključuje većinu tradicionalnih automobila, tj. onih koji nisu autonomni.

Nivoi 1–2 podrazumevaju da su ljudski operateri prvenstveno odgovorni za osnovne funkcije upravljanja vozilom, dok automatizovane funkcije predstavljaju sporedne karakteristike automobila (parking senzori, „tempomati" i sl.).

Nivoi 3–5, s druge strane, predstavljaju visokoautomatizovana vozila, jer su automatizovani sistemi ti koji su prvenstveno odgovorni za upravljanje vozilom, a učešće ljudskog operatera je sporedno ili u potpunosti isključeno.

Ono što je značajno istaći jeste da se razlikovanje u opsegu između nivoa 3 i nivoa 5 svodi na stepen i intenzitet aktivnog učešća ljudskog operatera u toku vožnje. Naime, autonomni automobili nivoa 3 koriste automatizovane sisteme koji mogu da reaguju na promene u voznom okruženju, koji se često nazivaju „dinamičkom vožnjom", međutim, vozila ovog stepena automatizacije će tražiti od ljudskog operatera da preuzme kontrolu kada god automobil nije siguran koju tačno radnju treba da preduzme.[13]

Nivo 4 podrazumeva gotovo identično učešće ljudskog operatera kao i u vozilima nivoa 3, s tim što je inicijativa za preuzimanje kontrole na vozaču (automobil neće tražiti od vozača da preuzme kontrolu), tj. u slučaju opasnosti, vozač može ali i ne mora da preuzme kontrolu nad vozilom.[14]

Naposletku, u vozilima nivoa 5 vozač nema nikakvog načina da interveniše jer su papučice i volan potpuno uklonjeni iz automobila, te se na taj način vozač faktički pretvara u putnika u sopstvenom vozilu.

U kontekstu domaćeg zakonodavstva autonomni automobili su prepoznati u Zakonu o bezbednosti saobraćaja na putevima, i to kao automobili koji su proizvedeni ili prepravljeni tako da poseduju „automatizovan sistem vožnje" i koji „omogućava kretanje tog vozila u saobraćaju na putu, uz delimično upravljanje od strane vozača, odnosno uz potpuno odsustvo upravljanja od strane vozača".[15]

Dodatno, Pravilnikom o uslovima za obavljanje autonomne vožnje definisano je da automatizovani sistem vožnje predstavlja „kombinaciju hardversko-softverskih komponenti uz pomoć kojih se, shodno nivou automatizacije, realizuje dinamički zadatak upravljanja vozilom, u utvrđenom radnom opsegu".[16]

Što se same upotrebe autonomnih vozila na domaćim putevima tiče, Zakon o bezbednosti saobraćaja i navedeni Pravilnik predviđaju mogućnost dobijanja dozvole isključivo za potrebe testiranja vožnje[17] i to zaključno sa nivoom 4 automatizacije vožnje. [18]

[13] Amar Kumar Moolayilal, *The Modern Trolley Problem: Ethical and Economically-Sound Liability Schemes for Autonomous Vehicles* , 9 CASE W. RESERVE J.L. TECH. & INTERNET 1, 2018, str. 2.

[14] Ibid.

[15] Zakon o bezbednosti saobraćaja na putevima, Sl. glasnik RS, br. 41/2009 , 53/2010, 101/2011, 32/2013 – odluka US, 55/2014, 96/2015 – dr. zakon , 9/2016 – odluka US, 24/2018, 41/2018, 41/2018 – dr. zakon , 87/2018, 23/2019, 128/2020 – dr. zakon i 76/2023), čl. 7 st. 1 tač. 105.

[16] Pravilnik o uslovima obavljanja automatizovane vožnje, Sl. glasnik RS, br. 104/2023, čl. 2 st. 1 tač. 1.

[17] Zakon o bezbednosti saobraćaja na putevima, čl. 122a.

[18] Pravilnik o uslovima obavljanja automatizovane vožnje, čl. 3 st. 3.

U tom kontekstu je važno istaći da i Zakon o bezbednosti saobraćaja na putevima i Pravilnik ostaju nedorečeni kada je reč o izvoru klasifikacije u pogledu nivoa automatizacije.

Kada je reč o odredbama koje uređuju osiguranje od auto-odgovornosti, pre svega kada se radi o Zakonu o obaveznom osiguranju u saobraćaju, važno je napomenuti da tekst tog zakona nije doživeo nikakve redakcije koje bi pratile „pionirsko" uvođenje autonomnih vozila na domaće puteve.

Dakle, domaći propisi ostaju nemi kada je u pitanju osiguranje autonomnih vozila, što gotovo izvesno može izazvati velike praktične probleme u kontekstu potencijalnih šteta koje mogu izazvati autonomni automobili. To se naročito odnosi na pitanje odgovornosti vozača, imajući u vidu da priroda autonomnih automobila i njihova konceptualnu ideja upravo podrazumeva suštinsko umanjenje, odnosno isključenje odgovornosti vozača s obzirom na to da je učešće vozača u vožnji autonomnih vozila redukovano ili u potpunosti isključeno.

III KONCEPT ODGOVORNOSTI ZA ŠTETE PRIČINJENE MOTORNIM VOZILOM

Pre svega treba imati u vidu da je na nivou EU pitanje odgovornosti za štetu usled upotrebe motornih vozila prepušteno nacionalnim zakonodavstvima,[19] dok je, s druge strane, pitanje osiguranja od auto-odgovornosti regulisano uniformno na nivou EU i to kroz (revidiranu) Direktivu o osiguranju motornih vozila.[20]

S tim u vezi, ukoliko je reč o uređenju odgovornosti, značajno je analizirati postojeće koncepte i pravila o odgovornosti kada su posredi motorna vozila. Tako na uporednopravnom terenu generalno možemo razlikovati tri sistema odgovornosti za štete prouzrokovane upotrebom motornih vozila:[21]

- sistem objektivne odgovornosti (zasnovan na principu uzročnosti) – karakterističan za Austriju, Švajcarsku, Nemačku, Poljsku, Češku, Slovačku, Mađarsku…;
- sistem pretpostavljene krivice – karakterističan za Italiju, Belgiju, Luksemburg, Francusku i Dansku;

[19] Position on the EC proposal to revise the MID, https://www.insuranceeurope.eu/publications/1807/position-paper-on-european-commission-proposal-to-revise-motor-insurance-directive/, posećeno 29. 6. 2024.

[20] Directive (EU) 2021/2118 of the European Parliament and of the Council of 24 November 2021 amending Directive 2009/103/EC relating to insurance against civil liability in respect of the use of motor vehicles, and the enforcement of the obligation to insure against such liability (Text with EEA relevance) PE/60/2021/REV/1 OJ L 430, 2. 12. 2021, p. 1–23 (BG, ES, CS, DA, DE, ET, EL, EN, FR, GA, HR, IT, LV, LT, HU, MT, NL, PL, PT, RO, SK, SL, FI, SV).

[21] Ivica Jankovec, Obavezno osiguranje za štete od motornih vozila, Savremena administracija, Beograd, 1977, str. 56.

- i sistem odgovornosti na osnovu krivice – karakterističan za teritoriju Velike Britanije i Irske.

U kontekstu odgovornosti naročitu pažnju izaziva nemački zakonodavni prostor. Kada je reč o opštim pravilima o odgovornosti, u nemačkom pravnom sistemu, umnogome isto kao i kod nas, za udes važe isti principi ako više vozila prouzrokuju štetu trećim licima, kao i u slučaju kada pričine štetu jedno drugom.[22] Međusobna odgovornost imalaca motornih vozila procenjuje se prema udelu u prouzrokovanju štete i veličini opasnosti. Naknada štete procenjuje se prema tome koliki je deo štete pretežno skrivio jedan ili drugi učesnik ili je ona pak nastala zbog vanredne ili pretežno zbog obične opasnosti pogona. Elemenat krivice se uzima u obzir samo toliko koliko njegov uticaj pokriven nije drugim okolnostima.

S druge strane, kada se pređe na teren odgovornosti i upotrebe autonomnih vozila, važno je napomenuti da je Nemačka 2021. godine usvojila Zakon o autonomnoj vožnji,[23] koji je odobrio upotrebu autonomnih vozila do 4. nivoa automatizacije po klasifikaciji Društva automobilskih inženjera. Usvojeno zakonsko rešenje predviđa da će vozači biti smatrani odgovornim u skladu s nemačkim Zakonom o saobraćaju[24] za štete ukoliko upravljaju vozilima do 3. nivoa automatizacije. Od 4. nivoa pa naviše, korisnik vozila neće biti odgovoran po osnovu odredaba nemačkog Zakona o saobraćaju,[25] već je ta odgovornost preneta na tzv. „tehničkog supervizora", kojem je, između ostalog, poverena i dužnost da deaktivira sistem koji upravlja autonomnim vozilom umesto vozača.[26]

Kada je reč o pravilima odgovornosti u slučaju udesa izazvanog motornim vozilom u pokretu u Republici Srbiji, zakonsko rešenje principijelno propisuje da se „u slučaju udesa izazvanog motornim vozilom u pokretu koji je prouzrokovan isključivom krivicom jednog imaoca, primenjuju pravila o odgovornosti po osnovu krivice",[27] a „ako nema krivice nijednog, imaoci odgovaraju na ravne delove ako razlozi pravičnosti ne zahtevaju što drugo".[28]

Dakle, zakonsko rešenje srpskog prava propisuje da je primarni kriterijum pri određivanju odgovornosti kod udesa izazvanog motornim vozilom u pokretu baziran na krivici, i to isključivoj krivici jednog imaoca, dok se kao pomoćni kriterijum

[22] Zoran Ilkić, „Odgovornost osiguranika od auto-odgovornosti za prouzrokovanu štetu", Zbornik radova Pravnog fakulteta u Novom Sadu – 1/2012, Novi Sad, 2012, str. 509.

[23] Amendment Act of the Road Traffic Act and the Compulsory Insurance Act – the Autonomous Driving Act Bundesgesetzblatt – BGBL I No. 49 of July 27, 2021.

[24] Straßenverkehrsgesetz in der Fassung der Bekanntmachung vom 5. März 2003 (BGBl. I S. 310, 919), das zuletzt durch Artikel 8 des Gesetzes vom 21. November 2023 (BGBl. 2023 I Nr. 315) geändert worden ist.

[25] Ibid, sekcija 18(1)(1).

[26] Martin Ebers, Civil Liability for Autonomous Vehicles in Germany, https://ssrn.com/abstract=4027594, posećeno 1. 7. 2024.

[27] Zakon o obligacionim odnosima, Sl. list SFRJ, br. 29/78, 39/85, 45/89 - odluka USJ i 57/89, Sl. list SRJ, br. 31/93, Sl. list SCG, br. 1/2003 – Ustavna povelja i Sl. glasnik RS, br. 18/2020, čl. 178 st 1.

[28] Zakon o obligacionim odnosima, čl. 178 stav 3.

(u situacijama kada ne postoji krivica nijednog od učesnika u udesu) primenjuju pravila o objektivnoj odgovornosti, i to u nekim slučajevima paralelno.[29] U tom slučaju, odgovornost nema svoj osnov u krivici, već u upotrebi opasne stvari, jer se „odgovornost vezuje za lica koja od upotrebe takvih stvari, odnosno vršenja takvih delatnosti, imaju neposredne koristi".[30]

Takvo rešenje jeste plod istorijskog razvoja koncepta odgovornosti, s obzirom na to da se s „razvojem automobilizma, povećanjem broja motornih vozila i broja nezgoda prouzrokovanih upotrebom motornih vozila, odgovornost za štetu postepeno transformisala od klasične odgovornosti zasnovane na krivici štetnika, preko pretpostavljene krivice štetnika do odgovornosti i za slučaj".[31]

To bi dalje značilo da lice koje je dužno da naknadi štetu jeste sopstvenik vozila bez obzira na to je li šteta nastala njegovom krivicom, uz dodatak da se osnov odgovornosti ne nalazi samo u riziku koji stvara upotreba opasne stvari, već je neophodno da lice koje takvu stvar upotrebljava ostvaruje i određenu korist. Jedine okolnosti koje mogu isključiti postojanje objektivne odgovornosti vezane su za prekid uzročno-posledične veze usled više sile ili usled radnje trećeg lica odnosno usled krivice samog oštećenog.[32]

Shodno tome, oštećeno lice ne mora da dokazuje ni krivicu imaoca motornog vozila, pa čak ni uzročnu vezu, da je šteta nastala upotrebom motornog vozila. Ovo stoga što se radi o vidu odgovornosti gde krivica nije od značaja, a uzročna veza, da je šteta prouzrokovana motornim vozilom, po slovu zakona se pretpostavlja.[33]

Teret dokazivanja činjenice da uzrok štete nije u vezi s upotrebom motornog vozila kao opasne stvari, i da se, u konkretnom slučaju, dejstvo uzroka štete nije moglo predvideti, izbeći, niti otkloniti, na korisniku je motornog vozila.[34]

IV AUTONOMNA VOZILA I ODGOVORNOST

1. Legislativa EU

Kada se pređe na teren autonomnih vozila, ključno pitanje koje se nameće jeste postojanje, odnosno nepostojanje krivice vozača prilikom izazivanja udesa. Ako

[29] „Osnovi objektivne i odgovornosti za štetu po osnovu krivice postoje istovremeno na strani vlasnika motornog vozila, kao imaoca opasne stvari, i lica koje je tim vozilom upravljalo pri nastanku štetnog događaja, a takva odgovornost štetnika prema oštećenom je solidarna". – (Presuda Apelacionog suda u Nišu, Gž 2475/2019(1) od 23. 5. 2019. godine).

[30] Z. Ilkić, str. 508

[31] I. Jankovec, str. 5.

[32] Mihailo Konstantinović, Skica Zakona o obligacionim odnosima, čl. 137.

[33] Rešenje Vrhovnog suda Srbije, Rev. br. 632/1998 od 17. 7. 1998. god.

[34] Slobodan Stanišić, Odgovornost u slučaju udesa izazvanog motornim vozilom u pokretu, magistarski rad, Pravni fakultet Univerziteta UNION u Beogradu, 2006, str. 25.

se ima u vidu da je uloga vozača u autonomnim vozilima redukovana (u autonomnim vozilima nivoa 5 čak i isključena), opravdano se postavlja pitanje adekvatnosti postojećeg zakonskog rešenja i koncepta osiguranja od auto-odgovornosti kada je reč o autonomnim vozilima.

To pitanje je već razmatrano u okviru tela Evropske unije, pa je tako Evropska komisija u Saopštenju upućenom Evropskom parlamentu[35] iznela određene preporuke koje podrazumevaju da se pitanje odgovornosti (i posledično pitanje osiguranja od auto-odgovornosti) rešava na terenu Direktive o osiguranju motornih vozila [36] i Direktive o odgovornosti za proizvode.[37]

Opšte karakteristike pomenute Direktive o osiguranju motornih vozila podrazumevaju sledeće:

– svaka država članica treba da postupi na odgovarajući način kako bi obezbedila da građanska odgovornost u vezi sa upotrebom vozila bude pokrivena osiguranjem;
– u skladu sa zakonima koji važe u drugim državama članicama, takvo osiguranje treba da pokriva svaki gubitak ili povredu koja je prouzrokovana na teritoriji tih država;
– obavezno osiguranje pokriva i štetu na imovini i telesne povrede.

S druge strane, iako Direktiva o osiguranju motornih vozila pruža sveobuhvatan pristup pitanju osiguranja na internacionalnom nivou, ovaj propis i dalje ne daje odgovore na fundamentalna pitanja kada je reč o potencijalnim štetama prouzrokovanim od strane autonomnih vozila. Dakle, navedena Direktiva ne tretira osnovni problem kod autonomnih vozila, a to je da vlasnik/korisnik učestvuje u jako malom intenzitetu u vožnji (ili uopšte ne učestvuje) i suštinski postaje potencijalna žrtva sopstvenog automobila. Drugim rečima, Direktiva ne prepoznaje problematiku u vezi sa odgovornošću vozača, odnosno vlasnika automobila koji postaje apsolutno zavisan od samog autonomnog automobila, odnosno od softvera ugrađenog u njega.

Stoga se postavlja veliko pitanje da li Direktiva o osiguranju motornih vozila u postojećoj redakciji može na adekvatan način regulisati pitanje odgovornosti i obezbediti jasnu i korektnu raspodelu rizika.[38]

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[35] COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE, THE COMMITTEE OF THE REGIONS On the road to automated mobility: An EU strategy for mobility of the future, COM/2018/283 final, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52018DC0283, posećeno 25. 5. 2024.

[36] Directive (EU) 2021/2118 of the European Parliament and of the Council of 24 November 2021 amending Directive 2009/103/EC relating to insurance against civil liability in respect of the use of motor vehicles, and the enforcement of the obligation to insure against such liability (Text with EEA relevance) PE/60/2021/REV/1 OJ L 430, 2.12.2021, p. 1–23 (BG, ES, CS, DA, DE, ET, EL, EN, FR, GA, HR, IT, LV, LT, HU, MT, NL, PL, PT, RO, SK, SL, FI, SV).

[37] Council Directive 85/374/EEC concerning liability for defective products, OJ L 210, 7.8.1985, p. 29–33 (DA, DE, EL, EN, FR, IT, NL).

[38] Francesco Paolo Patti, „The European Road To Autonomous Vehicles", Bocconi Legal Studies Research Paper Series, Number 3395206, 2019, str. 6.

Kada je reč o Direktivi o odgovornosti za proizvode, 2024. godine usvojena je tzv. Nova direktiva o odgovornosti za proizvode sa nedostatkom, u čijem je predlogu za usvajanje, između ostalog, navedeno da ona „ima za cilj da uskladi okvir Evropske unije o odgovornosti za proizvode s digitalnim dobom, poslovnim modelom cirkularne ekonomije i globalnim lancima vrednosti".[39]

Pomenuta Direktiva o odgovornosti za proizvode s nedostatkom (revidirana Direktiva o odgovornosti za proizvode) ima za cilj da modernizuje postojeći regulatorni okvir koji reguliše objektivnu odgovornost proizvođača stvari s nedostatkom. Kao jedna od najznačajnijih karakteristika Nove direktive o odgovornosti za proizvode sa nedostatkom, jeste to što se softverski sistemi i proizvodi zasnovani na veštačkoj inteligenciji smatraju „proizvodima", što dalje omogućava naknadu štete u situacijama kada neispravan sistem veštačke inteligencije prouzrokuje štetu, bez potrebe da oštećeno lice dokazuje krivicu proizvođača.

Drugo, predlog jasno navodi da odgovornost mogu snositi ne samo proizvođači hardvera, već i dobavljači softvera, odnosno pružaoci digitalnih usluga koji utiču na način funkcionisanja proizvoda (kao što je usluga navigacije u autonomnom vozilu).[40] Dodatno, kako bi se osigurao sveobuhvatan režim odgovornosti za proizvode u Uniji, odgovornost bez krivice za neispravne proizvode treba da se primenjuje na sve pokretne stvari, i onda kada su integrisane u druge pokretne stvari ili instalirane u nepokretne stvari.

Treba imati u vidu da bez obzira na gorenavedeno i unapređeni regulatorni okvir[41] (pogotovo kada je reč o Direktivi za odgovornosti za proizvode sa nedostatkom), pitanje osiguranja od auto-odgovornosti kod upotrebe autonomnih vozila i dalje ostaje siva zona, tj. i dalje ostaje u nedovoljnoj meri regulisano, s obzirom na to da nijedna od trenutno postojećih direktiva na nivou EU ne pruža koherentan i sveobuhvatan pristup kada je reč o osiguranju od auto-odgovornosti i autonomnim vozilima. To je suštinski i potvrđeno samim tekstom revidirane Direktive o osiguranju motornih vozila iz 2021. godine, u kojoj se navodi da Evropska komisija treba da obezbedi kontinuirano praćenje i preispitivanje Direktive o osiguranju iz 2009. godine kako bi se proverilo da navedena Direktiva (2009) i dalje služi svojoj svrsi, s obzirom na tehnološki razvoj, uključujući povećanu upotrebu autonomnih i poluautonomnih vozila.[42]

[39] New Product Liability Directive, https ://www .europarl .europa .eu /RegData /etudes /BRIE /2023 /739341 /EPRS _BRI (2023)739341 _EN .pdf , poslednji put posećeno 20. 5. 2024.

[40] Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on liability for defective products, 28. 9. 2022 COM(2022) 495 final 2022/0302 (COD), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022PC0495 , str. 6, posećeno 25. 5. 2024.

[41] Upotreba veštačke inteligencije na nivou EU, a samim tim i upotreba autonomnih vozila, regulisana je kroz Artifical Inteligence (AI) Act, a dodatno se radi i na Direktivi o odgovornosti za štetu prouzrokovanu veštačkom inteligencijom.

[42] Directive (EU) 2021/2118 of the European Parliament and of the Council of 24 November 2021 amending Directive 2009/103/EC relating to insurance against civil liability in respect of the use of motor

U vezi s tim, Evropskoj komisiji je dat rok do 2030. godine, do kada je neophodno da Evropska komisija sastavi izveštaj koji bi evaluirao adekvatnost Direktive o osiguranju motornih vozila iz 2021. godine u kontekstu upotrebe autonomnih vozila.

Dakle, očigledno je da se i na nivou EU pitanje osiguranja i autonomnih vozila razmatra u jednom *de lege ferenda* kontekstu.

2. Domaća legislativa

U kontekstu domaćeg zakonodavstva regulatorni okvir u pogledu autonomnih vozila i osiguranja od auto-odgovornosti takođe ne pruža specijalizovano i konkretno rešenje. U odnosu na obavezu osiguranja automobila, važeći je princip po kojem je „vlasnik motornog vozila dužan da zaključi ugovor o osiguranju od odgovornosti za štetu koju upotrebom motornog vozila pričini trećim licima usled smrti, povrede tela, narušavanja zdravlja, uništenja ili oštećenja stvari, osim za štete na stvarima koje je primio na prevoz". [43]

S tim u vezi, ako se uzme u obzir da *odgovornost* kao težišni institut osiguranja u saobraćaju podrazumeva čoveka kao nosioca rizika (odnosno krivice), ostaje nejasno od kakve odgovornosti bi se osiguravao vlasnik, odnosno vozač autonomnog vozila u kojem je učešće vozača redukovano ili čak u potpunosti isključeno. Ako je jedan od osnovnih postulata osiguranja od auto-odgovornosti ideja o oslobađanju od plaćanja naknade štete, odnosno ideja o izbegavanju umanjenja imovine osiguranika[44] do koje može doći usled odgovornosti vlasnika, odnosno vozača motornog vozila, jasno je da jedan takav pristup nije komplementaran s fundamentalnim konceptom upotrebe autonomnih vozila.

Dakle, pitanje odgovornosti kod autonomnih vozila jeste glavno polje na kojem treba ispitivati postojeća zakonska rešenja, kao i njihove potencijalne izmene, upravo zato što je osnovni *raison d'être* svakog autonomnog vozila skidanje odgovornosti sa vozača, odnosno umanjenje inherentnog rizika koji nastaje kao posledica odgovornosti za štetu u saobraćaju.

Stoga koncept subjektivne odgovornosti kao primarno pravilo kod naknade štete prema trećem oštećenom licu usled korišćenja motornih vozila može biti vrlo sporan kada je reč o štetama nastalim od strane autonomnih vozila, jer krivica vozača u takvim situacijama po pravilu ne postoji.

S druge strane u situacijama kada bi šteta nastala u udesu između dva autonomna vozila, imaoci vozila bi odgovarali na ravne delove, ako razlozi pravičnosti

vehicles, and the enforcement of the obligation to insure against such liability (Text with EEA relevance) PE/60/2021/REV/1 OJ L 430, 2.12.2021, p. 1–23 (BG, ES, CS, DA, DE, ET, EL, EN, FR, GA, HR, IT, LV, LT, HU, MT, NL, PL, PT, RO, SK, SL, FI, SV), uvodne odredbe tačka 39).

[43] Zakon o obaveznom osiguranju u saobraćaju – ZOOS, čl. 18 st. 1.

[44] Vladimir Čolović, „Pravna priroda osiguranja od auto-odgovornosti", Godišnjak fakulteta pravnih nauka, Banja Luka, Broj 10, 2020, str. 14.

ne zahtevaju što drugo.[45] Pitanje pravičnosti bi u tom slučaju bilo prepušteno sudskoj proceni, što bi zahtevalo vrlo detaljno ispitivanje visokotehnoloških aspekata upotrebe autonomnih vozila i njihovu prirodu i podrazumevalo bi vrlo verovatno definisanje novih pravila o odgovornosti od strane sudske prakse.

Situacije u kojima postojeće zakonsko rešenje o odgovornosti u slučaju udesa izazvanog motornim vozilima u pokretu može pokriti i upotrebu autonomnih vozila jesu situacije kada nastane šteta prema trećim licima od strane više imalaca motornog vozila. U tim situacijama svaki od imalaca bio bi odgovoran za naknadu celokupne štete bez mogućnosti da prema trećem licu ističe svoju umanjenu odgovornost, iz razloga što je ovakvo rešenje doneto s ciljem poboljšanja položaja oštećenog.[46]

U svakom slučaju, pravila o odgovornosti usled šteta nastalih upotrebom motornog vozila koja definiše Zakon o obligacionim odnosima ne mogu na adekvatan način zadovoljiti situacije kada u udesu učestvuju autonomna vozila.

Stoga polje gde se može tražiti privremeni odgovor na pitanje kakva pravila o odgovornosti su najsvrsishodnija kada je reč o autonomnim vozilima mogu biti pravila o odgovornosti proizvođača za stvari s nedostatkom. Opšta zakonska pravila definišu da „ko stavi u promet neku stvar koju je proizveo, a koja zbog nekog nedostatka za koji on nije znao predstavlja opasnost od štete za lica ili stvari, odgovara za štetu koja bi nastala zbog tog nedostatka"[47] odnosno da „proizvođač odgovara i za opasna svojstva stvari ako nije preduzeo sve što je potrebno da štetu, koju je mogao predvideti, spreči putem upozorenja, bezbedne ambalaže ili drugom odgovarajućom merom".[48]

Imajući u vidu da je osnovna karakteristika autonomnih vozila postojanje softvera koji upravlja vozilom, tj. da je vozilo do te mere automatizovano da suštinski podrazumeva smanjeno učešće vozača u vožnji (ili ga potpuno isključuje), takvo vozilo bi se moglo posmatrati kao „stvar" odnosno „proizvod" za čija svojstva odgovora proizvođač. Na terenu domaće regulative to bi podrazumevalo primenu suplementarnih propisa koji uređuju pitanje odgovornosti za štetu usled stvari s nedostatkom, odnosno Zakona o zaštiti potrošača koji se značajno naslanja na Direktivu o odgovornosti za proizvode iz 1985. godine. Takvo rešenje bi moglo biti na tragu jednog od mogućih predloženih rešenja na nivou Evropske unije, koje podrazumeva održavanje *statusa quo* u pogledu izmene zakonskih rešenja,[49] međutim, iako ovakvo rešenje ne bi zahtevalo izmenu postojećih propisa, s druge strane bi vrlo verovatno

[45] Zakon o obligacionim odnosima, čl. 178 st. 3.
[46] Slobodan Perović, Komentar Zakona o obligacionim odnosima, Pravni fakultet u Kragujevcu i Kulturni centar u Gornjem Milanovcu, 1980, str. 531.
[47] Zakon o obligacionim odnosima, čl. 179, st.1.
[48] Zakon o obligacionim odnosima, čl. 179, st. 2.
[49] EU Common Approach on the liability rules and insurance related to the Connected and Autonomous Vehicles, European Parlamentary Research Service, 2018, str 29.

otvorilo Pandorinu kutiju usled sledećih najvažnijih pitanja prepoznatih u okviru tretiranja ove materije u EU:[50]

– Pre svega, pravila o odgovornosti proizvođača za stvari s nedostatkom pokrivaju samo odgovornost proizvođača za neispravne proizvode. S tim u vezi koncept „neispravnosti" je jako usko definisan i teško ga je utvrditi za tehnički složene proizvode kao što su autonomna vozila. Na primer, štete koje bi nastale iz regularnog korišćenja, odnosno habanja vozila, lošeg održavanja ili neadekvatnih popravki ili usled određenih situacija na putu ili vremenskih uslova, neće biti pokrivene ovom vrstom odgovornosti. U tom pogledu, akteri koji učestvuju u proizvodnji autonomnog vozila kao što su programeri, proizvođači vozila, proizvođači sastavnih komponenata, uvoznici, distributeri i prodavci autonomnih vozila mogu koristiti brojne mehanizme koji im stoje na raspolaganju po pravilima koja uređuju odgovornost proizvođača za stvari s nedostatkom u cilju minimizacije ili isključenja ovakvog vida odgovornosti.
– Dalje, troškovi nepoznatih i još uvek nedefinisanih rizika koji se mogu pojaviti u okviru upotrebe autonomnih vozila stajali bi na teret oštećene strane, usled nepokrivanja takvih rizika odgovarajućom polisom.
– Visokotehnološka priroda autonomnih vozila u kombinaciji sa širokim odredbama pravila o odgovornosti proizvođača za stvari s nedostatkom i odredbama koje uređuju isključenje takve odgovornosti, a pogotovo u vezi s konceptom „razumnosti", može preopteretiti sudove i njihovo odlučivanje. Dakle, sudovi bi bili stavljeni u poziciju da tumače i primenjuju odredbe o odgovornosti proizvođača za stvari s nedostatkom u okviru sporova koji u sebi sadrže veoma složena tehnološka pitanja.

Dodatno, ono što može predstavljati najznačajnije probleme prilikom primene pravila o odgovornosti proizvođača za stvari s nedostatkom kod autonomnih vozila, jesu pravila koja podrazumevaju da „prodavac odgovara za nesaobraznosti isporučene robe ugovoru ako:

1) je ona postojala u času prelaska rizika na potrošača, bez obzira na to da li je za tu nesaobraznost prodavac znao;
2) se pojavila posle prelaska rizika na potrošača i potiče od uzroka koji je postojao pre prelaska rizika na potrošača;
3) ju je potrošač mogao lako uočiti ukoliko je prodavac izjavio da je roba saobrazna ugovoru."[51]

To važi i za pravila koja definišu da „prodavac odgovara za nesaobraznost robe koja se pojavi u roku od dve godine od dana prelaska rizika na potrošača".[52]

[50] Ibid, str. 21.
[51] Zakon o zaštiti potrošača, Sl. glasnik RS, br. 88/2021, čl. 50, st. 1.
[52] Zakon o zaštiti potrošača, čl. 52, st. 2.

Ovo bi u konkretnom slučaju podrazumevalo da usled greške softvera autonomnog vozila koja može nastati kao posledica trenutnog lošeg rada računara, a koja bi nastala u periodu od dve godine nakon prelaska rizika na potrošača, odnosno kupovine autonomnog vozila, navedeno zakonsko rešenja ne bi moglo odgovoriti na problematiku upotrebe autonomnih vozila.

Stoga, primena pravila o odgovornosti proizvođača za stvari s nedostatkom mogu samo delimično i privremeno poslužiti kao odgovarajući pravni okvir kada je reč o regulisanju pitanja odgovornosti i autonomnih vozila.

V AUTONOMNA VOZILA I OSIGURANJE

Ono što treba imati u vidu jeste da u svakom slučaju odredbe o odgovornosti proizvođača za stvari sa nedostatkom (kako na nivou EU, tako i na nivou Republike Srbije) ni na koji način ne korespondiraju sa odredbama koje uređuju obavezno osiguranje od auto-odgovornosti.

Čak i ako se uzme u obzir da odredbe koje uređuju zaštitu oštećenih trećih lica mogu da odgovore na zahteve koje nameće upotreba autonomnih vozila, s obzirom na to da relevantne odredbe Zakona o osiguranju od auto-odgovornosti u saobraćaju predviđaju da „potraživanje po osnovu osiguranja od auto-odgovornosti oštećeno lice ostvaruje podnošenjem odštetnog zahteva neposredno društvu za osiguranje“,[53] čime se uspostavlja mehanizam direktne zaštite oštećenih,[54] postavlja se pitanje da li bi se i sam vozač autonomnog vozila mogao tretirati kao oštećeni, imajući u vidu upravo da se on na svojevrstan način pretvara u putnika u sopstvenom vozilu.

Stoga je u kontekstu pitanja osiguranja od auto-odgovornosti sigurno da taj deo legislative zahteva značajne intervencije, i to pre svega u pogledu lica koja bi bila dužna da se osiguraju od auto-odgovornosti i da plaćaju odgovarajuću premiju. Na tom planu trenutno postoji širok prostor za usvajanje konceptualno novih rešenja koja bi značajno promenila postojeći legislativni okvir.

Sve gorenavedeno podrazumeva da je postojeći regulatorni okvir u pogledu osiguranja od auto-odgovornosti i autonomnih vozila principijelno neadekvatan, te da njegovi određeni postojeći segmenti mogu poslužiti samo kao privremena i parcijalna rešenja do momenta usvajanja novog, specifičnog i sveobuhvatnog legislativnog rešenja.

Jedno od mogućih rešenja podrazumevalo bi obavezu pribavljanja tzv. *no-fault* osiguranja, čiji pojavni oblici već postoje u Švedskoj i Belgiji.[55] Takav tip osiguranja

[53] Zakon o obaveznom osiguranju u saobraćaju, čl. 24, st. 1.

[54] COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE, THE COMMITTEE OF THE REGIONS On the road to automated mobility: An EU strategy for mobility of the future, COM/2018/283 final, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52018DC0283, posećeno 25. 5. 2024, str. 10.

[55] EU Common Approach on the liability rules and insurance related to the Connected and Autonomous Vehicles, European Parlamentary Research Service, 2018, str. 76.

bio bi pribavljan od strane vlasnika, ili operatera, ili proizvođača autonomnog vozila, ali se ni u kom slučaju ne bi bazirao na bilo kakvoj odgovornosti, već bi oštećenik bio direktno osiguran, i to ne po pravilima koja regulišu građansku odgovornost, već bi predmet osiguranja bio sam rizik da je motorno vozilo bilo učesnik u udesu.[56] Na taj način bi *no-fault osiguranje* bilo vezano za sam autonomni automobil, a osigurana lica bi bila sva ona koja od autonomnog automobila pretrpe štetu. Takav model bi podrazumevao da ugovarač osiguranja, kojeg odredi zakon, pribavlja polisu osiguranja i pokriće koje pokriva rizike za štetu na svim licima u autonomnom vozilu, ali i svim ostalim učesnicima u saobraćaju.[57]

Kada je reč o obveznicima ugovaranja takvog osiguranja, jedno od mogućih rešenja bi podrazumevalo da ga pribavljaju vlasnik vozila, odnosno upravljač i proizvođač vozila (u nekim varijantama možda i proizvođač softvera) zajedno. Njihovo učešće u premiji bi moglo biti definisano na različite načine, npr. premija bi se sastojala iz jednog fiksnog dela koji bi uplaćivali svi ovde pobrojani akteri, dok bi se drugi deo premije sastojao iz varijabilnog iznosa koji bi zavisio od doprinosa mogućnosti ostvarenja rizika, odnosno štete. To bi dalje podrazumevalo razradu čitave telemetrike izračunavanja premije na osnovu podataka koje bi autonomna vozila prikupljala o vlasnicima, tj. vozačima vozila, kao i o proizvođačima vozila, odnosno softvera.

Na predašnje rešenje mogla bi se nadovezati još jedna opcija koja bi doprinela drastičnoj promeni konfiguracije zakonodavnog okvira kada je reč o osiguranju od auto-odgovornosti. Reč je o principu *Pay As You Drive* uspostavljenom od strane nemačke osiguravajuće kuće *Allianz*. Taj sistem podrazumeva apsolutno prilagođen pristup problematici strukturiranja polise osiguranja i zasniva se na obradi ogromne količine podataka. Zahvaljujući crnim kutijama u vozilima, osiguravajuća društva su već sada u mogućnosti da prate ponašanje vozila, tj. vozača u saobraćaju i da osiguravajuće pokriće prilagođavaju konkretnim rizicima.[58] To bi dalje podrazumevalo da bi jedna takva polisa pravila razliku između vremenskih intervala kada vozilom upravlja vozač i kada vozilom upravlja softver, te bi na taj način primenjivala i različite režime odgovornosti za potencijalne štete.

VI ZAKLJUČAK

Tradicionalno osiguranje od auto-odgovornosti, odnosno osiguranje od šteta nastalih upotrebom motornih vozila zasnovano je na pretpostavci ljudske greške kao rizika koji za sobom povlači odgovornost vozača, odnosno vlasnika vozila. Sa

[56] Ibid, str. 112.
[57] Ibid.
[58] Bruno Sari, Alessandro Moraccini, Insurance in the related Automobile Vehicle industry, Law and Economics for Insurance and Finance, University of Bologna, 2020, str. 15.

autonomnim vozilima, ta paradigma se značajno menja iz razloga što su autonomna vozila konstruisana tako da učešće vozača u upravljanju vozilom svedu na minimum ili čak i da ga u potpunosti isključe. Stoga ta drastična promena u konceptu uloge vozača u saobraćaju zahteva i značajne promene na polju regulatornog okvira koji uređuje ovu oblast.

Sa uvođenjem autonomnih vozila i njihovom sve češćom upotrebom, biće neophodno usvojiti jednu apsolutno drugačiju zakonodavnu paradigmu u oblasti osiguranja, ali i u kontekstu ostalih različitih propisa koji regulišu odvijanje saobraćaja i odgovornosti svih onih koji u saobraćaju učestvuju. S tim u vezi očigledno je da trenutno postojeća regulativa koja uređuje obavezno osiguranje od auto-odgovornosti ne daje sveobuhvatan pristup na ovom planu i ne pruža adekvatna rešenja kada je reč o autonomnim vozilima i potencijalnim štetama koje mogu nastati njihovom upotrebom. Pre svega trebalo bi razmotriti promenu inicijalnog koncepta da se za štetu nastalu usled upotrebe motornih vozila odgovara po osnovu krivice i predvideti nova zakonska rešenja koja bi uvažavala činjenicu da kod autonomnih vozila krivice vozača po pravilu nema.

To bi dalje značilo izmeštanje odgovornosti od subjektivne ka objektivnoj, ako ne i izmeštanje instituta odgovornosti u celosti iz regulatornog okvira povezanog sa autonomnim vozilima. Dakle, u jednoj fundamentalnoj promeni paradigme, polise osiguranja više ne bi bile povezane sa odgovornošću kao rizikom, već sa samim autonomnim vozilom, dok bi obveznici plaćanja premija takvog osiguranja mogli da budu svi akteri koji učestvuju u proizvodnji odnosno „upravljanju" vozilom.

Jedan takav pristup bi podrazumevao celokupno sagledavanje uticaja koji će autonomna vozila imati na saobraćaj u celini i zahtevao bi adekvatnu modifikaciju ne samo propisa koji uređuju osiguranje već i propisa koji regulišu odvijanje saobraćaja u celosti, uz obavezno usaglašavanje s međunarodnom regulativom, pre svega na nivou EU, kako bi se obezbedila jedna harmonizovana tranzicija i ujednačavanje propisa iz oblasti osiguranja za štete nastale upotrebom autonomnih vozila, na jednom internacionalnom nivou.

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MOTOR THIRD-PARTY LIABILITY INSURANCE AND AUTONOMOUS VEHICLES

Abstract

The author examines the issue of using autonomous vehicles, or "smart cars," in the context of the existing regulatory framework governing insurance for damages arising from the use of motor vehicles. In this regard, the paper addresses the adequacy of current legal solutions concerning MTPL insurance and autonomous vehicles. It specifically highlights the challenges that the emergence of autonomous vehicles presents in relation to the concept of liability, a central component of this type of insurance. The analysis includes the current legal framework at the European Union level and domestic legislation, pointing out potential directions for improving legislative solutions, particulary in terms of shifting paradigms in understanding liability and liable parties, advocating for a new, specialized, and comprehensive approach to regulating matters related to traffic damage insurance more broadly.

Keywords: insurance, autonomous vehicles, liability, insurance policy.

I INTRODUCTION

The concept of insurance, as a social and business activity whose primary purpose is to prevent or mitigate economic damage arising from risks, or as an "institution developed from the human need to control surrounding risks"[2] has undergone significant evolution over the centuries.[3] From the rudimentary forms of insurance recorded in the Code of Hammurabi, through the recognition of life

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[2] Nataša Petrović Tomić, *Pravo osiguranja Sistem – Knjiga I*, *Official Gazette of the RS*, Belgrade, 2019, p. 41
[3] Ivana Soković, „Značaj osiguranja i persoektive razvoja u Srbiji", *Tokovi osiguranja*, br. 2/2024, str. 265-279.

insurance as relevant and permissible (which at the time marked a significant revolution in the insurance industry), to increasingly sophisticated policies covering risks in the cyber world, insurance has mirrored the socio-economic development of society through its evolutionary leaps in defining risks, coverage, insurance terms, and other principles of insurance law.

This chronological development of insurance reveals a consistent pattern: the growth of the insurance industry depends on the development of other branches of the economy. Given that technology, or more specifically technological advancement , is the primary driver of the industry, it leads to the conclusion that the insurance sector is also dependent on technological development.

Today, on the brink of the Fourth Industrial Revolution, a "technological revolution that will fundamentally alter the way we live, work, and relate to one another",[4] new questions arise about the synchronization of technological advancement and the insurance market. In the era of digitalization, nanotechnology, biotechnology, 3D printing, the Internet of Things (IoT), artificial intelligence (AI), quantum computing, and automation, the future of specific branches of insurance will come into question.[5]

One of the most significant branches of insurance that will face fundamental changes is the *conditio sine qua non* of every national legal framework in the field of insurance , i.e. motor third-party liability (MTPL) insurance.[6] This branch insures vehicle owners against liability for damages caused to third parties.[7]

Due to the tremendous technological leap propelling the Fourth Industrial Revolution, some of the most significant changes will occur in the motor liability insurance market as a result of the emergence of autonomous vehicles i.e. vehicles in which the role of the human driver is minimized or entirely eliminated. The emergence of "smart cars" controlled by AI challenges the insurance concept based on risk coverage derived from liability. Under such circumstances, established principles for compensation based on subjective or objective liability may become obsolete.

Therefore, in the coming years, one of the key questions in motor liability insurance will be the redefinition of existing concepts related to policyholders, insurance premium calculations, risk assessment, liability, and other components integral to this type of insurance.

[4] Klaus Schwab, *The Fourth Industrial Revolution – What It Means and How to Respond,* Foreign Affairs, 2015, *https://www.foreignaffairs.com/world/fourth-industrial-revolution*, accessed: 19. 5. 2024.

[5] Jelena Kočović, Tatjana Rakonjac Antić, Marija Koprivica, Kristina Bradić,„Pravci razvoja tržišta osiguranja", *Tokovi osiguranja*, br. 3/2024, str. 536-548.

[6] There are only a few countries in the world that have not implemented mandatory insurance for damages caused by motor vehicles. For more details, see Ivica Jankovec, *Obavezno osiguranje za štete od motornih vozila*, Savremena administracija, Belgrade, 1977, pp. 14–16.

[7] Law on Compulsory Traffic Insurance, Official Gazette of the RS, Nos.51/2009 , 78/2011, 101/2011, 93/2012 and 7/2013 - Decision of the Constitutional Court.

II AUTONOMOUS VEHICLES

The news that the first "license" for an autonomous vehicle[8] was issued in the Republic of Serbia marked a significant milestone in 2023 regarding autonomous vehicles and our country. This represents a substantial step forward in the use of such vehicles on domestic roads.

In this regard, it is important to clarify what autonomous vehicles are and how they function. In brief, their essence can be summarized as follows:[9]

- autonomous vehicles do not require a human operator, i.e. a driver;
- these vehicles are designed in a way that allows the software to perform driving tasks—day or night, in adverse weather conditions, etc., similar to how a human operator would;
- autonomous vehicles are programmed to be the perfect model of a car, entirely focused on driving, adhering to traffic regulations, ensuring the safety of passengers and pedestrians, and capable of responding to various emergency situations.

In recent years, significant progress has been made in designing and manufacturing of such vehicles aiming to minimize potential risks inherent to human drivers. This progress relies on artificial intelligence and software systems, which form the core of autonomous vehicles. Manufacturers hope that autonomous vehicles will reduce the number of fatalities in traffic accidents "because the computers in these vehicles will never get tired, get drunk, or otherwise get distracted like human operators".[10] Essentially, the primary role of autonomous cars is to ensure that "the vehicle behaves appropriately, even when the driver does not".[11]

Regarding the classification of autonomous vehicles, the generally accepted standard divides them into levels ranging from "level 0" to "level 5" depending on the degree of driving automation. For example, the U.S. National Highway Traffic Safety Administration (NHTSA)[12] defines the levels as following:

Level 0 encompasses most traditional vehicles, i.e. non-autonomous vehicles.

Levels 1–2 indicate that human operators are primarily responsible for basic driving functions, while automated features serve as secondary functions (e.g. parking sensors, cruise control, etc.).

[8] News: „Srbija izdala prvu dozvolu za vozilo bez vozača trećeg stepena", https ://n1info .rs /magazin / scitech /srbija-izdala-prvu-dozvolu -za-vozilo -bez -vozaca -3 -stepena / , accessed: 20. 5. 2024.

[9] Anthony Paolino, The Ultimate Insurance Policy: Autonomous Vehicles and Artificial Intelligence, A Statutory Proposal for a Complicated Product, Arizona Law Journal of Emerging Technologies, Arizona, 2018, p. 3

[10] Jeffrey K. Gurney, „Sue My Car Not Me: Products Liability and Accidents Involving Autonomous Vehicles", JOURNAL OF LAW, TECHNOLOGY & POLICY [Vol. 2013], 2013, p. 251

[11] Amar Kumar Moolayilal, The Modern Trolley Problem: Ethical and Economically-Sound Liability Schemes for Autonomous Vehicles, 9 CASE W. RESERVE J.L. TECH. & INTERNET 1, 2-4 (2018).

[12] National Highway Traffic Safety Administration, part of the U.S. Department of Transportation, https ://www .nhtsa .gov /vehicle -safety /automated -vehicles -safety , accessed: 19. 5. 2024.

Levels 3–5, on the other hand, represent highly automated vehicles, where automated systems are primarily responsible for driving, and the role of the human operator is secondary or entirely absent.

It is important to highlight that the distinction between levels 3 and 5 lies in the degree and intensity of the human operator's active involvement during driving. For instance, level 3 autonomous vehicles use automated systems capable of reacting to changes in the driving environment, often referred to as "dynamic driving". However, such vehicles require the human operator to take control whenever the system is uncertain about the precise action.[13]

Level 4, implies almost indentical human operator's involvement as level 3 vehicles, but the initiative to take control lies with the driver. The vehicle will not request the driver to take over control; instead, the driver can, but is not obligated to, intervene during an emergency.[14]

Finally, level 5 vehicles eliminate any possibility for the driver to intervene, as pedals and steering wheels are completely removed. In this way, the driver actually becomes a passenger in their own car.

In the context of domestic legislation, autonomous vehicles are recognized in the Road Traffic Safety Act as vehicles manufactured or modified to include an "automated driving system" that "allows the vehicle to move on the road with partial driver control or without complete control."[15]

Additionally, the Rulebook on the Conditions for Conducting Autonomous Driving defines the automated driving system as "a combination of hardware and software components which, depending on the level of automation, perform the dynamic driving task within a defined operational range."[16]

Regarding the use of autonomous vehicles on domestic roads, the Road Traffic Safety Act and the aforementioned Rulebook predict the possibility of obtaining permits solely for testing purposes,[17] limited to vehicles with up to level 4 automation.[18] However, it is important to note that both the Road Traffic Safety Act and the Rulebook remain unclear regarding the source of classification concerning levels of automation.

When it comes to motor liability insurance provisions, particularly in the Compulsory Traffic Insurance Law, it is important to emphasize that the text of this law has not undergone any revisions to align with the "pioneering" introduction of autonomous vehicles on domestic roads.

[13] Amar Kumar Moolayilal, The Modern Trolley Problem: Ethical and Economically-Sound Liability Schemes for Autonomous Vehicles , 9 CASE W. RESERVE J.L. TECH. & INTERNET 1, 2018, p. 2.
[14] Ibid.
[15] Law on Compulsory Traffic Insurance, Official Gazette of the RS, 41/2009 , 53/2010, 101/2011, 32/2013 – Decision of the CC, 55/2014, 96/2015 – Decision of the CC, 9/2016 – Decision of the CC, 24/2018, 41/2018, 41/2018 – other law , 87/2018, 23/2019, 128/2020 – other law and 76/2023), article 7 para. 1 item 105.
[16] Rulebook on the Conditions for Conducting Automated Driving, Official Gazette of the Republic of Serbia, No. 104/2023, Article 2, Paragraph 1, item 1.
[17] Road Traffic Safety Act, Article 122a.
[18] Rulebook on the Conditions for Conducting Automated Driving, Article 3, para. 3.

Thus, current domestic regulations remain silent on the issue of insuring autonomous vehicles, which is almost certain to cause significant practical problems concerning potential damages that autonomous vehicles may cause. This is particularly relevant to the issue of driver liability, considering that the nature and conceptual idea of autonomous vehicles implies a substantial reduction or elimination of driver responsibility, given that the driver's role in operating such vehicles is reduced or completely excluded.

III THE CONCEPT OF LIABILITY FOR DAMAGE CAUSED BY MOTOR VEHICLES

First, it is important to note that at the EU level, the issue of liability for damages caused by motor vehicles is left to national legislations.[19] On the other hand, motor liability insurance is uniformly regulated at the EU level through the (revised) Motor Insurance Directive.[20]

In this regard, when it comes to the regulation of liability, it is important to analyze existing liability systems and rules regarding motor vehicles. In comparative law, generally we can distinguish three main liability systems for damages caused by the use of motor vehicles:[21]

- objective liability system (based on the principle of causality) – characteristic of Austria, Switzerland, Germany, Poland, the Czech Republic, Slovakia, Hungary, and others;
- presumed fault system – characteristic of Italy, Belgium, Luxembourg, France, and Denmark;
- fault-based liability system – characteristic of Predominantly used in the United Kingdom and Ireland.

In the context of liability, special attention is drawn to the German legislative framework. Regarding general liability rules, in the German legal system, much like in ours, the same principles apply to accidents involving multiple vehicles causing damage to third parties or to each other.[22] Mutual liability of motor vehicle owners

[19] Position on the EC proposal to revise the MID, https://www.insuranceeurope.eu/publications/1807/position-paper-on-european-commission-proposal-to-revise-motor-insurance-directive/, accessed: 29. 6. 2024.

[20] Directive (EU) 2021/2118 of the European Parliament and of the Council of 24 November 2021 amending Directive 2009/103/EC relating to insurance against civil liability in respect of the use of motor vehicles, and the enforcement of the obligation to insure against such liability (Text with EEA relevance) PE/60/2021/REV/1 OJ L 430, 2. 12. 2021, p. 1–23 (BG, ES, CS, DA, DE, ET, EL, EN, FR, GA, HR, IT, LV, LT, HU, MT, NL, PL, PT, RO, SK, SL, FI, SV).

[21] Ivica Jankovec, Obavezno osiguranje za štete od motornih vozila, Savremena administracija, Belgrade, 1977, p. 56.

[22] Zoran Ilkić,„Odgovornost osiguranika od auto-odgovornosti za prouzrokovanu štetu", Zbornik radova Pravnog fakulteta u Novom Sadu – 1/2012, Novi Sad, 2012, p. 509.

is assessed based on their contribution to the damage and the degree of risk posed by their vehicles. Compensation is determined by evaluating which participant primarily caused the damage, or whether the damage resulted from an extraordinary or predominantly ordinary operational risks. The element of fault is considered only to the extent that its influence is not covered by other circumstances.

On the other hand, when addressing liability in the use of autonomous vehicles, it is important to note that Germany adopted the Autonomous Driving Act in 2021,[23] authorizing the use of autonomous vehicles up to level 4 automation, as classified by the Society of Automotive Engineers (SAE). This legislation stipulates that if drivers operate vehicles up to level 3 automation will remain liable under Germany's Traffic Act[24] for any damages caused. However, for vehicles level 4 and above, the user of the vehicle will no longer be held liable under the provisions of the German Traffic Act.[25] Instead, this liability shifts to a so-called "technical supervisor", who is also responsible for deactivating the system controlling the autonomous vehicle in place of the driver.[26]

When it comes to the rules of liability in the case of an accident caused by a moving motor vehicle in the Republic of Serbia, the legal framework principally stipulates that "in the event of an accident caused by a moving motor vehicle due to the exclusive fault of one owner, the rules of fault-based liability apply",[27] while "if neither party is at fault, the owners share liability equally unless fairness demands otherwise".[28]

Thus, the Serbian legal solution prescribes that the primary criterion for determining liability in accidents caused by moving motor vehicles is based on fault, specifically the exclusive fault of one owner. In situations where neither participant in the accident is at fault, the secondary criterion applies, which involves the rules of strict liability. In some cases, these criteria are applied concurrently.[29] In this case, liability is not based on fault but on the use of a dangerous object, as „liability is

[23] Amendment Act of the Road Traffic Act and the Compulsory Insurance Act – the Autonomous Driving Act Bundesgesetzblatt – BGBL I No. 49 of July 27, 2021.

[24] Straßenverkehrsgesetz in der Fassung der Bekanntmachung vom 5. März 2003 (BGBl. I S. 310, 919), das zuletzt durch Artikel 8 des Gesetzes vom 21. November 2023 (BGBl. 2023 I Nr. 315) geändert worden ist.

[25] Ibid, section 18(1)(1).

[26] Martin Ebers, Civil Liability for Autonomous Vehicles in Germany, https://ssrn.com/abstract=4027594, accessed: 1. 7. 2024.

[27] Law of Contracts and Torts , Official Gazette of SFRY, No., 29/78, 39/85, 45/89 - Decision of the Constitutional Court of Yugoslavia and 57/89, Official Gazette of FRY, No. 31/93, Official Gazette of Serbia and Montenegro, No. 1/2003 - Constitutional Charter and Official Gazette of the RS, No. 18/2020, Article 178 para. 1.

[28] Law of Contracts and Torts, Article 178 para. 3.

[29] "The bases of strict liability and fault-based liability exist simultaneously for the owner of the motor vehicle, as the holder of a dangerous object, and the person operating the vehicle at the time of the harmful event, and such liability of the injurer toward the injured party is joint and several." – (Judgment of the Court of Appeals in Niš, Gž 2475/2019(1), May 23, 2019).

attached to those who derive direct benefits from the use of such objects or the performance of such activities".[30]

This approach is the result of the historical development of the concept of liability. „With the development of the automobile industry, the increase in the number of motor vehicles, and the rise in accidents caused by the use of motor vehicles, liability for damages gradually evolved from classic fault-based liability of the injurer, through presumed fault, to liability regardless of fault".[31]

This would further mean that the person obligated to compensate for the damage is the owner of the vehicle, regardless of whether the damage was caused by their fault. Additionally, the basis for liability is not only found in the risk created by the use of a dangerous thing, but it is also necessary that the person using such a thing derives a certain benefit. The only circumstances that can exclude the existence of objective liability are the interruption of the causal link due to force majeure or due to the actions of a third party, or due to the fault of the injured party itself.[32]

Accordingly, the injured party is not required to prove either the fault of the motor vehicle owner or even the causal link showing that the damage resulted from the use of the motor vehicle. This is because it pertains to a form of liability where fault is irrelevant, and the causal link, establishing that the damage was caused by the motor vehicle, is presumed by law.[33]

The burden of proving that the damage was not caused by the use of the motor vehicle as a dangerous object, and that, in the specific case, the effect of the cause of the damage could not have been foreseen, avoided, or eliminated, falls on the motor vehicle user.[34]

IV AUTONOMOUS VEHICLES AND LIABILITY

1. EU Legislation

When addressing autonomous vehicles, the important issue is the presence or absence of driver's fault in causing accidents. Considering that the driver's role in autonomous vehicles is reduced (and even eliminated in level 5 autonomous vehicles), it is reasonable to question the adequacy of current legal framework and automobile liability insurance concepts regarding autonomous vehicles.

[30] Z. Ilkić, p. 508
[31] I. Jankovec, p. 5.
[32] Mihailo Konstantinović, Skica Zakona o obligacionim odnosima, Article 137.
[33] Decision of the Supreme Court of Serbia, Rev. No. 632/1998, July 17, 1998.
[34] Slobodan Stanišić, Odgovornost u slučaju udesa izazvanog motornim vozilom u pokretu, Master's Thesis, Faculty of Law, UNION University in Belgrade, 2006, p. 25.

This issue has already been discussed within European Union bodies. The European Commission, in a Communication addressed to the European Parliament[35], made specific recommendations suggesting that liability issues (and consequently motor vehicle liability insurance) should be resolved under the framework of the Motor Insurance Directive[36] and the Product Liability Directive.[37]

The key features of the Motor Insurance Directive include the following:

- each Member State must ensure that civil liability related to vehicle use is covered by insurance;
- such insurance must cover any loss or injury caused in the territory of other Member States, in accordance with their laws;
- compulsory insurance covers property damage and bodily injuries.

On the other hand, although the Motor Insurance Directive offers a comprehensive approach to insurance internationally, it still does not address fundamental questions related to potential damages caused by autonomous vehicles. The Directive does not address the core issue of autonomous vehicles that the owner/user has minimal or no involvement in driving, and essentially becomes a potential victim of their own vehicle. In other words, the Directive does not recognize the challenges associated with the driver liability in situations where the user becomes entirely dependent on the autonomous vehicle and the software embedded within it.

This raises significant question about whether the Motor Insurance Directive, in its current form, can effectively regulate liability and ensure a fair distribution of risk.[38]

When it comes to the Product Liability Directive, the so-called New Directive on Defective Product Liability was adopted in 2024**.** According to its adoption proposal, this Directive aims to „align the EU liability framework with the digital age, the circular economy business model, and global value chains".[39]

The aforementioned Directive on Defective Product Liability (a revised version of the original directive) seeks to modernize the existing regulatory framework

[35] COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE, THE COMMITTEE OF THE REGIONS On the road to automated mobility: An EU strategy for mobility of the future, COM/2018/283 final, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52018DC0283, accessed: 25. 5. 2024.

[36] Directive (EU) 2021/2118 of the European Parliament and of the Council of 24 November 2021 amending Directive 2009/103/EC relating to insurance against civil liability in respect of the use of motor vehicles, and the enforcement of the obligation to insure against such liability (Text with EEA relevance) PE/60/2021/REV/1 OJ L 430, 2.12.2021, p. 1–23 (BG, ES, CS, DA, DE, ET, EL, EN, FR, GA, HR, IT, LV, LT, HU, MT, NL, PL, PT, RO, SK, SL, FI, SV).

[37] Council Directive 85/374/EEC concerning liability for defective products, OJ L 210, 7.8.1985, p. 29–33 (DA, DE, EL, EN, FR, IT, NL).

[38] Francesco Paolo Patti, „The European Road To Autonomous Vehicles", Bocconi Legal Studies Research Paper Series, Number 3395206, 2019, p. 6.

[39] New Product Liability Directive, https ://www .europarl .europa .eu /RegData /etudes /BRIE /2023 /739341 /EPRS _BRI (2023)739341 _EN .pdf , accessed: 20. 5. 2024.

governing strict liability for manufacturers of defective products. As one of its most significant innovations is recognition of AI and software systems as "products". This enables compensation for damages caused by defective AI systems without requiring the injured party to prove the manufacturer's fault.

Moreover, the proposal clearly states that liability may extend beyond hardware manufacturers to include software providers and digital service providers whose contributions affect the functionality of the product (e.g. navigation services in an autonomous vehicle).[40]

Additionally, in order to ensure a comprehensive liability regime within the EU, fault-free liability for defective products applies to all movable goods, including those integrated into other movable or installed in immovable goods.

However, despite these advancements and the enhanced regulatory framework[41] (particularly regarding the New Directive on Defective Product Liability), the issue of motor vehicle liability insurance for autonomous vehicles remains a grey area. It continues to be insufficiently regulated because none of the current EU directives provide a coherent and comprehensive framework for addressing motor vehicle liability insurance in the context of autonomous vehicles.

This is further acknowledged by the revised Motor Insurance Directive of 2021, which mandates the European Commission to continuously monitor and review the 2009 Motor Insurance Directive. This review is to determine whether the Directive still fulfills its purpose, considering technological advancements such as the increased use of autonomous and semi-autonomous vehicles.[42]

In this regards, the European Commission has been tasked with preparing a report by 2030 that evaluates the adequacy of the 2021 Motor Insurance Directive concerning autonomous vehicles.

Thus, it is evident that, at the EU level, the issue of insurance and autonomous vehicles is considered in a *de lege ferenda* context.

[40] Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on liability for defective products, 28. 9. 2022 COM(2022) 495 final 2022/0302 (COD), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022PC0495 , p. 6, accessed: 25. 5. 2024.

[41] The use of artificial intelligence at the EU level, including the use of autonomous vehicles, is regulated under the Artificial Intelligence (AI) Act, with additional efforts underway to develop a Directive on Liability for Damage Caused by Artificial Intelligence.

[42] Directive (EU) 2021/2118 of the European Parliament and of the Council of 24 November 2021 amending Directive 2009/103/EC relating to insurance against civil liability in respect of the use of motor vehicles, and the enforcement of the obligation to insure against such liability (Text with EEA relevance), PE/60/2021/REV/1, OJ L 430, 2.12.2021, pp. 1–23 (BG, ES, CS, DA, DE, ET, EL, EN, FR, GA, HR, IT, LV, LT, HU, MT, NL, PL, PT, RO, SK, SL, FI, SV), introductory provisions, point 39.

2. Domestic Legislation

In the context of domestic legislation, the regulatory framework regarding autonomous vehicles and motor liability insurance also does not provide a specialized and specific solution. Regarding the obligation to insure vehicles, the current principle is that "the owner of a motor vehicle is required to conclude a liability insurance contract for damage caused to third parties through the use of the motor vehicle, resulting in death, bodily injury, impairment of health, destruction or damage to property, except for damages to property taken for transportation".[43]

In this regard, considering that *liability*, as the core principle of traffic insurance, assumes the person as the risk-bearer (or fault), it remains unclear what kind of liability the owner or driver of an autonomous vehicle would be insured for, given that their involvement in driving is either significantly reduced or completely excluded. If one of the fundamental postulates of motor liability insurance is the idea of relieving the insured from paying compensation for damages, or the concept of preventing the reduction of the insured's property[44] due to the liability of the owner or driver of a motor vehicle, it is clear that such an approach does not align with the fundamental concept of using autonomous vehicle.

Thus, the issue of liability in the context of autonomous vehicles is the main area where existing legal solutions and their potential amendments should be examined, precisely because the main *raison d'être* of autonomous vehicles is to relieve the driver from liability or to reduce the inherent risks that arise as a result of responsibility for traffic accidents.

Therefore, the concept of subjective liability as the primary rule for compensating third parties for damage caused by the use of motor vehicles can be highly problematic when it comes to damage caused by autonomous vehicles, as driver's fault typically does not exist in such situations.

On the other hand, in cases where damage occurs in a collision between two autonomous vehicles, the owners of the vehicles would be equally liable unless fairness requires otherwise.[45] In such cases, the issue of fairness would be left to judicial discretion, which would require a detailed examination of the high-tech aspects of autonomous vehicle use, and their nature, and would likely lead to the development of new liability rules by judicial practice.

Situations where the current legal solution on liability for accidents caused by moving motor vehicles may cover the use of autonomous vehicles are those where damage is caused to third parties by multiple vehicle owners. In such situations,

[43] Law on Compulsory Traffic Insurance, Article 18, para. 1.

[44] Vladimir Čolović, „Pravna priroda osiguranja od auto-odgovornosti", Godišnjak fakulteta pravnih nauka, Banja Luka, No. 10, 2020, p. 14.

[45] Law of Contracts and Torts, Article 178, para. 3.

each of the owners would be liable for compensating the full damage, without the possibility of claiming reduced liability to a third party, because this solution was designed to improve the position of the injured party.[46]

In any case, the rules on liability for damages arising from the use of motor vehicles, as defined by the Law of Contracts and Torts, cannot adequately address situations where autonomous vehicles are involved in an accident.

Therefore, the area where a temporary answer to the question of what liability rules are most appropriate for autonomous vehicles could be found is in the rules of product liability for defective items. General legal provisions define that "anyone who places a product on the market that they have manufactured, which poses a risk of harm to people or property due to a defect they did not know about, is liable for the damage caused by that defect".[47] Additionally,"the manufacturer is liable for dangerous characteristics of the product if they have not taken all necessary measures to prevent damage that could have been predicted through warnings, safe packaging, or other appropriate measures".[48]

Having in mind that the key characteristic of autonomous vehicles is the presence of software that controls the vehicle, i.e. the vehicle is so automated that it substantially reduces the driver's involvement in the driving process (or even eliminates it entirely), such a vehicle could be considered a "thing" or "product" for which the manufacturer is liable for. In the context of domestic regulation, this would imply the application of supplementary regulations governing liability for damage caused by defective products, or the Consumer Protection Law, which is significantly aligned with the 1985 Product Liability Directive. Such a solution could be in line with one of the potential proposed solutions at the EU level, which suggests maintaining the *status quo* regarding legal amendments.[49] However, while such a solution would not require changes to existing regulations, on the other hand, it would likely open Pandora's box due to the following major issues recognized in EU discussions on this matter:[50]

– First and foremost, the rules on product liability for defective products only cover the manufacturer's liability for defective products. The concept of "defectiveness" is narrowly defined, and it is difficult to determine for technically complex products such as autonomous vehicles. For example, damage arising from regular use, wear and tear, poor maintenance, inadequate repairs, or certain road conditions or weather events would not

[46] Slobodan Perović, Commentary on Law of Contracts and Torts, Faculty of Law in Kragujevac and Cultural Center in Gornji Milanovac, 1980, p. 531.
[47] Law of Contracts and Torts, Article 179, para. 1.
[48] Law of Contracts and Torts, Article 179, para. 2.
[49] EU Common Approach on the liability rules and insurance related to the Connected and Autonomous Vehicles, European Parlamentary Research Service, 2018, p. 29.
[50] Ibid, str. 21.

be covered under this form of liability. In this regard, participants in the production of autonomous vehicles, such as software developers, vehicle manufacturers, component manufacturers, importers, distributors, and sellers, could use various mechanisms available to them under the rules governing manufacturer liability for defective products to minimize or exclude such liability.

– Moreover, the costs of unknown and still undefined risks that may arise from the use of autonomous vehicles would fall to the injured party, as such risks would not be covered by an appropriate insurance policy.
– The high-tech nature of autonomous vehicles, combined with broad provisions on manufacturer liability for defective products and provisions regulating the exclusion of such liability, especially regarding the concept of "reasonableness," could overload the courts and their decision-making processes. Courts would be put in the position of interpreting and applying provisions on manufacturer liability for defective products in disputes involving very complex technological issues.

Additionally, one of the most significant problems when applying the product liability rules for defective products to autonomous vehicles is the concept that "the seller is liable for the lack of conformity of the goods delivered under the contract if:

1) the lack of conformity existed at the time the risk passed to the consumer, regardless of whether the seller was aware of it;
2) the lack of conformity appeared after the risk passed to the consumer and stems from a cause that existed before the risk passed to the consumer;
3) the consumer could easily detect the lack of conformity if the seller declared the goods to be in conformity with the contract."[51]

This also applies to rules stating that „the seller is liable for non-conformity of the goods that appears within two years from the time the risk passes to the consumer".[52]

In the specific case of an error in the autonomous vehicle's software, which may occur as a result of a computer malfunction, and which arises within two years of the risk passing to the consumer (i.e. after the purchase of the autonomous vehicle), the existing legal solution would not be able to address the issue of autonomous vehicle use.

Therefore, applying manufacturer liability rules for defective products can only partially and temporarily serve as an appropriate legal framework when it comes to regulating liability issues for autonomous vehicles.

[51] The Consumer Protection Law, Official Gazette of the Republic of Serbia, No. 88/2021, Article 50, para. 1.
[52] The Consumer Protection Law, Article 52, para. 2.

V Autonomous Vehicles and Insurance

What must be kept in mind is that, in any case, the provisions on manufacturer liability for defective products (both at the EU level and in the Republic of Serbia) do not correspond in any way to the provisions governing compulsory motor liability insurance.

Even if it is considered that the provisions governing the protection of injured third parties can meet the demands imposed by the use of autonomous vehicles, given that the relevant provisions of the Motor Vehicle Liability Insurance Act predict that "a claim based on motor liability insurance is filed by the injured party directly to the insurance company",[53] thus establishing a direct mechanism for protecting the injured party,[54] the question arises as to whether the driver of an autonomous vehicle could be treated as an injured party, considering that the driver, in a certain sense, becomes a passenger in their own vehicle.

Therefore, in the context of motor liability insurance, it is certain that this part of the legislation requires significant interventions, primarily regarding the individuals who would be required to obtain motor liability insurance and pay the corresponding premium. Currently, there is wide space for adopting conceptually new solutions that would significantly change the existing legislative framework.

All of the above implies that the existing regulatory framework regarding motor liability insurance and autonomous vehicles is fundamentally inadequate, and that its certain existing segments can only serve as temporary and partial solutions until a new, specific, and comprehensive legislative solution is adopted.

One possible solution would involve the obligation to obtain so-called *no-fault* insurance, a model that already exists in Sweden and Belgium.[55] This type of insurance would be obtained by the owner, operator, or manufacturer of the autonomous vehicle, but it would not be based on liability. Instead, the injured party would be directly insured, not according to the rules governing civil liability, but for the risk that the vehicle was involved in an accident.[56] In this way, *no-fault insurance* would be tied to the autonomous vehicle itself, and the insured parties would include anyone who suffers damage caused by the autonomous vehicle. This model would imply that the insurer, as designated by the law, would procure an insurance policy

[53] The Law on Compulsory Traffic Insurance, Article 24, para. 1.

[54] COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE, THE COMMITTEE OF THE REGIONS On the road to automated mobility: An EU strategy for mobility of the future, COM/2018/283 final, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52018DC0283, accessed 25. 5. 2024, p. 10.

[55] EU Common Approach on the liability rules and insurance related to the Connected and Autonomous Vehicles, European Parlamentary Research Service, 2018, p. 76.

[56] Ibid, p. 112.

that covers risks for damage to all persons in the autonomous vehicle, as well as all other participants in traffic.[57]

Regarding those who would be obligated to secure such insurance contracts, one possible solution would involve the procurement of insurance by the vehicle owner, operator, and manufacturer (and possibly the software manufacturer) together. Their contribution to the premium could be defined in various ways, for example, the premium could consist of a fixed part paid by all listed parties, while the other part of the premium would be a variable amount depending on the likelihood of risk, i.e. damage. This would further imply the development of telematics for calculating the premium based on data collected by autonomous vehicles about their owners, drivers, as well as the vehicle and software manufacturers.

An additional option that could complement the previous solution would be a drastic change to the legislative framework regarding motor liability insurance. This is the *Pay As You Drive* principle, established by the German insurance company *Allianz*. This system implies a fully adjusted approach to structuring insurance policies, based on the processing of huge volumes of data. Thanks to the use of black boxes installed in vehicles, insurance companies are already able to monitor vehicle behavior and driver on the road, adjusting insurance coverage to specific risks.[58] This would further mean that such a policy would differentiate between time intervals when the vehicle is driven by a human and when it is operated by software, applying different liability regimes for potential damages accordingly.

VI Conclusion

Traditional motor liability insurance, or insurance against damages caused by the use of motor vehicles, is based on the assumption of human error as the risk that carries the liability of the driver or vehicle owner. With autonomous vehicles, this paradigm changes significantly because autonomous vehicles are designed to minimize or even completely eliminate the driver's involvement in operating the vehicle. Therefore, this drastic change in the concept of the driver's role in traffic requires significant changes in the regulatory framework governing this area.

With the introduction and increasing use of autonomous vehicles, it will be necessary to adopt an entirely different legislative paradigm in the field of insurance, as well as in the context of various other regulations that govern traffic and the responsibilities of all participants. In this regard, it is clear that the current regulations governing mandatory motor liability insurance do not provide a comprehensive

[57] Ibid.

[58] Bruno Sari, Alessandro Moraccini, Insurance in the related Automobile Vehicle industry, Law and Economics for Insurance and Finance, University of Bologna, 2020, p. 15

approach to this issue and do not offer adequate solutions when it comes to autonomous vehicles and the potential damages that may arise from their use. First and foremost, it is necessary to reconsider the initial concept that damages caused by the use of motor vehicles are based on driver's fault and to propose new legislative solutions that would take into account the fact that, in the case of autonomous vehicles, there is generally no driver's fault.

This would further mean shifting the liability from a subjective to an objective one, or even removing concept of liability entirely from the regulatory framework related to autonomous vehicles. Thus, in a fundamental paradigm shift, insurance policies would no longer be tied to liability as a risk, but rather to the autonomous vehicle itself, while the parties responsible for paying premiums for such insurance could include all the participants in the production or "conducting" the vehicle.

Such an approach would require a comprehensive consideration of the impact that autonomous vehicles will have on traffic as a whole and would demand adequate modification not only of the regulations governing insurance but also of the regulations that govern traffic operations in general, with mandatory alignment with international regulations, primarily at the EU level, to ensure a harmonized transition and standardization of regulations regarding damages caused by the use of autonomous vehicles at the international level.

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PRILAGODBA REGULATORNOG OKVIRA SOLVENCY II NOVIM RIZICIMA I IZAZOVIMA SUVREMENOG KORPORATIVNOG UPRAVLJANJA

PREGLEDNI RAD

Apstrakt

Solvency II kao regulatorni okvir kojim se na sustavan način normira poslovanje društava za (re)osiguranje u Europskoj uniji u primjeni je od 2016. Od tada pa do danas Direktiva je u značajnoj mjeri doprinijela stabilizaciji tržišta osiguranja i boljoj zaštiti osiguranika, a sve s obzirom na implementirani sustav učinkovite procjene rizika i adekvatnosti kapitala društava. Međutim, dosadašnja primjena Direktive ukazala je na potencijalno pretjeranu kapitaliziranost tržišta osiguranja Europske unije te nužnost ulaganja u određene segmente poslovanja. Među njima posebice se ističe održivo poslovanje s naglaskom na klimatske i okolišne rizike. Posebno značajna novina predviđena izmjenama Direktive predviđa dodatno uvođenje kriterija proporcionalnosti za mala i nesložena društva koja bi primjenom ovoga načela trebala ostvariti korist u pogledu izvještavanja, objavljivanja, upravljanja, izračuna tehničkih pričuva, vlastite procjene rizika i solventnosti. Predviđene izmjene imaju niz prednosti, ali im se može prigovoriti dodtno nametanje obveza izvještavanja te potencijalna prenormiranost koja može uslijediti pri njihovoj implementaciji.

Ključne riječi: *izmjene Solvency II, održivost, klimatski i okolišni rizici, upravljanje rizikom, proporcionalnost, mala i nesložena društva.*

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I Uvod

Direktiva Solvency II[2] kao regulatorni okvir djelatnosti osiguranja i reosiguranja na tržištu Europske unije u primjeni je od 2016. Već od samog usvajanja teksta Direktive (2009.) kao i u obrazloženjima višestruke odgode njene primjene, isticala se pretjerana zahtjevnost u pojedinim segmentima njene regulacije. Direktiva je usvojena prvenstveno radi poboljšanja financijske stabilnosti i pouzdanosti europskog tržišta osiguranja. Namjeravana svrha i cilj su joj postizanje veće konkurentnosti cjelokupne djelatnosti osiguranja, kao i konkurentnosti pojedinih osiguratelja, odnosno reosiguratelja te bolja zaštiti samih korisnika usluga osiguranja. Glavni cilj donošenja Direktive Solvency II bio je uspostavljanje sustavnog pravnog okvira obavljanja poslova (re) osiguranja društava za (re)osiguranje na cijelom unutarnjem tržištu Europske unije te olakšanje pokrića rizika i obveza društvima za (re)osiguranje sa sjedištem u EU. Direktiva je u velikom opsegu postigla, pa i dalje postiže namjeravane ciljeve i svrhu. Međutim, opravdano se nakon 5 godina njene primjene počelo postavljati pitanje je li njen kvantitativni normativni sadržaj odgovarajući navedenim ciljevima. Opći dojam je da je razdoblje dosadašnje primjene Direktive pokazalo kako je tržište osiguranja EU previše kapitalizirano i da pored potrebe za daljnjim unaprjeđenjem alokacije kapitala među učesnicima na tržištu postoji dovoljno prostora za oslobađanjem dijela kapitala i ulaganjem u potrebnije segmente poslovanja.[3] Sukladno najavama prilikom samog početka primjene Direktive, 2020. se počelo raditi na pripremama potrebnih izmjena i prilagodbi te je 2021. Europska komisija pripremila prijedlog teksta direktive kojim se značajnije mijenja Solvency II. Predložene izmjene odnose se na tri glavna područja regulacije, a to su smanjenje regulatornih obveza za mala i tzv. nesložena društva za osiguranje odnosno ona s niskim profilom rizika (*small and non-complex undertakings*[4]), uzimanje u obzir dugoročnih rizika i rizika klimatskih promjena te jačanje grupnog i prekograničnog nadzora. Dakle, navedena područja su ona u kojima su se uočili određeni nedostatci Solvency II ili njena pretjerana normiranost te regulatorni zahtjevi kojima se ne postiže sama svrha Direktive. Nakon što su se Vijeće i Komisija krajem 2023. usuglasili s Prijedlogom teksta direktive o izmjenama Solvency II, Vijeće za ekonomske i monetarne poslove u okviru Europskog

[2] Direktiva 2009/138/EZ Europskog parlamenta i Vijeća od 25. 11. 2009. o osnivanju i obavljanju djelatnosti osiguranja i reosiguranja - Solventnost II (*Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II) (recast) (Text with EEA relevance), OJ L 335, 17.12.2009, p. 1–155).*

[3] Milo M. Marković, „Izazovi tržišta osiguranja u Srbiji na putu ka Solventnosti II", Tokovi osiguranja, časopis za teoriju i praksu osiguranja, Udruženje osiguravača Srbije, 2/2024, (str. 333. – 361.), str. 347.

[4] Solvency II dopunjava se novim člankom 29a. kojim se utvrđuju kriteriji za određivanje malih i nesloženih društava za osiguranje, a koji uključuju tehničke pričuve i prihod od zaračunate godišnje bruto premije u iznosima i postotcima koji se različito definiraju za društva koja se bave životnim osiguranjem te ona koja se bave neživotnim osiguranjem.

parlamenta je 29.1.2024. odobrilo Prijedlog. Prijedlog je razmatran u Europskom parlamentu tijekom zasjedanja u 4. mjesecu 2024. te je konačno 23.4.2024. usvojena Zakonodavna rezolucija Europskog parlamenta i Vijeća o izmjeni Direktive 2009/138/EZ u pogledu proporcionalnosti, kvalitete nadzora, izvještavanja, mjera dugoročnih jamstava, makrobonitetnih alata, rizika održivosti, nadzora grupe i prekograničnog nadzora (COM(2021)0581 – C9-0367/2021 – 2021/0295(COD))[5].

II Čimbenik održivosti kao dio reforme sustava Solvency II

Značaj i potreba održivosti gospodarskog poslovanja došli su u fokus šire, a posebno gospodarske, javnosti tijekom i neposredno nakon pandemije Covid-19. Održivost postaje nezaobilazan čimbenik svih suvremenih sustava korporativnog upravljanja. Pri procjeni održivosti u poslovanju u obzir se uzimaju okolišni, socijalni i upravljački čimbenici (*environmental, social and governance - ESG*). Generalno govoreći, težnja kompanija da postanu održive nije nova ideja. Međutim, 2015. godina donosi značajan preokret, jer je tada usvojen Pariški klimatski sporazum[6] kao „globalni odgovor na prijetnje izazvane klimatskim promjenama, uvažavajući održivi razvoj", a Ujedinjene nacije predstavljaju Ciljeve održivog razvoja u sklopu Agende 2030.[7] [8]

U djelatnosti osiguranja, kako je regulirana direktivom Solvency II i predviđenim njenim izmjenama, poseban naglasak stavlja se na okolišne čimbenike, odnosno rizike uzrokovane klimatskim promjenama. Djelatnost osiguranja temeljena na učinkovitoj procjeni rizika i adekvatnosti kapitala preuzetom riziku, osnova je

[5] Zakonodavna rezolucija Europskog parlamenta od 23. travnja 2024. o Prijedlogu direktive Europskog parlamenta i Vijeća o izmjeni Direktive 2009/138/EZ u pogledu proporcionalnosti, kvalitete nadzora, izvještavanja, mjera dugoročnih jamstava, makrobonitetnih alata, rizika za održivost, nadzora grupe i prekograničnog nadzora (*European Parliament legislative resolution of 23 April 2024 on the proposal for a directive of the European Parliament and of the Council amending Directive 2009/138/EC as regards proportionality, quality of supervision, reporting, long-term guarantee measures, macro-prudential tools, sustainability risks, group and cross-border supervision (COM(2021)0581 – C9-0367/2021 – 2021/0295(COD))*. Dostupno na: *https://www.europarl.europa.eu/RegData/seance_pleniere/textes_adoptes/definitif/2024/04-23/0295/P9_TA(2024)0295_HR.pdf* (3.7.2024.) (u nastavku: Zakonodavna rezolucija o izmjeni Solvency II)

[6] Pariški sporazum je pravno obvezujući međunarodni sporazum koji predstavlja plan djelovanja za ograničavanje globalnog zagrijavanja. Usvojilo ga je 196 stranaka na Konferenciji UN-a o klimatskim promjenama održanoj u Parizu krajem 2015. Potpisale su ga i ratificirale sve države članice Europske unije te je stupio na snagu krajem 2016. Cilj EU iskazan ovim Sporazumom je da do 2050. postane prvo klimatski neutralno društvo i gospodarstvo.

[7] *Transforming our world: the 2030 Agenda for Sustainable Development, United Nations General Assembly, 21. October 2015.* Agenda 2030. usvojena je na konferenciji Ujedinjenih naroda o održivom razvoju održanoj u New Yorku na kojoj je 150 svjetskih čelnika usvojilo novi Program globalnog razvoja do 2030. u okviru kojeg je doneseno 17 ciljeva održivog razvoja (*Sustainable Development Goals – SDG*).

[8] Nataša Petrović Tomić, „Održivo poslovanje – da li su ESG standardi stubovi otpornosti novog modela poslovanja?", *Bankarstvo* 2023., str. 204.

sustava Solvency II. Za ostvarivanje ambicija u pogledu okoliša i klime iz Europskog zelenog plana[9] potrebno je usmjeriti velike količine ulaganja iz privatnog sektora prema održivim ulaganjima, uključujući ulaganja društava za osiguranje i društva za reosiguranje.[10] Prema stavu Europskog parlamenta, sektor osiguranja i reosiguranja može europskim gospodarskim subjektima omogućiti privatne izvore financiranja i učiniti gospodarstvo otpornijim pružanjem zaštite od širokog raspona rizika.[11]

Održivo financiranje trebalo bi podrazumijevati takvo financiranje koje je usmjereno na ulaganja kojima se postiže manja izloženost klimatskim i okolišnim rizicima.[12] U svrhu realizacije planova koje je Europska komisija zacrtala u Zelenom planu nužno je dakle, usmjeriti ulaganja iz privatnog sektora u održiva ulaganja. Veliki opseg tih ulaganja čine upravo ulaganja društava za osiguranje i društava za reosiguranje. Sukladno navedenom, došlo se do zaključka kako kapitalni zahtjevi definirani u izvornom tekstu Solvency II ne bi trebali biti takvi da ometaju održiva ulaganja društava za osiguranje i društava za reosiguranje, ali bi svakako trebali odražavati puni rizik ulaganja u djelatnosti štetne za okoliš. Shodno tome, zahtjeva se određena prilagodba kapitalnih zahtjeva potrebama održivog poslovanja u sektoru osiguranja i svim povezanim djelatnostima.[13] U analizi ovih potreba bitna je i uloga Europskog nadzornog tijela - EIOPA koja će u svojim izvješćima i izradi regulatornih tehničkih standarda uzimati u obzir rizik održivosti posebice u pogledu opravdanosti ulaganja koja su povezana s okolišnim i socijalnim ciljevima (članak 304a. kojim je predviđena dopuna Solvency II). EIOPA će nakon savjetovanja s Europskim odborom za sustavne rizike - ESRB procjenjivati opravdanost posebnog bonitetnog tretmana izloženosti povezanih s imovinom ili djelatnostima koje su u znatnoj mjeri povezane s okolišnim ili socijalnim ciljevima.

[9] Europski zeleni plan je paket inicijativa koje je 2019. pokrenula Europska komisija u području politika kojima se želi postići zelena tranzicija u Europskoj uniji, a kao svojevrsna nadopuna aktivnosti preuzetih Pariškim sporazumom iz 2015. Zelenim planom Komisija se obvezala da će bolje integrirati upravljanje klimatskim i okolišnim rizicima u bonitetni okvir EU. Krajnji cilj je klimatska neutralnost do 2050. za koju se predviđa da će omogućiti gospodarski rast, nove poslovne modele i tržišta, nova radna mjesta i tehnološki razvoj. Zelenim planom želi se osigurati pravedno i prosperitetno društvo s modernim i konkurentnim gospodarstvom.
Više vidi: *https://www.consilium.europa.eu/hr/policies/green-deal/* (30.6.2024.)

[10] Točka (95) Zakonodavne rezolucije o izmjeni Solvency II.

[11] Točka (2) Zakonodavne rezolucije o izmjeni Solvency II.

[12] U svojoj Komunikaciji pod nazivom Strategija financiranja tranzicije prema održivom gospodarstvu od 6.7.2021. (*Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions — Strategy for Financing the Transition to a Sustainable Economy' (COM(2021) 390 final),* Komisija se obvezala predložiti izmjene Solvency II s ciljem da se rizici održivosti integriraju u sustave upravljanja rizicima osiguratelja na način da će se od osiguratelja zahtijevati analiza klimatskih promjena.

[13] Jelena Kočović, Tatjana Rakonjac Antić, Marija Koprivica, Kristina Bradić, „Pravci razvoja tržišta osiguranja", *Tokovi osiguranja*, br. 3/2024, str. 536-548.

Na sektor osiguranja i reosiguranja osim Solvency II i predloženih izmjena, utječu i drugi dokumenti, prvenstveno uredbe i direktive usvojene na razini Europske unije kojima se regulira povećanje otpornosti i doprinos održivosti.[14] U definiranju čimbenika održivosti Zakonodavna rezolucija o izmjeni Solvency II poziva se na određenje definirano člankom 2. točka 24. Uredbe (EU) 2019/2088 Europskog parlamenta i Vijeća o objavama povezanim s održivosti u sektoru financijskih usluga[15] prema kojemu ovi čimbenici podrazumijevaju okolišna i socijalna pitanja te pitanja u vezi sa zaposlenicima, poštovanjem ljudskih prava, borbom protiv korupcije i podmićivanja. Rizik održivosti podrazumijeva okolišni, socijalni ili upravljački (*ESG*) događaj ili stanje koji, ako do njih dođe, mogu uzrokovati stvaran ili potencijalno negativan utjecaj na vrijednost ulaganja ili na vrijednost obveze (prijedlog dopunjenog članka 13. Solvency II).

Prema predviđenim izmjenama Solvency II, društva za osiguranje i društva za reosiguranje bit će u obvezi izričito uzimati u obzir kratkoročno, srednjoročno i dugoročno razdoblje pri procjeni rizika održivosti (predviđena dopuna stavka 2. članka 44. Solvency II). Kontrola postojanja odgovarajućih politika i strategija za provedbu navedene procjene bit će na nadzornim tijelima. Zakonodavna rezolucija o izmjeni Solvency II predviđa i uključivanje informacija koje se odnose na rizik održivosti u izvješće o solventnosti i financijskom stanju društva (izmjene stavka 1a. članka 51. Solvency II).

Rizik održivosti postaje značajan i u pogledu investicijskih ulaganja osiguratelja. Društva za osiguranje i društva za reosiguranje pri odlučivanju o svojoj strategiji ulaganja također će uzimati u obzir i učinak rizika održivosti na ulaganja i potencijalni dugoročni učinak odluka o ulaganjima na čimbenike održivosti (predviđena dopuna članka 132. Solvency II).

1. Klimatski i okolišni rizici

Održivost financiranja podrazumijeva fokusiranje na ulaganja kojima se smanjuje izloženost klimatskim i okolišnim rizicima. U Europskom zakonu o klimi[16]

[14] Među ovim dokumentima najznačajnije su uredbe Europskog parlamenta i Vijeća (EU) br. 537/2014 i (EU) 2019/2088 o objavama povezanim s održivosti u sektoru financijskih usluga; direktive 2004/109/EZ i 2006/43/EZ Europskog parlamenta i Vijeća, Direktiva (EU) 2022/2464 Europskog parlamenta i Vijeća kojom se dopunjuju i prethodno navedene direktive u pogledu korporativnog izvještavanja o održivosti te najnovija Direktiva (EU) 2024/1760 Europskog parlamenta i Vijeća o dužnoj pažnji za održivo poslovanje i izmjeni Direktive (EU) 2019/1937 te Uredbe (EU) 2023/2859.

[15] Uredba (EU) 2019/2088 Europskog Parlamenta i Vijeća od 27.studenoga 2019. o objavama povezanim s održivosti u sektoru financijskih usluga *(Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability–related disclosures in the financial services sector (Text with EEA relevance), OJ L 317, 9.12.2019., p. 1 – 16)*

[16] Uredba (EU) 2021/1119 Europskog parlamenta i Vijeća od 30. 6. 2021. o uspostavi okvira za postizanje klimatske neutralnosti i o izmjeni uredaba (EZ) br. 401/2009 i (EU) 2018/1999 (*Regulation (EU) 2021/1119*

naglašeno je kako egzistencijalna prijetnja koju predstavljaju klimatske promjene zahtijeva veću ambicioznost i snažnije djelovanje Unije i država članica u području klime. Rizike poput onih vezanih uz klimatske promjene teško je kvantificirati ili se oni realiziraju tijekom razdoblja dužeg od onog koje se koristi za kalibraciju potrebnog solventnog kapitala. Ti se rizici mogu bolje uzeti u obzir u vlastitoj procjeni rizika i solventnosti. Solvency II propisuje da društva za osiguranje i društva za reosiguranje kao sastavni dio svoje poslovne strategije provode periodičnu vlastitu procjenu rizika i solventnosti (*Own Risk and Solvency Assesment* – ORSA). Vlastita procjena rizika i solventnosti sastavni je dio poslovne strategije i kontinuirano se uzima u obzir u donošenju strateških odluka društva za (re) osiguranje (čl. 45. st. 4. Solvency II). Ako su društva za osiguranje i društva za reosiguranje značajno izložena rizicima od klimatskih promjena, od njih bi se trebalo zahtijevati da u odgovarajućim vremenskim razmacima i u okviru svoje ORSA-e provedu analize učinka dugoročnih scenarija rizika od klimatskih promjena na svoje poslovanje. Takve analize trebale bi biti razmjerne prirodi, opsegu i složenosti rizika poslovanja društava. Dakle, dugoročne analize i procjene klimatskih rizika ne bi se trebale zahtijevati za mala društva i ona s niskim profilom rizika.[17]

Klimatske promjene posljednjih godina predstavljaju ozbiljne rizike koji rezultiraju učestalim, nepredvidivim, teritorijalno neuobičajenim i nerijetko katastrofalnim vremenskim nepogodama. Sve to uzrokuje velike štete i goleme materijalne gubitke. Štete povezane s rizicima klimatskih promjena mogle bi zauzeti značajan postotak ukupnog portfelja šteta u osiguranju. Ovaj podatak ukazuje na činjenicu da se sektor osiguranja mora prilagoditi novim rizicima te inovirati svoje proizvode i usluge proporcionalno zastupljenosti klimatskih i okolišnih rizika. ESG rizici prema matricama rizika EIOPA-e značajan porast bilježe tijekom 2023., dok u 2024. zadržavaju stabilnu srednju razinu.[18] Matrice rizika EIOPA-e ukazuju dakle, na činjenicu da je industrija osiguranja EU ozbiljno shvatila utjecaj rizika održivosti na poslovanje te da se u svojim procjenama okolišnih i klimatskih rizika već dobrim dijelom prilagodila novim zahtjevima ESG rizika. Međutim, EIOPA u svome Mišljenju o održivosti u okviru Solvency II još 2019. upozorava na neprimjereno razumijevanje i shvaćanje pojma klimatski rizik. Pod klimatskim rizicima ne treba razumijevati samo rizike povezane s vremenskim nepogodama već je ispravnije ove rizike terminološki odrediti kao rizike povezane s klimatskim promjenama. Ovi rizici u širem shvaćanju uključuju

of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law'), PE/27/2021/REV/1, OJ L 243, 9.7.2021, p. 1–17)

[17] Točka (31) Zakonodavne rezolucije o izmjeni Solvency II

[18] Više vidi: *EIOPA Insurance Risk dashboards* dostupno na: *https://www.eiopa.europa.eu/tools-and-data/insurance-risk-dashboard/insurance-risk-dashboards-previous-publications_en#insurance-risk-dashboard-february-2024-q3-2023-solvency-ii-data* (28.6.2024.)

i promjene povezane s globalnim porastom temperature, povećanjem razine mora, migracijama uzrokovanim klimatskim promjenama i dr.[19]

U Mišljenju EIOPA-e o nadzoru primjene scenarija rizika klimatskih promjena u ORSA-i[20], rizici povezani s klimatskim promjenama dijele se u dvije osnovne kategorije: tranzicijski rizici i fizički rizici. Tranzicijski rizici su oni rizici koji proizlaze iz prijelaza na gospodarstvo s niskim udjelom ugljika i otporno na klimatske promjene. Uključuju rizike izravno povezane uz poslovanje poput rizika narušavanja poslovnog ugleda, pravnog zastupanja, rizike tržišne osjetljivosti, tehnološke rizike i sl., a sve povezano uz potencijalno nedovoljno razvijene poslovne sustave zaštite od klimatskih promjena. Fizički rizici su rizici koji proizlaze iz fizičkih učinaka klimatskih promjena kao što su primjerice rizici od određenih događaja, posebno vremenskih nepogoda poput oluja, poplava, požara i sl. te rizici koji proizlaze iz dugotrajnijih klimatskih promjena poput globalnog zatopljenja, podizanja razine mora, smanjene dostupnosti pitke vode, promjene bioraznolikosti i dr.

Prema Solvency II, rizici se smatraju materijalnim kada ignoriranje rizika može utjecati na odlučivanje ili prosudbu upravljačkih i nadzornih tijela društava za osiguranje te njihovih nadležnih zaposlenika u procesu ORSA-e. Društva za osiguranje bi trebala kombinacijom kvalitativnih i kvantitativnih analiza procijeniti materijalni karakter izloženosti rizicima povezanim s klimatskim promjenama. Klimatske promjene utječu na učestalost i težinu prirodnih katastrofa, koje će se vjerojatno dodatno povećati zbog uništavanja okoliša i onečišćenja. To bi moglo promijeniti izloženost društava za osiguranje i društava za reosiguranje riziku prirodne katastrofe i poništiti standardne parametre za rizik prirodne katastrofe koji se primjenjuju prema Solvency II[21]. Stoga, Europski parlament u Zakonodavnoj rezoluciji o izmjeni Solevancy II u svrhu izbjegavanja stalne neusklađenosti između standardnih parametara za rizik prirodne katastrofe i stvarne izloženosti društava za osiguranje i društava za reosiguranje takvim rizicima, definira kako bi EIOPA trebala redovito preispitivati opseg modula rizika prirodne katastrofe i kalibraciju njegovih standardnih parametara.[22]

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[19] Više vidi: *EIOPA Opinion on Sustainability within Solvency II* dostupno na: *https://www.eiopa.europa.eu/document/download/d5ae4db7-cc30-40db-ad5e-045876e3c7b3_en?filename=Opinion%20on%20Sustainability%20within%20Solvency%20II%20%28EIOPA-BoS-19/241%29%E2%80%8B* (28.6.2024.)

[20] *EIOPA Opinion on the supervision of the use of climate change risk scenarios in ORSA,* 2021., dostupno na: *https://www.eiopa.europa.eu/document/download/f984b53b-3549-49a4-9beb-7fe5057ecd94_en?filename=Opinion%20on%20climate%20change%20risk%20scenarios%20in%20ORSA.pdf* (29.6.2024.)

[21] Parametri rizika, uključujući i rizik prirodnih katastrofa, utvrđeni su Delegiranom uredbom (EU) 2015/35 uz Solvency II; *(Commission Delegated Regulation (EU) 2015/35 of 10 October 2014 supplementing Directive 2009/138/EC of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II) Text with EEA relevance, OJ L 12, 17.1.2015, p. 1–797)*

[22] Točka (96) Zakonodavne rezolucije o izmjeni Solvency II.

III Suvremeni sustav korporativnog upravljanja društvima za (re)osiguranje

Upravljanje društvima za (re)osiguranje predstavlja jedan od važnijih segmenata poslovanja u (re)osiguranju. Dobro organizirano korporativno upravljanje rezultira uspješnim poslovanjem društava, stabilnim tržištem osiguranja te sigurnim i zadovoljnim korisnicima usluga osiguranja.[23] Korporativno upravljanje podrazumijeva određenu organizacijsku strukturu organa društva, ali Solvency II ne normira klasično korporativno upravljanje s naglaskom na organe već fokus stavlja na upravljačke funkcije poput sustava interne kontrole i usklađivanja, upravljanja rizicima, aktuarsku funkciju te internu reviziju i dr.[24] Solvency II posebice naglašava važnost upravljanja rizicima kao osnovu uspješnog poslovanja društava za (re) osiguranje. Upravljanje podrazumijeva uspostavljanje ravnoteže između vođenja poslova i nadzora poslovanja.[25] Dakle, prema Solvency II, osim uspješnog vođenja poslovanja, za uspješno upravljanje društvima za (re)osiguranje važno je uspostaviti stabilan sustav kontrole i nadzora poslovanja.[26]

1. Upravljanje rizikom

U segmentu korporativnog upravljanja društvima za osiguranje, najznačajnije izmjene koje je Solvency II uvela odnose se na promjene u strukturi upravljanja rizicima. Solvency II uvodi utemeljenost sustava upravljanja rizikom i kapitalnih zahtjeve društava za (re)osiguranje na rizicima (*risk based regulatory framework*), a koji počiva na izloženosti riziku svakog pojedinačnog društva u jednogodišnjem razdoblju.[27] Upravljanje rizikom, u tako uspostavljenoj strukturi korporativnog upravljanja društvima za osiguranje, može se definirati kao prva crta obrane protiv nestabilnosti gospodarskog subjekta.[28] Sustav upravljanja rizicima u društvima obuhvaća strategije, procese i postupke izvještavanja koji su potrebni za utvrđivanje, mjerenje i praćenje rizika, upravljanje rizicima i kontinuirano izvještavanje na pojedinačnoj

[23] Nikolina Maleta, *Statusno pravo osiguranja Europske unije i Bosne i Hercegovine*, PRESSUM, Mostar 2023., str. 108.

[24] Vidi: Maria Grazia Starita, Irma Malafronte, *Capital Requirements, Disclosure and Supervision in the European Insurance Industry; New Challenges towards Solvency II,* Palgrave Macmillan*, 2014.*, str. 158. Isto tako: FMA – Őesterreichische Finanzmarktaufsicht (Hrsg.): *Handbuch Solvency II, Eine Einführung in das neue europäische Versicherungsaufsichtsrecht, FMA*, LexisNexis ARD ORAC, 2016., str. 58.

[25] M. Grazia Starita, I. Malafronte, str. 158.

[26] Više vidi: N. Maleta, str. 108. – 137.

[27] Vidi: Korneel van den Broek, „Long-term insurance products and volatility under the Solvency II Framework", *European Actuarial Journal*, Vol. 4, Iss. 2, 2014., (str. 315.-334.), str. 316.

[28] Isto tako: Andrew Crockett, „Objectives and Developments in International Supervision of Financial Institutions", The Geneva Papers on Risk and Insurance, Vol. 26 No. 1, 2001., (str. 31-36), str. 33.

i grupnoj osnovi o rizicima kojima su izložena ili bi mogla biti izložena, te o međusobnoj ovisnosti tih rizika (čl. 44. st. 1. Solvency II).[29] Izvješće o rizicima (*risk report*) treba sadržavati najvažnije podatke o sustavu upravljanja rizicima i njegovoj praktičnoj primjeni, pa kao takvo predstavlja uspješan mehanizam otkrivanja mogućih rizika i preventivnog djelovanja.[30] Sustav upravljanja rizicima prema Solvency II treba biti tako organiziran da može postići učinkovitost i dobru integriranost u organizacijsku strukturu i postupke odlučivanja društva za (re)osiguranje.[31] Upravljanje rizicima doprinosi postizanju kapitalnih zahtjeva u skladu s prvim stubom Solvency II, ispunjavanju zahtjeva nadzornog tijela sukladno drugom stubu, te ispunjavanju zahtjeva trećeg stuba povodom uspostavljanja solventnosti prikladne tržišnim potrebama.[32] Funkcija *risk managementa* uključuje identifikaciju rizika, analizu rizika i mjerenje njegove jačine i učestalosti, zatim vrednovanje njegovog značaja za konkretno društvo, te u konačnici odabir strategije upravljanja rizicima.[33] Prema novoj Direktivi o dužnoj pažnji za održivo poslovanje[34] koja se primjenjuje i na društva za (re)osiguranje, dužna pažnja u pogledu ljudskih prava i okoliša treba se također temeljiti na rizicima, a društva u sve svoje relevantne politike i sustave upravljanja rizicima trebaju integrirati standard dužne pažnje (čl. 7.).

Sustav upravljanja rizicima reguliran internim pravilnicima pojedinog društva za (re)osiguranje, prema predloženim izmjenama članka 44. Solvency II trebao bi uključivati i procjenu rizika održivosti, a što uključuje analizu klimatskih promjena. Pri vlastitoj procjeni rizika društvo za osiguranje trebalo bi analizirati i scenarij klimatskih promjena odnosno stupanj vlastite izloženosti rizicima klimatskih promjena. Od ove obveze izuzeta su mala i tzv. nesložena društva za osiguranje (stavak 5. predloženog članka 45a. Solvency II). Društva koja su u obvezi analizirati rizik klimatskih promjena, ako su značajno izložena tim rizicima, navodit će najmanje dva dugoročna scenarija klimatskih promjena, a koji se razlikuju s obzirom je li predviđeni porast globalne temperature manji ili znatno viši od dva Celzijeva stupnja.

[29] Isto tako: Marion Rittmann, *Neausrichtung der Versicherungsaufsicht im Rahmen von Solvency II,* Gabler Research, 1 Auflage 2009., str. 42. – 43.

[30] Isto tako: M. Grazia Starita, I. Malafronte, str. 167.

[31] N. Maleta, str. 112.

[32] M. Grazia Starita, I. Malafronte, str. 38.

[33] Vidi: Andreas Klein (Hrsg), *Risikomanagement und Risiko-Controlling*, Haufe Gruppe, Freiburg-Berlin-München, 2011., str. 28.; Isto tako: Christian Weißensteiner, *Reputation als Risikofaktor in technologieorientierten Unternehmen, Status Quo – Reputationstreiber – Bewertungsmodell*, Springer Gabler, 2013., str. 18.; Isto tako: Marijana Ćurak, Drago Jakovčević, *Osiguranje i rizici*, PRIF, Zagreb, 2007., str. 69.; Isto tako: Safet Kozarević, *Rizik menadžment i osiguranje*, Ekonomski fakultet Univerziteta u Tuzli, 2010., str. 2.7 – 2.8. Isto tako: Ratko Vujović, *Upravljanje rizicima i osiguranje*, Univerzitet Singidunum, Beograd, 2009., str. 80., 97. – 98.

[34] Direktiva (EU) 2024/1760 Europskog parlamenta i Vijeća od 13. 6. 2024. o dužnoj pažnji za održivo poslovanje i izmjeni Direktive (EU) 2019/1937 te Uredbe (EU) 2023/2859 (*Directive (EU) 2024/1760 of the European Parliament and of the Council of 13 June 2024 on corporate sustainability due diligence and amending Directive (EU) 2019/1937 and Regulation (EU) 2023/2859Text with EEA relevance. PE/9/2024/REV/1, OJ L, 2024/1760, 5.7.2024.)*

Prema Solvency II, vlastita procjena rizika obavlja se redovito i bez odgađanja kada se dogodi bilo koja značajna promjena u profilu rizičnosti konkretnog društva za (re)osiguranje. Rizik, a samim tim i kapital društva za (re)osiguranje, procjenjuju se na temelju jednogodišnjeg razdoblja izloženosti rizicima društava za (re)osiguranje.[35] Dakle, pri procjeni u obzir se uzima izloženost društva pojedinim vrstama rizika u razdoblju od jedne godine, te na temelju toga *risk management* izrađuje portfelj rizičnosti društva za (re)osiguranje. Sukladno izmjenama Solvency II koje u članku 45a. predviđa Zakonodavna rezolucija, vremenski razmaci procjene rizika moraju biti razmjerni prirodi, opsegu i složenosti rizika od klimatskih promjena prisutnih u poslovanju društva, ali ne smiju biti dulji od tri godine. Dugoročni scenariji klimatskih promjena trebaju se preispitati barem svake tri godine i ažurirati prema potrebi.

2. Proporcionalnost

Posebno značajna novina koja se predviđa u izmjenama Solvency II je dodatno implementiranje kriterija proporcionalnosti s obzirom na određene elemente korporativnog upravljanja poput upravljanja rizikom, obveze izvještavanja, nadzora i dr. Prema ovome kriteriju, od navedenih obveza trebala bi biti izuzeta mala i društva za osiguranje s niskim profilom rizika (nesložena društva). Pravilna provedba načela proporcionalnosti ključna je za izbjegavanje prekomjernog opterećenja društava za osiguranje i društava za reosiguranje. Zakonodavna rezolucija o izmjeni Solvency II posebno naglašava kako bi se ova Direktiva trebala primjenjivati sukladno načelu proporcionalnosti. S tim ciljem, a kako bi se olakšala proporcionalna primjena Solvency II na društva koja su manja i manje složena od prosječnog društva te kako bi se osiguralo da ne podliježu nerazmjerno opterećujućim zahtjevima, potrebno je pružiti kriterije koji se temelje na riziku i omogućuju njihovu identifikaciju.[36]

Društva koja prema *risk-based* kriteriju ispunjavaju uvjete da se klasificiraju kao mala i nesložena društva za osiguranje, tako se razvrstavaju u jednostavnom procesu obavještavanja nadzornom tijelu. Ako se u roku od najviše dva mjeseca od takve obavijesti nadzorno tijelo ne usprotivi razvrstavanju iz opravdanih razloga povezanih s procjenom relevantnih kriterija, to društvo trebalo bi se smatrati malim i nesloženim društvom. Nakon što se na taj način izvrši razvrstavanje u kategoriju malih i nesloženih društava, konkretno društvo bi u načelu trebalo automatski ostvarivati korist od utvrđenih mjera proporcionalnosti u pogledu izvještavanja, objavljivanja, upravljanja, revizije pisanih pravila, izračuna tehničkih pričuva, vlastite procjene rizika i solventnosti te plana upravljanja rizikom likvidnosti.[37] Ako nadzorno tijelo

[35] Isto tako: Alessandro Ferriero, „Solvency capital estimation, reserving cycle and ultimate risk", *Insurance: Mathematics and Economics 68*, Elsevier, 2016., (str. 162.-168.), str. 162.
[36] Točka (14) Zakonodavne rezolucije o izmjeni Solvency II.
[37] Točka (15) Zakonodavne rezolucije o izmjeni Solvency II.

utvrdi da više ne postoji usklađenost ili postoji rizik od neusklađenosti s potrebnim solventnim kapitalom, ako se profil rizičnosti društva znatno mijenja ili ako je sustav upravljanja nedjelotvoran, može se odstupiti od primjene kriterija proporcionalnosti. Zakonodavna rezolucija o izmjenama Solvency II predviđa da mjere proporcionalnosti budu dostupne i društvima koja nisu razvrstana kao mala i nesložena društva, ali za koja su neki od zahtjeva Direktive preskupi i složeni, s obzirom na rizike povezane s poslovanjem tih društava.[38] Tim bi društvima trebalo biti dopušteno koristiti mjere proporcionalnosti na temelju analize svakog pojedinačnog slučaja i nakon prethodnog odobrenja njihovih nadzornih tijela.

Proporcionalnost se primjenjuje na mala i nesložena društva za osiguranje kako bi se rasteretila obveze objavljivanja informacija, izvještavanja uključujući i pojednostavljeno izvještavanje o održivosti, zatim pri izračunu tehničkih pričuva i drugih elemenata korporativnog upravljanja. U svrhu poboljšanja proporcionalnosti unutar kvantitativnih zahtjeva, društvima za osiguranje i društvima za reosiguranje trebalo bi omogućiti da izračunaju potrebni kapital za neznačajne rizike u standardnoj formuli s pomoću pojednostavljenog pristupa za razdoblje od najviše tri godine.[39]

3. Izvještavanje

Jedan od mehanizama kojim se osigurava dobar sustav upravljanja u društvima za (re)osiguranje jeste obveza javnog objavljivanja izvješća o solventnosti i financijskom stanju društva.[40] Uspješnost tržišta osiguranja velikim dijelom je uvjetovana i informacijama koje osiguratelj pruža o rizicima koje pokriva.[41] Društva za (re)osiguranje dužna su prema Solvency II svake godine javno objaviti ta izvješća. Izvješće sadržava propisane informacije u cijelosti ili putem pozivanja na informacije koje su po svojoj prirodi i opsegu istovjetne, a bile su javno objavljene u skladu s drugim pravnim ili regulatornim zahtjevima.[42] Najznačajnije izmjene koje Zakonodavna rezolucija o izmjeni Solvency II donosi u segmentu izvještavanja, odnose se na primjenu načela proporcionalnosti u kontekstu obveza izvještavanja i olakšavanje regulatornih obveza primjenom toga načela malim i nesloženim društvima za osiguranje. Predviđaju se i određena pojednostavljenja za izvještavanje na razini grupe. Kako bi se pojednostavio zahtjev u pogledu izvještavanja za grupe za osiguranje i grupe za reosiguranje, trebalo bi biti moguće, pod određenim uvjetima, dostaviti

[38] Točka (17) Zakonodavne rezolucije o izmjeni Solvency II.
[39] Točka (52) Zakonodavne rezolucije o izmjeni Solvency II.
[40] Isto tako: Karel van Hulle, „Solventnost II bi mogao da postane svetski model, prikaz članka (Solvency II kőnnte ein Modell fűr die Welt werden)", *Revija za pravo osiguranja* br. 2/2011, (str. 67.-71.), str. 68.
[41] Vidi: Donatella Porrini, „Risk Classification Efficiency and the Insurance Market Regulation", *Risks 2015*, 3, (str. 445 – 454), str. 452. Isto tako: M. Rittmann, str. 45. Isto tako: A. Klein, str. 46.
[42] N, Maleta, str. 34.

informacije iz redovitog nadzornog izvješća koje se odnosi na grupu i njezina društva kćeri na agregirani način za cijelu grupu.[43]

S obzirom na iskustva tijekom pandemije Covid-19 i otežano poslovanje u tome razdoblju, izmjenama se predviđaju i određeni izuzetci, odnosno mogućnost produženja rokova za izvještavanje koji su definirani u Solvency II. Komisija bi nakon savjetovanja s EIOPA-om trebala imati ovlasti produžiti izvještajne rokove u iznimnim okolnostima poput zdravstvene krize, prirodne katastrofe i sličnih ekstremnih događaja.[44] Također se predlaže i mogućnost produženja rokova pri izradi revidiranih izvješća. U pogledu kvantitativnog redovitog izvještavanja uvode se određena ograničenja, posebice kada bi podnošenje nekih informacija bilo preveliko opterećenje s obzirom na prirodu, opseg i složenost rizika prisutnih u poslovanju društva, ako to informiranje nije nužno za učinkovit nadzor, ako izuzimanje ne ugrožava financijsku stabilnost te kada se takve informacije dostavljaju jednom godišnje ili se mogu dostaviti na zahtjev (predloženi članak 35a. Solvency II). To ograničenje redovitog nadzornog izvješćivanja odobrava se samo društvima koja kolektivno ne predstavljaju više od 20 % tržišta životnog i neživotnog osiguranja odnosno reosiguranja države članice, pri čemu se udio tržišta životnog osiguranja temelji na bruto tehničkim pričuvama, a udio tržišta neživotnog osiguranja na zaračunatim bruto premijama. Pri utvrđivanju prihvatljivosti društava za ta ograničenja, nadzorna tijela daju prednost malim i nesloženim društvima. Predviđeni su i izuzetci redovitog nadzornog izvještavanja za vlastita društva za osiguranje.

Izmjene Solvency II predviđaju i dodatna izvještavanja, posebice ona koja se odnose na održivost poslovanja, ali i ona koja uključuju mjere proporcionalnosti za mala i nesložena društva. Također, dodatno usložnjavaju izvješće o solventnosti i financijskom stanju naglašavajući njegov podjelu na dva zasebna dijela. Prvi dio sastoji se od informacija posebno usmjerenih na ugovaratelje osiguranja i korisnike osiguranja, a drugi se dio sastoji od informacija usmjerenih na stručnjake za tržište (predviđene izmjene članka 51. Solvency II). Ovome treba pridodati i zahtjeve predviđene Direktivom o korporativnom izvještavanju o održivosti[45] prema kojoj društva za osiguranje zajedno s kreditnim institucijama imaju ključnu ulogu u prelasku na potpuno održiv i uključiv gospodarski i financijski sustav u skladu sa Europskim zelenim planom.

[43] Točka (21) Zakonodavne rezolucije o izmjeni Solvency II.

[44] Točka (23) Zakonodavne rezolucije o izmjeni Solvency II.

[45] Direktiva (EU) 2022/2464 Europskog parlamenta i Vijeća od 14. 12. 2022. o izmjeni Uredbe (EU) br. 537/2014, Direktive 2004/109/EZ, Direktive 2006/43/EZ i Direktive 2013/34/EU u pogledu korporativnog izvješćivanja o održivosti (*Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (Text with EEA relevance) PE/35/2022/REV/1 OJ L 322, 16.12.2022, p. 15–80)*

4. Nadzor

Solvency II je uvela značajne novine u nadzoru tržišta osiguranja Europske unije. Postignut je veći stupanj kontrole i date su šire ovlasti za nadzor osiguranja, posebice za segment financijskog nadzora. Može se dakle, reći kako je u odnosu na prethodni sustav, Solvency II reformirala temelje nadzora djelatnosti (re)osiguranja u Europskoj uniji.[46] Nadzor se tako sada zasniva na rizicima i uključuje kontinuiranu provjeru pravilnog obavljanja poslova (re)osiguranja te usklađenosti poslovanja s nadzornim propisima. Nadzorna tijela imaju zadaću prva identificirati slabosti *risk managementa* u financijskim institucijama, te donijeti ključne odluke o postupanju u takvim situacijama.[47] Nadzor društava za (re)osiguranje obuhvaća odgovarajuću kombinaciju aktivnosti neizravnog nadzora i izravnih kontrola (čl. 29. st. 2. Solvency II). Dakle, mjere nadzora prilagođavaju se prirodi, opsegu i složenosti rizika koji se javljaju u obavljanju djelatnosti društava za (re)osiguranje, a delegirani akti te regulatorni i provedbeni tehnički standardi prilagođavaju se opsegu poslovanja društava. Načelom proporcionalnosti i prema trenutno važećem sustavu nadzora, posebice se štite mala društva za osiguranje.[48]

Međutim, kontinuirano unaprjeđenje nadzora društava za osiguranje i društava za reosiguranje čije se poslovanje temelji na slobodi pružanja usluga i slobodi poslovnog nastana stalna je tendencija. To unaprjeđenje nadzornih mehanizama trebalo bi provoditi bez ugrožavanja cilja daljnje integracije jedinstvenog tržišta osiguranja kako bi se osigurala dosljedna zaštita potrošača i zaštitilo pravedno tržišno natjecanje na cijelom jedinstvenom tržištu. Zbog događanja na tržištu posljednjih godina potrebno je implementirati dodatne mehanizme kontrole korporativnog upravljanja u društvima za osiguranje kao i primjenu značajnih promjena na financijskom tržištu poput inflacije, niskih kamatnih stopa i sl. u nadzoru osiguranja. Uzimajući u obzir prirodu, opseg i složenost rizika, nadzorna tijela trebala bi moći prikupljati relevantne makrobonitetne informacije o investicijskoj strategiji društava za osiguranje i društava za reosiguranje, analizirati ih zajedno s drugim relevantnim informacijama koje bi mogle biti dostupne iz drugih tržišnih izvora te uključiti makrobonitetnu perspektivu u svoj nadzor društava za osiguranje i društava za reosiguranje. To bi moglo uključivati nadzor rizika povezanih s određenim kreditnim ciklusima, gospodarskim padom i kolektivnim ponašanjem odnosno „ponašanjem krda" u ulaganjima.[49]

[46] Isto tako: Mirko Kraft, „Auswirkungen von Solvency II und der neuen EU-Finanzaufsichtsarchitektur auf die Kapitalallokationsstrukturen von Versicherungsgruppen", *Zeitschrift für die gesamte Versicherungswissenschaft,* December 2012., Volume 101, Issue 5, (str. 657. – 674.), str. 659.

[47] Vidi: Julie Dickson, „Supervision: Looking Ahead to the Next Decade" u A. Joanne Kellermann, Jakob de Haan, Femke de Vries (edt.): *Financial Supervision in the 21st Century*, Springer, 2013., str. 222.

[48] N. Maleta, str. 140.

[49] Točka (59) Zakonodavne rezolucije o izmjeni Solvency II.

Zbog značaja kojega ima dodatna regulacija izuzimanja malih i nesloženih društava temeljem načela proporcionalnosti, izmjene Solvency II detaljno reguliraju postupak kvalificiranja društava za osiguranje kao malih i nesloženih te normiraju ovlasti nadzornih tijela u tome postupku kao i u postupku praćenja mjera proporcionalnosti (predloženi članci 29b., 29c., 29d. i 29e. Solvency II). Zakonodavna rezolucija o izmjeni Solvency II predviđa određena normiranja kojima se jača i detaljnije normira prekogranični i nadzor na razini grupe, dodatne ovlasti nadzornih tijela u slučaju ugroženosti solventnosti i likvidnosti društava za osiguranje, nadzorne mjere za očuvanje financijskog položaja društava tijekom iznimnih sektorskih šokova, neusklađenosti s potrebnim solventnim kapitalom te poboljšanje drugih nadzornih makrobonitetnih mjera, a sve s ciljem podizanja više razine kvalitete i istovremeno pojednostavljenja nadzora i kontrole djelatnosti osiguranja.

IV Zaključak

Djelatnost osiguranja na globalnoj, europskoj, pa i nacionalnim razinama opsežno je normirana i nadzirana te se zahtjeva također i višestruko izvještavanje od strane osiguratelja uključujući i nefinancijska izvješća. Detaljna pravna regulacija nužna je za cjelovit i sustavan razvoj i napredak određene industrije, ali istovremeno može stvoriti i atmosferu prenormiranosti. Dobra pravna regulacija i normativno uređenje djelatnosti trebalo bi se temeljiti na kvalitativnim, a ne dominantno kvantitativnim zahtjevima kako bi se postigao učinkovit regulatorni okvir. Direktiva Solvency II predstavlja sustavan regulatorni okvir poslovanja društava za (re)osiguranje u Europskoj uniji. Dopunjena je s nekoliko zakonodavnih i nezakonodavnih akata, ali prijedlog prve značajne izmjene same Direktive Europski parlament usvojio je u 2024. te se početak primjene ovih izmjena može očekivati tijekom 2026.

Djelatnost osiguranja na europskoj razini predstavlja jednu od vodećih, ako ne i najveću, institucionalnu ulagačku djelatnost. Osiguratelji u ulozi investitora moraju sve više u procjeni svojih ulaganja uzimati u obzir čimbenike održivog poslovanja i ulaganja. Za djelatnost osiguranja u kontekstu ESG čimbenika primarni su okolišni i klimatski rizici. Stoga je razumljivo da predviđene izmjene Solvency II velikim dijelom se odnose na implementaciju rizika održivosti u sustav upravljanja rizikom društava za osiguranje, a posebice rizika uzrokovanih klimatskim promjenama. Međutim, prelazak na gospodarstvo neovisno o klimatskim promjenama ne bi trebalo zauzeti dominaciju u regulatornom sustavu Solvency II niti poslužiti kao jedno od osnovnih normativnih sredstava implementacije održivog gospodarstva, a na teret bonitetnog okvira utemeljenog na riziku koji je u osnovi ove Direktive. Dakle, iako industrija osiguranja podržava i može dati značajan doprinos razvoju održivog poslovanja i zelenoj tranziciji, treba uložiti dodatan oprez kako se ne bi otišlo u neku drugu krajnost i zanemarilo osnovnu svrhu regulatornog okvira djelatnosti osiguranja, a koja je stabilno tržište temeljeno na adekvatnosti kapitala preuzetim rizicima.

Bolja implementacija načela proporcionalnosti također je jedna od osnovnih i značajnijih predviđenih izmjena Solvency II. Omogućit će manjim osiguratelji-ma, definiranim kao mala i nesložena društva, brojne koristi od pojednostavljenja i mjera proporcionalnosti te na taj način stvoriti prikladnije i stabilnije tržište za tako kvalificirana društva za osiguranje. Primjena načela proporcionalnosti u segmentu obveznog izvještavanja temeljenog na riziku doprinosi izbjegavanju regulatornog opterećenja s kojim se brojni osiguratelji trenutno suočavaju. Nerazmjer opsega poslovanja i preuzetog rizika s jedne strane te kapitalnih zahtjeva i drugih regulatornih obveza s druge strane ne doprinosi funkcionalnosti i daljnjem razvoju tržišta osiguranja. Stoga je primjena načela proporcionalnosti s obzirom na tehničke pričuve i zaračunatu bruto premiju te neke druge bonitetne elemente, s nestrpljenjem očekivana prilagodba sustava Solvency II potrebama tržišta osiguranja.

Ako se definirane izmjene Solvency II implementiraju kako je to predviđeno, doprinijet će boljoj zaštiti korisnika usluga osiguranja te osloboditi značajna sredstva za ulaganja u zelenu i digitalnu tranziciju. Međutim, iz samog prijedloga izmjena mogu se uočiti dodatni zahtjevi izvještavanja, a kojih ni prema trenutno važećem regulatornom okviru nije malo. Također, predviđaju se dodatni delegirani akti kojima će se razraditi izmjene Direktive, a što opet doprinosi prenormiranosti i kompleksnosti samoga regulatornog okvira obavljanja djelatnosti osiguranja. Taj teret osjetit će posebno zemlje koje nisu članice Europske unije, a žele to postati te u tome pravcu svoje zakonodavstvo nastoje uskladiti s *acquis communautaire*.

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ADJUSTMENT OF THE SOLVENCY II REGULATORY FRAMEWORK TO NEW RISKS AND CHALLENGES OF MODERN CORPORATE GOVERNANCE

REVIEW ARTICLE

Abstract

Solvency II, as a regulatory framework that systematically governs the operations of (re)insurance companies in the European Union, has been in force since 2016. Since then, the Directive has significantly contributed to the stabilization of the insurance market and better protection for policyholders, thanks to the implemented system of effective risk assessment and capital adequacy of companies. However, the application of the Directive to date has highlighted the potentially excessive capitalization of the EU insurance market and the need for investments in certain business segments. Among these, sustainable business practices with a focus on climate and environmental risks stand out. A particularly important innovation introduced by the amendments to the Directive is the additional introduction of proportionality criteria for small and non-complex companies, which, by applying this principle, should benefit in terms of reporting, disclosure, governance, technical provision calculations, and their own risk and solvency assessments. The proposed amendments offer several advantages, but they may be criticized for adding reporting obligations and the potential overregulation that may arise during their implementation.

Keywords: Solvency II amendments, sustainability, climate and environmental risks, risk management, proportionality, small and non-complex companies

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I Introduction

The Solvency II Directive[2], as the regulatory framework for insurance and reinsurance activities on the European Union market, has been in effect since 2016. From the moment the Directive's text was adopted in 2009, and through the justifications for the multiple delays in its implementation, its excessive demands in certain segments of its regulation were emphasized. The Directive was adopted primarily to improve the financial stability and reliability of the European insurance market. Its intended purpose and goal are to achieve greater competitiveness across the entire insurance industry, as well as the competitiveness of individual insurers and reinsurers, and to better protect the users of insurance services. The main goal of the Solvency II Directive was to establish a systematic legal framework for conducting the activities of (re)insurance companies across the entire internal market of the European Union and to facilitate the coverage of risks and liabilities for insurance and reinsurance companies headquartered in the EU. The Directive has largely achieved, and continues to achieve, its intended goals and purpose. However, after five years of its application, it became reasonable to question whether its quantitative regulatory content is aligned with these objectives. The general impression is that the period of the Directive's application has shown that the EU insurance market is overly capitalized, and despite the need for further improvement in capital allocation among market participants, there is enough room to release part of this capital and invest it in more necessary business segments.[3] In line with the announcements made at the beginning of the Directive's aplication, preparations for the necessary amendments and adjustments began in 2020, and in 2021, the European Commission prepared a proposal for a revised Directive that would significantly alter Solvency II. The proposed amendments focus on three main areas of regulation: reducing regulatory obligations for small and so-called non-complex insurance companies, or those with low-risk profiles (*small and non-complex companies*[4]), considering long-term risks and climate change risks, and strengthening group and cross-border supervision. These areas were identified as those in which certain deficiencies of Solvency II or its overregulation became apparent, with regulatory requirements failing to achieve the intended purpose of the Directive. After the Council and the Commission

[2] Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II) (recast) (Text with EEA relevance), OJ L 335, 17.12.2009, p. 1–155.

[3] Milo M. Marković, "Challenge for Serbia's Insurance Market on the Path to Solvency II," *Insurance Trends*, Journal of Insurance Theory and Practice, Association of Insurers of Serbia, 2/2024, pp. 333–361, p. 347.

[4] Solvency II is supplemented by a new Article 29a, which establishes criteria for specifying small and non-complex insurance companies. These criteria include tresholds for technical provisions and annual gross premium income, which are defined differently for undertakings engaged in life insurance and those involved in non-life insurance.

reached an agreement on the proposal for the Solvency II amendment text at the end of 2023, the Economic and Monetary Affairs Council of the European Parliament approved the proposal on January 29, 2024. The proposal was then discussed in the European Parliament during the session in April 2024, and finally, on April 23, 2024, the Legislative Resolution of the European Parliament and the Council on the amendment of Directive 2009/138/EC regarding proportionality, supervision quality, reporting, long-term guarantee measures, macroprudential tools, sustainability risks, group supervision, and cross-border supervision (COM(2021)0581 – C9-0367/2021 – 2021/0295(COD)) was adopted.[5]

II The Sustainability Factor as Part of the Solvency II Reform

The significance and necessity of sustainability in economic operations came into focus among the broader public, especially in the business sector, during and immediately after the Covid-19 pandemic. Sustainability is becoming an indispensable factor of all modern corporate governance systems. When assessing sustainability in business, *environmental, social, and governance (ESG)* factors are taken into consideration. Generally speaking, the drive for companies to become sustainable is not a new idea. However, 2015 marked a significant turning point, as the Paris Climate Agreement[6] was adopted as a "global response to the threats posed by climate change, taking into account sustainable development," and the United Nations introduced the Sustainable Development Goals within the 2030 Agenda.[7] [8]

In the insurance industry, as regulated by the Solvency II Directive and its anticipated amendments, special emphasis is placed on environmental factors, particularly risks caused by climate change. The insurance industry, based on effective

[5] European Parliament legislative resolution of 23 April 2024 on the proposal for a directive of the European Parliament and of the Council amending Directive 2009/138/EC as regards proportionality, quality of supervision, reporting, long-term guarantee measures, macro-prudential tools, sustainability risks, group and cross-border supervision (COM(2021)0581 – C9-0367/2021 – 2021/0295(COD)). Available at: *https://www.europarl.europa.eu/RegData/seance_pleniere/textes_adoptes/definitif/2024/04-23/0295/P9_TA(2024)0295_HR.pdf* (accessed on 3 July 2024.) (hereinafter referred to as: Legislative Resolution on the Amendment of Solvency II).

[6] The Paris Agreement is a legally binding international treaty that outlines a plan of action to limit global warming. It was adopted by 196 parties at the UN Climate Change Conference held in Paris at the end of 2015. All EU Member States have signed and ratified it, and it entered into force at the end of 2016. The EU's objective under this Agreement is to become the first climate-neutral society and economy by 2050.

[7] *Transforming our World: The 2030 Agenda for Sustainable Development," United Nations General Assembly, October 21, 2015*. The 2030 Agenda was adopted at the United Nations Conference on Sustainable Development held in New York, where 150 world leaders endorsed a new global development program through 2030. This program established 17 *Sustainable Development Goals (SDGs)*.

[8] Nataša Petrović Tomić, "Sustainable Business – Are ESG Standards the Pillars of Resilience in a New Business Model?", *Bankarstvo 2023*, p. 204.

risk assessment and capital adequacy for the assumed risks, is the foundation of the Solvency II system. To achieve the environmental and climate goals outlined in the European Green Deal[9], large amounts of investment from the private sector need to be directed toward sustainable investments, including investments from insurance and reinsurance companies[10]. According to the European Parliament, the insurance and reinsurance sector can provide European economic entities with private sources of financing and make the economy more resilient by offering protection against a wide range of risks.[11]

Sustainable financing should imply financing directed toward investments that reduce exposure to climate and environmental risks.[12] To implement the plans outlined by the European Commission in the Green Deal, it is therefore essential to direct private sector investments into sustainable investments. A large proportion of these investments come from insurance and reinsurance companies. Accordingly, it was concluded that the capital requirements defined in the original text of Solvency II should not obstruct sustainable investments by insurance and reinsurance companies, but they should certainly reflect the full risk of investments in environmentally harmful activities. Therefore, an adjustment of capital requirements to align with the needs of sustainable operations in the insurance sector and all related activities is necessary.[13] In analyzing these needs, the European Insurance and Occupational Pensions Authority (EIOPA) plays a crucial role. EIOPA will, in its reports and the creation of regulatory technical standards, take into account sustainability risks, particularly in terms of the justification for investments associated with environmental and social goals (Article 304a, which proposes an addition to Solvency II). After consulting with the European Systemic Risk Board (ESRB), EIOPA will assess the justification for special prudential treatment of exposures related to assets or activities significantly aligned with environmental or social objectives.

[9] The European Green Deal, launched by the European Commission in 2019, is a set of initiatives aimed at achieving a green transition in the EU, complementing the efforts of the 2015 Paris Agreement. It commits to integrating climate and environmental risk management more effectively into the EU's prudential framework, with the ultimate goal of achieving climate neutrality by 2050. This transition is expected to foster economic growth, new business models and markets, job creation, and technological development. The Green Deal also seeks to ensure a fair and prosperous society with a modern and competitive economy. More information: *https://www.consilium.europa.eu/hr/policies/green-deal/* (accessed on 30 June 2024).

[10] Point (95) of the Legislative Resolution on the Amendment of Solvency II.

[11] Point (2) of the Legislative Resolution on the Amendment of Solvency II.

[12] In its Strategy for Financing the Transition to a Sustainable Economy (from 6 July 2021),*(Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions — Strategy for Financing the Transition to a Sustainable Economy' (COM(2021) 390 final)*, the European Commission is committed to proposing amendments to Solvency II to integrate sustainability risks into insurers' risk management systems, requiring insurers to conduct analyses of climate change.

[13] Jelena Kočović, Tatjana Rakonjac Antić, Marija Koprivica, Kristina Bradić, „Pravci razvoja tržišta osiguranja", *Tokovi osiguranja*, br. 3/2024, str. 536-548.

In addition to Solvency II and the proposed amendments, other documents, primarily regulations and directives adopted at the EU level, also impact the insurance and reinsurance sector by regulating the increase in resilience and contributing to sustainability.[14] In defining sustainability factors, the Legislative Resolution on the amendment of Solvency II refers to the definitiont in Article 2, point 24 of Regulation (EU) 2019/2088 of the European Parliament and Council on disclosures related to sustainability in the financial services sector.[15] According to this, sustainability factors include environmental and social issues, as well as matters related to employees, respect for human rights, and the fight against corruption and bribery. Sustainability risk refers to an environmental, social, or governance (*ESG*) event or condition that, if it occurs, could cause a real or potentially negative impact on the value of an investment or on the value of a liability (proposed addition to Article 13 of Solvency II).

Under the proposed changes to Solvency II, insurance and reinsurance companies will be required to explicitly consider short-term, medium-term, and long-term periods when assessing sustainability risks (proposed addition to paragraph 2 of Article 44 of Solvency II). The supervision of the existence of appropriate policies and strategies for implementing this assessment will fall to supervisory bodies. The Legislative Resolution on the amendment of Solvency II also includes provisions for including information related to sustainability risks in the solvency and financial condition report of an insurance company (amendments to paragraph 1a of Article 51 of Solvency II).

Sustainability risk is also becoming increasingly significant in terms of insurers' investment activities. Insurance and reinsurance companies will also have to take sustainability risk into account when deciding on their investment strategies and the potential long-term effects of investment decisions on sustainability factors (proposed addition to Article 132 of Solvency II).

1. Climate and Environmental Risks

Sustainable financing involves focusing on investments that reduce exposure to climate and environmental risks. The European Climate Law[16] emphasizes

[14] Among these documents, the most significant are Regulations (EU) No. 537/2014 and (EU) 2019/2088 on sustainability-related disclosures in the financial services sector; Directives 2004/109/EC and 2006/43/EC of the European Parliament and the Council; Directive (EU) 2022/2464, which supplements the previously mentioned directives regarding corporate sustainability reporting; and the latest Directive (EU) 2024/1760 on due diligence for sustainable business and amending Directive (EU) 2019/1937 and Regulation (EU) 2023/2859.

[15] Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector (Text with EEA relevance), OJ L 317, 9.12.2019, pp. 1–16.

[16] *Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law'), PE/27/2021/REV/1, OJ L 243, 9.7.2021, p. 1–17.*

that the existential threat posed by climate change requires greater ambition and stronger action from both the Union and its member states in the field of climate policy. Risks such as those associated with climate change are difficult to quantify, or they may materialize over a period longer than the one typically used for calibrating the required solvency capital. These risks can be better accounted for in the company's own risk and solvency assessment (*ORSA*). Solvency II requires that insurance and reinsurance companies, as integral part of their business strategy, carry out a periodic *own risk and solvency assessment* (ORSA), which includes assessing risks and solvency (Article 45, paragraph 4 of Solvency II). The ORSA is an integral part of the business strategy and is continuously considered in making strategic decisions. If insurance and reinsurance companies are significantly exposed to climate change risks, they should be required to conduct analyses of the impact of long-term climate change scenarios on their operations at appropriate intervals within their ORSA. Such analyses should be proportionate to the nature, scale, and complexity of the company's business risks. Therefore, long-term climate risk assessments should not be mandatory for small companies or those with low-risk profiles.[17]

In recent years, climate change has posed serious risks, resulting in more frequent, unpredictable, territorially unusual, and often catastrophic weather events. All of this causes significant damage and enormous material losses. Damages associated with climate change risks could account for a significant percentage of the total claims portfolio in insurance. This data indicates the need for the insurance sector to adapt to new risks and innovate its products and services in proportion to the representation of climate and environmental risks. According to the EIOPA risk matrices, ESG risks saw a significant increase in 2023, while in 2024 they maintain a stable medium level.[18] The EIOPA risk matrices point out that the EU insurance industry has seriously recognized the impact of sustainability risks on its business and has already significantly adapted its assessments of environmental and climate risks to meet new ESG requirements. However, EIOPA in its opinion on sustainability under Solvency II in 2019, warned about an inapprorpiate understandingand interpretation of the term "climate risk." Climate risks should not be understood solely as risks related to weather events; it is more accurate to term these risks as "climate change-related risks." These risks, in a broader sense, include changes such as global warming, sea level rise, migration caused by climate chang, and more.[19]

[17] Point (31) of the Legislative Resolution on amending Solvency II.

[18] For more details, see: *EIOPA Insurance Risk Dashboards* available at: *https://www.eiopa.europa.eu/tools-and-data/insurance-risk-dashboard/insurance-risk-dashboards-previous-publications_en#insurance-risk-dashboard-february-2024-q3-2023-solvency-ii-data* (accessed on June 28, 2024).

[19] For more details, see: *EIOPA Opinion on Sustainability within Solvency II* available at: *https://www.eiopa.europa.eu/document/download/d5ae4db7-cc30-40db-ad5e-045876e3c7b3_en?filename=Opinion%20on%20Sustainability%20within%20Solvency%20II%20%28EIOPA-BoS-19/241%29%E2%80%8B* (accessed on June 28, 2024).

In EIOPA's Opinion on Supervising the Application of Climate Change Risk Scenarios in the ORSA[20], climate change-related risks are categorized into two main categories: transition risks and physical risks. Transition risks are those that arise from the shift to a low-carbon economy and one that is resilient to climate change. These include risks directly related to business operations, such as reputational damage, legal risks, market sensitivity, technological risks, and others, often linked to insufficiently developed climate change protection systems. Physical risks are those arising from the physical effects of climate change, such as risks from specific events, especially weather disasters like storms, floods, wildfires, etc., as well as risks arising from longer-term climate changes such as global warming, sea level rise, decreased availability of drinking water, changes in biodiversity, and more.

According to Solvency II, risks are considered material when ignoring them can affect decision-making or judgment by the management or supervisory bodies of insurance companies and their relevant staff in the ORSA process. Insurance companies should assess the material nature of their exposure to climate change risks through a combination of qualitative and quantitative analyses. Climate change affects the frequency and severity of natural disasters, which are likely to increase further due to environmental degradation and pollution. This could change the exposure of insurance and reinsurance companies to natural catastrophe risks and invalidate the standard parameters for natural catastrophe risks under Solvency II.[21] Therefore, the European Parliament's Legislative Resolution on Solvency II amendments outlines that EIOPA should regularly review the scope of the natural catastrophe risk module and the calibration of its standard parameters to avoid a permanent misalignment between these parameters and the actual exposure of insurance and reinsurance companies to such risks.[22]

III Modern Corporate Governance System for Insurance and Reinsurance Companies

Corporate governance in (re)insurance companies is one of the most important aspects of business within the (re)insurance sector. Well-organized corporate governance leads to successful company performance, a stable insurance market,

[20] *EIOPA Opinion on the supervision of the use of climate change risk scenarios in ORSA, 2021*., available at: *https://www.eiopa.europa.eu/document/download/f984b53b-3549-49a4-9beb-7fe5057ecd94_en?filename=Opinion%20on%20climate%20change%20risk%20scenarios%20in%20ORSA.pdf* (accessed on June 29, 2024).

[21] The risk parameters, including the risk of natural disasters, are established by the Delegated Regulation (EU) 2015/35 accompanying Solvency II; (*Commission Delegated Regulation (EU) 2015/35 of 10 October 2014 supplementing Directive 2009/138/EC of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II) Text with EEA relevance, OJ L 12, 17.1.2015, p. 1–797*).

[22] Point (96) of the Legislative Resolution on the Amendment of Solvency II.

and secure, satisfied insurance servic customers.[23] Corporate governance implies a defined organizational structure of the company's governing bodies, but Solvency II does not regulate traditional corporate governance with a focus on these bodies. Instead, it focuses on managerial functions, such as the internal control and compliance system, risk management, actuarial function, internal audit, and others.[24] Solvency II specifically highlights the importance of risk management as the foundation for the successful business of (re)insurance companies. Effective management implies establishing a balance between business management and business oversight[25]. Therefore, according to Solvency II, in addition to the successful business management, it is important for the proper governance of (re)insurance companies to establish a stable system of control and business oversight.[26]

1. Risk Management

In the corporate governance segment of insurance companies, the most significant changes introduced by Solvency II pertain to alterations of the risk management structure. Solvency II establishes a *risk based regulatory framework* for risk management and capital requirements in (re)insurance companies, based on the risk exposure of each individual company over a one-year period.[27] Risk management, within this established corporate governance structure, can be defined as the first line of defense against the instability of the economic entity.[28]

The risk management system in insurance companies encompasses the strategies, processes, and reporting procedures required to identify, measure, and monitor risks, manage those risks, and provide continuous reporting, on both individual and group level, on the risks to which the company is exposed or could be exposed, and the interdependence of those risks (Article 44, Paragraph 1, Solvency II).[29] *The risk report* should contain key information about the risk management system and its practical application, serving as an effective mechanism for identifying

[23] Nikolina Maleta, *Statusno pravo osiguranja Europske unije i Bosne i Hercegovine*, PRESSUM, Mostar 2023, p. 108.

[24] See: Maria Grazia Starita, Irma Malafronte, *Capital Requirements, Disclosure, and Supervision in the European Insurance Industry; New Challenges towards Solvency II*, Palgrave Macmillan, *2014*, p. 158. Also: FMA – Österreichische Finanzmarktaufsicht (Ed.): *Handbook Solvency II, An Introduction to the New European Insurance Supervision Law, FMA*, LexisNexis ARD ORAC, 2016, p. 58.

[25] M. Grazia Starita, I. Malafronte, p. 158.

[26] See more: N. Maleta, pp. 108–137.

[27] See: Korneel van den Broek, "Long-term insurance products and volatility under the Solvency II Framework," *European Actuarial Journal*, Vol. 4, Iss. 2, 2014, (pp. 315–334), p. 316.

[28] Also see: Andrew Crockett, "Objectives and Developments in International Supervision of Financial Institutions," The Geneva Papers on Risk and Insurance, Vol. 26 No. 1, 2001, (pp. 31–36), p. 33.

[29] Also see: Marion Rittmann, *Neuausrichtung der Versicherungsaufsicht im Rahmen von Solvency II*, Gabler Research, 1 Auflage, 2009, pp. 42–43.

potential risks and taking preventive actions.[30] According to Solvency II, the risk management system should be organized in a way that ensures effectiveness and good integration into the organizational structure and decision-making processes of the (re)insurance companies.[31] Risk management contributes to meeting the capital requirements set out in the first pillar of Solvency II, fulfilling supervisory requirements under the second pillar, and ensuring solvency that is appropriate for market needs under the third pillar.[32]

The risk management function includes the identification of risks, risk analysis, and the measurement of their intensity and frequency, followed by evaluating their significance for the specific company and, ultimately, choosing a risk management strategy[33]. According to the new Directive on Corporate Sustainability Due Diligence[34], which applies to (re)insurance companies, due diligence regarding human rights and the environment must also be risk-based. Companies are required to integrate the due diligence standards for human rights and environmental concerns into their relevant policies and risk management systems (Article 7).

The risk management system, regulated by the internal rules of each (re) insurance company, should, according to the proposed changes to Article 44 of Solvency II, also include sustainability risk assessment, including the analysis of climate change. In their own risk and solvency assessment (ORSA), insurance companies should analyze climate change scenarios and their exposure to climate-related risks. Small and so-called non-complex insurance companies are exempt from this obligation (Article 5 of the proposed Article 45a, Solvency II). Companies that are required to analyze climate change risks, if significantly exposed, must consider at least two long-term climate change scenarios, which differ depending on whether the expected global temperature increase is less than or substantially exceeds two degrees Celsius.

According to Solvency II, the own risk and solvency assessment (ORSA) should be performed regularly and immediately whenever there is a significant change in the risk profile of a specific (re)insurance company.[35] Therefore, when making the

[30] Also see: M. Grazia Starita, I. Malafronte, p. 167.

[31] N. Maleta, p. 112.

[32] M. Grazia Starita, I. Malafronte, p. 38.

[33] See: Andreas Klein (Ed.), *Risikomanagement und Risiko-Controlling*, Haufe Gruppe, Freiburg-Berlin-Munich, 2011, p. 28; also see: Christian Weißensteiner, *Reputation als Risikofaktor in technologieorientierten Unternehmen: Status Quo – Reputationstreiber – Bewertungsmodell*, Springer Gabler, 2013, p. 18; also see: Marijana Ćurak, Drago Jakovčević, *Osiguranje i rizici*, PRIF, Zagreb, 2007, p. 69; see also: Safet Kozarević, *Rizik menadžment i osiguranje*, Ekonomski fakultet Univerziteta u Tuzli, 2010, pp. 2.7–2.8; Ratko Vujović, *Upravljanje rizicima i osiguranje*, Univerzitet Singidunum, Belgrade, 2009, pp. 80., 97–98.

[34] *Directive (EU) 2024/1760 of the European Parliament and of the Council of 13 June 2024 on corporate sustainability due diligence and amending Directive (EU) 2019/1937 and Regulation (EU) 2023/2859, Text with EEA relevance. PE/9/2024/REV/1, OJ L, 2024/1760, 5.7.2024.*

[35] See also: Alessandro Ferriero, "Solvency capital estimation, reserving cycle and ultimate risk," *Insurance: Mathematics and Economics 68*, Elsevier, 2016, (pp. 162–168), p. 162.

assessment, the company's exposure to various types of risk is considered over a one-year period, and based on that, *risk management* creates a risk portfolio for the (re)insurance company. In line with the amendments to Solvency II outlined in Article 45a by the Legislative Resolution, the time intervals for risk assessments must be proportionate to the nature, scope, and complexity of the climate-related risks present in the company's operations, but should not exceed three years. Long-term climate change scenarios must be reviewed at least every three years and updated as necessary.

2. Proportionality

A particularly significant innovation anticipated in the amendments to Solvency II is the further implementation of proportionality criteria with regard to specific elements of corporate governance, such as risk management, reporting obligations, supervision, etc. According to this criterion, small companies and those with a low-risk profile (non-complex companies) should be exempt from some of these obligations. The proper implementation of the principle of proportionality is key to avoiding excessive burdens on insurance and reinsurance companies. The Legislative Resolution on the amendment of Solvency II specifically emphasizes that this Directive should be applied in accordance with the principle of proportionality. To facilitate the proportional application of Solvency II to companies that are smaller and non-complex than the average insurance company, and to ensure that they are not subject to disproportionately burdensome requirements, it is necessary to provide risk-based criteria that enable their identification.[36]

Companies that meet the criteria for classification as small and non-complex insurance companies, based on a *risk-based* criterion, are categorized through a simple notification process to the supervisory body. If, within a maximum of two months from such a notification, the supervisory body does not oppose the classification on legitimate grounds related to the assessment of relevant criteria, the company should be considered small and non-complex. Once classified in this way, the company should, in principle, automatically benefit from proportionality measures regarding reporting, disclosure, governance, audit of written policies, calculation of technical provisions, own risk and solvency assessment (ORSA), and liquidity risk management plans.[37] If the supervisory body determines that the company is no longer in compliance, or there is a risk of non-compliance with the required solvency capital, or if the company's risk profile changes significantly, or if its management system becomes ineffective, the application of the proportionality

[36] Point (14) of the Legislative Resolution on the amendment of Solvency II.
[37] Point (15) of the Legislative Resolution on the amendment of Solvency II.

criteria may be suspended. The Legislative Resolution on the amendments to Solvency II also anticipates that proportionality measures will be available to companies that are not classified as small and non-complex, but for which some of the Directive's requirements are considered too expensive or complex, given the risks associated with their operations.[38] These companies should be allowed to apply proportionality measures based on the analysis of each specific case, and with prior approval by their supervisory authorities.

Proportionality is applied to small and non-complex insurance companies to ease their obligations regarding information disclosure, reporting, including simplified sustainability reporting, the calculation of technical provisions, and other aspects of corporate governance. To improve proportionality within quantitative requirements, insurance and reinsurance companies should be allowed to calculate the required capital for minor risks using a simplified approach within the standard formula, for a period of up to three years.[39]

3. Reporting

One of the mechanisms that ensures a good governance system in (re) insurance companies is the obligation to publicly disclose solvency and financial condition reports.[40] The success of the insurance market is largely conditioned by the information that insurers provide regarding the risks they cover.[41] Insurance and reinsurance companies are required to publicly disclose these reports annually under Solvency II. The report must include prescribed information either in full or by referencing information that is of the same nature and scope and has been publicly disclosed in accordance with other legal or regulatory requirements.[42] The most significant changes brought by the Legislative Resolution on the amendments to Solvency II in the reporting segment concern the application of the principle of proportionality in the context of reporting obligations, particularly easing the regulatory obligations for small and non-complex insurance companies. Simplifications are also anticipated for group-level reporting. To simplify the reporting requirement for insurance and reinsurance groups, it should be possible, under certain conditions, to provide information from the regular supervisory report relating to the group and its subsidiaries in an aggregated manner for the entire group.[43]

[38] Point (17) of the Legislative Resolution on the amendment of Solvency II.
[39] Point (52) of the Legislative Resolution on the amendment of Solvency II.
[40] Also: Karel van Hulle, "Solvency II could become a global model," *Revija za pravo osiguranja* No. 2/2011, (pp. 67-71), p. 68.
[41] See: Donatella Porrini, "Risk Classification Efficiency and the Insurance Market Regulation," *Risks 2015*, 3, (pp. 445-454), p. 452. Also: M. Rittmann, p. 45. Also: A. Klein, p. 46.
[42] N. Maleta, p. 34.
[43] Point (21) of the Legislative Resolution on the amendment of Solvency II.

Given the experience during the COVID-19 pandemic and the challenges businesses faced during that period, the amendments also anticipate certain exceptions, including the possibility of extending reporting deadlines defined under Solvency II. The Commission, after consulting with EIOPA, should have the authority to extend reporting deadlines in exceptional circumstances such as health crises, natural disasters, and similar extreme events.[44] It is also proposed that deadlines for the preparation of audited reports could be extended.

Regarding quantitative regular reporting, certain limitations are introduced, particularly when the submission of some information would impose an excessive burden considering the nature, scope, and complexity of the risks present in a company's operations. These limitations apply if such reporting is not essential for effective supervision, does not jeopardize financial stability, and when the information can either be submitted annually or upon request (proposed Article 35a, Solvency II). This limitation on regular supervisory reporting applies only to companies that collectively represent no more than 20% of the life or non-life insurance or reinsurance market share in the member state. The life insurance market share is based on gross technical provisions, while the non-life insurance market share is based on written gross premiums. When determining eligibility for these reporting limitations, supervisory bodies will prioritize small and non-complex companies. Additional exceptions to regular supervisory reporting are anticipated for insurance companies themselves.

The amendments to Solvency II also introduce anticipate reporting requirements, particularly those related to business sustainability, and proportionality measures for small and non-complex companies. Furthermore, they complicate the solvency and financial condition report by splitting it into two distinct parts. The first part consists of information specifically aimed at policyholders and insurance customers, while the second part focuses on information intended for market experts (proposed amendments to Article 51, Solvency II). This is complemented by the requirements under the Corporate Sustainability Reporting Directive[45] which introduces additional requirements under which insurance companies, together with credit institutions, play a key role in the transition to a fully sustainable and inclusive economic and financial system, in accordance with the European Green Deal.

4. Supervision

Solvency II has introduced significant innovations in the supervision of the European Union insurance market. A higher level of control has been achieved,

[44] Point (23) of the Legislative Resolution on the amendment of Solvency II.

[45] *Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (Text with EEA relevance) PE/35/2022/REV/1 OJ L 322, 16.12.2022, p. 15–80)*

and broader powers have been granted to the supervisory authorities, particularly in the area of financial oversight. Compared to the previous system, Solvency II has reformed the foundations of the supervision of insurance and reinsurance activities within the European Union.[46] Supervision is now risk-based and includes continuous monitoring of the proper conduct of insurance and reinsurance operations, as well as compliance with supervisory regulations. The supervisory authorities have the task of identifying weaknesses in *risk management* within financial institutions and making critical decisions regarding actions to be taken in such situations.[47] The supervision of (re)insurance companies involves a balanced combination of indirect supervision and direct controsl (Article 29, paragraph 2 of Solvency II). Therefore, the supervisory measures are tailored to the nature, scope, and complexity of the risks associated with the activities of (re)insurance companies, and delegated acts, as well as regulatory and implementing technical standards, are adjusted according to the size and scope of the companies' operations. The principle of proportionality and the current supervision system especially protect small insurance companies.[48]

However, the continuous improvement of insurance and reinsurance companies supervision, whose operations are based on the freedom to provide services and the freedom of establishment, is an ongoing trend. This improvement in supervisory mechanisms should be carried out without undermining the goal of further integration of the single insurance market, in order to ensure consistent consumer protection and safeguard fair market competition across the entire single market. Due to recent market developments, it is necessary to implement additional mechanisms for controlling corporate governance in insurance companies and apply significant changes in the financial markets, such as inflation, low interest rates, and others, within insurance supervision. Given the nature, scope, and complexity of risks, supervisory bodies should be able to collect relevant macroprudential information about the investment strategies of insurance and reinsurance companies, analyze this information along with other relevant data available from other market sources, and integrate a macroprudential perspective into their supervision of insurance and reinsurance companies. This could include monitoring risks associated with specific credit cycles, economic downturns, and collective behavior or "herding behavior" in investments.[49]

Due to the importance of additional regulation exempting small and non-comlex companies based on the principle of proportionality, the amendments to Solvency II thoroughly regulate the process of qualifying insurance companies

[46] See also: Mirko Kraft, „Auswirkungen von Solvency II und der neuen EU-Finanzaufsichtsarchitektur auf die Kapitalallokationsstrukturen von Versicherungsgruppen", *Zeitschrift für die gesamte Versicherungswissenschaft,* December 2012., Volume 101, Issue 5, (pp. 657. – 674.), p. 659.

[47] See: Julie Dickson, „Supervision: Looking Ahead to the Next Decade" in A. Joanne Kellermann, Jakob de Haan, Femke de Vries (edt.): *Financial Supervision in the 21st Century*, Springer, 2013., p. 222.

[48] N. Maleta, p. 140.

[49] Point (59) of the Legislative Resolution on the amendment of Solvency II.

as small and non-complex and define the powers of supervisory authorities in this process, as well as the monitoring of proportionality measures (proposed Articles 29b, 29c, 29d, and 29e of Solvency II). The Legislative Resolution on the amendments to Solvency II also includes provisions strengthening and detailing cross-border and group-level supervision, additional powers for supervisory authorities in cases of solvency and liquidity threats to insurance companies, supervisory measures to preserve the financial position of companies during exceptional sectoral shocks, non-compliance with required solvency capital, and improving other macroprudential supervisory measures. The aim is to raise the overall quality of supervision while simplifying the oversight and control of insurance activities.

IV Conclusion

The insurance industry at global, European, and national levels is extensively regulated and supervised, requiring multiple reporting obligations from insurers, including non-financial reports. Detailed legal regulation is essential for the comprehensive and systematic development of the industry, but at the same time, it can lead to an atmosphere of overregulation. Good legal regulation and normative governance should be based on qualitative, rather than predominantly quantitative, requirements to achieve an effective regulatory framework. The Solvency II Directive represents a systematic regulatory framework for the operation of (re)insurance companies within the European Union. This framework has been supplemented by several legislative and non-legislative acts, but the proposal for the first significant amendment to the Directive was adopted by the European Parliament in 2024, with these amendments expected to come into effect in 2026.

The insurance industry at the European level is one of the leading, if not the largest, institutional investment activities. Insurers, in their role as investors, must increasingly consider factors of sustainable business and investment when evaluating their investments. For the insurance sector in the context of ESG (Environmental, Social, and Governance) factors, environmental and climate risks are primary concerns. Therefore, it is understandable that the proposed amendments to Solvency II largely focus on integrating sustainability risks into the risk management systems of insurance companies, particularly those risks caused by climate change. However, it is the transition to a climate-neutral economy should not dominate the regulatory framework of Solvency II or serve as the primary normative tools for implementing a sustainable economy, at the expense of the risk-based prudential framework of this Directive. While the insurance industry supports and can make a significant contribution to the development of sustainable business practices and the green transition, additional caution is needed to avoid going to the other extreme and neglecting the fundamental purpose of the regulatory framework for the insurance

industry, which is to ensure a stable market based on capital adequacy in relation to the risks undertaken.

A better implementation of the principle of proportionality is also one of the key and significant changes anticipated in Solvency II. It will enable smaller insurers, defined as small and non-complex companies, to benefit from simplifications and proportionality measures, thus creating a more suitable and stable market for such qualified insurance companies. Applying the principle of proportionality in the area of mandatory risk-based reporting helps to avoid the regulatory burden that many insurers currently face. The disproportion between the scope of business and the risks undertaken on one hand, and capital requirements and other regulatory obligations on the other, does not contribute to the functionality and further development of the insurance market. Therefore, the application of the principle of proportionality with regard to technical provisions, gross written premiums, and some other solvency elements is eagerly awaited as an adjustment of the Solvency II framework to meet the needs of the insurance market.

If the proposed amendments to Solvency II are implemented as planned, they will contribute to better protection for insurance service users and free up significant funds for investments in the green and digital transitions. However, the proposed changes indicate an increase in reporting obligations, which, even under the current regulatory framework, are not insignificant. Additionally, the proposed delegated acts to further elaborate the changes to the Directive could contribute to the increasing complexity and overregulation of the insurance industry's regulatory framework. This burden will be particularly felt by by non-EU countries aspiring for membership, and thus need to align their legislation with the *acquis communautaire*.

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INTELLECTUAL CAPITAL AND PROFITABILITY: STATE AND PERSPECTIVES OF INSURANCE COMPANIES IN SERBIA

SCIENTIFIC WORK

Abstract

The knowledge-based era requires an increasing application of intellectual capital in knowledge-intensive activities, such as the insurance industry, to gain sustainable competitive advantage and profitability. The paper aims to determine the contribution of intellectual capital and its components to the profitability of insurance companies in Serbia. The research includes 16 insurance companies in Serbia from 2018 to 2022. Regression analysis was used to test the research hypotheses. The results show that intellectual capital contributes to the profitability of insurance companies, but physical capital still has a dominant influence on profitability. The analysis of intellectual capital components shows that human capital has a greater contribution than structural capital.

Key words: *intellectual capital, profitability, insurance companies*

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I Introduction

The monetary industry, which includes insurance, represents an industry intensified by knowledge, where more intellectual than physical resources are used for the realization of their activities[4]. The goal of the monetary authorities is to improve the efficiency and effectiveness of this sector, which will contribute to economic growth through strengthening financial stability[5]. The insurance sector in Serbia achieved growth in insurance premiums in 2023[6], which indicates the development potential of this sector[7]. It should also be added that Serbia lags behind the countries of the European Union when it comes to the share of premiums in the value of the gross domestic product[8].

In today's dynamic business world, insurance companies must focus on monitoring changes in business performance [9] and the causes of these changes. In support of this, the authors[10] state that insurance companies are increasingly facing price sensitivity and, therefore, low profitability. Considering the knowledge-intensive nature of the insurance sector, intellectual capital is recognized as a key factor in introducing changes in companies and creating satisfactory business results. Thus, the process of intellectual capital allocation and planning becomes central to insurance companies[11], so it is necessary to develop new, more advanced intellectual capital management strategies[12]. Effective allocation of intellectual resources can provide insurance companies with an advantage and thus sustainable business in the future[13]. Accordingly, the paper aims to determine the contribution of intellectual capital and its components to the profitability of insurance companies in Serbia.

[4] Alipour Mohammad, "The effect of intellectual capital on firm performance: an investigation of Iran insurance companies", *Measuring Business Excellence*, 16/1, 2012, pp. 53-66.

[5] Olarewaju Odunayo Magret, Msomi Thabiso Sthembiso, "Intellectual capital and financial performance of South African development community's general insurance companies", *Heliyon*, 7/2021, e06712, pp. 1-10.

[6] Kočović Jelena, Rakonjac Antić Tatjana, Koprivica Marija, Bradić Kristina, "Pravci razvoja tržišta osiguranja", *Tokovi osiguranja,* 3/2024, str. 536-549.

[7] Njegomir Vladimir, "Analiza stanja i trendova sektora osiguranja u Srbiji", *Trendovi osiguranja,* 3/2011, pp. 3-15.

[8] Soković Ivana, "Značaj osiguranja i perspektive razvoja u Srbiji", *Tokovi osiguranja,* 2/2024, str. 265-280.

[9] Lu Wen-Min, Wang Wei-Kang, Kweh Qian Long, "Intellectual capital and performance in the Chinese life insurance industry", *Omega*, 42/2014, pp. 65–74.

[10] Kweh, Qian Long, Lu Wen-Min, Wang Wei-Kang, "Dynamic efficiency: intellectual capital in the Chinese non-life insurance firms", *Journal of Knowledge Management*, 18/5, 2014, pp. 937-951.

[11] Lu Wen-Min, Wang Wei-Kang, Kweh Qian Long, "Intellectual capital and performance in the Chinese life insurance industry", *Omega*, 42/2014, pp. 65–74.

[12] Kweh, Qian Long, Lu Wen-Min, Wang Wei-Kang, "Dynamic efficiency: intellectual capital in the Chinese non-life insurance firms", *Journal of Knowledge Management*, 18/5, 2014, pp. 937-951.

[13] Lu Wen-Min et al. (2014).

The literature review revealed the following research gaps. First, both practitioners and academics realize that it is necessary to do more research on intellectual capital in terms of its measurement, management, and disclosure in insurance companies, which will contribute to a better analysis of profitability[14]. Second, studies on the relationship between intellectual capital and the business performance of companies are numerous but limited in the field of insurance companies[15]. Previous studies which focus on the financial sector have mainly investigated intellectual capital in the banking industry[16]. Third, the researchers noted that there is a lack of research on this topic in emerging countries or countries in transition[17]. Emerging markets differ from developed markets by low markets, information efficiency, volatility, and overall size[18], which will additionally encourage the need to analyze the contribution of intellectual capital to strengthen the profitability of insurance companies, as one of the carriers of the monetary sector. The insurance market of Serbia belongs to the group of emerging markets.

The paper contains an introduction and three other parts. The second part presents a brief overview of the definition and components of intellectual capital in insurance companies, as well as an overview of previous research on the contribution of this capital to the profitability of the insurance sector. The third part of the paper describes the sample and applied methodology and presents the results of empirical research. The fourth part of the paper includes a discussion of the obtained results concerning previously conducted research, with the limitations of the research and the direction of future research.

II Literature review

1. Intellectual capital in insurance companies

A knowledge-based economy functions through the use of knowledge and information[19], which singles out intellectual capital as one of the significant drivers of

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[15] Asare Nicholas et al. (2017) and Oppong Godfred Kesse, Pattanayak Jamini Kanta, Irfan Mohd, "Impact of intellectual capital on productivity of insurance companies in Ghana: A panel data analysis with System GMM estimation", *Journal of Intellectual Capital*, 20/6, 2019, pp. 763-783.

[16] Asare Nicholas et al. (2017) and Mamun Syed Abdulla, Aktar Alima, "Intellectual capital disclosure practices of financial institutions in an emerging economy", *PSU Research Review*, 5/1, 2020, pp. 33-53.

[17] Dalwai Tamanna, Mohammadi Syeeda Shafiya, "Intellectual capital and corporate governance: an evaluation of Oman's financial sector companies", *Journal of Intellectual Capital*, 21/6, 2020, pp. 1125-1152.

[18] *Ibidem*

[19] Alipour Mohammad (2012).

value creation in companies[20]. Thus, the operations of knowledge-based companies increasingly depend on the use of intellectual capital[21], in support of which some studies estimate that 50 out of 90% of the value created for the company is created by the use of this capital[22]. Research indicates that intellectual capital is considered a source of competitive advantage and sustainability for companies on the market[23] by becoming a key factor in product and service innovation[24]. Accordingly, intellectual capital plays a very important role in achieving sustainable results for knowledge-based companies, which include financial institutions and insurance companies[25]. Insurance companies must be directed toward the development and efficient use of intellectual capital, knowledge, and new ideas, which will improve the competitiveness of financial institutions[26]. Previous, modest research notes that insurance companies have low intellectual capital efficiency compared to other financial institutions[27]. Therefore, it can be concluded that the insurance sector has many challenges that require an innovative approach, such as an approach to intellectual capital management[28].

Intellectual capital can be defined as part of the intangible assets of an insurance company with the help of which the added value of new products, processes, and services is created[29]. Researchers today equate intellectual capital with knowledge assets[30]. In this context, author[31] describes intellectual capital as a set of knowledge assets that are owned and/or controlled by insurance companies and that significantly enhance the mechanisms of organizational value creation for key company stakeholders.

As an asset that constitutes a significant part of the company, in the broadest sense, intellectual capital includes human capital (e.g. skills, knowledge, experience, etc.) and structural capital (e.g. company culture, systems, working environment)[32]. Human capital includes the knowledge, experiences, abilities, skills, creativity, and

[20] Dalwai Tamanna, Mohammadi Syeeda Shafiya (2020).
[21] Mamun Syed Abdulla, Aktar Alima (2020).
[22] Alipour Mohammad (2012).
[23] Dalwai Tamanna, Mohammadi Syeeda Shafiya (2020); Mamun Syed Abdulla, Aktar Alima (2020).
[24] Krstić Bojan, Jovanović Vujatović Milica (2022).
[25] Mamun Syed Abdulla, Aktar Alima (2020).
[26] Lu Wen-Min et al. (2014) and Alipour Mohammad (2012).
[27] Joshi Mahesh, Cahill Daryll, Sidhu Jasvinder, Kansal Monika, «Intellectual capital and financial performance: an evaluation of the Australian financial sector», *Journal of Intellectual Capital*, 14/2, 2013, pp. 264-285.
[28] Olarewaju Odunayo Magret, Msomi Thabiso Sthembiso, "Intellectual capital and financial performance of South African development community's general insurance companies", *Heliyon*, 7/2021, e06712, pp. 1-10.
[29] Mamun Syed Abdulla, Aktar Alima (2020).
[30] Asare Nicholas et al. (2017).
[31] Alipour Mohammad (2012).
[32] Carson, E., Ranzijn, R., Winefield Anthony, Marsden Helen, "Intellectual capital: Mapping employee and work group attributes", *Journal of Intellectual Capital*, 5/3, 2017, pp. 443 - 463.

innovation of employees[33]. Improving the value of human capital requires employee training programs[34], which will further improve employee efficiency[35] as well as company productivity[36]. Through the development and improvement of the value of human capital, insurance companies adapt to dynamic challenges from the environment and maintain a satisfactory level of performance[37]. The authors[38] talk about the importance of human capital, indicating that the loss and departure of qualified employees pose serious threats to the survival of insurance companies. Structural capital can be defined as knowledge created by an organization that cannot be separated from the entity[39]. This component of intellectual capital includes non-human assets such as organizational structure, routines, systems, hardware, databases, organizational culture[40], rules, procedures, and decision-making policies in the company[41]. As a necessary organizational infrastructure of knowledge-intensive companies, investment in the capital structure leads to the improvement of business results[42].

2. Intellectual capital and profitability of insurance companies

Intellectual capital, together with financial capital, is considered the main factor in the profitability of a company[43]. Profitable business implies efficient use of intellectual capital through value creation and sustainable growth[44]. The efficiency of intellectual capital can be improved through additional investments in this type of capital[45], especially through the improvement of human and structural capital. In the literature, special attention is paid to intellectual capital, proper management, and investment in this type of capital to increase business profitability[46].

[33] Mäenpää Irinja, Voutilainen Raimo, "Insurances for human capital risk management in SMEs", *VINE*, 42/1, 2012, pp. 52-66. and Olarewaju Odunayo Magret, Msomi Thabiso Sthembiso (2021).
[34] Joshi Mahesh et al. (2013).
[35] Olarewaju Odunayo Magret, Msomi Thabiso Sthembiso (2021).
[36] Mäenpää Irinja, Voutilainen Raimo (2012).
[37] Jakubiv Marija, Pršić Mladen, & Ćirić Miloš, "The effects of organizational factors on work outcomes – The role of employee resilience in hospitality kitchens", *Hotel and Tourism Management*, 10/2, 2022, pp. 71–89.
[38] Mäenpää Irinja, Voutilainen Raimo (2012).
[39] Joshi Mahesh et al. (2013).
[40] *Ibidem*
[41] Olarewaju Odunayo Magret, Msomi Thabiso Sthembiso (2021).
[42] *Ibidem*
[43] Alipour Mohammad (2012).
[44] Dalwai Tamanna, Mohammadi Syeeda Shafiya (2020) and Alipour Mohammad (2012).
[45] Lu Wen-Min et al. (2014).
[46] Farooq Muhammad, Ahmad Naeem, "Nexus between board characteristics, firm performance and intellectual capital: an emerging market evidence", *Corporate Governance*, 23/6, 2023, pp. 1269-1297. and Firer Steven, Stainbank Lesley, "Testing the relationship between intellectual capital and a company's performance: Evidence from South Africa", *Meditari Accountancy Research*, 11/1, 2003, pp. 25-44.

Monitoring the profitability of financial institutions is important for all stakeholders: managers, clients, and depositors[47]. Profitability is one of the key indicators of the stability of financial institutions[48] which measures the ability of a company to keep its profit stable from year to year[49]. Authors[50] view profitability as the ultimate test of risk management effectiveness. Profitability growth contributes to the economic progress of insurance companies because profits influence investment decisions and offer greater flexibility regarding the sources of investment financing[51]. Easier access to finance creates conditions for large investments that improve productivity, competitiveness of companies, and employment[52].

Investing in intellectual capital is a key factor in achieving better performance of insurance companies[53]. Although few studies have been conducted in the insurance sector in this context, one way to improve the performance of these companies is through the strategic management of intellectual capital. The disparity in the performance of insurance companies is caused precisely by the good management of strategic (intellectual) capital[54]. It should also be mentioned that research on intellectual capital in the insurance sector is limited, among other things, due to the dynamic nature of profitability[55]. This situation arises because the profit in the current period can be affected by the result from the previous period. After all, a larger part of the profit is kept for further investments[56].

Previously conducted studies indicate the importance of intellectual capital in insurance companies. The authors[57] conclude that, compared to other financial institutions, the insurance sector has the lowest efficiency of using intellectual capital. Authors[58] find that non-life insurance companies have higher intellectual capital performance compared to life insurers. The influence of intellectual capital components (human, structural, and relational capital) on operating efficiency in non-life

[47] Ben Selma Mokni Rim, Rachdi Houssem, "Assessing the bank profitability in the MENA region: A comparative analysis between conventional and Islamic bank", *International Journal of Islamic and Middle Eastern Finance and Management*, 7/3, 2014 pp. 305-332.

[48] Kanapiyanova Kamshat, Faizulayev Alimshan, Ruzanov Rashic, Ejdys Joanna, Kulumbetova Dina, Elbadria Marei, "Does social and governmental responsibility matter for financial stability and bank profitability? Evidence from commercial and Islamic banks", *Journal of Islamic Accounting and Business Research*, 14/3, 2023, 451–472.

[49] Menicucci Elisa, Paolucci Guido, "The determinants of bank profitability: empirical evidence from European banking sector", *Journal of Financial Reporting and Accounting*, 14/1, 2016 pp. 86-115

[50] Ben Selma Mokni Rim, Rachdi Houssem (2014).

[51] Menicucci Elisa, Paolucci Guido (2016).

[52] *Ibid.*

[53] Lu Wen-Min et al. (2014).

[54] Olarewaju Odunayo Magret, Msomi Thabiso Sthembiso (2021).

[55] Oppong Godfred Kesse et al. (2019).

[56] *Ibidem*

[57] Dalwai Tamanna, Mohammadi Syeeda Shafiya (2020).

[58] Asare Nicholas et al. (2017).

insurance companies is confirmed by the authors[59]. The same results are reached by authors[60] proving that intellectual capital is significantly positively associated with firm operating efficiency but in Chinese life insurance. Authors[61] prove that just structural and human capital have a significant relationship with function in insurance companies. Authors[62] conclude that intellectual capital along with human capital and capital employed significantly affect the productivity of insurance companies.

Previous research analyzed the contribution of intellectual capital in insurance companies through the VAIC (Value added intellectual coefficient) method. Authors[63] demonstrate the presence of a significant and positive relationship between intellectual capital and the profitability of insurance companies in Ghana, with human capital efficiency being the main driver of intellectual capital performance. In contrast to this study, the authors[64] conclude that capital employed efficiency (CEE) is a key contributor to VAIC in insurance companies. Authors[65] conclude that insurance companies in Australia are more focused on physical capital than on human and structural capital, leading to lower VAIC. Bearing in mind the specificity of the insurance sector in Serbia[66] and the fact that the financial sector of Serbia is still dominated by the influence of physical property[67], there is a need to analyze the contribution of intellectual capital and its components to the profitability of insurance companies in Serbia.

The profitability of insurance companies will be monitored through indicators of return on assets (ROA) and return on equity (ROE)[68]. ROA is used to measure the efficiency of using assets to generate profit while ROE measures a company's ability to increase invested capital to generate profit[69]. The ROA indicator is suitable for use when comparing smaller financial institutions and for monitoring their financial performance, while the ROE indicator is suitable for comparison between larger financial

[59] Kweh, Qian Long et al. (2014).
[60] Lu Wen-Min et al. (2014).
[61] Yeganeh Mohammad Vafaee, SHarahi Bahman Yasbolaghi, Mohammadi Esfandyar, Beigi Fatemeh Havas, "A Survey of the Relationship between Intellectual Capital and performance of the Private Insurance Companies of Iran", *Procedia - Social and Behavioral Sciences,* 114, 2014, pp. 699 – 705.
[62] Oppong Godfred Kesse et al. (2019).
[63] Asare Nicholas et al. (2017).
[64] Dalwai Tamanna, Mohammadi Syeeda Shafiya (2020).
[65] Joshi Mahesh et al. (2013).
[66] Dimić Maja, Balaban Mladenka, Paunović Svetislav, "Effects of ownership transformation of insurers on insurance sector in Serbia" *Journal of Insurance Theory and Practice*, 4/2023, pp. 525-538.
[67] Bontis Nick, Janosevic Stevo, Dzenopoljac Vladimir, "Intellectual capital and corporate performance of Serbian banks", *Actual problems of economics*, 4/34, 2013, pp. 287 – 299.
[68] Mondal Amitava, Ghosh Santanu Kumar, "Intellectual capital and financial performance of Indian banks", *Journal of Intellectual Capital*, 13/4, 2012, pp. 515-530.
[69] Xu Jian, Haris Muhammad, Liu Feng, "Intellectual capital efficiency and firms' financial performance based on business life cycle", *Journal of Intellectual Capital*, 24/3, 2023, pp. 653-682.

institutions[70]. Previous research confirms the influence of VAIC and its components on the ROA of insurance companies[71]. Also, the impact of intellectual capital on ROA has been proven in the banking sector[72]. Bearing in mind the increasing importance of intellectual capital in creating sustainable business performance and competitive advantage, it is necessary to investigate the nature of the relationship between intellectual capital and the ROA of insurance companies in Serbia. Accordingly, the following hypotheses were defined:

H_1: VAIC positively contributes to the ROA of insurance companies.

H_{1a}: Human capital efficiency coefficient positively contributes to the ROA of insurance companies.

H_{1b}: Structural capital efficiency positively contributes to the ROA of insurance companies.

H_{1c}: Capital employed efficiency positively contributes to the ROA of insurance companies.

Previous research has not analyzed in detail the impact of intellectual capital on the ROE of insurance companies. Studies confirm the impact of intellectual capital on ROE in the banking sector[73], so it is assumed that this type of capital will have a significant impact on the ROE of insurance companies. Some studies have only partially confirmed the impact of intellectual capital on the ROE of the banking sector[74]. Author[75] concludes that employed and human capital efficiencies have a dominant influence on banks' ROE, while structural capital efficiency is less important. Considering the lack of research on the relationship between intellectual capital and ROE in insurance companies in emerging countries, the following hypotheses were defined:

H_2: VAIC positively contributes to the ROE of insurance companies.

H_{2a}: Human capital efficiency coefficient positively contributes to the ROE of insurance companies.

H_{2b}: Structural capital efficiency positively contributes to the ROE of insurance companies.

H_{2c}: Capital employed efficiency efficiency positively contributes to the ROE of insurance companies.

[70] Uslu Hakan, "The role of intellectual capital in financial development: evidence from the banking sector of Turkey", *Competitiveness Review*, 32/2, 2022, pp. 230-249.

[71] Alipour Mohammad (2012).

[72] Xu Jian et al. (2023) and Githaiga Nderitu, "Intellectual capital and bank performance: the moderating role of income diversification", *Asia-Pacific Journal of Business Administration*, 15/4, 2023, pp. 509-526.

[73] Buallay Amina, "Intellectual capital and performance of Islamic and conventional banking: Empirical evidence from Gulf Cooperative Council countries", *Journal of Management Development*, 38/7, 2019, pp. 518-537 and Xu Jian et al. (2023).

[74] Mollah Md. Anhar Sharif, Rouf Md. Abdur, "The impact of intellectual capital on commercial banks' performance: evidence from Bangladesh", *Journal of Money and Business*, 2/1, 2022, pp. 82-93.

[75] Uslu Hakan (2022).

III Research methodology and sample data

The research in the paper was conducted on a sample of 16 insurance companies that operated at the end of 2022 in the Republic of Serbia, while their operations were observed in the period from 2018 to 2022. According to data from the National Bank of Serbia (2023), four companies deal exclusively with life insurance, six deal exclusively with non-life insurance, and six insurance companies deal with both life and non-life insurance. According to the ownership structure, 15 companies are majority foreign-owned (Narodna Banka Srbije, 2023)[76]. The calculation of profitability indicators and coefficients of intellectual capital is based on the data presented in the financial reports of insurance companies, which are available on the official website of the Serbian Business Registers Agency.

VAIC is a monetary measure that provides the advantage of providing numerical results that are comparable within departments and across industries[77]. VAIC is suitable for measuring the value of intellectual capital because it provides comparative analysis among companies, which is why it varies widely across industries. Research shows that this method is often used in the banking sector[78].

The VAIC coefficient measures how much new value is created per invested monetary unit in intellectual and physical capital[79]. VAIC represents the sum of the following coefficients[80]:

$$VAIC = HCE+SCE+CEE$$

Wherein:

- HCE - human capital efficiency coefficient. It is calculated as a ratio of value added and the value of human capital. Value added is calculated as the sum of operating, employee costs, depreciation, and amortization, while the value of human capital is the total salaries and wages of the company[81].
- SCE – structural capital efficiency. it is calculated as the ratio of the value of structural capital and value added. The value of structural capital is the difference between value added and human capital[82].
- CEE – capital employed efficiency coefficient is calculated as a ratio of value added and book value of net assets of the company[83].

[76] Godišnji izveštaj o poslovanju i rezultatima rada. Narodna banka Srbije, 2023, Beograd.
[77] Dalwai Tamanna, Mohammadi Syeeda Shafiya (2020).
[78] Joshi Mahesh et al. (2013).
[79] Pulić Ante, "Intellectual capital –does it create or destroy value?" *Measuring Business Excellence*, 8/1, 2004, 62–68.
[80] *Ibid.*
[81] *Ibid.*
[82] *Ibid.*
[83] *Ibid.*

The profitability of insurance companies is measured by the return on assets (ROA) and return on equity (ROE). For paper purposes, ROA is calculated as the ratio of net profit and value of assets, while ROE is the ratio of net profit and value of equity.

To examine the impact of the VAIC model and its components on the profitability of insurance companies in the Republic of Serbia, two general regression models were formed:

$$\text{Model 1: } PROF_{it}=\beta_0+\beta_1 VAIC_{it}$$
$$\text{Model 2: } PROF_{it}=\beta_0+\beta_1 HCE_{it}+\beta_2 SCE_{it}+\beta_3 CEE_{it}$$

where PROF represents ROA and ROE.

In addition to regression analysis, descriptive and correlational analysis was also applied in the paper. Statistical package for social sciences was used for statistical data processing IBM SPSS Statistics (version 23) and EViews (version 12).

IV Research results and discussions

Descriptive statistics of the research variables are shown in Table 1. Of the three components of the VAIC model, HCE has the highest mean value (Mean = 4.163), while the lowest mean value is identified with SCE (Mean = 0.504). A negative value of SCE was identified at two insurance companies (at one insurer in 2018 and at the other in 2019). The mean value of ROE of insurance companies is 0.248 and is higher than the value of ROA (Mean = 0.029).

Table 1. Descriptive statistics

	Mean	Median	Std. Deviation	Minimum	Maximum
HCE	4.163	2.785	3.009	0.111	12.000
SCE	0.504	0.641	1.033	-7.974	0.917
CEE	0.461	0.397	0.296	0.010	1.420
VAIC	5.128	3.809	3.736	-7.853	13.671
ROA	0.029	0.025	0.025	-0.045	0.095
ROE	0.248	0.174	0.223	-0.074	0.914

Source: Authors

The results of the Pearson correlation analysis are shown in Table 2. Looking at the correlation between the components of the VAIC model, there is a strong, positive, and statistically significant correlation between HCE and CEE (ρ=0.768, p=0.000). The correlation between the other VAIC components is moderate and statistically significant. Profitability indicators establish a generally strong and

statistically significant relationship with VAIC and its components, with the strongest correlation identified between ROE and CEE (ρ=0.951, p=0.000).

Table 2. Correlation analysis

	HCE	SCE	CEE	VAIC	ROA	ROE
HCE	1					
SCE	0.348**	1				
CEE	0.768**	0.351**	1			
VAIC	0.963**	0.584**	0.795**	1		
ROA	0.591**	0.479**	0.567**	0.654**	1	
ROE	0.856**	0.347**	0.951**	0.861**	0.675**	1

Source: Authors

The results of the Hausman test are shown in Table 3, where it is concluded that the Random effect model is more adequate in 3 out of 4 cases compared to the Fixed effect model. In other words, the Fixed effect model is adequate for examining the influence of the VAIC value on the ROA value.

Table 3. Hausman test

Depend	Model 1 (ROA)	Model 1 (ROE)	Model 2 (ROA)	Model 2 (ROE)
Chi-sq. statistic	60.596	0.873	5.013	1.254
Chi-sq. d.f.	1	1	3	3
p-value	0.0138	0.3501	0.1708	0.740
Effects	Fixed	Random	Random	Random

Source: Authors

Based on the data in Table 4, it can be concluded that VAIC contributes positively to the observed profitability indicators (ROA and ROE) of insurance companies in Serbia during the observed period. This means that hypotheses **H_1 and H_2 are accepted**.

Table 4. Regression analysis: VAIC and profitability of insurance companies

	Model 1 (ROA)	Model 1 (ROE)	Model 2 (ROA)	Model 2 (ROE)
C	-0.005 (-1.719)*	0.004 (0.003)	-0.004 (-0.828)	-0.104 (-6.749)
VAIC	0.007 (12.428)***	0.0482 (13.175)***		
HCE			0.004 (3.512)***	0.023 (5.445)***
SCE			0.007 (4.662)***	-0.004 (-0.737)
CEE			0.026 (2.105)**	0.562 (13.692)***
Adj. R^2	0.814	0.686	0.654	0.923
F-value	(22.613)***	(173.867)***	(50.814)***	(318.550)***

*Note: * - statistical significance at the 0.1 level;*
*** - statistical significance at the 0.05 level;*
**** - statistical significance at the 0.01 level.*

Source: Authors

Observing the components of VAIC, the contribution of HCE and CEE to profitability indicators of insurance companies was identified, whereby **H_{1a}, H_{1c}, H_{2a}, and H_{2c} were accepted**. Only a positive contribution of SCE to ROA was identified, while the impact on the ROE of insurance companies was absent, so hypothesis **H_{1b} was accepted** while hypothesis **H_{2b} was rejected**. Such results are expected considering the low mean SCE.

V Discussion of the results, implications and limitations of the research

Intellectual capital is increasingly becoming a creator of value and a company's competitive advantage, especially in knowledge industries such as insurance[84]. This is supported by the results of the study indicating that VAIC contributes to the profitability indicators of insurance companies. The same results were reached by the authors[85]. These results are in line with the conclusions of the authors[86] that the

[84] Nimtrakoon Sirinuch, "The relationship between intellectual capital, firms' market value and financial performance: Empirical evidence from the ASEAN", *Journal of Intellectual Capital*, 16/3, 2015, pp. 587-618.
[85] Alipour Mohammad (2012) and Asare Nicholas et al. (2017).
[86] Maji Santi Gopal, Saha Rupjyoti, "Does intellectual capital influence banks' efficiency? Evidence from India using panel data tobit model", *Managerial Finance*, 50/4, 2024, pp. 697-717.

orientation of financial institutions towards intellectual resources leads to more efficient functioning, thus ensuring profitability in the long term. Despite not being fully reflected in financial statements, the value of intellectual capital remains a major driver of insurance company profitability[87].

Research on the contribution of VAIC components to the profitability of insurance companies produced the following results. First, the impact of SCE is proven only in the case of ROA of insurance companies. A weaker influence of SCE on profitability was also identified in the study authors[88]. The lack of impact on ROE is a consequence of insufficient investment and development of the organizational infrastructure. Second, the results of the study prove the impact of HCE on the profitability of insurance companies. This influence was also proved by the authors[89]. Insurance company employees create investment plans and policies to ensure good returns on premiums generated[90]. These and other important tasks make human capital an important factor that insurance companies use to gain a competitive advantage[91]. In support of that, authors[92] state that financial institutions should support the development of human capital since they are responsible for the efficient use of all other resources. Third, the results show that physical capital has a dominant influence on the profitability of insurance companies. Such results are expected since financial companies are still more committed to physical than to intangible assets[93]. Authors[94] explain why managers focus on physical assets - investing in intellectual assets is more risky, the effects of investing in intellectual assets cannot be quantified and the costs of maintaining intellectual assets are high.

Practical implications. The results of the research indicate that in the coming period, insurance companies should focus more on investing in intellectual capital. The era of knowledge requires, in addition to investments, efficient management of intellectual capital, so managers must provide working conditions that will provide employees with additional knowledge for managing intellectual capital. In addition, the management of insurance companies is advised to invest in and improve structural capital, which represents support for the development and increase of the value of human capital.

Research limitations and future research directions. The limitation of the research is related to the application of VAIC methods. Authors[95] state that VAIC does not

[87] Asare Nicholas et al. (2017).
[88] Joshi Mahesh et al. (2013).
[89] Asare Nicholas et al. (2017).
[90] *Ibid.*
[91] *Ibid.*
[92] Maji Santi Gopal, Saha Rupjyoti (2024).
[93] Bontis Nick et al. (2015).
[94] Firer Steven, Stainbank Lesley (2003).
[95] Dalwai Tamanna, Mohammadi Syeeda Shafiya (2020).

accurately calculate the value of intellectual capital because it cannot be expressed through the efficiency of investment in labor and capital of the company. Because of these shortcomings, researchers have tried to create other, expanded versions of the VAIC method, such as MVAIC, which includes R&D and copyright investment in the calculation of the value of intellectual capital[96]. The original aim of the paper was the application of MVAIC methods. However, the financial statements of insurance companies do not show expenditures for research and development, advertising, and copyright. Future research could be based on expanding the observed profitability performance of insurance companies. Also, in the future, researchers could conduct a comparative analysis of the contribution of intellectual capital and its components to insurance companies and banks in Serbia.

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[96] *Ibid.*

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INTELEKTUALNI KAPITAL I PROFITABILNOST: STANJE U OSIGURAVAJUĆIM KOMPANIJAMA U REPUBLICI SRBIJI

ORIGINALNI NAUČNI RAD

Apstrakt

Dominacija ere znanja dovela je do sve veće primene intelektualnog kapitala u delatnostima koje se temelje na znanju kako bi se stekla održiva konkurentska prednost i rast profitabilnosti. Osiguravajuće kompanije zasnivaju svoje poslovanje na znanju pa upravljanje intelektualnim kapitalom postaje ključni faktor daljeg razvoja ovih kompanija. Cilj rada je da se utvrdi doprinos intelektualnog kapitala i njegovih komponenti profitabilnosti osiguravajućih kompanija u Republici Srbiji. Istraživanje obuhvata 16 osiguravajućih kompanija čiji se rezultati prate od 2018. do 2022. godine. Za testiranje istraživačkih hipoteza korišćena je regresiona analiza. Rezultati pokazuju da intelektualni kapital doprinosi profitabilnosti osiguravajućih kompanija, pri čemu efikasnost fizičkog kapitala ima dominantan uticaj na profitabilnost. Analiza uticaja komponenti intelektualnog kapitala pokazuje da efikasnost ljudskog kapitala ima veći doprinos profitabilnosti osiguravajućih kompanija u poređenju sa efikasnošću strukturnog kapitala.

Ključne reči: *intelektualni kapital, profitabilnost, osiguravajuće kompanije*

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I Uvod

Monetarni sektor, koji uključuje i osiguranje, realizaciju svojih aktivnosti bazira na većoj upotrebi intelektualnih nego fizičkih resursa[4]. Cilj monetarnih vlasti je da unaprede efikasnost i efektivnost ovog sektora, što će doprineti ekonomskom rastu kroz jačanje finansijske stabilnosti[5]. Sektor osiguranja u Srbiji 2023. godine beleži rast premija osiguranja[6], što ukazuje na razvojni potencijal ovog sektora[7]. Treba dodati i to da Srbija zaostaje za zemljama Evropske unije kada je u pitanju učešće premija u vrednosti bruto domaćeg proizvoda[8].

Dinamična priroda poslovnog okruženja stavlja osiguravajuće kompanije pred izazov konstatnog praćenja promena u vrednosti poslovnih performansi[9] i uzroka nastanka tih promena. U tom kontekstu, autori[10] navode da se osiguravajuće kompanije sve više suočavaju sa cenovnom osetljivošću i, shodno tome, niskom profitabilnošću. Imajući u vidu znanjem-intenziviranu prirodu sektora osiguranja, intelektualni kapital (engl. *Intellectual capital*) se prepoznaje kao ključni faktor uvođenja promena i stvaranja zadovoljavajućih poslovnih rezultata. Stoga, proces alokacije i upravljanja intelektualnim kapitalom postaje ključan za osiguravajuće kompanije[11]. Efektivna alokacija intelektualnih resursa može pružiti osiguravajućim kompanijama prednost i tako omogućiti održivo poslovanje u budućnosti[12]. U skladu s navedenim, cilj rada je da se utvrdi doprinos intelektualnog kapitala i njegovih komponenti profitabilnosti osiguravajućih kompanija u Srbiji.

Pregledom literature identifikovani su sledeći istraživački gepovi. Prvo, kako praktičari tako i naučnici ističu da je potrebno sprovesti detaljnija istraživanja u pogledu merenja, upravljanja i obelodanjivanja intelektualnog kapitala u osiguravajućim kompanijama, što će doprineti i boljoj analizi profitabilnosti ovih kompanija[13]. Drugo,

[4] Alipour Mohammad, "The effect of intellectual capital on firm performance: an investigation of Iran insurance companies", *Measuring Business Excellence*, 16/1, 2012, str. 53-66.

[5] Olarewaju Odunayo Magret, Msomi Thabiso Sthembiso, "Intellectual capital and financial performance of South African development community's general insurance companies", *Heliyon*, 7/2021, e06712, str. 1-10.

[6] Kočović Jelena, Rakonjac Antić Tatjana, Koprivica Marija, Bradić Kristina, "Pravci razvoja tržišta osiguranja", *Tokovi osiguranja,* 3/2024, str. 536-549.

[7] Njegomir Vladimir, "Analiza stanja i trendova sektora osiguranja u Srbiji", *Tokovi osiguranja,* 3/2011, str. 3-15.

[8] Soković Ivana, "Značaj osiguranja i perspektive razvoja u Srbiji", *Tokovi osiguranja,* 2/2024, str. 265-280.

[9] Lu Wen-Min, Wang Wei-Kang, Kweh Qian Long, "Intellectual capital and performance in the Chinese life insurance industry", *Omega*, 42/2014, str. 65–74.

[10] Kweh, Qian Long, Lu Wen-Min, Wang Wei-Kang, "Dynamic efficiency: intellectual capital in the Chinese non-life insurance firms", *Journal of Knowledge Management*, 18/5, 2014, str. 937-951.

[11] Lu Wen-Min, Wang Wei-Kang, Kweh Qian Long, "Intellectual capital and performance in the Chinese life insurance industry", *Omega*, 42/2014, str. 65–74.

[12] Lu Wen-Min et al. (2014).

[13] Asare Nicholas, Alhassan Abdul Latif, Asamoah Michael Effah, Ntow-Gyamfi Matthew, "Intellectual capital and profitability in an emerging insurance market", *Journal of Economic and Administrative Sciences*, 33/1, 2017, str. 2-19.

studije koje analiziraju prirodu veze između intelektualnog kapitala i poslovnih performansi kompanija su brojne, ali su ograničene u sektoru osiguranja[14]. Prethodna istraživanja sprovedena u okvirima finansijskog sektora uglavnom su proučavala intelektualni kapital u bankama[15]. Treće, istraživači su primetili da postoji nedostatak istraživanja o uticaju intelektualnog kapitala na profitabilnost osiguravajućih kompanija u zemljama u razvoju[16]. Tržišta u razvoju razlikuju se od razvijenih tržišta po veličini tržišta, efikasnosti upotrebe informacija i volatilnosti[17], što dodatno ohrabruje potrebu za analizom doprinosa intelektualnog kapitala jačanju profitabilnosti osiguravajućih kompanija u Srbiji, koja pripada grupi zemalja u razvoju.

Rad se sastoji od uvoda i tri dela. Drugi deo rada pruža kratak pregled definicije i komponenti intelektualnog kapitala u osiguravajućim kompanijama, kao i pregled prethodnih istraživanja o doprinosu ovog kapitala profitabilnosti sektora osiguranja. Treći deo rada opisuje uzorak, primenjenu metodologiju i pruža prikaz rezultata empirijskog istraživanja. Četvrti deo rada obuhvata diskusiju dobijenih rezultata u odnosu na prethodno sprovedena istraživanja, uočena ograničenja prilikom sprovođenja istraživanja i pravce budućih istraživanja.

II Pregled literature

1. Intelektualni kapital u osiguravajućim kompanijama

Ekonomija znanja funkcioniše kroz upotrebu znanja i informacija[18], što izdvaja intelektualni kapital kao jedan od značajnih pokretača stvaranja vrednosti u kompanijama[19]. Tako aktivnosti kompanija zasnovanih na znanju sve više zavise od upotrebe intelektualnog kapitala[20], pri čemu neka istraživanja procenjuju da 50 do 90% stvorene vrednosti dolazi upravo od upotrebe ovog kapitala[21]. Istraživanja takođe ukazuju da se intelektualni kapital smatra izvorom održive konkurentske prednosti kompanije[22] tako što postaje ključni faktor inovacija proizvoda i usluga[23].

[14] Asare Nicholas et al. (2017) and Oppong Godfred Kesse, Pattanayak Jamini Kanta, Irfan Mohd, «Impact of intellectual capital on productivity of insurance companies in Ghana: A panel data analysis with System GMM estimation», *Journal of Intellectual Capital*, 20/6, 2019, str. 763-783.

[15] Asare Nicholas et al. (2017) and Mamun Syed Abdulla, Aktar Alima, "Intellectual capital disclosure practices of financial institutions in an emerging economy", *PSU Research Review*, 5/1, 2020, str. 33-53.

[16] Dalwai Tamanna, Mohammadi Syeeda Shafiya, "Intellectual capital and corporate governance: an evaluation of Oman's financial sector companies", *Journal of Intellectual Capital*, 21/6, 2020, str. 1125-1152.

[17] *Ibid.*

[18] Alipour Mohammad (2012).

[19] Dalwai Tamanna, Mohammadi Syeeda Shafiya (2020).

[20] Mamun Syed Abdulla, Aktar Alima (2020).

[21] Alipour Mohammad (2012).

[22] Dalwai Tamanna, Mohammadi Syeeda Shafiya (2020); Mamun Syed Abdulla, Aktar Alima (2020).

[23] Krstić Bojan, Jovanović Vujatović Milica (2022).

U skladu s navedenim, intelektualni kapital igra značaju ulogu u postizanju održivih rezultata za kompanije zasnovane na znanju, među koje spadaju i finansijske institucije i osiguravajuće kompanije[24]. Zato osiguravajuće kompanije moraju biti usmerene ka razvoju i efikasnoj upotrebi intelektualnog kapitala, znanja i novih ideja, što će poboljšati njihovu konkurentnost[25]. Prethodna istraživanja ukazuju da osiguravajuće kompanije imaju nisku efikasnost intelektualnog kapitala u poređenju sa drugim finansijskim institucijama. Stoga se može zaključiti da sektor osiguranja ima mnoge izazove koji zahtevaju inovativan pristup, poput pristupa upravljanju intelektualnim kapitalom.

Intelektualni kapital se može definisati kao deo nematerijalne imovine osiguravajuće kompanije uz pomoć kog se stvara dodata vrednost proizvoda, procesa i usluga.[26] Istraživači danas izjednačavaju intelektualni kapital sa znanjem kao imovinom.[27] U ovom kontekstu, autor[28] opisuje intelektualni kapital kao skup znanja koje poseduju i/ili kontrolišu osiguravajuće kompanije i koje značajno unapređuje mehanizme stvaranja vrednosti za ključne stejkholdere kompanije.

Intelektualni kapital se u najširem smislu može posmatrati kao skup ljudskog kapitala i strukturnog kapitala.[29] Ljudski kapital obuhvata znanje, iskustva, sposobnosti, veštine, kreativnost i inovativnost zaposlenih.[30] Unapređenje vrednosti ljudskog kapitala zahteva programe za obuku zaposlenih[31], koji će dodatno poboljšati efikasnost[32] zaposlenih kao i produktivnost[33] kompanije. Kroz razvoj i unapređenje vrednosti ljudskog kapitala, osiguravajuće kompanije spremno odgovaraju dinamičnim izazovima iz okruženja i održavaju zadovoljavajući nivo performansi.[34] Autori[35] govore o značaju ljudskog kapitala za osiguravajuće kompanije, naglašavajući da gubitak i odlazak kvalifikovanih zaposlenih predstavljaju ozbiljne pretnje za opstanak ovih kompanija. Strukturni kapital se može definisati kao znanje koje je stvorila kompanija i koje se ne može odvojiti od entiteta.[36] Ova komponenta intelektualnog

[24] Mamun Syed Abdulla, Aktar Alima (2020).
[25] Lu Wen-Min et al. (2014) and Alipour Mohammad (2012).
[26] Mamun Syed Abdulla, Aktar Alima (2020).
[27] Asare Nicholas et al.. (2017).
[28] Alipour Mohammad (2012).
[29] Carson, E., Ranzijn, R., Winefield Anthony, Marsden Helen, "Intellectual capital: Mapping employee and work group attributes", *Journal of Intellectual Capital*, 5/3, 2017, str. 443 - 463.
[30] Mäenpää Irinja, Voutilainen Raimo, "Insurances for human capital risk management in SMEs", *VINE*, 42/1, 2012, str. 52-66. and Olarewaju Odunayo Magret, Msomi Thabiso Sthembiso (2021).
[31] Joshi Mahesh et al. (2013).
[32] Olarewaju Odunayo Magret, Msomi Thabiso Sthembiso (2021).
[33] Mäenpää Irinja, Voutilainen Raimo (2012).
[34] Jakubiv Marija, Pršić Mladen, & Ćirić Miloš, "Efekti organizacionih faktora na ishode posla - uloga rezilijentnosti zaposlenih u ugostiteljskim kuhinjama", *Menadžment u hotelijerstvu i turizmu*, 10/2, 2022, str. 71–89.
[35] Mäenpää Irinja, Voutilainen Raimo (2012).
[36] Joshi Mahesh et al. (2013).

kapitala uključuje organizacionu strukturu, organizacionu kulturu, poslovne sisteme, hardver, baze podataka[37] pravila, procedure i politike odlučivanja u kompaniji.[38] Kao neophodna organizaciona infrastruktura kompanija zasnovanih na znanju, investiranje u strukturni kapital vodi ka poboljšanju poslovnih rezultata.[39]

2. Intelektualni kapital i profitabilnost osiguravajućih kompanija

Intelektualni kapital, zajedno sa finansijskim kapitalom, smatra se glavnim faktorom profitabilnosti kompanije.[40] Profitabilno poslovanje podrazumeva efikasnu upotrebu intelektualnog kapitala kroz stvaranje vrednosti i održivi rast.[41] Efikasnost intelektualnog kapitala može se poboljšati dodatnim investicijama u ovu vrstu kapitala,[42] posebno kroz unapređenje ljudskog i strukturnog kapitala. U literaturi se posebna pažnja posvećuje pravilnom upravljanju intelektualnim kapitalom i investicijama u ovu vrstu kapitala u cilju pozitivnog uticaja na rast profitabilnosti.[43]

Analiza profitabilnosti finansijskih institucija je značajna za stejkholdere ovih insistucija: menadžere, klijente i deponente.[44] Profitabilnost je jedan od ključnih indikatora stabilnosti finansijskih institucija[45] koja meri sposobnost kompanije da održava stabilan profit iz godine u godinu[46]. Autori[47] vide profitabilnost kao krajnji test efikasnosti upravljanja rizikom. Rastuća profitabilnost doprinosi ekonomskom napretku osiguravajućih kompanija jer profit utiče na odluke o investicijama i pruža veću fleksibilnost u vezi sa izvorima finansiranja investicija[48]. Lakši pristup finansijama stvara uslove za velike investicije koje poboljšavaju produktivnost i konkurentnost kompanija.[49]

[37] *Ibid.*

[38] Olarewaju Odunayo Magret, Msomi Thabiso Sthembiso (2021).

[39] *Ibid.*

[40] Alipour Mohammad (2012).

[41] Dalwai Tamanna, Mohammadi Syeeda Shafiya (2020) and Alipour Mohammad (2012).

[42] Lu Wen-Min et al. (2014).

[43] Farooq Muhammad, Ahmad Naeem, "Nexus between board characteristics, firm performance and intellectual capital: an emerging market evidence", *Corporate Governance*, 23/6, 2023, str. 1269-1297. and Firer Steven, Stainbank Lesley, "Testing the relationship between intellectual capital and a company's performance: Evidence from South Africa", *Meditari Accountancy Research*, 11/1, 2003, str. 25-44.

[44] Ben Selma Mokni Rim, Rachdi Houssem, "Assessing the bank profitability in the MENA region: A comparative analysis between conventional and Islamic bank", *International Journal of Islamic and Middle Eastern Finance and Management*, 7/3, 2014 str. 305-332.

[45] Kanapiyanova Kamshat, Faizulayev Alimshan, Ruzanov Rashic, Ejdys Joanna, Kulumbetova Dina, Elbadria Marei, "Does social and governmental responsibility matter for financial stability and bank profitability? Evidence from commercial and Islamic banks", *Journal of Islamic Accounting and Business Research*, 14/3, 2023, str. 451–472.

[46] Menicucci Elisa, Paolucci Guido, "The determinants of bank profitability: empirical evidence from European banking sector", *Journal of Financial Reporting and Accounting*, 14/1, 2016 str. 86-115

[47] Ben Selma Mokni Rim, Rachdi Houssem (2014).

[48] Menicucci Elisa, Paolucci Guido (2016).

[49] *Ibid.*

Istraživanja pokazuju da investiranje u intelektualni kapital postaje ključni faktor u postizanju boljih performansi osiguravajućih kompanija.[50] Iako su istraživanja o intelektualnom kapitalu u osiguravajućem sektoru skromna, pretpostavlja se da je jedan od načina za poboljšanje performansi ovih kompanija strateško upravljanje intelektualnim kapitalom. U prilog tome, autori[51] navode da je razlika u performansama osiguravajućih kompanija uzrokovana dobrim upravljanjem strateškim (intelektualnim) kapitalom. Takođe treba napomenuti da su istraživanja intelektualnog kapitala u sektoru osiguranja ograničena, između ostalog, zbog dinamične prirode profitabilnosti.[52] Ova situacija nastaje zato što profit u tekućem periodu može biti pod uticajem rezultata iz prethodnog perioda. Uostalom, veći deo profita se planira za dalja ulaganja.[53]

Sprovedena istraživanja na temu intelektualnog kapitala u osiguravajućim kompanijama dala su sledeće rezultate. Autori[54] zaključuju da, u poređenju sa drugim finansijskim institucijama, sektor osiguranja ima najnižu efikasnost u korišćenju intelektualnog kapitala. S druge strane, autori[55] ukazuju da osiguravajuće kompanije koje se bave neživotnim osiguranjem imaju bolje performanse intelektualnog kapitala u poređenju sa osiguravajućim kompanijama koje se bave životnim osiguranjem. Uticaj komponenti intelektualnog kapitala (ljudski, strukturni i relacioni kapital) na operativnu efikasnost u kompanijama koje se bave neživotnim osiguranjem potvrđena je strane autora.[56] Do istih rezultata došli su i autori[57], s tim što su istraživanje sproveli u kompanija za životno osiguranje u Kini. Autori[58] dokazuju da samo strukturni i ljudski kapital imaju značajnu povezanost sa funkcionalnošću u osiguravajućim kompanijama. Autori[59] zaključuju da intelektualni kapital, zajedno sa ljudskim kapitalom i uloženim kapitalom, značajno utiču na produktivnost osiguravajućih kompanija.

U prethodno sprovedenim istraživanja u osiguravajućim kompanijama korišćen je metod Koeficijenta dodate vrednosti intelektualnog kapitala odnosno VAIC metod (engl. *Value Added Intellectual Coefficient*). Prema ovom metodu, VAIC predstavlja zbir efikasnosti ljudskog kapitala (engl. *Human Capital Efficiency - HCE*) , efikasnosti strukturnog kapitala (eng. *Structural Capital Efficiency - SCE*) i efikasnosti

[50] Lu Wen-Min et al. (2014).
[51] Olarewaju Odunayo Magret, Msomi Thabiso Sthembiso (2021).
[52] Oppong Godfred Kesse et al. (2019).
[53] *Ibid.*
[54] Dalwai Tamanna, Mohammadi Syeeda Shafiya (2020).
[55] Asare Nicholas et al. (2017).
[56] Kweh, Qian Long et al. (2014).
[57] Lu Wen-Min et al. (2014).
[58] Yeganeh Mohammad Vafaee, SHarahi Bahman Yasbolaghi, Mohammadi Esfandyar, Beigi Fatemeh Havas, "A Survey of the Relationship between Intellectual Capital and performance of the Private Insurance Companies of Iran", *Procedia - Social and Behavioral Sciences,* 114, 2014, str. 699 – 705.
[59] Oppong Godfred Kesse et al. (2019).

fizičkog kapitala (engl. *Capital employed efficiency - CEE*) Autori[60] pokazuju prisustvo značajne i pozitivne veze između intelektualnog kapitala i profitabilnosti osiguravajućih kompanija u Gani, pri čemu je efikasnost ljudskog kapitala glavni pokretač performansi intelektualnog kapitala. Suprotno ovom istraživanju, autori[61] zaključuju da je efikasnost fizičkog kapitala (*CEE*) pruža ključni doprinos koeficijentu dodate vrednosti intelektualnog kapitala u osiguravajućim kompanijama. Autori[62] zaključuju da su osiguravajuće kompanije u Australiji više fokusirane na fizički kapital nego na ljudski i strukturni, što dovodi do niže vrednosti koeficijenta dodate vrednosti intelektualnog kapitala. Imajući u vidu specifičnosti sektora osiguranja u Srbiji[63] i činjenicu da finansijskim sektorom Srbije i dalje dominira uticaj fizičke imovine,[64] postoji potreba da se analizira doprinos intelektualnog kapitala i njegovih komponenti profitabilnosti osiguravajućih kompanija u Srbiji.

Profitabilnost osiguravajućih kompanija u radu pratiće se putem stope prinosa na ukupnu imovinu (engl. *Return on assets - ROA*) i stope prinosa na sopstveni kapital (engl. *Return on equity - ROE*).[65] ROA se koristi za merenje efikasnosti upotrebe imovine za generisanje profita, dok ROE meri sposobnost kompanije da poveća uloženi kapital za generisanje profita.[66] Pokazatelj ROA je pogodan za poređenje rezultata manjih finansijskih institucija i za praćenje njihovog finansijskog učinka, dok je pokazatelj ROE pogodan za poređenje rezultata među većih finansijskih institucija.[67] Prethodna istraživanja potvrđuju uticaj VAIC-a i njegovih komponenti na ROA osiguravajućih kompanija[68]. Takođe, uticaj intelektualnog kapitala na ROA je dokazan u bankarskom sektoru.[69] Imajući u vidu sve veći značaj intelektualnog kapitala u stvaranju održivih poslovnih performansi i konkurentske prednosti, neophodno je istražiti prirodu odnosa između intelektualnog kapitala i ROA osiguravajućih kompanija u Srbiji. Shodno tome, definisane su sledeće istraživačke hipoteze:

[60] Asare Nicholas et al. (2017).
[61] Dalwai Tamanna, Mohammadi Syeeda Shafiya (2020).
[62] Joshi Mahesh et al. (2013).
[63] Dimić Maja, Balaban Mladenka, Paunović Svetislav, "Životna osiguranja vezana za jedinice investicionih fondova u funkciji razvoja tržišta osiguranja i finansijskog tržišta Republike Srbije" *Tokovi osiguranja*, 4/2023, str. 525-538.
[64] Bontis Nick, Janosevic Stevo, Dzenopoljac Vladimir, "Intellectual capital and corporate performance of Serbian banks", *Actual problems of economics*, 4/34, 2013, str. 287 – 299.
[65] Mondal Amitava, Ghosh Santanu Kumar, "Intellectual capital and financial performance of Indian banks", *Journal of Intellectual Capital*, 13/4, 2012, str. 515-530.
[66] Xu Jian, Haris Muhammad, Liu Feng, "Intellectual capital efficiency and firms' financial performance based on business life cycle", *Journal of Intellectual Capital*, 24/3, 2023, str. 653-682.
[67] Uslu Hakan, "The role of intellectual capital in financial development: evidence from the banking sector of Turkey", *Competitiveness Review*, 32/2, 2022, str. 230-249.
[68] Alipour Mohammad (2012).
[69] Xu Jian et al. (2023) and Githaiga Nderitu, "Intellectual capital and bank performance: the moderating role of income diversification", *Asia-Pacific Journal of Business Administration*, 15/4, 2023, str. 509-526.

$H_{1:}$ VAIC pozitivno doprinosi stopi prinosa na ukupnu imovinu (ROA) osiguravajućih kompanija.

H1a: Efikasnost ljudskog kapitala pozitivno doprinosi stopi prinosa na ukupnu imovinu (ROA) osiguravajućih kompanija.

H1b: Efikasnost strukturnog kapitala pozitivno doprinosi stopi prinosa na ukupnu imovinu (ROA) osiguravajućih kompanija.

H1c: Efikasnost fizičkog kapitala pozitivno doprinosi stopi prinosa na ukupnu imovinu (ROA) osiguravajućih kompanija.

Prethodna istraživanja nisu detaljno analizirala uticaj intelektualnog kapitala na stopu prinosa na sopstveni kapital (ROE) osiguravajućih kompanija. Studije potvrđuju uticaj intelektualnog kapitala na ROE u bankarskom sektoru,[70] pa se pretpostavlja da će ova vrsta kapitala imati značajan uticaj i na ROE osiguravajućih kompanija. Pojedine studije su samo delimično potvrdile uticaj intelektualnog kapitala na stopu prinosa kapitala (ROE) bankarskog sektora.[71] Autor[72] zaključuje da efikasnost fizičkog kapitala i efikasnost ljudskog kapitala imaju dominantan uticaj na ROE banaka, dok je efikasnost strukturnog kapitala manje značajna. S obzirom na uočeni nedostatak informacija o prirodi veze između intelektualnog kapitala i ROE osiguravajućih kompanija u zemljama u razvoju, definisane su sledeće istraživačke hipoteze:

H_{2}: VAIC pozitivno doprinosi stopi prinosa na sopstveni kapital (ROE) osiguravajućih kompanija.

H2a: Efikasnost ljudskog kapitala pozitivno doprinosi stopi prinosa na sopstveni kapital (ROE) osiguravajućih kompanija.

$H_{2b:}$ Efikasnost strukturnog kapitala pozitivno doprinosi stopi prinosa na sopstveni kapital (ROE) osiguravajućih kompanija.

$H_{2c:}$ Efikasnost fizičkog kapitala pozitivno doprinosi stopi prinosa na sopstveni kapital (ROE) osiguravajućih kompanija.

III Opis uzorka i metodologija istraživanja

Istraživanje u radu sprovedeno je na uzorku od 16 osiguravajućih kompanija koje su bile aktivne u 2022. godine u Republici Srbiji. Rezultati ovih kompanija posmatrani su od 2018. do 2022. godine. Prema podacima Narodne banke Srbije (2023), četiri kompanije se bave isključivo životnim osiguranjem, šest se bavi

[70] Buallay Amina, "Intellectual capital and performance of Islamic and conventional banking: Empirical evidence from Gulf Cooperative Council countries", *Journal of Management Development*, 38/7, 2019, str. 518-537 and Xu Jian et al. (2023).

[71] Mollah Md. Anhar Sharif, Rouf Md. Abdur, "The impact of intellectual capital on commercial banks' performance: evidence from Bangladesh", *Journal of Money and Business*, 2/1, 2022, str. 82-93.

[72] Uslu Hakan (2022).

neživotnim osiguranjem dok se preostalih šest osiguravajućih kompanija bavi i životnim i neživotnim osiguranjem. Prema vlasničkoj strukturi, 15 kompanija je u većinskom stranom vlasništvu (Narodna banka Srbije, 2023).[73]

Obračun pokazatelja profitabilnosti i koeficijenata dodate vrednosti intelektualnog kapitala (VAIC) zasniva se na podacima iz finansijskih izveštaja osiguravajućih kompanija, koji su dostupni na zvaničnom sajtu Agencije za privredne registre Republike Srbije.

VAIC je monetarna mera čija je ključna prednost uporedivost između kompanija i između delatnosti.[74] Ovo je razlog zašto se ovaj koeficijent vrlo često koristi za praktične i naučne svrhe. Istraživanja pokazuju da se ovaj metod često koristi i u bankarskom sektoru.[75]

VAIC koeficijent procenjuje Koliko je nove vrednosti stvoreno po uloženoj monetarnoj jedinici u intelektualni i fizički kapital.[76] Kao što je već navedeno, VAIC predstavlja zbir sledećih koeficijenata:[77]

$$VAIC = HCE + SCE + CEE$$

Gde je:

- Efikasnost ljudskog kapitala (HCE) - Računa se kao racio dodate vrednosti i vrednosti ljudskog kapitala. Dodata vrednost predstavlja zbir operativnih troškova, troškova zaposlenih, amortizacije i depresijacije. Vrednost ljudskog kapitala predstavlja zbir izdataka po osnovu zarada zaposlenih.[78]
- Efikasnost strukturnog kapitala (SCE) - Računa se kao racio vrednosti strukturnog kapitala i dodate vrednosti. Vrednost strukturnog kapitala predstavlja razliku između dodate vrednosti i ljudskog kapitala[79].
- Efikasnost fizičkog kapitala (CEE) - Računa se racio dodate vrednosti i knjigovodstvene vrednosti neto imovine kompanije.[80]

Profitabilnost osiguravajućih kompanija prati se putem stope prinosa na ukupnu imovinu (ROA) i stope prinosa na sopstveni kapital (ROE). Za potrebe rada, ROA se računa kao racio neto profita i vrednosti imovine, dok je ROE racio neto profita i vrednosti sopstvenog kapitala.

[73] Godišnji izveštaj o poslovanju i rezultatima rada. Narodna banka Srbije, 2023, Beograd.
[74] Dalwai Tamanna, Mohammadi Syeeda Shafiya (2020).
[75] Joshi Mahesh et al. (2013).
[76] Pulić Ante, "Intellectual capital –does it create or destroy value?" *Measuring Business Excellence*, 8/1, 2004, 62–68.
[77] *Ibid.*
[78] *Ibid.*
[79] *Ibid.*
[80] *Ibid.*

Da bi se ispitao uticaj VAIC i njegovih komponenti na profitabilnost osiguravajućih kompanija u Republici Srbiji, definisana su dva regresiona modela:

$$\text{Model 1: } PROF_{it}=\beta_0+\beta_1 VAIC_{it}$$
$$\text{Model 2: } PROF_{it}=\beta_0+\beta_1 HCE_{it}+\beta_2 SCE_{it}+\beta_3 CEE_{it}$$

gde PROF predstavlja ROA i ROE.

Istaživačke hipoteze testirane su primenom regresione analize. U cilju dobijanja detaljnijih podataka o posmatranom uzorku, radu je primenjena i deskriptivna statistika i korelaciona analiza. Za statističku obradu podataka korišćen je statistički paket IBM SPSS Statistics (verzija 23) i EViews (verzija 12).

IV Rezultati istraživanja

Rezultati deskriptivne statistike za posmatrane varijable prikazani su u Tabeli 1. Od tri komponente VAIC, efikasnost ljudskog kapitala ima najveću srednju vrednost (Mean = 4,163), dok je najniža srednja vrednost zabeležena u slučaju efikasnosti strukturnog kapitala (Mean = 0,504). Negativna vrednost efikasnosti strukturnog kapitala identifikovana u slučaju dve osiguravajuće kompanije (kod jednog osiguravača u 2018. i kod drugog u 2019. godini). Rezultati pokazuju i da je srednja vrednost ROE osiguravajućih kompanija (0,248) viša u odnosu na srednju vrednost ROA (0,029). Najveća vrednost standardne devijacije zabeležena je u slučaju efikasnosti ljudskog kapitala.

Tabela 1. Deskriptivna statistika

	Srednja vrednost	Standardna Devijacija	Min	Max
HCE	4,163	3,009	0,111	1,2000
SCE	0,504	1,033	-7,974	0,917
CEE	0,461	0,296	0,010	1,420
VAIC	5,128	3,736	-7,853	13,671
ROA	0,029	0,025	-0,045	0,095
ROE	0,248	0,223	-0,074	0,914

Izor: Autori

Rezultati korelacione analize za posmatrane varijable prikazani su u Tabeli 2. Zabeležena je jaka, pozitivna i statistički značajna korelacija između efikasnosti ljudskog kapitala i efikasnosti fizičkog kapitala (ρ=0,768; p=0,000). Korelacija između

ostalih komponenti VAIC je srednja i statistički značajna. Pokazatelji profitabilnosti uspostavljaju jaku i statistički značajnu korelaciju sa VAIC i njegovim komponentama, pri čemu je najjača korelacija identifikovana između ROE i efikasnosti fizičkog kapitala (ρ=0,951; p=0,000).

Tabela 2. Korelaciona analiza

	HCE	SCE	CEE	VAIC	ROA	ROE
HCE	1					
SCE	0,348**	1				
CEE	0,768**	0,351**	1			
VAIC	0,963**	0,584**	0,795**	1		
ROA	0,591**	0,479**	0,567**	0,654**	1	
ROE	0,856**	0,347**	0,951**	0,861**	0,675**	1

Izvor: Autori

Rezultati Hausmanovog testa prikazani su u Tabeli 3. Može se primetiti da je model sa nasumičnim efektima (engl. *Random effect*) adekvatniji u 3 od 4 slučaja u poređenju sa modelom sa fiksnim efektima (engl. *Fixed effect*). Drugim rečima, model sa fiksnim efektima je adekvatan za ispitivanje uticaja vrednosti VAIC i njegovih komponenti na ROA vrednost.

Tabela 3. Hausmanov test

	Model 1 (ROE)	Model 2 (ROA)	Model 2 (ROE)
Chi-sq. statistika	0.873	5.013	1.254
Chi-sq. d.f.	1	3	3
p-vrednost	0.3501	0.1708	0.740
Efekti	Nasumičan	Nasumičan	Nasumičan

Izvor: Autori

Na osnovu podataka iz Tabele 4, može se zaključiti da VAIC pozitivno doprinosi posmatranim pokazateljima profitabilnosti (ROA i ROE) osiguravajućih kompanija u Republici Srbiji tokom posmatranog perioda. To znači da su hipoteze **H_1 i H_2 prihvaćene.**

Tabela 4. Regresiona analiza: VAIC i profitabilnost osiguravajućih kompanija

	Model 1 (ROA)	Model 1 (ROE)	Model 2 (ROA)	Model 2 (ROE)
C	-0,005 (-1,719)*	0,004 (0,003)	-0,004 (-0,828)	-0,104 (-6,749)
VAIC	0,007 (12,428)***	0,0482 (13,175)***		
HCE			0,004 (3,512)***	0,023 (5,445)***
SCE			0,007 (4,662)***	-0,004 (-0,737)
CEE			0,026 (2,105)**	0,562 (13,692)***
Adj. R^2	0,814	0,686	0,654	0,923
F-vrednost	(22,613)***	(173,867)***	(50,814)***	(318,550)***

*Napomena: * - statistička značajnost na nivou od 0.1;*
*** - statistička značajnost na nivou od 0.05;*
**** - statistička značajnost na nivou od 0.01.*

Izvor: Autori

Posmatrajući komponente VAIC, identifikovan je doprinos efikasnosti ljudskog kapitala (HCE) i efikasnosti fizičkog kapitala (CEE) pokazateljima profitabilnosti osiguravajućih kompanija (ROA i ROE). To znači da su hipoteze **H_{1a}, H_{1c}, H_{2a}** i **H_{2c} prihvaćene**. Uticaj efikasnosti strukturnog kapitala (SCE) identifikovan je u slučaju ROA, čime je i hipoteza **H_{1b} prihvaćena**. S druge strane, hipoteza **H_{2b}** je **odbijena** budući da je izostao stitistički značajan uticaj efikasnosti strukturnog kapitala na ROE osiguravajućih kompanija. Ovakvi rezultati su očekivani s obzirom na nisku srednju vrednost ovog koeficijenta efikasnosti.

V Diskusija rezultata, implikacije i ograničenja istraživanja

Uloga intelektualnog kapitala postaje sve dominantnija u procesu stvaranja vrednosti i konkurentske prednosti kompanija, posebno u delatnostima zasnovanim na znanju, kao što je osiguranje.[81] Na to ukazuju i rezultati studije koja pokazuje da VAIC i njegove komponente doprinose pokazateljima profitabilnosti osiguravajućih kompanija u Republici Srbiji. Do sličnih rezultata došli su i drugi autori.[82]

Dobijeni rezultati u skladu su i sa zaključcima autora[83] da orijentacija finansijskih institucija ka intelektualnim resursima vodi ka efikasnijem funkcionisanju, čime

[81] Nimtrakoon Sirinuch, "The relationship between intellectual capital, firms' market value and financial performance: Empirical evidence from the ASEAN", *Journal of Intellectual Capital*, 16/3, 2015, str. 587-618.
[82] Alipour Mohammad (2012) and Asare Nicholas et al. (2017).
[83] Maji Santi Gopal, Saha Rupjyoti, "Does intellectual capital influence banks' efficiency? Evidence from India using panel data tobit model", *Managerial Finance*, 50/4, 2024, str. 697-717

se obezbeđuje profitabilnost na duži rok. Uprkos tome što se ne obelodanjuje ukupna vrednost intelektualne imovine u finansijskim izveštajima, ovaj kapital predstavlja značajan pokretač profitabilnosti osiguravajućih kompanija.[84]

Istraživanje doprinosa komponenti VAIC profitabilnosti osiguravajućih kompanija dalo je sledeće rezultate. Prvo, uticaj efikasnosti strukturnog kapitala je potvrđen samo u slučaju ROA osiguravajućih kompanija. Slabiji uticaj efikasnosti strukturnog kapitala na profitabilnost kompanija takođe je identifikovan u studiji autora.[85] Nedostatak uticaja na ROE može biti posledica nedovoljnih ulaganja i razvoja organizacione infrastrukture. Drugo, rezultati studije dokazuju uticaj efikasnosti ljudskog kapitala na profitabilnost osiguravajućih kompanija. Ovaj uticaj su takođe potvrdili autori.[86] Zaposleni u osiguravajućim kompanijama kreiraju investicione planove i politike kako bi obezbedili zadovoljavajuće stope dobiti na prikupljene premije[87]. Ovi i drugi doprinosi čine ljudski kapital značajnim faktorom koji osiguravajuće kompanije koriste za sticanje konkurentske prednosti.[88] U prilog tome, autori[89] navode da finansijske institucije treba da podrže razvoj ljudskog kapitala budući da su odgovorne za efikasnu upotrebu svih drugih resursa. Treće, rezultati pokazuju da efikasnost fizičkog kapitala ima dominantan uticaj na profitabilnost osiguravajućih kompanija. Takvi rezultati su očekivani s obzirom na to da su finansijske institucije još uvek više posvećene materijalnim nego nematerijalnim sredstvima.[90] Autori[91] objašnjavaju orijentaciju menadžera ka efikasnijoj upotrebi fizičkih resursa - ulaganje u intelektualne resurse je rizičnije, efekti ulaganja u intelektualne resurse ne mogu se kvantifikovati i troškovi održavanja intelektualnih resursa su visoki.

Praktične implikacije. Rezultati istraživanja ukazuju da u narednom periodu osiguravajuće kompanije trebaju više pažnje posvetiti investiranju u intelektualni kapital. Era znanja zahteva, pored ulaganja, i efikasno upravljanje intelektualnim kapitalom, tako da menadžeri moraju obezbediti radne uslove koji će omogućiti zaposlenima dodatno usavršavanje za upravljanje intelektualnim kapitalom. Takođe, menadžmentu osiguravajućih kompanija se savetuje da ulažu dodatna sredstva u unapređenje efikasnosti upotrebe strukturnog kapitala, koji predstavlja podršku razvoju i rastu vrednosti ljudskog kapitala.

Ograničenja istraživanja i pravci budućih istraživanja. Ograničenje istraživanja odnosi se na primenu VAIC metoda. Autori[92] navode da VAIC neprecizno meri vrednost

[84] Asare Nicholas et al. (2017).
[85] Joshi Mahesh et al. (2013).
[86] Asare Nicholas et al. (2017).
[87] *Ibid.*
[88] *Ibid.*
[89] Maji Santi Gopal, Saha Rupjyoti (2024).
[90] Bontis Nick et al. (2015).
[91] Firer Steven, Stainbank Lesley (2003).
[92] Dalwai Tamanna, Mohammadi Syeeda Shafiya (2020).

intelektualnog kapitala jer ne može da se izrazi kroz efikasnost ulaganja u radnu snagu i kapital kompanije. Zbog ovih nedostataka, istraživači su pokušali da kreiraju druge, proširene verzije VAIC metode, kao što je MVAIC, koja uključuje ulaganja u istraživanje i razvoj i autorska prava u obračun vrednosti intelektualnog kapitala.[93] Prvobitna svrha rada bila je primena MVAIC metoda (engl. *Modified Value-Added Intellectual Capital*). Međutim, finansijski izveštaji osiguravajućih kompanija ne prikazuju troškove istraživanja i razvoja i autorskih prava, što ograničava primenu navedenog metoda. Buduća istraživanja bi se mogla zasnivati na proširivanju posmatranih pokazatelja profitabilnosti osiguravajućih kompanija. Takođe, u budućnosti bi istraživači mogli sprovesti komparativnu analizu doprinosa intelektualnog kapitala i njegovih komponenti među osiguravajućim kompanijama i bankama u Republici Srbiji.

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[93] *Ibid.*

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UPRAVLJANJE RIZIKOM OD PREVARA U OSIGURANJU „Prilika čini lopova“

ORIGINALNI NAUČNI RAD

Apstrakt

Prevare u osiguranju nesumnjivo predstavljaju značajan izazov za osiguravajuća društva, imajući u vidu da dovode do finansijskih gubitaka, destabilizacije tržišta i gubitka poverenja klijenata. Efikasno upravljanje rizikom od prevara ključno je za zaštitu osiguravajućih društava i održivosti industrije osiguranja. Ovaj rad istražuje mehanizme koje osiguravajuće kompanije koriste kako bi identifikovale, procenile i smanjile rizike od prevara. Cilj ovog rada je da pruži uvid u sveobuhvatni pristup upravljanju rizikom od prevara u osiguranju, kao i da identifikuje kritične tačke u suočavanju sa pretnjama u ovom sektoru. Sve to treba da posluži za iznalaženje proaktivnih strategija.

Ključne reči*: rizik, prevare, upravljanje, osiguravajuća društva*
JEL klasifikacija: G22, M41, G39

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I Uvod

Prevare u osiguranju predstavljaju jedan od ozbiljnijih problema koji mogu da ugroze održivost osiguravajućih društava jer imaju dalekosežan uticaj.[5] Obuhvataju širok spektar radnji koje su nedozvoljene i nezakonite koje mogu dovesti do promena u vlasništvu kompanije, gubitka poverenja investitora i najzad, do bankrotstva organizacije.[6] Zbog rastućeg broja prevara, i njihove složenosti, s jedne strane i dinamične prirode industrije osiguranja, s druge strane, upravljanje rizicima dobija sve veći značaj u ovoj industriji. Dakle, osiguravajućim društvima su potrebne sveobuhvatne strategije upravljanja rizikom koje uključuju,[7] kako procenu rizika od prevare, tako i prevenciju prevare. Uprkos rastućem obimu studija o prevari, posebno u oblasti upravljanja rizikom od prevara i sistema interne kontrole različitih organizacija, bilo je vrlo malo istraživanja koja su se duboko fokusirala na prevaru u osiguranju. Neki od naučnih radova koji su doneli značajan napredak u ovoj oblasti (Clarke[8]; Litton[9]) bili su empirijski oskudni.

Prevare u osiguranju kao jedan od najozbiljnijih problema sa kojima se susreću osiguravači, korisnici usluga osiguranja i regulatori se javljaju u različitim oblicima prema vrstama polisa, i sa različitom jačinom deluju na poslovanje osiguravajućih društava. Način na koji se osiguravaju polise takođe značajno varira prema detaljnosti zahteva ka potencijalnom korisniku osiguranja. Menadžment ima odgovornost za efikasno upravljanje rizikom od prevare, jer njeno postojanje dovodi do rasta troškova osiguranja, s jedne strane, i ugrožava finansijsku snagu osiguravača, s druge strane, što zajedno ima negativan uticaj na dostupnost usluga osiguranja.

Jedan od problema koji je uočen, jeste dostupnog podataka o obimu i strukturi prevara u osiguranju. Osiguravajuća društva, policija i druge agencije ne pružaju detalje o obimu prevare u osiguranju, što bi se delimično moglo objasniti činjenicom da je prevaru kao krivično delo teško identifikovati i dokazati. U prošlosti je uočena tendencija da osiguravači umanjuju značaj problema vezanog za različite rizike koji prate ovu delatnost (barem u očima javnosti). Iz tog razloga je prisutan manjak informacija o tome koji su motivi prevaranata u osiguranju i njihovoj per-

[5] Stefan Milojević, Snežana Knežević, Vladimir Šebek, "Identifikacija i sprečavanje prevarnog finansijskog izveštavanja", *Tokovi osiguranja*, br. 1/2024, str. 146-163.

[6] Bosilja Srebro, *et al*, „Bankruptcy risk prediction in ensuring the sustainable operation of agriculture companies", *Sustainability*, No 14/2021, str. 7712.

[7] Iako je i sam regulatorni okvir Solvency II nastao sa ciljem da se doprinese dugoročno transparentnom mehanizmu upravljanja rizikom, za sada je izvesno da rizik prevara u osiguranju i dalje postoji. Detaljnije o Solvency II konceptu iz ugla našeg prava: Milo Marković, „Izazovi tržišta osiguranja u Srbiji na putu ka Solventnosti II", *Tokovi osiguranja,* br. 2/2024, str. 333–361.

[8] Michael Clarke, "Insurance Fraud", The British Journal of Criminology, No. 1/1989, str. 1-20

[9] Roger Litton, "Moral hazard and insurance fraud", *European Journal on Criminal Policy and Research,* No 3/1995, str. 30–47.

cepciji industrije osiguranja, kao i o obrascima ili obimu njihovog prevarnog dela. U tom kontekstu se ističe da ovo ne obezbeđuje adekvatnu osnovu koja bi poslužila u svrhu identifikovanja strategije prevencije u upravljanju rizikom od prevara.

Ovaj rad se fokusira na sagledavanje kritičnih tačaka u upravljanju rizikom od prevare u osiguranju, i nadamo se da će to pružiti osnovu za dalja istraživanja. Rad je organizovan na sledeći način. Prvi deo je posvećen sagledavanju prirode prevara u osiguranju i njihovoj klasifikaciji prema različitim kriterijumima. Sagledavanjem značaja interne kontrole u upravljanju rizikom od prevara se bavi drugi deo rada. Tradicionalni pristupi i inovacije za prevenciju prevara su predmet trećeg dela rada. U četvrtom delu rada su predstavljeni rezultati istraživanja i diskusija, nakon čega slede zaključna razmatranja.

Istraživanje je sprovedeno kako bi se dublje razumeli izazovi vezani za prevare u osiguravajućem sektoru, njihovi počinioci, vrste i mehanizmi. Njegova važnost proizilazi iz potrebe da se poboljša efikasnost osiguravajućih društava, poveća poverenje korisnika i zaštiti integritet osiguravajućeg sistema. Istraživačka pitanja definisana u skladu sa ciljem i predmetom istraživanja jesu:[10]

1. Da li osiguravajuća društva imaju efikasne interne sisteme koji otkrivaju i sprečavaju prevare?
2. Da li osiguranici čine prevare?
3. Da li posrednici u osiguranju i/ili brokeri sporovode prevare?
4. Da li se pružaoci komplementarnih usluga osiguranja bave prevarama?

II Priroda prevara u osiguranju

Institut za informacije o osiguranju[11] definiše prevaru u osiguranju kao „namernu obmanu koju je izvršila kompanija za osiguranje ili agent radi finansijske dobiti". Prema Derigu,[12] prevara u osiguranju je „krivično delo koje uključuje sticanje finansijske dobiti od osiguravača ili osiguranika koristeći lažno predstavljene činjenice ili lažne pretpostavke". Za ova kriminalna dela je poznato da se realizuju izdaleka, odnosno ne zahtevaju lični kontakt između počinioca i žrtve i smanjujući uočeni rizik za učinioca, što dovodi od toga da se smanjuju društvene i psihološke barijere za angažovanje u ovom obliku krivičnog dela. Zapravo, kod prevare u osiguranju ne postoji lična veza između učinioca i žrtve.

[10] Karen M. Gill, Adrian Woolley, Martin Gill, "Insurance fraud: the business as a victim?". *Crime at Work: Studies in Security and Crime Prevention (editor Margin Gill), Volume I,* Palgrave Macmillan UK, London, 2005, str. 73–82.

[11] The Insurance Information Institute, 2020, https://www.iii.org/fact-statistic/facts-and-statistics-insurance-fraud, pristupljeno 2. 9. 2024.

[12] Richard A. Derrig, „Insurance fraud", *Journal of Risk and Insurance*, No 3/2004, str. 271–287.

Razni su kriterijumi za klasifikovanje prevara u osiguranju. Prema jednoj od podela, prevare u osiguranju se kategorišu kao oportunističke i planirane prevare u osiguranju. Oportunistička prevara u osiguranju je ona koja se dovodi u vezu sa *post hoc* spoznajom pojedinca, u smislu da se osigurani slučaj može iskoristiti za ličnu korist pružanjem lažnih informacija ili preuveličavanjem legitimnog potraživanja,[13] dok se planirana prevara vezuje za namerni pokušaj da se izmisli rizični događaj koji bi bio pokriven polisom osiguranja.[14] Tennyson[15] smatra da su oportunističke prevare u osiguranju češće od planiranih prevara u osiguranju upoređujući reakcije ljudi na ove prevare. Prema Akomea-Frimpong *et al.*,[16] prevare u osiguranju se dele na interne i eksterne prevare, a kriterijum je mesto nastanka prevare u osiguranju - unutar ili izvan osiguravajućeg društva. Olalekan Yusuf & Rasheed Babalola (2010)[17] uočavaju da se dve vrste prevare dešavaju unutar osiguravajućeg društva u obliku interne prevare: osiguravač čini jednu, a zaposleni drugu, pošto obe počine radnici unutar kompanije. Akomea *et al.* (2016)[18] navode da postoje dve vrste eksternih prevara: (1) ona koju počine potrošači ili osiguranici protiv osiguravača (*policyholder fraud* - prevara osiguranika) i (2) ona koju su počinili nezavisni brokeri ili agenti protiv osiguravača (*intermediary fraud* - posrednička prevara). Eksterna prevara dolazi u obliku prevare nosioca polise/potrošača protiv osiguravača pri kupovini polise osiguranja ili izvršenju potraživanja dobijanjem pogrešnog pokrića ili plaćanja.[19,20] Prevare u osiguranju se mogu klasifikovati i kao (1) interne naspram eksternih, (2) osiguranje naspram potraživanja i (3) meke naspram tvrdih prevara. Internu prevaru karakteriše da su počinioci insajderi u industriji osiguranja, među kojima se nalaze osiguravači, agenti, brokeri, menadžeri i drugi zaposleni ili predstavnici osiguravača. Eksterna prevara je lažna aktivnost autsajdera u industriji osiguranja, kao što su podnosioci zahteva, osiguranici i lica koja imaju prava na potraživanja, nemoralno učinjena sa insajderima kao što su agenti, brokeri ili pružaoci usluga treće strane. *Underwriting fraud* uključuje lažne radnje izvršene prilikom obnavljanja ugovora o osiguranju i pokriva, dok "claim fraud" predstavlja namerno postavljanje fiktivnih ili lažnih potraživanja. Meke prevare su slučajne jer su povezane sa neželjenim oportunističkim ponašanjem uobičajeno

[13] K. Syamkumar *et al.*, K. S., "Causes and effects and prevention of insurance fraud: A systematic literature review", "*Seybold Report Journal*", No 6/2024, str. 106–122.
[14] Richard A. Derig, "Insurance fraud", *Journal of Risk and Insurance*, No 2002/3, str. 271–287.
[15] Sharon Tennyson, "Economic institutions and individual ethics: A study of consumer attitudes toward insurance fraud", *Journal of Economic Behavior & Organization*, No. 2/1997, str. 247–265.
[16] Isaac Akomea-Frimpong, Charles Andoh, Eric Dei Ofosu-Hene, "Causes, effects and deterrence of insurance fraud: evidence from Ghana", *Journal of Financial Crime*, 4/2016, str. 678–699.
[17] Tajudeen Olalekan Yusuf, Abdur Rasheed Babalola, "Control of insurance fraud in Nigeria: an exploratory study (case study)", *Journal of Financial Crime*, 4/2009, str. 418–435.
[18] Isaac Akomea-Frimpong, Charles Andoh, Eric Dei Ofosu-Hene, str. 678–699
[19] Richard A. Derig, str. 271–278
[20] Tajudeen Olalekan Yusuf, Abdur Rasheed Babalola, str. 418–435

poštenih ljudi, uglavnom u zavisnosti od zainteresovane strane koja koristi rečnik. Međutim, teške prevare su slične prevarama u vezi sa potraživanjima i imaju tendenciju da budu povezane sa pažljivo smišljenim i do detalja izvršenim prevarama kako bi se „izvrnulo" osiguranje.

Raznolikost *modusa operandi* odražava različite mogućnosti koje su dostupne akterima koji zauzimaju različite pozicije na tržištu, a mogu se svrstati u četiri kategorije:

a) Posrednička prevara (*Intermediary fraud*): sprovode je profesionalci poput lica kao što su nezavisni brokeri ili zastupnici osiguranja koji posreduju u kupovini osiguranja između kupaca i dobavljača. Kao primeri se mogu navesti slučajevi podnošenja preuveličanih zahteva u ime osiguranika ili obmanjujućih osiguranika i prodaja lažnih polisa.
b) Prevara osiguravača (*Insurer's fraud*): prekršioci se maskiraju u osiguravajuću kompaniju i vode klijente tako što prodaju polise koje ne postoje ili podnose lažne polise emitentu kako bi na prevaru zatražili proviziju.
c) Prevara sa osiguranicima (ili kupcima)(*Policyholder (or customer) fraud*): ovo se odnosi na prevaru protiv osiguravača tako što ugovarač osiguranja dobija pogrešno pokriće ili na neki način izbegava plaćanje. Ovo su slučajevi kada se radi o podnošenju preuveličanih potraživanja, falsifikovanja detalja, kao što su medicinska istorija, polise nakon upoznavanja, prevara u osiguranju automobila i lažiranje potraživanja smrti/otmice/ubistva sa strane kupaca.
d) Interna prevara (*Internal fraud*): ovde je reč o tome da zaposleni u osiguravajućim kompanijama koriste svoj legitimni položaj za vršenje prevare. Primer takve prevare jeste slučaj kada se oni dogovaraju sa kupcima u svrhu omogućavanja isplate po osnovu prinosa za svoju dobit.

Prevara u osiguranju može se desiti u dve glavne faze u životu polise: faza početka/obnove i faza potraživanja.[21] Vrste prevara koje se dešavaju na početku polise su sledeće:

Fronting. - Ovo se obično dešava u vezi sa motornim prevarama – kada, na primer, roditelji osiguraju vozilo na svoje ime (potražujući vlasništvo) u ime svog deteta. Na ovaj način se može dobiti osiguranje po preferencijalnoj stopi, ili osiguran rizik koji bi u suprotnom mogao biti odbijen.

Pogrešno predstavljanje (*Misrepresentation*). - Ovde pojedinac svesno propušta da obavesti osiguravača o faktorima koji bi mogli da utiču na rizik ili da pruži lažne ili obmanjujuće informacije. Osiguranje se tako može dobiti tamo gde bi inače moglo biti odbijeno, i po preferencijalnoj stopi. Primera radi, podnosilac zahteva može da kaže osiguravaču da nije bilo potraživanja tokom prethodnih pet godina kada je takav zahtev u stvari i podnet.

[21] Gill, Karen Ann, *Insurance fraud: causes, characteristics and prevention*, University of Leicester, Thesis, 2002, https://hdl.handle.net/2381/29106, pristupljeno 2. 3. 2024.

Lažno osiguranje (*False insurance*). - Ovo se dešava kada pojedinac ili grupa pojedinaca traži osiguranje za rizik koji ne postoji da bi kasnije podneo zahtev za polisu.

Više smernica (*Multiple policies*). Ovde pojedinac sklapa nekoliko polisa kako bi kasnije namerno podneo više zahteva za isti gubitak.

Vrste prevare koje se dešavaju u fazi potraživanja (*Claim stage*) su sledeće:

Preterivanje (Exaggeration). Preterivanje može imati tri oblika:

- Inflacija vrednosti: kada pojedinac svesno traži više od vrednosti predmeta.
- Dodatni predmeti: gde pojedinac dodaje zahtevu jednu ili više stavki.
- Poboljšani model: gde pojedinac traži poboljšani (i skuplji) model.

Višestruka potraživanja (Multiple claims). Ova vrsta prevare se preklapa sa više smernica i može imati dva oblika:

- Pojedinac može po osnovu više legitimnih polisa da traži isplatu za isti gubitak; na primer, kamera može biti izgubljena na odmoru, a ugovarač osiguranja traži isti gubitak preko svog putnog osiguravača i osiguravača domaćinstva, i plaća mu se dva puta.
- Pojedinac sklapa nekoliko polisa, zasnovanih na lažnim izjavama, da bi podneo više zahteva za fiktivni ili stvarni gubitak.

Lažno potraživanje (False claim). Lažno potraživanje (tvrdnja) se može realizovati na dva načina:

- Pojedinac sklapa važeće osiguranje i nakon toga odlučuje da podnese lažno potraživanje.
- Sprovodi se politika prevare, pa je tako od početka planirano lažno potraživanje. Primeri ovde uključuju inscenirane nesreće.

III Interna kontrola i njena efikasnost u osiguranju

Merenje obima prevare u osiguranju nije jednostavno. Veliki deo prevara u osiguranju ostaje neotkriven i nisu sve prevare jasne. Može biti teško za osiguravača da razlikuje legitimno pregovaranje, namernu obmanu i grešku. Stoga, jako su važni dobro strukturisani i adekvatno organizaciono pozicionirani sistemi kontrole. Velika promena se dešava u strategiji za borbu protiv prevara. Naglasak se pomera sa 20% prevencije/odvraćanja i 80% otkrivanja/istrage na suprotan odnos. Neke od grešaka koje osiguravajuća društva prave kada je reč o njihovim naporima na prevenciji prevara jesu: nedefinisanje posebne odgovornosti za sprečavanje prevara; nedefinisanje jasnih ciljeva ili politika upravljanja prevarama; nedovoljno procenjivanje rizika od prevare, posebno onih katastrofalnih; propuštanje mogućnosti za uštedu novca kroz smanjenje prevara; i preterano oslanjanje na neefikasne kontrole.[22]

[22] Toby J. F. Bishop, "Preventing, deterring, and detecting fraud: What works and what doesn't", *Journal of Investment Compliance*, No. 2/2004, str. 120-127.

Efikasnost interne kontrole je bila predmet izveštavanja revizora u okviru integrisanih revizija. Model za upravljanje revizorskim rizikom koji se trenutno koristi u standardima revizije je dizajniran za revizije finansijskih izveštaja, a ne revizije za potrebe interne kontrole, što predstavlja ključni deo integrisanih revizija. Imajući u vidu činjenicu da je revizija procesa (interna kontrola) konceptualno različita od revizije rezultata (finansijskih izveštaja), neminovno se nameće kao zaključak da je revizoru potreban drugačiji model upravljanja rizikom kako bi poslužio kao fundament za konceptualni okvir za potrebe revizije interne kontrole (Akresh, 2010).

Frauditing (revizija prevare; istraga prevare od strane revizora) ima jedinstvenu poziciju da se bavi složenim pitanjima kao što su mito i korupcija zbog svog ciljanog fokusa, specijalizovanih veština i sveobuhvatnih metodologija. „Frauditing" je koncept koji je Džonatan T. Marks (*Jonathan T. Marks*) razvio 1996. godine[23] i predstavlja strateško ispitivanje finansijskih podataka i operativnih praksi sa ciljem otkrivanja namernih obmana koje ugrožavaju integritet organizacije. Definicija (frauditing) je razvijena kako bi se istakla proaktivna, sveobuhvatna i istražna priroda prevare kao specijalizovanog oblika revizije dizajniranog posebno za borbu protiv i otkrivanje prevara unutar organizacija. Inkorporira miks forenzičkog ispitivanja, analitičkih pregleda i istražni intervju za identifikaciju neslaganja, otkrivanja nepravilnosti i razotkrivanje i otvorenih i prikrivenih prevara. Kao proaktivan mehanizam, kontrola prevara služi kao kamen temeljac u očuvanju imovine (posebno interna kontrola),[24] obezbeđivanju usklađenosti, kao i promovisanju kulture transparentnosti i odgovornosti. Efikasnost i efektivnost interne kontrole ima istaknutiji značaj u javnom sektoru. To se može videti na primeru revizije usklađenosti sa zakonima i propisima, kada se kontrole usmeravaju na smanjenje rizika usklađenosti, kao i na reviziju ekonomičnosti, efikasnosti i efektivnosti poslovanja, kada se kontrole usmeravaju na rizike koji ometaju dostizanje optimalnih vrednosti istih.[25]

IV Tradicionalni pristupi i inovacije za prevenciju prevara

Da bi se na najbolji mogući način upravljalo rizikom od prevara, potrebno je primeniti holistički pristup kojim se sagledava svih šest aktivnosti upravljanja prevarama, naime, (1) odvraćanje, (2) prevencija, (3) otkrivanje, (4) istraga, (5) sankcionisanje

[23] Jonathan T. Marks, 2020, https://www.linkedin.com/pulse/use-red-flags-detect-misconduct-fraud-even-bribery-jonathan-t-/, pristupljeno 4. 9. 2024.

[24] Marko Špiler, *et al.*, "Does the Internal Control System Play a Strong Safeguarding Role Against Fraud in Local Communities?", *Lex Localis: Journal of Local Self-Government*, No. 3/2024, str. 188–208.

[25] Jozefina Beke-Trivunac, Nebojša Jeremić, „Jedinstvene karakteristike interne revizije u javnom sektoru i Globalni standardi interne revizije", *Revizor – časopis za upravljanje organizacijama, finansije i reviziju*, No. 2-3/2023, str. 83–93.

i obeštećenje i (6) praćenje[26]. Merenje, otkrivanje i prevencija prevara napreduju uz primenu statističkih modela i inteligentnih tehnologija, koje se koriste za analizu baza podataka radi obezbeđivanja efikasnog rešavanja problema sa raznim vrstama potraživanjima. Istovremeno, strateška analiza se primenjuje na slučajeve imovinske odgovornosti i zdravstvenog osiguranja[27].

Poznato je da prevare u osiguranju predstavljaju ozbiljan i rastući problem, tako da je nesporno istaći da su tradicionalni pristupi borbi protiv prevara neadekvatni. Imajući u vidu učestalost prevara u osiguranju u razvijenim zemljama, privatni istražitelji i javni organi treba da uče u kontinuitetu kako koristiti nove tehnologije da bi osiguravajuća društva bila uspešna u otkrivanju i sprečavanju prevara, što bi imalo pozitivan uticaj na industriju osiguranja. Povećanje prisustva digitalnih usluga u sektoru osiguranja podstaklo je osigravajuće kompanije da prikupljaju i analiziraju informacije radi dobre procene modaliteta rizika od prevarnih radnji. Međutim, ovo pitanje se može dovesti u vezu sa problemom koji se pooštrava u okolnostima kada se kontrola nad procesom preda na tržište posredničkih usluga koje se kontinuirano razvija.

Pored ostalog, kompjuterska tehnologija je snažno uticala na tehnike administracije i istrage. Izražen je pritisak da se za veoma kratak vremenski period identifikuju aktivnosti koje mogu da izgledaju lažno, kako bi pokrenula odgovarajuća istraga. Unapređeni kompjuterski softver otvara mogućnosti za kreiranje efikasnijih strategija koje će biti uspešne u odabiru i razlikovanju legitimnih potraživanja u odnosu na ona koja to nisu. Nedavne kompjuterske platforme koje se koriste kao alat za razvoj sistema za otkrivanje i prevenciju prevara su spredšitovi, tabele, veliki podaci, forenzička analitika, analitika teksta i ekspertni sistemi[28]. Što duže prevare ostaju neotkrivene, to je veći potencijal za gubitak i manje šanse za oporavak. S druge strane, potrebno je imati u vidu i činjenicu da je napretkom kompjuterske tehnologije prevara izbila u sam vrh visokorizičnih kriminalnih aktivnosti u svetu, tako da je neophodno njeno hitno otkrivanje i prevencija već u ranoj fazi[29]. Današnja tehnologija koja se koristi u borbi protiv prevara nastavlja da se širi i postaje efikasnija, i u skladu sa tim je važno evoluirati kako se šeme prevare menjaju. Softverska rešenja u najvećoj meri napreduju tamo gde je moguće „učiti" iz iskustva, kako bi se povećala efikasnost u otkrivanju prevarnih radnji i identifikaciji obrazaca[30].

[26] Štefan Furlan, & Marko Bajec, „Holistic approach to fraud management in health insurance", *Journal of Information and Organizational Sciences*, 2/2008, str. 99-114.

[27] Richard A. Derrig, „Insurance Fraud", *Journal of Risk & Insurance*, 3/2002, str. 271–287.

[28] Rafidah Zainal, Ayub Md. Som, & Nafsiah Mohamed, "A review on computer technology applications in fraud detection and prevention", *Management & Accounting Review (MAR)*, 2/2017, str. 59-72.

[29] *Ibidem*.

[30] "The State of Insurance Fraud Technology - A study of insurer use, strategies and plans for anti-fraud technology, November 2016", *SAS, Coalition Against Insurance Fraud*, https://www.the-digital-insurer.com/

V Metodološki deo

Empirijsko istraživanje je sprovedeno primenom metode ispitivanja odabranog uzorka, pri čemu je uzorak činilo 313 ispitanika. U svrhu istraživanja, pripremljen je anketni upitnik koji je distribuiran onlajn putem. Anketni upitnik koji je korišćen u ovom istraživanju je sastavljen od ukupno 48 tvrdnji koje su na osnovu tematske srodnosti svrstani u 5 domena. Na svaku od navedenih tvrdnji ispitanici su označavali stepen slaganja na Likertovoj skali od 1 (uopšte se ne slažem) do 5 (u potpunosti se slažem). U ispitivanom uzorku 39,0% (122) ispitanika je bilo muškog pola, dok je 61,0% (191) bilo ženskog pola. Najveći broj ispitanika, njih 40,3% (126), pripadao je starosnoj grupi od 35 do 44 godine, dok je 22,7% (71) bilo mlađe od 35 godina, 27,5% (86) je bilo u grupi od 45 do 54 godine, a 9,6% (30) je bilo starije od 54 godine. Što se tiče obrazovnog nivoa, većina ispitanika, njih 63,3% (198), imala je završen fakultet, 13,1% (41) je imalo srednju školu, 21,2% (66) master diplomu, dok je 2,6% (8) imalo doktorat. Kada je u pitanju radno iskustvo, najveći broj ispitanika, njih 40,6% (127), imao je između 11 i 20 godina radnog iskustva, dok je 26,5% (83) imalo između 0 i 5 godina, 14,7% (46) između 6 i 10 godina, a 18,2% (57) više od 20 godina iskustva. U ispitivanom uzorku, 29,4% (92) ispitanika radi u oblasti prodaje i posredovanja, dok 16,9% (53) radi na pozicijama za procenu i likvidaciju šteta. U sektoru finansija i računovodstva zaposleno je 4,8% (15) ispitanika, a 9,9% (31) radi u oblasti pravnih i regulatornih pitanja. Na poslovima marketinga i rada sa klijentima nalazi se 3,2% (10) ispitanika. Najveći broj zaposlenih, njih 35,8% (112), radi u sektoru upravljanja i administracije. Demografske karakteristike ispitanika su prikazane u Tabeli 1.

Tabela 1. Demografske karakteristike ispitanika

DEMOGRAFSKE KARAKTERISTIKE	**N (%)**
Pol	
Muški pol	122 (39,0%)
Ženski pol	191 (61,0%)
Starost	
Ispod 35 godina	71 (22,7%)
35-44 godina	126 (40,3%)
45-54 godina	86 (27,5%)
Iznad 54	30 (9,6%)
Obrazovanje	
Srednja skola	41 (13,1%)

wp-content/uploads/2017/05/901-coalition-against-insurance-fraud-the-state-of-insurance-fraud-technology-105976.pdf, pristupljeno 24. 9. 2024.

Fakultet	198 (63,3%)
Master	66 (21,2%)
Doktorat	8 (2,6%)
Radno iskustvo	
0-5 godina	83 (26,5%)
6-10 godina	46 (14,7%)
11-20 godina	127 (40,6%)
Više od 20 godina	57 (18,2%)
Pozicija na poslu	
Prodaja i posredovanje	92 (29,4%)
Procena i likvidacija šteta	53 (16,9%)
Finansije i računovodstvo	15 (4,8%)
Pravna i regulatorna pitanja	31 (9,9%)
Marketing i rad sa klijentima	10 (3,2%)
Upravljanje i administracija	112 (35,8)

Za analizu podataka u ovom istraživanju korišćen je softver SPSS (IBM SPSS Statistics), verzija 20. Dobijeni podaci su analizirani koristeći metode deskriptivne statistike. Rezultati upitnika prikazani su kao frekvencije, odnosno broj ispitanika koji su odabrali određene odgovore i kao procenat njihove zastupljenosti. Pirsonov koeficijent korelacije korišćen je za ispitivanje povezanosti numeričkih varijabli. Pouzdanost i unutrašnja konzistencija varijabli procenjeni su putem Cronbach's alpha koeficijenta. Linearna regresija je primenjena za ispitivanje odnosa između nezavisnih i zavisne varijable.

VI Rezultati i diskusija

Prvi domen "Merenje internih faktora" je obuhvatio ukupno 8 tvrdnji pri čemu je distribucija odgovora po stepenu slaganja kao i prosečna vrednost za svaku od navedenih stavki prikazana u Tabeli 2. Prosečne vrednosti za tvrdnje u okviru prvog domena kretale su se od minimalnih 1,96 za tvrdnju *Osiguravajuća kompanija ne razvija nove proizvode* do maksimalnih 4,08 za tvrdnju *Osiguravajuća kompanija ima složenu organizacionu strukturu*. Ovo ukazuje na to da ispitanici najviše percipiraju složenost organizacione strukture i prisutnost centralizovanog sistema upravljanja (3,56), dok su najmanje saglasni s tvrdnjama koje ukazuju na nedostatak razvoja novih proizvoda, stabilnost operativnog učinka (2,00) i ulaganje u kvalifikovanost zaposlenih (2,10). Ostale tvrdnje, poput neadekvatne tehnološke infrastrukture (2,36) i sistema nagrađivanja koji ne zadovoljava potrebe zaposlenih (2,85), imaju prosečne vrednosti koje ukazuju na neutralnost ili blago neslaganje.

Tabela 2. Distribucija odgovora na tvrdnje iz domena „Merenje internih faktora"

	1 - Uopšte se ne slažem	2 - Uglavnom se ne slažem	3 - Niti se slažem, niti se ne slažem	4 - Uglavnom se slažem	5 - U potpunosti se slažem	Prosečna vrednost±SD
T1: Osiguravajuća kompanija ima složenu organizacionu strukturu						
	6 (1,9)	16 (5,1)	48 (15,3)	119 (38,0)	124 (39,6)	4,08±0,961
T2: Organizaciona struktura osiguravajuće kompanije nema jasno razdvajanje dužnosti i odgovornosti						
	103 (32,9)	93 (29,7)	49 (15,7)	47 (15,0)	21 (6,7)	2,33±1,260
T3: Sistem nagrađivanja i podsticaja osiguravajuće kompanije ne zadovoljava potrebe zaposlenih						
	52 (16,6)	68 (21,7)	94 (30,0)	72 (23,0)	27 (8,6)	2,85±1,200
T4: Osiguravajuća kompanija ima centralizovan sistem upravljanja						
	17 (5,4)	32 (10,2)	87 (27,8)	112 (35,8)	65 (20,8)	3,56±1,093
T5: Osiguravajuća kompanija ima neadekvatnu tehnološku infrastrukturu						
	98 (31,3)	82 (26,2)	72 (23,0)	44 (14,1)	17 (5,4)	2,36±1,212
T6: Operativni učinak osiguravajuće kompanije je nestabilan						
	135 (43,1)	85 (27,2)	62 (19,8)	19 (6,1)	12 (3,8)	2,00±1,105
T7: Osiguravajuća kompanija ne ulaže u povećanje kvalifikovanosti zaposlenih i ne obučava radnike profesionalno i tehnički						
	122 (39,0)	92 (29,4)	58 (18,5)	29 (9,3)	12 (3,8)	2,10±1,134
T8: Osiguravajuća kompanija ne razvija nove proizvode						
	143 (45,7)	90 (28,8)	42 (13,4)	26 (8,3)	12 (3,8)	1,96±1,127

Odgovori na datih 8 tvrdnji su sabrani i dobijen je skor za ovaj domen za svakog ispitanika. Prosečna vrednost ukupnog skora za domen iznosila je 21,24±5,613 od maksimalno mogućih 40. Ovakvi rezultati pokazuju da iako ispitanici nisu u potpunosti saglasni sa tvrdnjama koje ukazuju na nedostatke u tehnološkoj infrastrukturi, stabilnosti operativnog učinka i ulaganju u obuku zaposlenih, uočavaju složenost organizacione strukture.

Drugi domen *Izjava o faktorima osiguranika* je obuhvatio ukupno 7 tvrdnji (Tabela 3). Prosečne vrednosti za tvrdnje u okviru ovog domena pokazuju da ispitanici uglavnom izražavaju neslaganje sa tvrdnjama koje ukazuju na probleme u poslovanju sa osiguranicima. Najnižu prosečnu vrednost ima tvrdnja *Osiguravajuća kompanija retko pregleda i ažurira sadržaj i uslove svojih ugovora o osiguranj* (2,02), dok najvišu vrednost ima tvrdnja *Osiguranici preuveličavaju veličinu potraživanja* (3,16). Prosečna vrednost ukupnog skora za domen iznosi 17,35±5,200, od mogućih 35. Ovaj rezultat ukazuje na umerenu percepciju problema u odnosu na faktore osiguranika.

Tabela 3. Distribucija odgovora na tvrdnje iz domena „Izjava o faktorima osiguranika“

	1 - Uopšte se ne slažem	2 - Uglavnom se ne slažem	3 - Niti se slažem, niti se ne slažem	4 - Uglavnom se slažem	5 - U potpunosti se slažem	Prosečna vrednost±SD
T9: Osiguravajuća kompaniija retko pregleda i ažurira sadržaj i uslove svojih ugovora o osiguranju						
	132 (42,2)	89 (28,4)	57 (18,2)	23 (7,3)	12 (3,8)	2,02±1,116
T10: Osiguravajuća kompanija izdaje nepotpune polise osiguranja, te su potrebne dodatne informacije na zahtev klijenata						
	147 (47,0)	77 (24,6)	49 (15,7)	31 (9,9)	9 (2,9)	1,97±1,133
T11: Zahtevi osiguranika su često lažni						
	72 (23,0)	110 (35,1)	86 (27,5)	35 (11,2)	10 (3,2)	2,36±1,054
T12: Naknade isplaćene osiguranicima su neočekivane vrednosti						
	107 (34,2)	84 (26,8)	90 (28,8)	25 (8,0)	7 (2,2)	2,17±1,060
T13: Osiguranici preuveličavaju veličinu potraživanja						
	25 (8,0)	54 (17,3)	110 (35,1)	93 (29,7)	31 (9,9)	3,16±1,078
T14: Ponekad postoji saučesništvo stručnjaka u korist osiguranika						
	63 (20,1)	67 (21,4)	98 (31,3)	55 (17,6)	30 (9,6)	2,75±1,233
T15: Osiguranici se ne pridržavaju rokova navedenih u polisi osiguranja						
	30 (9,6)	79 (25,2)	115 (36,7)	70 (22,4)	19 (6,1)	2,90±1,047

Prosečne vrednosti za tvrdnje u okviru trećeg domena *Merenje međuproizvoda i faktora brokera*, kao i distribucija odgovora su prikazani u Tabeli 4. Rezultati pokazuju da su ispitanici najviše saglasni sa tvrdnjom da se većina značajnih usluga osiguranja nudi preko kompanije, agenata i brokera (3,77), kao i sa tvrdnjama da kompanija koristi veliki broj agenata i brokera za pružanje usluga osiguranja (3,56) i da zastupnici imaju ovlašćenje da potpisuju ugovore (3,57). Najnižu prosečnu vrednost ima tvrdnja *Agenti i brokeri primaju premije i izdaju lažna dokumenta* (2,02). Prosečna vrednost ukupnog skora za ovaj domen iznosi 22,29±3,856 od maksimalnih 35. Ovakav rezultat sugeriše da ispitanici prepoznaju važnost posrednika i brokera u pružanju osiguravajućih usluga, ali takođe ukazuje na mogućnost postojanja nejasnoća ili zabrinutosti u vezi sa njihovim aktivnostima i transparentnošću, što bi moglo zahtevati dodatno istraživanje i analizu.

Tabela 4. Distribucija odgovora na tvrdnje iz domena „Merenje međuproizvoda i faktora brokera“

	1 - Uopšte se ne slažem	2 - Uglavnom se ne slažem	3 - Niti se slažem, niti se ne slažem	4 - Uglavnom se slažem	5 - U potpunosti se slažem	Prosečna vrednost±SD
T16: Većina značajnih usluga osiguranja nudi se preko kompanije, agenata i brokera						
	17 (5,4)	17 (5,4)	67 (21,4)	132 (42,2)	80 (25,6)	3,77±1,061
T17: Brokeri vode evidenciju koja sadži imena klijenata						
	13 (4,2)	19 (6,1)	152 (48,6)	75 (24,0)	54 (17,3)	3,44±0,982
T18: Agenti i brokeri primaju premije i izdaju lažna dokumenta						
	140 (44,7)	58 (18,5)	90 (28,8)	19 (6,1)	6 (1,9)	2,02±1,074
T19: Kompanija koristi veliki broj agenata i brokera za pružanje usluga osiguranja						
	7 (2,2)	23 (7,3)	121 (38,7)	113 (36,1)	49 (15,7)	3,56±0,919
T20: Zastupnici imaju ovlašćenje da potpišu ugovore						
	27 (8,6)	20 (6,4)	103 (32,9)	74 (23,6)	89 (28,4)	3,57±1,210
T21: Posrednici i brokeri naplaćuju provizije i premije						
	32 (10,2)	21 (6,7)	116 (37,1)	81 (25,9)	63 (20,1)	3,39±1,180
T22: Značajno je povećan broj nenaplaćenih potraživanja osiguranika						
	63 (20,1)	70 (22,4)	137 (43,8)	32 (10,2)	11 (3,5)	2,55±1,034

Četvrti domen obuhvata stavove ispitanika o ponašanju komplementarnih pružalaca usluga (*Merenje komplementarnih pružalaca usluga*). Prosečne vrednosti za tvrdnje u okviru ovog domena, kao i distribucija odgovora su prikazani u Tabeli 5. Prema rezultatima, prosečne vrednosti ukazuju na umeren stepen neslaganja ili neutralnih stavova kada je reč o tvrdnjama poput naduvavanja potraživanja i namernog davanja netačnih faktura. Najveći nivo saglasnosti postignut je za tvrdnje koje sugerišu da neki postupci ovih pružalaca usluga mogu biti nepotrebni, gde je prosečna vrednost bila 3,04. Prosečna vrednost ukupnog skora za domen *Merenje komplementarnih pružalaca usluga* iznosio je 14,08±3,851 od maksimalnih 25, što ukazuje na niži nivo saglasnosti ispitanika s tvrdnjama o mogućim nepravilnostima među komplementarnim pružaocima usluga. Ovakvi rezultati sugerišu da su ispitanici svesni mogućih problema, ali ih ne doživljavaju kao sveprisutne ili ozbiljno ugrožavajuće po transparentnost i efikasnost pružanja osiguravajućih usluga.

Tabela 5. Distribucija odgovora na tvrdnje iz domena „Merenje komplementarnih pružalaca usluga“

	1 - Uopšte se ne slažem	2 - Uglavnom se ne slažem	3 - Niti se slažem, niti se ne slažem	4 - Uglavnom se slažem	5 - U potpunosti se slažem	Prosečna vrednost±SD
T23: Komplementarni pružaoci usluga (povezane usluge) naduvavaju potraživanja						
	40 (12,8)	47 (15,0)	145 (46,3)	58 (18,5)	23 (7,3)	2,93±1,067
T24: Komplementarni pružaoci usluga namerno daju netačne fakture						
	81 (25,9)	56 (17,9)	133 (42,5)	34 (10,9)	9 (2,9)	2,47±1,077
T25: Ponekad se javljaju slučajevi pružanja usluga osiguranja od strane neosiguravača						
	61 (19,5)	48 (15,3)	138 (44,1)	48 (15,3)	18 (5,8)	2,73±1,116
T26: Neke radnje koje preduzimaju komplementarni pružaoci usluga su nepotrebne						
	24 (7,7)	36 (11,5)	177 (56,5)	54 (17,3)	22 (7,0)	3,04±0,936
T27: Kompanija koristi veliki broj komplementarnih pružalaca usluga						
	25 (8,0)	40 (12,8)	195 (62,3)	43 (13,7)	10 (3,2)	2,91±0,841

Naredni domen obuhvata tvrdnje koje ispituju prisustvo „crvenih zastavica” (*red flags*) u poslovanju, odnosno indikatora koji bi mogli da signaliziraju potencijalne rizike i probleme u finansijskim praksama i računovodstvu. Prosečne vrednosti kao i distribucija odgovora za tvrdnje u okviru poslednjeg su prikazani u Tabeli 6. Analiza odgovora pokazuje da je najveći nivo slaganja postignut kod tvrdnje o postojanju prepreka koje otežavaju efikasno obavljanje posla, sa prosečnom vrednošću od 2,94±1,207. Nasuprot tome, najmanji stepen slaganja od 2,42 je uočen kod tvrdnje koja se odnosila na previše složenu organizacionu strukturu koja uključuje neobična pravna lica ili rukovodeće linije, što ukazuje na to da su učesnici u najmanjoj meri identifikovali složenost strukture kao prepreku. Odgovori na date tvrdnje su sabrani kako bi se dobio ukupni skor za svakog ispitanika u ovom domenu. Prosečna vrednost ukupnog skora domena koji obuhvata ukupno 21 tvrdnju, iznosila je 54,51±17,870, od mogućih maksimalnih 105. Ova vrednost ukazuje na prosečan nivo slaganja ispitanika sa tvrdnjama koje ukazuju na prisustvo „crvenih zastavica” u poslovanju.

Tabela 6. Distribucija odgovora na tvrdnje iz domena „Crvene zastavice“ (“Red flags”)

	1 - Uopšte se ne slažem	2 - Uglavnom se ne slažem	3 - Niti se slažem, niti se ne slažem	4 - Uglavnom se slažem	5 - U potpunosti se slažem	Prosečna vrednost±SD
T28: Dominantno ponašanje menadžmenta u ophođenju sa revizorima, posebno uključujući pokušaje uticanja na obim poslova revizora.						
	73 (23,3)	43 (13,7)	148 (47,3)	40 (12,8)	9 (2,9)	2,58±1,068
T29: Značajne, neobične ili veoma složene transakcije se posebno dešavaju blizu kraja godine						
	62 (19,8)	53 (16,9)	131 (41,9)	49 (15,7)	18 (5,8)	2,71±1,125

	1 - Uopšte se ne slažem	2 - Uglavnom se ne slažem	3 - Niti se slažem, niti se ne slažem	4 - Uglavnom se slažem	5 - U potpunosti se slažem	Prosečna vrednost±SD
T30: Značajne transakcije povezanih lica koje nisu uključene u redovno poslovanja ili sa povezanim licima koji nisu revidirani ili su revidirani od strane druge firme	66 (21,1)	43 (13,7)	176 (56,2)	19 (6,1)	9 (2,9)	2,56±0,982
T31: Česti sporovi sa sadašnjim ili prethodnim revizorom za računovodstvene, revizorske ili pitanja koje se tiču izveštavanja	80 (25,6)	36 (11,5)	165 (52,7)	25 (8,0)	7 (2,2)	2,50±1,029
T32: Ponavljajući pokušaji menadžmenta da opravda marginalno ili neadekvatno računovodstvo na osnovu materijalnosti	87 (27,8)	34 (10,9)	151 (48,2)	30 (9,6)	11 (3,5)	2,50±1,101
T33: Neadekvatno praćenje značajnih internih kontrola	93 (29,7)	52 (16,6)	116 (37,1)	41 (13,1)	11 (3,5)	2,44±1,148
T34: Dominantno upravljanje od strane jedne osobe ili male grupa u poslu kojim ne upravljaju vlasnici bez kontrole kompenzacija	81 (25,9)	39 (12,5)	145 (46,3)	33 (10,5)	15 (4,8)	2,56±1,125
T35: Preveliki pritisak na operativni menadžment ili osoblje za postizanje finansijskih ciljeva (prodaja i profitabilnost kao podsticajni ciljevi) vrše odbor direktora ili glavni izvršni direktori	48 (15,3)	40 (12,8)	120 (38,3)	80 (25,6)	25 (8,0)	2,98±1,149
T36: Značajni bankovni računi ili podružnica ili filijala kompanija u poreskim jurisdikcijama za koje izgleda da nema jasnog poslovnog opravdanja	87 (27,8)	41 (13,1)	152 (48,6)	23 (7,3)	10 (3,2)	2,45±1,070
T37: Neefikasni računovodstveni i informacioni sistemi	93 (29,7)	53 (16,9)	109 (34,8)	44 (14,1)	14 (4,5)	2,47±1,182
T38: Neuspeh menadžmenta da blagovremeno ispravi prijavu u vezi sa poznatim stanjem u internim kontrolama	49 (15,7)	138 (44,1)	25 (8,0)	11 (3,5)	2,42±1,092	
T39: Prevelika zainteresovanost menadžmenta za održavanje ili povećanje cene akcija subjekta ili trend zarade	41 (13,1)	162 (51,8)	44 (14,1)	14 (4,5)	2,77±1,032	
T40: Ponavljanje negativnih tokova gotovine iz poslovanja ili nemogućnost generisanja novčanih tokova tokom izveštavanja o zaradama i rastu zarada	34 (10,9)	169 (54,0)	20 (6,4)	11 (3,5)	2,52±1,047	
T41: Nerealna profitabilnost ili očekivanja na nivou trenda od strane menadžmenta u previše optimističnim saopštenjima za štampu ili poruke godišnjeg izveštaja	51 (16,3)	139 (44,4)	38 (12,1)	20 (6,4)	2,67±1,125	
T42: Visoke stope fluktuacije ili zapošljavanje neefikasnog osoblja u računovodstvu, internoj reviziji ili informacionim tehnologijama	48 (15,3)	125 (39,9)	53 (16,9)	23 (7,3)	2,75±1,174	
T43: Nerazumni zahtevi prema revizoru, kao npr. nerazumna vremenska ograničenja u pogledu završetka revizije ili izdavanja revizorskog izveštaja	42 (13,4)	159 (50,8)	21 (6,7)	16 (5,1)	2,56±1,082	

	1 - Uopšte se ne slažem	2 - Uglavnom se ne slažem	3 - Niti se slažem, niti se ne slažem	4 - Uglavnom se slažem	5 - U potpunosti se slažem	Prosečna vrednost±SD
T44: Sredstva, obaveze, prihodi ili rashodi na osnovu značajne procene koje uključuju subjektivne sudove ili neizvesnosti koje je teško potvrditi						
	30 (9,6)	179 (57,2)	29 (9,3)	11 (3,5)		2,66±1,017
T45: Brz rast ili neobična profitabilnost, posebno u poređenju sa drugim kompanijama u industriji osiguranja						
	48 (15,3)	141 (45,0)	34 (10,9)	15 (4,8)		2,57±1,110
T46: Prekomeran uticaj nefinansijskog menadžmenta u izboru računovodstvenih principa ili na utvrđivanje značajnih procena						
	43 (13,7)	152 (48,6)	30 (9,6)	8 (2,6)		2,50±1,053
T47: Previše složena organizaciona struktura koja uključuje neobična pravna lica ili rukovodeće linije						
	60 (19,2)	126 (40,3)	33 (10,5)	8 (2,6)		2,42±1,077
T48: Da li smatrate da postoje prepreke koje otežavaju efikasno obavljanje posla?						
	52 (16,6)	103 (32,9)	76 (24,3)	30 (9,6)		2,94±1,207

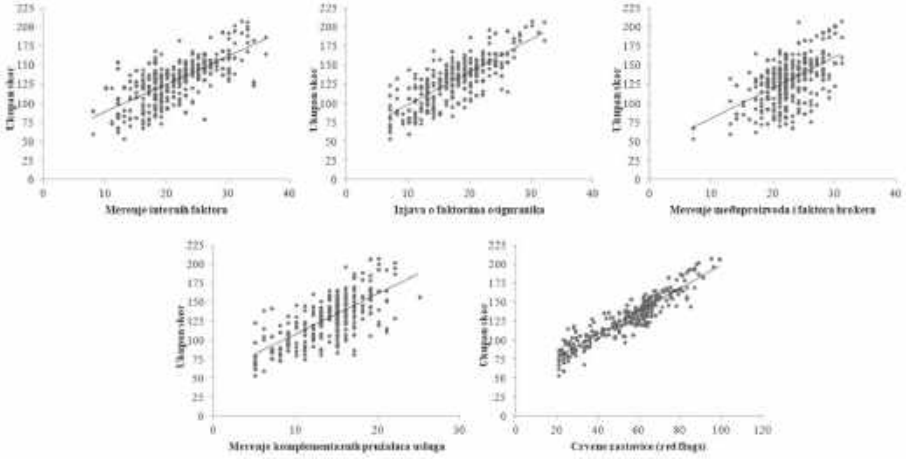
Ukupan skor, dobijen sabiranjem skorova svih pet domena (ukupno 48 tvrdnji), oslikava različite aspekte obuhvaćene istraživanjem. Prosečna vrednost ovog ukupnog skora iznosila je 129,47±29,27 od mogućih maksimalnih 240, što ukazuje na umereno slaganje ispitanika sa tvrdnjama kroz sve domene. Minimalna vrednost skora bila je 53, a maksimalna 208, što pokazuje znatnu varijaciju u percepciji i procenama različitih faktora rizika i mera u osiguranju među ispitanicima.

Rezultati ukazuju na prisustvo unutrašnje konzistentnosti većine domena i visok nivo pouzdanosti celog upitnika. Domeni *Merenje internih faktora* (α=0,766), *Izjava o faktorima osiguranika* (α=0,798) i *Merenje komplementarnih pružalaca usluga* (α=0,818) pokazuju dobru pouzdanost, uzimajući u obzir da su vrednosti Cronbach's alpha iznad 0,7, što sugeriše da stavke u ovim domenima međusobno dobro koreliraju. Domen *Merenje međuproizvoda i faktora brokera* (α=0,538) pokazuje nisku pouzdanost, dok domen *Crvene zastavice* (α=0,967) ima izuzetno visoku pouzdanost. Ceo upitnik pokazuje visoku pouzdanost (α=0,953), što ukazuje na ukupnu konzistentnost celog upitnika (Tabela 7).

Tabela 7. Vrednosti Cronbach's alpha po domenima i za ceo upitnik

DOMEN	*Cronbach's alpha*
Merenje internih faktora	0,766
Izjava o faktorima osiguranika	0,798
Merenje međuproizvoda i faktora brokera	0,538
Merenje komplementarnih pružalaca usluga	0,818
Crvene zastavice (red flags)	0,967
CEO UPITNIK	0,953

Domen *Merenje internih faktora* ima jaku pozitivnu statistički značajnu korelaciju sa ukupnim skorom (r=0,703, p=0,000), ukazujući da su odgovori u ovom domenu značajno povezani sa ukupnim rezultatima upitnika, što je slučaj i kod domena *Izjava o faktorima osiguranika* (r=0,768, p=0,000). Domen *Merenje međuproizvoda i faktora brokera* pokazuje umerenu korelaciju (r=0,531, p=0,000) sa ukupnim skorom. Koeficiijent korelacije je niži u poređenju sa drugim domenima, što je u skladu i sa nižom pouzdanošću ovog domena. Ovakvi rezultati potencijalno ukazuju da postoji veća varijabilnost u odgovorima ili manja relevantnost ovog domena za ukupni skor. Domen *Merenje komplementarnih pružalaca* usluga ima jaku pozitivnu značajnu korelaciju sa ukupnim skorom (r=0,695, p=0,000), dok domen *Crvene zastavice* pokazuje vrlo visoku korelaciju sa ukupnim skorom (r=0,929, p=0,000), što ukazuje da ovaj domen ima najveći uticaj na ukupni rezultat. Obzirom i na visok Cronbach's alpha za ovaj domen (0,967), možemo zaključiti da su odgovori u ovom domenu izuzetno homogenizovani i veoma relevantni za celokupan upitnik. Ovi rezultati se mogu sagledati na grafikonima u okviru Slike 1.



Slika 1. Korelacija između pojedinačnih domena i ukupnog skora
(merenje internih faktora, izjava o faktorima osiguranika,
merenje međuproizvoda i faktora brokera,
merenje komplementarnih pružalaca usluga i crvene zastavice – "red flags")

Analiza faktora koji utiču na skorove po domenima i ukupan skor

Sagledavanjem podataka u Tabeli 8 se može dati nekoliko konstatacija. U odnosu na pol, statistički značajna razlika primećena je jedino u domenu *Merenje komplementarnih pružalaca usluga* gde su muškarci imali značajno veće vrednosti od

žena (14,71 naspram 13,68, p=0,020) odnosno veći stepen slaganja sa s tvrdnjama o mogućim nepravilnostima u ponašanju ovih pružalaca usluga, poput naduvavanja potraživanja ili davanja netačnih faktura. Što se tiče starosti, rezultati pokazuju značajne razlike između starosnih grupa samo za domen *Merenje internih faktora* (p=0,003). Ispitanici stariji od 54 godine imali su najvišu prosečnu vrednost u ovom domenu (23,87±6,19), što sugeriše da stariji zaposleni doživljavaju više izazova unutar organizacione strukture osiguravajuće kompanije. Ovo može ukazivati na to da stariji ispitanici percipiraju složenost organizacione strukture, neadekvatnu tehnološku infrastrukturu ili nestabilnost operativnog učinka kao značajnije probleme u poređenju sa mlađim ispitanicima. Rezultati su pokazali da obrazovni nivo ima značajan uticaj na percepciju internih faktora u osiguravajućoj kompaniji, kao i na ukupan skor. Grupa ispitanika sa doktoratom imala je najvišu prosečnu vrednost u domenu *Merenje internih faktora* (26,13±5,41), što ukazuje da visoko obrazovani pojedinci kritičnije procenjuju složenost organizacione strukture, tehnološku infrastrukturu, i operativni učinak kompanije. S druge strane, grupa ispitanika sa završenom srednjom školom imala je najniži prosečan skor (20,49±6,01). Kada je u pitanju ukupan skor, grupa sa doktoratom imala je najveću prosečnu vrednost (155,13±30,518), što ukazuje na njihovu veću kritičnost ili svesnost o svim aspektima istraženim kroz upitnik. Za ostale domene nisu uočene statistički značajne razlike između grupa sa različitim nivoima obrazovanja. Rezultati su pokazali da grupe sa radnim iskustvom od 11 do 15 godina i više od 16 godina imaju najveće prosečne vrednosti u većini domena, iako rezultati ukazuju na to da nije uočena statistički značajna razlika između grupa u nijednom od analiziranih domena. Rezultati pokazuju da pozicija na poslu značajno utiče na percepcije u tri domena i na ukupan skor. Najviši prosečni skor u domenima *Merenje internih faktor, Izjava o faktorima osiguranik,* i *Crvene zastavice*, kao i u ukupnom skoru, imali su ispitanici čije su pozicije na poslu bile povezane sa finansijama i računovodstvom. Ovo ukazuje na to da zaposleni u ovim sektorima kritičnije procenjuju različite aspekte poslovanja, uključujući organizacionu strukturu, faktore osiguranika i rizike unutar kompanije. S druge strane, zaposleni u upravljanju i administraciji imali su najniži prosek u domenu *Merenje internih faktora* (19,77±5,035), što ukazuje na to da možda ne primećuju iste izazove ili su manje kritični prema internim procesima u poređenju sa zaposlenima u drugim sektorima. Ispitanici koji su bili zaposleni na pozicijama povezanim sa prodajom i posredovanjem imali su najniži prosek u domenu *Izjava o faktorima osiguranika* (16,53±5,381), što može ukazivati na to da drugačije procenjuju faktore koji utiču na osiguranike, verovatno zbog svoje direktne interakcije sa klijentima. Ispitanici koji su se bavili pravnim i regulatornim pitanjima imali su najniži skor kako u domenu Crvene zastavice (49,68±17,099), tako i u ukupnom skoru (122,97±29,150), što može ukazivati na to da su manje skloni prepoznavanju potencijalnih nepravilnosti ili rizika unutar osiguravajuće kompanije, na šta bi trebalo obratiti posebnu pažnju.

Tabela 8. Uticaj demografskih karakteristika na skorove po domenima i ukupan skor

	D1	D2	D3	D4	D5	UKUPAN SKOR
Pol[a]						
Muški pol	21,04±5,843	17,98±5,053	22,28±3,577	**14,71±4,097**	53,69±18,989	129,70±30,547
Ženski pol	21,38±5,473	16,94±5,265	22,30±4,034	**13,68±3,640**	55,04±17,149	129,32±28,511
Starost[b]						
Ispod 35 godina	**22,35±6,148**	16,80±6,413	22,45±4,519	13,89±4,348	56,80±19,854	132,30±35,210
35-44 godina	**20,17±4,915**	17,27±4,524	21,94±3,655	14,11±3,402	54,57±16,012	128,06±24,624
45-54 godina	**20,99±5,540**	17,48±4,891	22,43±3,394	13,84±3,979	51,86±17,335	126,59±27,786
Iznad 54	**23,87±6,191**	18,57±5,569	23,00±4,267	15,10±4,046	56,43±21,470	136,97±35,211
Obrazovanje[b]						
Srednja skola	**20,49±6,009**	16,44±5,540	21,59±3,886	13,78±3,410	56,22±17,362	**128,51±30,351**
Fakultet	**21,13±5,501**	17,29±5,196	22,25±3,900	14,06±3,838	53,49±17,501	**128,22±28,478**
Master	**21,47±5,548**	17,65±5,160	22,64±3,550	14,26±4,085	54,71±18,546	**130,73±30,005**
Doktorat	**26,13±5,410**	20,88±2,949	24,13±4,853	14,75±4,892	69,25±20,091	**155,13±30,518**
Radno iskustvo[b]						
0-5 godina	21,75±5,953	16,67±5,990	21,82±4,625	14,06±4,148	57,69±18,766	131,99±33,180
6-10 godina	20,87±5,999	17,43±5,402	22,24±3,401	13,87±3,403	54,43±16,412	128,85±28,470
11-20 godina	20,59±5,095	17,32±4,402	22,49±3,354	14,12±3,670	53,17±16,766	127,65±25,328
Više od 20 godina	22,35±5,789	18,30±5,431	22,58±4,053	14,19±4,219	52,95±19,829	130,37±32,398

Pozicija na poslu[b]							
Prodaja i posredovanje	**22,07±5,930**	**16,53±5,381**	22,16±3,993	13,87±3,920	**58,50±17,486**	**133,13±30,350**
Procena i likvidacija šteta	**22,19±5,533**	**18,26±4,221**	21,70±3,061	15,00±2,889	**53,89±15,207**	**131,04±22,587**
Finansije i računovodstvo	**24,87±5,730**	**21,60±5,262**	24,60±3,621	15,60±4,323	**66,27±15,746**	**152,93±31,891**
Pravna i regulatorna pitanja	**20,65±5,419**	**17,32±5,192**	21,61±3,499	13,71±4,398	**49,68±17,099**	**122,97±29,150**
Marketing i rad sa klijentima	**21,70±5,964**	**18,20±6,015**	22,40±3,098	14,70±3,498	**61,00±17,397**	**138,00±30,467**
Upravljanje i administracija	**19,77±5,035**	**16,94±5,157**	22,54±4,185	13,66±3,951	**50,71±18,625**	**123,63±29,015**

[a] Independent Samples t-test [b] One-Way ANOVA

Rezultati linearne regresije (Tabela 9) pokazuju da demografski faktori značajno utiču na skorove u nekoliko domena i na ukupan skor. U domenu *Merenje internih faktora*, obrazovanje je značajan prediktor (β=0,128, p=0,024, 95% CI: 0,147–2,042), pri čemu veći nivo obrazovanja pozitivno utiče na percepcije, dok je pozicija na poslu imala negativan uticaj (β=-0,212, p<0,001, 95% CI:-0,859–(-0,251)). U domenu *Merenje komplementarnih pružalaca usluga*, pol se izdvojio kao značajan faktor (β=-0,142, p=0,014, 95% CI: -2,011–(-0,233)), pri čemu muškarci pokazuju veću tendenciju da prijavljuju nepravilnosti. U domenu *Crvene zastavice*, pozicija na poslu je značajan prediktor (β=-0,152, p=0,011, 95% CI: -2,245–(-0,289)). Kada je reč o ukupnom skoru, obrazovanje je značajno pozitivno uticalo (β=0,103, p=0,042, 95% CI: 0,412–9,600), dok je pozicija na poslu imala negativan uticaj (β=-0,151, p = 0,012, 95% CI: -3,672–(-0,460)). S druge strane, regresioni modeli za *Izjavu o faktorima osiguranika* (p=0,102) *brokera* i *Merenje međuproizvoda i faktora* (p=0,417) nisu bili statistički značajni.

Tabela 9. Rezultati linearne regeresije za posmatrane domene - merenje internih faktora, merenje komplementarnih pružalaca usluga i crvene zastavice – "red flags"

	B	β	**P**	**95% interval poverenja**
Merenje internih faktora				
Obrazovanje	1,094	0,128	0,024	0,147-2,042
Pozicija na poslu	-0,555	-0,212	0,000	-0,859-(-0,251)
Merenje komplementarnih pružalaca usluga				
Pol	-1,122	-0,142	0,014	-2,011-(-0,233)
Crvene zastavice (red flags)				
Pozicija na poslu	-1,267	-0,152	0,011	-2,245-(-0,289)
Ukupan skor				
Obrazovanje	4,594	0,103	0,042	0,412-9,600
Pozicija na poslu	-2,066	-0,151	0,012	-3,672-(-0,460)

U okviru domena merenja internih faktora, najveći procenat ispitanika složio se sa izjavama da osiguravajuća kompanija ima složenu organizacionu strukturu i centralizovan sistem upravljanja, što sugeriše da su organizacija i upravljanje kompanijom strukturisani na način koji omogućava kontrolu i nadzor, što je važno za efikasno otkrivanje i prevenciju prevara. S druge strane, sa tvrdnjama da osiguravajuća kompanija ima neadekvatnu tehnološku infrastrukturu, da je operativni učinak nestabilan**,** najveći procenat ispitanika izrazio je neslaganje. Ovi rezultati daju

odgovor na *prvo istraživačko pitanje* u smislu da osiguravajuća društva poseduju efikasne interne sisteme koji su sposobni da otkriju i spreče prevare. Sa tvrdnjom da su zahtevi osiguranika često lažni većina se uglavnom ne slaže, dok je tvrdnja da osiguranici preuveličavaju veličinu potraživanja imala visok nivo saglasnosti. Ovi podaci se odnose na *drugo istraživačko pitanje* ukazujući na to da se osiguravajuća društva u nekoj meri suočavaju sa prevarama osiguranika. Iako se većina ispitanika ne slaže s tvrdnjama o direktnim prevarama, određene stavke poput preuveličavanja potraživanja i nepoštovanja rokova ukazuju na potencijalne slučajeve manipulacija od strane osiguranika, što implicira da prevare ipak postoje u određenoj meri. Ovi podaci upućuju na odgovor na *treće istraživačko pitanje*, a to je da osiguravajuća društva retko nailaze na prevare koje čine posrednici i brokeri. Najveći deo ispitanika se ne slaže sa tvrdnjama o prevarama u vezi sa lažnim dokumentima ili neplaćenim potraživanjima, što implicira da su posrednici u osiguranju i brokeri generalno pouzdani i da se retko suočavaju sa prevarama u svom poslovanju. Većina ispitanika se niti slaže niti ne slaže sa tvrdnjama da komplementarni pružaoci usluga naduvavaju potraživanja, daju netačne fakture, ili preduzimaju nepotrebne radnje. Ovi podaci daju odgovor na *četvrto istraživačko pitanje*, a to je da osiguravajuća društva uglavnom ne nailaze na prevare koju čine komplementarni pružaoci usluga.

VI Zaključak

Prevara predstavlja ogroman problem za osiguravajuća društva i jedini način borbe protiv prevare je korišćenje specijalizovanih sistema za upravljanje prevarama. Sadašnja istraživačka zajednica je uložila velike napore u razvijanju različitih tehnika otkrivanja prevara, zanemarujući druge, takođe važne aktivnosti upravljanja prevarama. Potrebno je otvoreno i konstruktivno razgovarati o riziku od prevare na svim nivoima u organizaciji. Promovisanje pozitivne kulture upravljanja rizikom od prevara se ističe kao posebno važna aktivnost. Borba protiv prevare u osiguranju pomaže društvu u celini.

Kao i kod svih dobrih istraživanja, dublje razumevanje procesa postavlja dodatna pitanja. Potrebno je imati u vidu postojanje moguće subjektivnosti kod ispitanika prilikom davanja odgovora, kao i veličine uzorka kako bi se moglo pričati o nekoj generalizaciji rezultata.

Strategija upravljanja rizikom treba da bude snažno fokusirana na rezultate, koji pomažu organizacijama u industriji osiguranja, da postigne njihove ciljeve. Rizik od prevare je potrebno evaluirati u kontekstu potencijalne vrednosti (stvaranje i uništenje) i uticaja na reputaciju koja je posebno osetljiva tema kada je reč o finansijskim institucijama. Pored toga, potrebno je naglasiti značaj koji ima usklađenost sa regulatornim standardima, jačanje internih kontrola i edukacija zaposlenih koji svi zajedno predstavljaju ključne elemente prevencije na kojima treba da se zasniva

strategija upravljanja rizikom od prevarnih radnji. Kontrola prevare je mnogo kompleksnije i teže pitanje nego što se to uobičajeno misli.

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INSURANCE FRAUD RISK MANAGEMENT

'Opportunity makes thieves'

Abstract

Insurance fraud undoubtedly represents a significant challenge for insurance companies, bearing in mind that it leads to financial losses, market destabilization and loss of client confidence. Effective fraud risk management is critical to protecting insurance companies and the viability of the insurance industry. This paper explores the mechanisms used by insurance companies to identify, assess and mitigate fraud risks. This paper aims to provide insight into a comprehensive approach to insurance fraud risk management and identify critical points for dealing with threats in this sector. All this should serve to find proactive strategies.

Keywords: risk, fraud, management, insurance companies
JEL classification: G22, M41, G39

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I Introduction

Insurance frauds represent one of the most serious challenges to the sustainability of insurance companies due to their far-reaching impact.[5] They encompass a wide range of illicit and unlawful activities that can result in changes in company ownership, loss of investor confidence, and ultimately, organizational bankruptcy.[6] Given the growing number of fraud cases, their complexity on one hand, and the dynamic nature of the insurance industry on the other, risk management is becoming increasingly critical in this sector. Therefore, insurance companies require comprehensive risk management strategies that include both fraud risk assessment and fraud prevention.[7] Despite the growing volume of studies on fraudulent activities, particularly in the area of fraud risk management and internal control systems in various organizations, there has been limited research deeply focused on this phenomenon. Some academic contributions that have advanced the field (e.g., Clarke[8]; Litton[9]), have been empirically scarce.

Fraud in insurance, one of the most serious issues faced by insurers, policyholders, and regulators, occurs in various forms depending on the type of policies and affects the operations of insurance companies to different extents. The manner in which policies are issued also varies significantly in terms of the level of detail required from potential policyholders. Management holds the responsibility for effective fraud risk management, as its occurrence increases insurance costs on one hand and undermines the financial strength of insurers on the other, that altogether has a negative impact on the availability of insurance services.

Moreover, there is an issue regarding the availability of data on the scope and structure of insurance fraud. Insurance companies, law enforcement, and other agencies do not give detailed information about the extent of insurance fraud. This may partly be explained by the fact that fraud, as a criminal offense, is difficult to detect and prove. In the past, there was a tendency to downplay issues related to various risks associated with their operations (at least publicly). As a result, there is a lack of information about the motivations of insurance fraud perpetrators, their

[5] Stefan Milojević, Snežana Knežević, Vladimir Šebek, "Identification and Prevention of Fraudulent Financial Reporting", *Insurance Trends*, No. 1/2024, pp. 146–163.

[6] Bosiljka Srebro, *at al.*, „Bankruptcy risk prediction in ensuring the sustainable operation of agriculture companies", *Sustainability*, No. 14/2021, 7712.

[7] Although the Solvency II regulatory framework was created with the aim of contributing to a transparent risk management, for now it is certain that the risk of insurance fraud still exists. More details from the point of view of our law: Milo Marković, „Izazovi tržišta osiguranja u Srbiji na putu ka Solventnosti II", *Tokovi osiguranja,* No. 2/2024, pp. 333-361.

[8] Michael Clarke, „Insurance fraud", *The British Journal of Criminology*, No. 1/1989, pp. 1–20.

[9] Roger Litton, „Moral hazard and insurance fraud", *European Journal on Criminal Policy and Research,* No. 3/1995, pp. 30–47.

perception of the insurance industry, and patterns or scope of their fraudulent activities. In this context, it is emphasized that this does not provide an adequate basis for identifying a strategy for fraud prevention in fraud risk management.

This paper focuses on identifying critical points in fraud risk management in the insurance sector, which should serve as a basis for further research. The paper is structured as follows. The first section examines the nature of insurance fraud and its classification based on various criteria. The importance of internal control in fraud risk management is addressed in the second section. Traditional approaches and innovations in fraud prevention are the subject of the third section, while the fourth section presents research findings and discussion, followed by concluding remarks.

The research was conducted to gain a deeper understanding of the challenges related to fraud in the insurance sector, including its perpetrators, types, and mechanisms. Its significance stems from the need to improve the efficiency of insurance companies, increase user trust, and protect the integrity of the insurance system. The research questions, defined following the objectives and scope of the study, are as follows:[10]

1. Do insurance companies have effective internal systems for detecting and preventing fraud?
2. Do policyholders commit fraud?
3. Are insurance intermediaries and/or brokers perpetrators of fraud?
4. Do providers of complementary insurance services engage in fraudulent activities?

II The Nature of Insurance Fraud

The Insurance Information Institute[11] defines insurance fraud as „a deliberate deception committed by an insurance company or agent for financial gain". According to Derrig,[12] insurance fraud is „a criminal act that involves obtaining financial benefits from an insurer or insured by misrepresenting facts or making false assumptions". These criminal acts are known for being conducted remotely, meaning they do not require personal contact between the perpetrator and the victim. This reduces the perceived risk for the perpetrator, resulting in lowering both social and psychological barriers to engaging in such criminal activity. In fact, insurance fraud lacks any personal connection between the perpetrator and the victim.

[10] Karen M. Gill, Adrian Woolley, & Martin Gill, „Insurance fraud: the business as a victim?". *Crime at Work: Studies in Security and Crime Prevention Volume I*, Palgrave Macmillan UK, London, 2005, 73–82.

[11] The Insurance Information Institute, 2020, https://www.iii.org/fact-statistic/facts-and-statistics-insurance-fraud, accessed: 2. 9. 2024.

[12] Richard A. Derrig, „Insurance fraud", *Journal of Risk and Insurance*, No. 3/2004, pp. 271–287.

Various criteria can be used to classify insurance fraud. One classification divides insurance fraud into opportunistic and premeditated. Opportunistic insurance fraud is associated with an individual's *post hoc* understanding that an insured event can be exploited for personal gain by providing false information or exaggerating a legitimate claim.[13] Premeditated fraud, on the other hand, involves the deliberate attempt to fabricate a risk event that would be covered by an insurance policy.[14] Comparing people's reactions to these types of fraud, Tennyson[15] notes that opportunistic fraud is more common than premeditated fraud. According to Akomea-Frimpong et al.,[16] insurance fraud can also be categorized as internal or external, based on the origin of the fraud – whether it occurs within or outside the insurance company. Olalekan Yusuf and Rasheed Babalola (2010)[17] observe that two types of fraud occur within an insurance company, in the form of internal fraud: one committed by the insurer and the other by employees, both of which take place within the company. Akomea et al. (2016)[18] point out two forms of external fraud: (1) fraud committed by consumers or policyholders against insurers (*policyholder fraud*) and (2) fraud committed against insurers by independent brokers or agents (*intermediary fraud*). External fraud takes the form of fraud committed by the policyholder/consumer against the insurer, either during the purchase of an insurance policy or when making a claim by obtaining false coverage or payment.[19,20] Insurance fraud can also be classified as (1) internal vs. external, (2) underwritting vs. claims fraud, and (3) soft vs. hard fraud. Internal fraud is characterized by perpetrators who are insiders in the insurance industry, such as insurers, agents, brokers, managers, and other employees or representatives of the insurer. External fraud, on the other hand, involves deceptive activities committed by outsiders, such as claimants, policyholders, and beneficiaries involving immoral actions with insiders such as agents, brokers, or third-party service providers. "Underwriting fraud" includes deceptive activities during the renewal of insurance contracts and coverage, while "claim fraud" refers to the intentional submission of fictitious or false claims. Soft fraud occurs accidentally, as it is associated with unwanted opportunistic behavior by

[13] K. Syamkumar *et al.*, „Causes and effects and prevention of insurance fraud: A systematic literature review", „Seybold Report Journal", 6/2024, pp. 106–122.
[14] Richard A. Derig, *Insurance fraud*, *Journal of Risk and Insurance*, No. 2002/3, pp. 271–287.
[15] Sharon Tennyson, „Economic institutions and individual ethics: A study of consumer attitudes toward insurance fraud", *Journal of Economic Behavior & Organization*, No. 2/1997, pp. 247–265.
[16] Isaac Akomea-Frimpong, Charles Andoh, Eric Dei Ofosu-Hene, „Causes, effects and deterrence of insurance fraud: evidence from Ghana", *Journal of Financial Crime*, No. 4/2016, pp. 678–699.
[17] Tajudeen Olalekan Yusuf, Abdur Rasheed Babalola, „Control of insurance fraud in Nigeria: an exploratory study (case study)", *Journal of Financial Crime*, No. 4/2009, pp. 418–435.
[18] Isaac Akomea-Frimpong, Charles Andoh, Eric Dei Ofosu-Hene, pp. 678–699
[19] Richard A. Derig, pp. 271–287
[20] Tajudeen Olalekan Yusuf, Abdur Rasheed Babalola, pp. 418–435

generally honest individuals and can depend on the language used by the interested party. However, hard fraud is similar to claims fraud and tends to involve carefully planned and meticulously executed schemes aimed at "scamming" the insurance, so to speak.

The diversity of *modus operandi* reflects different opportunities available to participants occupying various positions in the market, and can be categorized into four groups:

a) *Intermediary fraud*: it is carried out by professionals such as independent brokers or insurance agents who mediate in the purchase of policies between buyers and providers. Examples include cases where exaggerated claims are submitted on behalf of policyholders, or fraudulent claims made by policyholders, and the sale of fraudulent policies.

b) *Insurer's fraud*: perpetrators disguise themselves as insurance companies and mislead clients by selling non-existent policies or submitting fraudulent policies to the issuer in order to fraudulently claim commissions.

c) *Policyholder (or customer) fraud*: this refers to fraud against the insurer where the policyholder obtains incorrect coverage or finds ways to avoid payment. Examples include submitting exaggerated claims, falsifying details such as medical history, policies signed after initial meetings, car insurance fraud, and faking claims for death/kidnapping/murder by customers.

d) *Internal fraud*: this involves employees within insurance companies exploiting their legitimate position to commit fraud. An example of such fraud is when employees collude with clients to facilitate payouts for personal gain.

Insurance fraud can occur in two main phases of a policy's lifecycle: the beginning/renewal phase and the claims phase. [21] Types of fraud that occur at the start of a policy include:

Fronting – This typically occurs in motor vehicle frauds — for instance, parents insuring a vehicle in their name (claiming ownership) on behalf of their child. In this way, it is possible to obtain insurance at a preferential rate or insure a risk that would otherwise be denied.

Misrepresentation – Here, an individual deliberately fails to inform the insurer about factors that could affect the risk or provides false or misleading information. Insurance can be granted where it might otherwise be denied, often at a preferential rate. For example, a claimant might tell the insurer that there were no claims in the past five years, when in fact a claim was filed during that period.

[21] Gill, Karen Ann, *Insurance fraud: causes, characteristics and prevention*, University of Leicester, Thesis, 2002, https://hdl.handle.net/2381/29106, accessed: 2. 3. 2024.

False Insurance – This occurs when an individual or group seeks insurance for a non-existent risk, with the intention of later filing a claim for the policy.

Multiple policies – In this case, an individual takes out several policies with the intent to later intentionally submit multiple claims for the same loss.

Types of fraud that occur in the claims phase include the following:

Exaggeration – Exaggeration can take three forms:

- Inflation of value: when an individual purposely claims more than the actual value of an item.
- Additional items: where an individual adds one or more items to a claim.
- Upgraded model: where an individual claims an upgraded (and more expensive) model.

Multiple Claims – This type of fraud overlaps with multiple policies and can take two forms:

- An individual seeks compensation from more than one legitimate policy for the same loss; for example, a camera might be lost on vacation, and the policyholder claims the same loss from both their travel insurer and home insurer, receiving payment twice.
- An individual takes out several policies based on false statements to submit multiple claims for a fictitious or real loss.

False Claim – A false claim can be executed in two ways:

- An individual takes out valid insurance and later decides to file a false claim.
- A fraud is planned from the outset, and the false claim is part of the scheme. Example: staged accidents.

III Internal Control and Its Effectiveness in Insurance

Measuring the extent of fraud in insurance is not simple. A large part of insurance fraud remains undetected, and not all frauds are well defined. For the insurer, it can be difficult to distinguish legitimate negotiation from intentional deception or mistake. Therefore, well-structured and appropriately positioned control systems are essential. A significant shift is taking place in the strategy for combating fraud. The focus is shifting from a 20% prevention/deterrence and 80% detection/investigation ratio to the opposite ratio. Some of the mistakes that insurance companies make in their efforts to prevent fraud include: failing to define specific responsibilities for fraud prevention; not setting clear goals or policies for fraud management; insufficiently assessing fraud risks, especially catastrophic ones; missing opportunities for cost savings through fraud reduction; and over-relying on inefficient controls.[22]

[22] Toby J. F. Bishop, „Preventing, deterring, and detecting fraud: What works and what doesn't", *Journal of Investment Compliance*, No. 2/2004, pp. 120–127.

The effectiveness of internal control has been a subject of reporting by auditors within integrated audits. The risk management model currently used in auditing standards is designed for financial statement audits, not audits for internal control purposes, which is a key part of integrated audits. Given that process auditing (internal control) is conceptually different from result auditing (financial statements), it inevitably leads to the conclusion that auditors need a different risk management model to serve as the foundation for a conceptual framework for internal control audits (Akresh, 2010).

"Frauditing" (fraud audit; fraud investigation by auditors) has a unique position in dealing with complex issues such as bribery and corruption due to its focused approach, specialized skills, and comprehensive methodologies. "Frauditing" is a concept developed by Jonathan T. Marks in 1996[23] and represents a strategic examination of financial data and operational practices aimed at uncovering intentional frauds that jeopardize the integrity of the organization. The definition of fraud auditing was developed to highlight the proactive, comprehensive, and investigative nature of fraud as a specialized form of auditing specifically designed to fight and detect fraud within organizations. It incorporates a mix of forensic examination, analytical reviews, and investigative interviews to identify discrepancies, detect irregularities, and uncover both open and concealed frauds. As a proactive mechanism, fraud control serves as the cornerstone in safeguarding assets (especially internal control),[24] ensuring compliance, and promoting a culture of transparency and liability. The effectiveness and efficiency of internal controls are of particular significance in the public sector. This can be seen in the example of compliance audits with laws and regulations, where controls are aimed at reducing compliance risks, as well as audits of economy, efficiency, and effectiveness, where controls focus on risks that impede achieving their optimal values.[25]

IV Traditional Approaches and Innovations for Fraud Prevention

In order to effectively manage the risk of fraud, a holistic approach must be applied, which considers all six fraud management activities, namely, (1) deterrence, (2) prevention, (3) detection, (4) investigation, (5) sanctioning and compensation, and

[23] Jonathan T. Marks, 2020, https://www.linkedin.com/pulse/use-red-flags-detect-misconduct-fraud-even-bribery-jonathan-t-/, accessed: 4. 9. 2024.

[24] Marko Špiler, *et al.*, „Does the Internal Control System Play a Strong Safeguarding Role Against Fraud in Local Communities?", *Lex Localis: Journal of Local Self-Government*, 3/2024, pp. 188–208.

[25] Jozefina Beke Trivunac, Nebojša Jeremić, „Jedinstvene karakteristike interne revizije u javnom sektoru i Globalni standardi interne revizije", *Revizor – časopis za upravljanje organizacijama, finansije i reviziju*, No. 2-3/2023, pp. 83– 93.

(6) monitoring.[26] Measurement, detection, and prevention of fraud are advancing through the application of statistical models and intelligent technologies, which are used for analyzing databases in order to ensure the efficient resolution of issues related to various types of claims. At the same time, strategic analysis is applied to property liability and health insurance cases.[27]

It is well-known that insurance fraud is a serious and growing problem, so it is indisputable that traditional approaches to combating fraud are inadequate. Considering the frequency of fraud in insurance in developed countries, private investigators and public authorities must continually learn how to use new technologies to help insurance companies effectively detect and prevent fraud, which would have a positive impact on the insurance industry. The increasing presence of digital services in this sector has prompted insurance companies to collect and analyze information to assess the risk of fraudulent activities effectively. However, this issue can be linked to the problem that intensifies under circumstances when control over the process is handed over to a developing intermediary services market.

Among other things, computer technology has significantly impacted administration and investigative techniques. There is significant pressure to identify activities that may appear fraudulent within a very short time frame to initiate the appropriate investigation. Advanced computer software opens up possibilities for creating more efficient strategies to successfully identify and distinguish legitimate claims from those that are not. Recently established computer platforms, such as spreadsheets, tables, big data, forensic analytics, text analytics, and expert systems, are increasingly being used as tools for fraud detection and prevention.[28] The longer fraud remains undetected, the greater the potential for loss and the fewer the chances for recovery. On the other hand, it is important to keep in mind that, with advancements in computer technology, fraud has become one of the highest-risk criminal activities worldwide, making early detection and prevention essential.[29] Today's technology used in the fight against fraud continues to expand and become more efficient, and therefore, it is important to evaluate how fraud schemes are changing. Software solutions have made the most progress in areas where learning from experience can increase efficiency in detecting fraudulent activities and identifying patterns.[30]

[26] Štefan Furlan, Marko Bajec, „Holistic approach to fraud management in health insurance", *Journal of Information and Organizational Sciences*, No. 2/2008, pp. 99–114.

[27] Richard A. Derrig, „Insurance Fraud", *Journal of Risk & Insurance*, 3/2002, pp. 271–287.

[28] Rafidah Zainal, Ayub Md. Som, Nafsiah Mohamed, „A review on computer technology applications in fraud detection and prevention", *Management & Accounting Review (MAR)*, No. 2/2017, pp. 59–72.

[29] *Ibidem*.

[30] „The State of Insurance Fraud Technology – A study of insurer use, strategies and plans for anti-fraud technology, November 2016", *SAS, Coalition Against Insurance Fraud*, https://www.the-digital-insurer.com/wp-content/uploads/2017/05/901-coalition-against-insurance-fraud-the-state-of-insurance-fraud-technology-105976.pdf, accessed: 24. 9. 2024.

V Methodological Section

Empirical research was conducted using a survey method with a selected sample of 313 respondents. For the purpose of this research, a questionnaire was prepared and distributed online. The questionnaire used in this study consisted of 48 statements, which were grouped into five domains based on thematic similarities. Respondents indicated their level of agreement with each statement on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). In the sample, 39.0% (122) of respondents were male, while 61.0% (191) were female. The largest group of respondents, 40.3% (126), belonged to the age group of 35 to 44 years, followed by 22.7% (71) who were under 35, 27.5% (86) in the 45 to 54 age group, and 9.6% (30) who were older than 54. Regarding educational level, the majority of respondents, 63.3% (198), had completed a university degree, while 13.1% (41) had completed high school, 21.2% (66) held a master's degree, and 2.6% (8) had a PhD. When it comes to work experience, the largest number of respondents, 40.6% (127), had between 11 and 20 years of work experience, 26.5% (83) had between 0 and 5 years, 14.7% (46) had between 6 and 10 years, and 18.2% (57) had more than 20 years of experience. In the sample, 29.4% (92) of respondents worked in sales and brokerage, while 16.9% (53) worked in risk assessment and liquidation. In the finance and accounting sector, 4.8% (15) of respondents were employed, and 9.9% (31) worked in legal and regulatory issues. Additionally, 3.2% (10) worked in marketing and customer service, while the largest group, 35.8% (112), worked in management and administration. The demographic characteristics of the respondents are presented in Table 1.

Table 1. Demographic Characteristics of Respondents

DEMOGRAPHIC CHARACTERISTICS	N (%)
Gender	
Male	122 (39,0%)
Female	191 (61,0%)
Age	
Under 35 years	71 (22,7%)
35-44 years	126 (40,3%)
45-54 years	86 (27,5%)
Over 54 years	30 (9,6%)
Education	
High school	41 (13,1%)
University degree	198 (63,3%)
Master's degree	66 (21,2%)
PhD	8 (2,6%)

Work experience	
0-5 years	83 (26,5%)
6-10 years	46 (14,7%)
11-20 years	127 (40,6%)
More than 20 years	57 (18,2%)
Job position	
Sales and brokerage	92 (29,4%)
Risk assessment and liquidation	53 (16,9%)
Finance and accounting	15 (4,8%)
Legal and regulatory issues	31 (9,9%)
Marketing and customer service	10 (3,2%)
Management and administration	112 (35,8)

For data analysis in this study, SPSS software (IBM SPSS Statistics), version 20, was used. The data collected were analyzed using descriptive statistics methods. The results of the questionnaire were presented as frequencies, i.e. the number of respondents who selected specific answers, and as the percentage of their representation. Pearson's correlation coefficient was used to examine the relationship between numerical variables. Reliability and internal consistency of the variables were assessed using the Cronbach's alpha coefficient. Linear regression was applied to examine the relationship between independent variables and the dependent variable.

VI Results and Discussion

The first domain, "Measurement of internal factors" included a total of eight statements, with the distribution of responses based on the level of agreement and the average value for each statement presented in Table 2. The average values for the statements within the first domain ranged from a minimum of 1,96 for the statement *The insurance company does not develop new services* to a maximum of 4,08 for the statement *The insurance company has a complex organizational structure*. This indicates that respondents most strongly perceive the complexity of the organizational structure and the presence of a centralized management system (3,56), while they least agree with statements pointing to a lack of new service development, operational performance stability (2,00), and investment in employee qualifications (2,10). Other statements, such as inadequate technological infrastructure (2,36) and a reward system that does not meet employees' needs (2,85), have average values suggesting neutrality or slight disagreement.

Table 2. Distribution of responses to statements in the domain "Measurement of internal factors"

	1 – Strongly Disagree	2 – Mostly Disagree	3 – Neither Agree Nor Disagree	4 – Mostly Agree	5 – Completely Agree	Average Value ± SD
T1: The insurance company has a complex organizational structure						
	6 (1,9)	16 (5,1)	48 (15,3)	119 (38,0)	124 (39,6)	4,08±0,961
T2: The organizational structure of the insurance company lacks a clear separation of duties and responsibilities						
	103 (32,9)	93 (29,7)	49 (15,7)	47 (15,0)	21 (6,7)	2,33±1,260
T3: The insurance company's reward and incentive system does not meet employees' needs						
	52 (16,6)	68 (21,7)	94 (30,0)	72 (23,0)	27 (8,6)	2,85±1,200
T4: The insurance company has a centralized management system						
	17 (5,4)	32 (10,2)	87 (27,8)	112 (35,8)	65 (20,8)	3,56±1,093
T5: The insurance company has inadequate technological infrastructure						
	98 (31,3)	82 (26,2)	72 (23,0)	44 (14,1)	17 (5,4)	2,36±1,212
T6: The operational performance of the insurance company is unstable						
	135 (43,1)	85 (27,2)	62 (19,8)	19 (6,1)	12 (3,8)	2,00±1,105
T7: The insurance company does not invest in enhancing employee qualifications or provide professional and technical training						
	122 (39,0)	92 (29,4)	58 (18,5)	29 (9,3)	12 (3,8)	2,10±1,134
T8: The insurance company does not develop new services						
	143 (45,7)	90 (28,8)	42 (13,4)	26 (8,3)	12 (3,8)	1,96±1,127

The responses to the eight statements were collected, and a score for this domain was calculated for each respondent. The average total score for the domain was 21,24±5,613, out of a maximum possible score of 40. These results indicate that, while respondents do not fully agree with statements pointing to shortcomings in technological infrastructure, operational performance stability, and employee training investment, they do recognize the complexity of the organizational structure.

The second domain, *Statements on Policyholder Factors*, included a total of seven statements (Table 3). The average values for the statements within this domain show that respondents generally disagree with statements suggesting problems in dealings with policyholders. The lowest average value was for the statement *The insurance company rarely reviews and updates the content and terms of its insurance contracts* (2,02), while the highest was for *Policyholders exaggerating the size of claims* (3,16). The average total score for the domain was 17,35±5,200, out of a possible 35. This result indicates a moderate perception of issues related to policyholder factors.

Table 3. Distribution of Responses to Statements in the Domain "Statements on Policyholder Factors"

	1 – Strongly Disagree	2 – Mostly Disagree	3 – Neither Agree Nor Disagree	4 – Mostly Agree	5 – Completely Agree	Average Value ± SD
T9: The insurance company rarely reviews and updates the content and terms of its insurance contracts						
	132 (42,2)	89 (28,4)	57 (18,2)	23 (7,3)	12 (3,8)	2,02±1,116
T10: The insurance company issues incomplete insurance policies, requiring additional information upon client request						
	147 (47,0)	77 (24,6)	49 (15,7)	31 (9,9)	9 (2,9)	1,97±1,133
T11: Policyholder claims are often fraudulent						
	72 (23,0)	110 (35,1)	86 (27,5)	35 (11,2)	10 (3,2)	2,36±1,054
T12: Payments made to policyholders represent unexpected amounts						
	107 (34,2)	84 (26,8)	90 (28,8)	25 (8,0)	7 (2,2)	2,17±1,060
T13: Policyholders exaggerate the size of claims						
	25 (8,0)	54 (17,3)	110 (35,1)	93 (29,7)	31 (9,9)	3,16±1,078
T14: Occasionally, there is collusion among professionals in favor of policyholders						
	63 (20,1)	67 (21,4)	98 (31,3)	55 (17,6)	30 (9,6)	2,75±1,233
T15: Policyholders fail to meet deadlines specified in their insurance policies						
	30 (9,6)	79 (25,2)	115 (36,7)	70 (22,4)	19 (6,1)	2,90±1,047

The average values for the statements within the third domain *Measurement of Intermediary Products and Broker Factors*, as well as the distribution of responses, are presented in Table 4. The results show that respondents mostly agree with the statement that the majority of significant insurance services are offered through the company, agents, and brokers (3,77), as well as with the statements that the company uses a large number of agents and brokers to provide insurance services (3,56) and that agents have the authority to sign contracts (3,57). The statement *Agents and brokers receive premiums and issue false documents* has the lowest average value (2,02). The average value of the total score for this domain is 22,29±3,856, out of a maximum of 35. This result suggests that respondents recognize the importance of intermediaries and brokers in providing insurance services, but also indicates the possibility of ambiguities or concerns regarding their activities and transparency, which may require further investigation and analysis.

Table 4. Distribution of responses to statements from the domain "Measurement of Intermediary Products and Broker Factors"

1 – Strongly Disagree	2 – Mostly Disagree	3 – Neither Agree Nor Disagree	4 – Mostly Agree	5 – Completely Agree	Average Value ± SD	1 – Strongly Disagree
T16: Most significant insurance services are offered through the company, agents, and brokers						
	17 (5,4)	17 (5,4)	67 (21,4)	132 (42,2)	80 (25,6)	3,77±1,061
T17: Brokers keep records that contain the names of clients						
	13 (4,2)	19 (6,1)	152 (48,6)	75 (24,0)	54 (17,3)	3,44±0,982
T18: Agents and brokers receive premiums and issue false documents						
	140 (44,7)	58 (18,5)	90 (28,8)	19 (6,1)	6 (1,9)	2,02±1,074
T19: The company uses a large number of agents and brokers to provide insurance services						
	7 (2,2)	23 (7,3)	121 (38,7)	113 (36,1)	49 (15,7)	3,56±0,919
T20: Representatives have the authority to sign contracts						
	27 (8,6)	20 (6,4)	103 (32,9)	74 (23,6)	89 (28,4)	3,57±1,210
T21: Intermediaries and brokers charge commissions and premiums						
	32 (10,2)	21 (6,7)	116 (37,1)	81 (25,9)	63 (20,1)	3,39±1,180
T22: The number of uncollected claims from policyholders has significantly increased						
	63 (20,1)	70 (22,4)	137 (43,8)	32 (10,2)	11 (3,5)	2,55±1,034

The fourth domain covers the respondents' views on the behavior of complementary service providers ("Measurement of Complementary Service Providers"). The average values for the statements within this domain, as well as the distribution of responses, are presented in Table 5. According to the results, the average values indicate a moderate level of disagreement or neutral views when it comes to statements such as inflating claims and intentionally issuing incorrect invoices. The highest level of agreement was achieved for statements suggesting that some actions of these service providers might be unnecessary, where the average score was 3,04. The average value of the total score for the domain *Measurement of Complementary Service Providers* was 14,08±3,851, out of a maximum of 25, indicating a lower level of agreement among respondents with statements about potential irregularities among complementary service providers. These results suggest that respondents are aware of potential issues but do not perceive them as ubiquitous or seriously threatening the transparency and efficiency of insurance services delivery.

Table 5. Distribution of responses to the statements from the domain "Measurement of Complementary Service Providers"

	1 – Strongly Disagree	2 – Mostly Disagree	3 – Neither Agree Nor Disagree	4 – Mostly Agree	5 – Completely Agree	Average Value ± SD
T23: Complementary service providers (related services) inflate claims						
	40 (12,8)	47 (15,0)	145 (46,3)	58 (18,5)	23 (7,3)	2,93±1,067
T24: Complementary service providers intentionally issue incorrect invoices						
	81 (25,9)	56 (17,9)	133 (42,5)	34 (10,9)	9 (2,9)	2,47±1,077
T25: Occasionally, cases of insurance services being provided by non-insurers arise						
	61 (19,5)	48 (15,3)	138 (44,1)	48 (15,3)	18 (5,8)	2,73±1,116
T26: Some actions taken by complementary service providers are unnecessary						
	24 (7,7)	36 (11,5)	177 (56,5)	54 (17,3)	22 (7,0)	3,04±0,936
T27: The company uses a large number of complementary service providers						
	25 (8,0)	40 (12,8)	195 (62,3)	43 (13,7)	10 (3,2)	2,91±0,841

The next domain includes statements that examine the presence of "red flags" in business operations, or indicators that could signal potential risks and problems in financial practices and accounting ("Red flags"). The average values, as well as the distribution of responses for the statements within this domain, are shown in Table 6. The analysis of the responses shows that the highest level of agreement was achieved with the statement regarding the existence of barriers that hinder efficient business operations, with an average value of 2,94±1,207. In contrast, the lowest level of agreement, 2,42, was observed with the statement regarding an overly complex organizational structure involving unusual legal entities or management lines, indicating that participants identified the complexity of the structure as the least significant obstacle. Responses to these statements were summed to obtain an overall score for each respondent in this domain. The average total score for the domain, which includes 21 statements, was 54,51±17,870, out of a possible maximum of 105. This value indicates the average level of agreement among respondents with statements indicating the presence of "red flags" in business operations.

Table 6. Distribution of responses to statements in the "Red flags" domain

	1 – Strongly Disagree	2 – Mostly Disagree	3 – Neither Agree Nor Disagree	4 – Mostly Agree	5 – Completely Agree	Average Value ± SD
T28: The dominant behavior of management in dealing with auditors, particularly attempts to influence the scope of the auditors' work						
	73 (23,3)	43 (13,7)	148 (47,3)	40 (12,8)	9 (2,9)	2,58±1,068
T29: Significant, unusual, or very complex transactions particularly occur near the end of the year						
	62 (19,8)	53 (16,9)	131 (41,9)	49 (15,7)	18 (5,8)	2,71±1,125

T30: Significant related-party transactions not involved in regular business operations or business with related parties that are not audited or audited by another company

66 (21,1) 43 (13,7) 176 (56,2) 19 (6,1) 9 (2,9) 2,56±0,982

T31: Frequent disputes with the current or previous auditor regarding accounting, auditing issues, or reporting matters

80 (25,6) 36 (11,5) 165 (52,7) 25 (8,0) 7 (2,2) 2,50±1,029

T32: Repeated attempts by management to justify marginal or inadequate accounting based on materiality

87 (27,8) 34 (10,9) 151 (48,2) 30 (9,6) 11 (3,5) 2,50±1,101

T33: Inadequate monitoring of significant internal controls

93 (29,7) 52 (16,6) 116 (37,1) 41 (13,1) 11 (3,5) 2,44±1,148

T34: Dominant management by one person or a small group in a business not controlled by owners without compensation controls

81 (25,9) 39 (12,5) 145 (46,3) 33 (10,5) 15 (4,8) 2,56±1,125

T35: Excessive pressure on operational management or staff to achieve financial goals (sales and profitability as incentive goals) exerted by the board of directors or CEOs

48 (15,3) 40 (12,8) 120 (38,3) 80 (25,6) 25 (8,0) 2,98±1,149

T36: Significant bank accounts or subsidiaries or branches of companies in tax jurisdictions that seem to have no clear business justification

87 (27,8) 41 (13,1) 152 (48,6) 23 (7,3) 10 (3,2) 2,45±1,070

T37: Inefficient accounting and information systems

93 (29,7) 53 (16,9) 109 (34,8) 44 (14,1) 14 (4,5) 2,47±1,182

T38: Failure by management to promptly correct a report regarding known internal control conditions

49 (15,7) 138 (44,1) 25 (8,0) 11 (3,5) 2,42±1,092

T39: Excessive interest by management in maintaining or increasing the entity's stock price or earnings trend

41 (13,1) 162 (51,8) 44 (14,1) 14 (4,5) 2,77±1,032

T40: Repeated negative cash flows from operations or inability to generate cash flows during earnings reports and earnings growth

34 (10,9) 169 (54,0) 20 (6,4) 11 (3,5) 2,52±1,047

T41: Unrealistic profitability or expectations at the trend level by management in overly optimistic press releases or annual report messages

51 (16,3) 139 (44,4) 38 (12,1) 20 (6,4) 2,67±1,125

T42: High turnover or hiring of inefficient personnel in accounting, internal auditing, or in IT

48 (15,3) 125 (39,9) 53 (16,9) 23 (7,3) 2,75±1,174

T43: Unreasonable demands on the auditor, such as unreasonable time limits regarding the completion of the audit or issuance of the audit report

42 (13,4) 159 (50,8) 21 (6,7) 16 (5,1) 2,56±1,082

T44: Assets, liabilities, revenues, or expenses based on significant estimations that involve subjective judgments or uncertainties that are difficult to verify

30 (9,6) 179 (57,2) 29 (9,3) 11 (3,5) 2,66±1,017

T45: Rapid growth or unusual profitability, especially compared to other companies in the insurance industry

	48 (15,3)	141 (45,0)	34 (10,9)	15 (4,8)	2,57±1,110
T46: Excessive influence of non-financial management in selecting accounting principles or determining significant estimations					
	43 (13,7)	152 (48,6)	30 (9,6)	8 (2,6)	2,50±1,053
T47: Too complex organizational structure which involves unusual legal entities or management lines					
	60 (19,2)	126 (40,3)	33 (10,5)	8 (2,6)	2,42±1,077
T48: Do you think there are obstacles that hinder the efficient performance of the work?					
	52 (16,6)	103 (32,9)	76 (24,3)	30 (9,6)	2,94±1,207

The total score, obtained by summing the scores of all five domains (a total of 48 statements), reflects various aspects covered by the research. The average value of this total score was 129,47±29,27, out of a possible maximum of 240, which indicates moderate agreement among respondents with the statements across all domains. The minimum score was 53, while the maximum was 208, showing considerable variation in the perception and assessments of different risk factors and measures in insurance among the respondents.

The results indicate the presence of internal consistency across most domains and a high level of reliability for the entire questionnaire. The domains *Measurement of Internal Factors* (α=0,766), *Statement about Insurer Factors* (α=0,798), and *Measurement of Complementary Service Providers* (α=0,818) show good reliability, considering that Cronbach's alpha values are above 0,7, suggesting that the items in these domains correlate well with each other. The domain *Measurement of Intermediaries and Broker Factors* (α=0,538) shows low reliability, while the *Red Flags* domain (α=0,967) has extremely high reliability. The entire questionnaire shows high reliability (α=0,953), indicating the overall consistency of the entire questionnaire (Table 7).

Table 7. Cronbach's Alpha Values by Domain and for the Entire Questionnaire

DOMAIN	*Cronbach's alpha*
Measurement of internal factors	0,766
Statement about insurer factors	0,798
Measurement of intermediaries and broker Factors	0,538
Measurement of complementary service Providers	0,818
Red flags	0,967
ENTIRE QUESTIONNAIRE	0,953

The domain *Measurement of Internal Factors* has a strong positive statistically significant correlation with the overall score (r=0,703, p=0,000), indicating that responses in this domain are significantly related to the overall results of the questionnaire, which is also the case for the domain *Statement on Insured Factors*

(r=0,768, p=0,000). The domain *Measurement of Intermediary Products and Broker Factors* shows a moderate correlation (r=0,531, p=0,000) with the overall score. The correlation coefficient is lower compared to other domains, which aligns with the lower reliability of this domain. Such results potentially suggest that there is greater variability in responses or lower relevance of this domain to the overall score. The domain *Measurement of Complementary Service Providers* has a strong positive significant correlation with the overall score (r=0,695, p=0,000), while the *Red flags* domain shows a very high correlation with the overall score (r=0,929, p=0,000), indicating that this domain has the greatest impact on the overall result. Given the high Cronbach's alpha for this domain (0,967), we can conclude that the responses in this domain are highly homogeneous and extremely relevant for the entire questionnaire. These results can be visualized in the graphs presented in Figure 1.

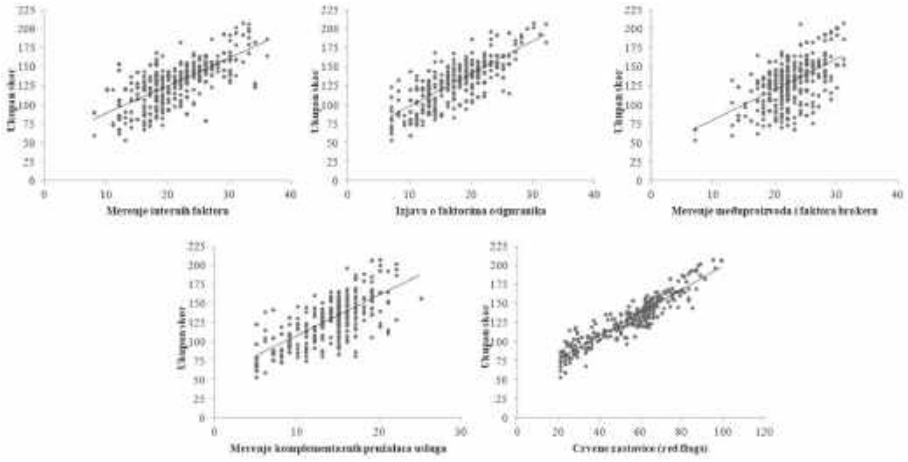

Figure 1. Correlation between individual domains and the overall score (measurement of internal factors, statement on insured factors, measurement of intermediary products and broker factors, measurement of complementary service providers, and "red flags").

Analysis of factors affecting domain scores and overall score

By examining the data in Table 8, several conclusions can be made. In terms of gender, a statistically significant difference was observed only in the domain *Measurement of Complementary Service Providers*, where men had significantly higher values than women (14,71 versus 13,68, p=0,020), indicating a higher degree of agreement with statements about potential irregularities in the behavior of these service providers, such as inflating claims or issuing incorrect invoices. Regarding

age, the results show significant differences between age groups only for the domain *Measurement of Internal Factors* (p=0,003). Respondents older than 54 years had the highest average score in this domain (23,87±6,19), suggesting that older employees experience more challenges within the organizational structure of the insurance company. This may indicate that older respondents, compared to younger respondents, perceive the complexity of the organizational structure, inadequate technological infrastructure, or instability in operational performance as more significant issues. The results showed that education level significantly influences the perception of internal factors within the insurance company, as well as the overall score. The group of respondents with a PhD had the highest average score in the *Measurement of Internal Factors* domain (26,13±5,41), indicating that highly educated individuals assess the complexity of the organizational structure, technological infrastructure, and company operational performance more critically. On the other hand, the group with a high school education had the lowest average score (20,49±6,01). Regarding the overall score, the group with a PhD had the highest average value (155,13±30,518), suggesting their greater criticality or awareness of all aspects examined through the questionnaire. No statistically significant differences were found for other domains between groups with different educational levels. The results showed that groups with 11 to 15 years of work experience and more than 16 years of work experience had the highest average values in most domains. However, the results indicated that no statistically significant differences were observed between groups in any of the analyzed domains. The results show that job position significantly affects perceptions in three domains and the overall score. The highest average scores in the *Measurement of Internal Factors*, *Statement on Insured Factors*, and *Red flags* domains, as well as in the overall score, were found among respondents whose positions were related to finance and accounting. This suggests that employees in these sectors assess various aspects of business operations more critically, including the organizational structure, insured factors, and risks within the company. On the other hand, employees in management and administration had the lowest average in the *Measurement of Internal Factors* domain (19.77±5.035), which indicates that they may not notice the same challenges or are less critical to internal processes compared to employees in other sectors. Respondents employed in sales and brokerage positions had the lowest average in the *Statement on Insured Factors* domain (16,53±5,381), which may indicate that they evaluate the factors affecting insured parties differently, likely due to their direct interaction with clients. Respondents working in legal and regulatory fields had the lowest scores both in the *Red flags* domain (49,68±17,099) and in the overall score (122,97±29,150), which may indicate that they are less inclined to recognize potential irregularities or risks within the insurance company, a point that should be given special attention.

Table 8. Impact of Demographic Characteristics on Domain Scores and Total Score

	D1	D2	D3	D4	D5	TOTAL SCORE
Gender[a]						
Male	21,04±5,843	17,98±5,053	22,28±3,577	**14,71±4,097**	53,69±18,989	129,70±30,547
Female	21,38±5,473	16,94±5,265	22,30±4,034	**13,68±3,640**	55,04±17,149	129,32±28,511
Age[b]						
Under 35	**22,35±6,148**	16,80±6,413	22,45±4,519	13,89±4,348	56,80±19,854	132,30±35,210
35-44 years	**20,17±4,915**	17,27±4,524	21,94±3,655	14,11±3,402	54,57±16,012	128,06±24,624
45-54 years	**20,99±5,540**	17,48±4,891	22,43±3,394	13,84±3,979	51,86±17,335	126,59±27,786
Over 54	**23,87±6,191**	18,57±5,569	23,00±4,267	15,10±4,046	56,43±21,470	136,97±35,211
Education[b]						
High School	**20,49±6,009**	16,44±5,540	21,59±3,886	13,78±3,410	56,22±17,362	**128,51±30,351**
University	**21,13±5,501**	17,29±5,196	22,25±3,900	14,06±3,838	53,49±17,501	**128,22±28,478**
Master's Degree	**21,47±5,548**	17,65±5,160	22,64±3,550	14,26±4,085	54,71±18,546	**130,73±30,005**
PhD	**26,13±5,410**	20,88±2,949	24,13±4,853	14,75±4,892	69,25±20,091	**155,13±30,518**
Work experience[b]						
0-5 years	21,75±5,953	16,67±5,990	21,82±4,625	14,06±4,148	57,69±18,766	131,99±33,180
6-10 years	20,87±5,999	17,43±5,402	22,24±3,401	13,87±3,403	54,43±16,412	128,85±28,470
11-20 years	20,59±5,095	17,32±4,402	22,49±3,354	14,12±3,670	53,17±16,766	127,65±25,328
More than 20 years	22,35±5,789	18,30±5,431	22,58±4,053	14,19±4,219	52,95±19,829	130,37±32,398
Job position[b]						

Sales and brokerage positions	**22,07±5,930**	**16,53±5,381**	22,16±3,993	13,87±3,920	**58,50±17,486**	**133,13±30,350**
Risk assessment and liquidation	**22,19±5,533**	**18,26±4,221**	21,70±3,061	15,00±2,889	**53,89±15,207**	**131,04±22,587**
Finance and Accounting	**24,87±5,730**	**21,60±5,262**	24,60±3,621	15,60±4,323	**66,27±15,746**	**152,93±31,891**
Legal and Regulatory issues	**20,65±5,419**	**17,32±5,192**	21,61±3,499	13,71±4,398	**49,68±17,099**	**122,97±29,150**
Marketing and customer service	**21,70±5,964**	**18,20±6,015**	22,40±3,098	14,70±3,498	**61,00±17,397**	**138,00±30,467**
Management and Administration	**19,77±5,035**	**16,94±5,157**	22,54±4,185	13,66±3,951	**50,71±18,625**	**123,63±29,015**

[a] Independent Samples t-test [b] One-Way ANOVA

The results of the linear regression (Table 9) show that demographic factors significantly affect the scores in several domains and the overall score. In the domain *Measurement of Internal Factors*, education is a significant β=0,128, p=0,024, 95% CI: 0,147–2,042), with higher levels of education having a positive impact on perceptions, while the position in the job had a negative impact (β=-0,212, p<0,001, 95% CI:-0,859–(-0,251)).

In the domain *Measurement of Complementary Service Providers*, gender stood out as a significant factor (β=-0,142, p=0,014, 95% CI: -2,011–(-0,233)), with men showing a higher tendency to report irregularities. In the *Red flags* domain, the position at work is a significant predictor (β=-0,152, p=0,011, 95% CI: -2,245–(-0,289)). Regarding the overall score, education had a significant positive effect (β=0,103, p=0,042, 95% CI: 0,412–9,600), while the position at work had a negative impact (β=-0,151, p = 0,012, 95% CI: -3,672–(-0,460)). On the other hand, the regression models for the *Statement on Insured Factors* (p=0,102), brokers, and *Measurement of Intermediates and Broker Factors* (p=0,417) were not statistically significant.

Table 9. Results of Linear Regression for the Observed Domains – Measurement of Internal Factors, Measurement of Complementary Service Providers, and Red Flags

	B	β	P	95% confidence interval
Measurement of Internal Factors				
Education	1,094	0,128	0,024	0,147-2,042
Job Position	-0,555	-0,212	0,000	-0,859-(-0,251)
Measurement of Complementary Service Providers				
Gender	-1,122	-0,142	0,014	-2,011-(-0,233)
Red flags				
Job Position	-1,267	-0,152	0,011	-2,245-(-0,289)
Total Score				
Education	4,594	0,103	0,042	0,412-9,600
Job Position	-2,066	-0,151	0,012	-3,672-(-0,460)

Within the domain of measuring internal factors, the highest percentage of respondents agreed with statements indicating that the insurance company has a complex organizational structure and a centralized management system. This suggests that the organization and management of the company are structured in a way that enables control and oversight, which is crucial for the effective detection and prevention of fraud. On the other hand, most respondents disagreed with the statements that the insurance company has inadequate technological infrastructure and that operational performance is unstable. These results address *the first*

research question, indicating that insurance companies possess effective internal systems capable of detecting and preventing fraud. Regarding the statement that insurance claims are often fraudulent, most respondents disagreed, whereas the claim that policyholders tend to exaggerate the value of their claims received a high level of agreement. These data pertain to *the second research question*, suggesting that insurance companies do face instances of fraud to some extent. Although most respondents do not agree with statements about direct fraud, certain aspects, such as claim exaggeration and deadline violations, indicate potential cases of policyholder manipulation, implying that fraud does exist to some degree. These data provide an answer to *the third research question*: insurance companies rarely encounter fraud perpetrated by intermediaries and brokers. Most respondents disagreed with statements about fraud involving false documents or unpaid claims. This implies that insurance intermediaries and brokers are generally reliable and rarely face fraud in their operations. Most respondents were neutral about statements suggesting that complementary service providers inflate claims, issue inaccurate invoices, or undertake unnecessary actions. These results address *the fourth research question*, indicating that insurance companies generally do not encounter fraud committed by complementary service providers.

VI Conclusion

Fraud is a significant issue for insurance companies, and the only way to combat it is by using specialized fraud management systems. The current research community has made substantial efforts in developing various fraud detection techniques, often neglecting other equally important fraud management activities. It is necessary to openly and constructively discuss the risk of fraud at all levels within the organization. Promoting a positive fraud risk management culture stands out as a particularly important activity. Combating insurance fraud benefits society as a whole.

As with all thorough research, a deeper understanding of the process raises additional questions. It is important to consider the potential subjectivity of respondents in providing answers, as well as the sample size, in order to discuss any generalization of the results.

A risk management strategy should be strongly focused on outcomes that help insurance organizations achieve their goals. The risk of fraud should be evaluated in the context of its potential value (both creation and destruction) and its impact on reputation, which is a particularly sensitive issue for financial institutions. Additionally, it is crucial to emphasize the importance of compliance with regulatory standards, strengthening internal controls, and employee education. Together, these represent the key elements of fraud prevention upon which a fraud risk management strategy should be based. Fraud control is a much more complex and challenging issue than is commonly assumed.

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ZNAČAJ RAZVOJA TRŽIŠTA KAPITALA ZA OSIGURAVAJUĆA DRUŠTVA KAO INSTITUCIONALNE INVESTITORE U REPUBLICI SRBIJI

PREGLEDNI RAD

Apstrakt

Nebankarske finansijske institucije kao značajni učesnici na finansijskom tržištu u svetu, nemaju mogućnosti da kreiraju diversifikovana porfolija svojih aktiva na tržištu kapitala u Srbiji, već novčana sredstva drže ili na depozitnim kod banaka ili ulaganjem u državne hartije od vrednosti. Polazeći od značaja razvoja tržišta kapitala za privredu i ekonomiju, Republika Srbija je usvojila Strategiju za razvoj tržišta kapitala za period od 2021. do 2026. godine koja treba da podstakne razvoj tržišta korporativnih obveznica, a Svetska banka je odobrila Srbiji zajam za podršku razvoja tržišta kapitala. Cilj ovog rada je da ukaže na značaj razvoja tržišta kapitala za institucionalne investitore, pre svega osiguravajućih društava sa jedne strane, ali i ceo finansijski sektor sa druge strane. U radu će se ukazati na postojeće stanje na tržištu kapitala, tj. strukturu hartija od vrednosti u koje ulažu osiguravajuća društva, kao i na mogućnosti koje može doneti razvoj tržišta kapitala za investitore i celokupnu nacionalnu ekonomiju.

Ključne reči: *tržište kapitala, investitori, osiguravajuća društva, hartije od vrednosti, obveznice*

JEL klasifikacija: G22, G34

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I Uvod

Na razvijenim finansijskim tržištima u svetu, kao što su to SAD, institucionalni investitori predstavljaju najveće učesnike, koji efikasno mobilišu privremeno slobodna sredstva od sektora stanovništva i privrede. Preko dobro razvijenog finansijskog tržišta, ova sredstva se kroz različite instrumente alociraju u finansijske i privredne tokove nacionalne ekonomije. Sa druge strane razvijeno finansijsko tržište omogućava da se finansijske aktive brzo pretvore u novac, čime se ubrzava protok novčanih sredstava što doprinosi povećanju efikasnosti poslovanja privrede i boljoj stabilnosti privrede u celini.[3] Tržište institucionalnih investitora u Srbiji je podeljeno uglavnom između tri sektora: penzioni fondovi, osiguravajuća društva i menadžeri imovine. S obzirom da u prethodnom period najveće ušešće i rast na finansijskom tržištu u Srbiji imaju osiguravajuća društva, predmet ovog rada biće kretanje premija osiguranja kao i struktura ulaganja osiguravajućih društava na finansijskom tržištu u Srbiji, kao i analiza značaja razvoja tržišta kapitala za ove institucionalne investitore.

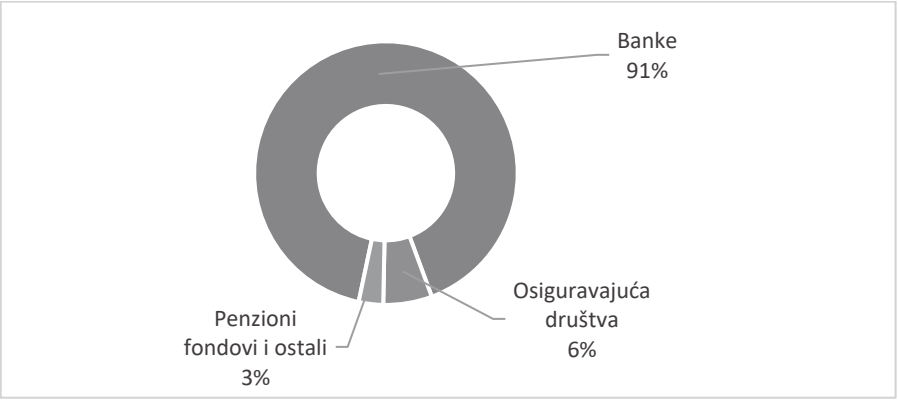
II Tržište kapitala u Republici Srbiji

1. Postojeće stanje

Najveće učešće u bilansnoj strukturi finansijskog sektora Srbije imaju banke sa 91% učešća u 2023. godini, zatim osiguravajuća društva sa 5,7%, dok se na penzijske fondove i investicione fondove odnosi 3,3%. Brojna teorijska i empirijska istraživanja su ukazala da je razvoj tržišta kapitala usko povezan sa ekonomskim razvojem nacionalne ekonomije. Ali uzročno-posledična veza između razvoja tržišta kapitala i rasta nacionalne ekonomije nije jednosmerna i zavisi od strukture finansijskog sistema zemlje, snage institucionalnih kapaciteta, korporativnog upravljanja, zaštite potrošača i ostalih faktora.

[3] Milo Marković, „Izazovi tržišta osiguranja u Srbiji na putu ka Solvency II", *Tokovi osiguranja*, br. 2/2024, str. 333-361.

Slika 1. Bilansna struktura finansijskog sektora u 2023. godini



Izvor: Autor na bazi podataka NBS

Statistički podaci i izveštaji ukazuju da tržište kapitala tj. tržište akcija i obveznica Republike Srbije egzistira sa niskim obim prometa kao i nerazvijenom strukturom hartija od vrednosti koja se nudi na njemu. Najdominantnije tržište na finansijskom tržištu je tržište državnih obveznica na kome je u 2023. godini ostvaren promet od 187,3 mlrd dinara, sekundarno trgovanje hartijama od vrednosti u evrima iznosilo je 206,4 mln evra (346,6 mln evra u 2022. godini). Ukupan promet dugoročnih državnih obveznica, koje su uključene na prime listing Beogradske berze (u dinarima i evrima), iznosio je 17,8 mlrd dinara u 2023. godini. Imajući u vidu da je finansijski sektor Srbije bankocentričan, najveći investitori u dinarske državne obveznice poslednih 10 godina su banke, čije je učešće u 2023. godini bilo 63%. Pored banaka, zabeleženo je i manje učešće osiguravajućih društava i penzionih fondova, koje usporeno raste iz godine u godinu.

Tržište korporativnih obveznica je slabo razvijeno, a na to ukazuje činjenica da je u periodu od 2020. do 2024. godine, samo 11 kompanija izdalo ukupno 32 korporativne obveznice, nominalne vrednosti od 942 miliona evra. Od toga je samo jedan emitent korpratvnih obveznica uvrstio svoje obveznice na Beogradsku berzu za sekundarno trgovanje (Energoprojekt Holding a.d. Beograd), dok su ostale kompanije to uradile putem privatnog plasmana.

Kada je reč o strukturi hartija od vrednosti na tržištu kapitala u Srbiji, dominiraju hartije od vrednosti sa fiksnim prihodom.

Tabela 1. Pregled dostupnih instrumenata tržišta kapitala u Srbiji

Vrsta imovine	Hartije od vrednosti	Tip	Dostupan
Fiksni prihod	Državne obveznice	Fiskni kupon	+
		Vezane za indeks	+
		Vezana za inflaciju	-
	Municipalne obveznice	Fiskni kupon	+
		Vezane za indeks	-
		Vezana za inflaciju	-
	Korporativne obveznice	Fiskni kupon	+
		Vezane za indeks	-
		Vezana za inflaciju	-
	Kredit (sekjuritizovani)	Hartije od vrednosti obezbeđene imovinom (ABS)	-
		Hartije od vrednosti obezbeđene hipotekom (MBS)	-
Derivati	Fjučersi/ Fforvord		-
	Svop	CDS	-
			-
		CDOs	-
	Opcije	put	-
		Call	-

Izvor: Analiza na osnovu podataka KHOV i Beogradske berze

Ključni pokazatelj razvijenosti tržišta kapitala jedne nacionalne ekonomije jeste obim poslovanja berze. Podaci o tržišnoj kapitalizaciji i prometu akcijama i obveznicama na berzi ukazuju da je tržište kapitala Republike Srbije u fazi razvoja i da je njegova osnovna karakteristika nedovoljan obim trgovine hartijama od vrednosti. Prema godišnjem izveštaju NBS „tržišna kapitalizacija Beogradske berze na kraju 2023. godine iznosila je 425,0 mlrd dinara (5,2% BDP-a). Tržišna kapitalizacija je u 2023. godini, u poređenju sa 2022. godinom, povećana u delu open market za 132,8 mlrd dinara i u delu listinga za 26,6 mlrd dinara, dok je na MTP175 segmentu smanjena za 144,0 mlrd dinara."[4] Za posmatrani period od 10 godina (2013-2023) može se zaključiti da je se na Beogradskoj berzi više trgovalo akcijama nego obveznicama, što ukazuje na nepoverenje investitora u finansijsko tržište pre svega tržište korporativnih obveznica.

[4] NBS, *Godišnji izveštaj o stabilnosti finansijskog sistema za 2023. godinu*, Beograd, str. 100, https://www.nbs.rs/export/sites/NBS_site/documents/publikacije/fs/finansijska_stabilnost_23.pdf (datum pristupa 03. 09. 2024).

Tabela 2. Promet na Beogradskoj berzi za period 2020-2023. godine

Godina	Tržišna kapitalizacija na kraju godine (u RSD)	Tržišna kapitalizacija na kraju godine (u EUR)	Godišnji obim trgovanja akcijama (u RSD)	Godišnji obim trgovanja akcijama (u RSD)	Godišnji ukupni obim trgovanja (u RSD)	Godišnji ukupni obim trgovanja (u EUR)	Broj transakcija
2020	523.407.000.000	4.451.200.000	5.030.000.000	42.790.000	48.752.230.000	414.650.000	18.098
2021	533.342.335.066	4.535.914.353	6.482.716.327	55.133.531	41.231.194.976	350.679.870	18.743
2022	409.576.767.229	3.485.794.633	11.421.790.229	97.152.861	38.296.960.114	325.934.839	22.760
2023	424.958.052.044	3.624.461.684	3.097.724.733	26.417.100	20.895.639.056	178.218.633	19.471

Izvor: Autor na osnovu podataka *https://www.belex.rs/trgovanje/izvestaj/godisnji*

Tržište kapitala se smatra razvijenim ukoliko je udeo tržišne kpaitalizacije u BDP preko 50%, ali se prilikom davanja zaključaka treba osloniti i na druge indikatore tržišta kapitala. Ako pogledamo ove pokazatelje u razvijenim delovima sveta i EU, može se uočiti da smo na dnu lestvice i da je tržište kapitala na nižem stepenu razvoja.

Tabela 3. - **Vrednost tržišne kapitalizacije u pojedninim zemljma za 2023. godinu**

Zemlja	Tržišna kapitalizacija u odnosu na BDP
USA	156.5%
Nemačka	47.9%
Velika Britanija	71.3%
Mađarska	19.9%
Slovačka	1.8%
Slovenija	14.5%
Hrvatska	30%
Srbija	5.2%

Izvor: Autor na bazi podataka https://www.ceicdata.com/en/indicator/european-union/market-capitalization--nominal-gdp

III Perspektiva razvoja tržišta kapitala

Postavlja se pitanje šta predstavlja „razvijeno" tržište kapitala? U nedostatku jasne i opšteprihvaćene definicije tržišta kapitala koristićemo definiciju datu od strane američke berze Nasdak (NASDAQ, engl. National Association of Securities Dealers Automated Quotations), prema kojoj se tržište kapitala tradicionalno odnosi na „mesto (platforma) za trgovanje dugoročnim dužničkim instrumentima, odnosno, tržište na kojem se prikuplja kapital. U novije vreme, tržišta kapitala se koriste

u opštijem kontekstu za označavanje tržišta akcija, obveznica, derivata i drugih instrumenata".[5]

Preduslov za razvoj tržišta kapitala u jednoj nacionalnoj ekonomiji ogleda se u:
- stabilnom makroekonomskom okruženju,
- relativno razvijenom i stabilnom finansijskom sistemu,
- uređenom zakonodavnom i institucionalnom okviru.

Ako se pođe od svakog uslova pojedinačno može se reći da je Srbija tokom prethodnih godina obezbedila ekonomski rast i razvoj domaćeg finansijskog sistema, posebno nebankarskog sektora. Takođe je novim Zakonom o tržištu kapitala stvoren regulatorno–institucionalni okvir koji je usaglašena sa regulativom EU. Kako bi podstakla rast tržišta kapitala, Vlada Srbije je usvojila Strategiju za razvoj tržišta kapitala za period od 2021. do 2026. godine, kao i prateći akcioni plan koji treba da podstakne razvoj tržišta korporativnih obveznica i ostalih značajnih instrumenata tržišta kapiala.

Cilj strategije je:
1. optimizacija regulatornog sistema za podršku većem učešću na tržištu kapitala;
2. povećanje kvaliteta, atraktivnosti i dostupnosti investicionih proizvoda i povećanje broja izdavalaca u sistemu;
3. privlačenje domaćih i međunarodnih investitora;
4. kreiranje podsticajnog i efikasnog institucionalnog okvira;
5. jačanje institucionalnih kapaciteta u pogledu tehnologije i ljudskih resursa;
6. promocija i finansijska edukacija učesnika na tržištu, uključujući ukupnu populaciju.[6]

Pored toga, Agencija za ocenu kreditnog rejtinga Moody's potvrdila je kreditni rejting Republike Srbije na nivou „Ba2" i zadržala stabilne izglede za njegovo dalje povećanje.

Međunarodna banka za obnovu i razvoj odobrila je Republici Srbiji kredit u iznosu od 30 miliona dolara za podršku reforme i revitalizacije tržišta kapitala kroz implementaciju projekta „Projekat razvoja tržišta kapitala". Opšti ciljevi Projekta su podrška daljem razvoju pravnog, regulatornog i ekonomskog okruženja, jačanje tržišta korporativnih obveznica kao dodatnog načina finansiranja preduzeća (uključujući zelena i druga tematska izdavanja obveznica).

[5] https://www.nasdaq.com/glossary/c/capital-market (datum pristupa 03. 09. 2024).
[6] https://mfin.gov.rs/sr/dokumenti2-1/strategija-za-razvoj-trita-kapitala-za-period-2021-do-2026-godine-1 (datum pristupa 01. 09. 2024).

Projekat je strukturisan oko dve glavne komponente:

1. Institucionalne, pravne i regulatorne reforme
   - Jačanje kapaciteta relevantnih institucija: Komisije za hartije od vrednosti, Centralnog registra hartija od vrednosti i Beogradske berze
   - Razvoj i unapređenje regulatornog okvira
   - Usklađivanje rada relevantnih institucija sa međunarodnim standardima
   - Reforma poreskog sistema u cilju unapređenja tržišta kapitala
   - Kreiranje interaktivnog web portala sa objedinjenim informacijama relevantnim za tržište kapitala
2. Podrška izdavanju korporativnih obveznica
   - Proširenje ponude i baze izdavaoca korporativnih obveznica
   - Identifikacija potencijalnih emitenata
   - Angažovanje profesionalnih savetnika koji će raditi sa emitentima i pružiti im podršku u procesu izdavanja korporativnih obveznica
   - Poseban fokus će biti na zelenim i drugim tematskim izdanjima.

IV Osiguravajuća društva kao institucinalni investitori na tržištu kapitala u Srbiji

Osiguravajuća društva prikupljaju novčana sredstva kroz premiju osiguranja, a struktura ulaganja će svakako zavisiti od izvora prikupljenih sredstava (neživotno i životno osiguranje). „S obzirom na to da su obaveze kod neživotnih osiguranja manje predvidive, sredstva prikupljena po ovom osnovu uglavnom se plasiraju u kratkoročne plasmane. Sasvim je drugačija situacija kod premija životnog osiguranja, čiji plasman sredstava ima dugoročan karakter."[7]

Premija životnog osiguranja u Srbiji raste iz godine u godinu, što znači da osiguranja imaju u obliku tehničkih rezervi značajan potencijal za ulaganja na finasijskom tržištu. U cilju zaštite osiguranika i ostalih korisnika polisa osiguranja, osiguravajuća društva su u obavezi da formiraju i održavaju dovoljan nivo tehničkih rezervi za pokriće šteta. Pored toga, obaveza osiguravajućih društava je da tehničke rezerve ulažu u skladu sa propisima, a u cilju uvećanja njihove vrednosti, kako bi odgovorili svojim obavezama. Prilikom plasmana raspoloživih sredstava osiguravajuća društva moraju nastojati da je profit najmanje jednak prosečnoj kamatnoj stopi zarađenoj na tržištu kapitala. Osiguravajuće kompanije mogu plasirati slobodna sredstva u sledeće oblike:

- nekretnine
- hartije od vrednosti
- depozite kod banaka.

[7] Miro Sokić, "Osiguravajuće kuće kao institucionalni investitori u Republici Srbiji", *Tokovi osiguranja*, br. 4/2015, str. 49 -70.

Dva su principa kojim se osiguravajuća društva rukovode prilikom plasmana sredstav i to:

- pružanje visokog nivoa zaštite od rizika svog osiguranika,
- ostvarivanje što većeg prinosa na uložena sredstva.

Značaj aktivnosti osiguravajućih društava kao učesnika na finansijskim tržištima, u jednoj nacionalnoj ekonomiji ogleda se u sledećem:

- Osiguranje obezbeđuje finansijsku stabilnost i smanjuje neizvesnost kroz obeštećenje svih onih koji su pretrpeli gubitak. Na taj način smanjuje se efekat masovnih bankrota koji bi mogli imati katastrofalne posledice na proizvodnju, zapošljavanje, poreske prihode i stanje privrede uopšte.
- Dobrovoljno penzijsko osiguranje kao jedan od najvažnijih vidova osiguranja u smislu ulaganja ovih sredstava na finansijskim tržištima pruža sigurnost budućim penzionerima da im se penzionisanje po osnovu njihovih uplata isplaćuje mesečno, stabilno do kraja života.
- Rastom malih količina novca prikupljenih u vidu premija, osiguravajuća društva su u mogućnosti da finansiraju velike investicione projekte i na taj način pozitivno utiču na privredni rast zemlje.
- Osiguranje obezbeđuje efikasno upravljanje rizikom i transformisanje procene rizika. Kada investiraju, osiguravajuća društva temeljno istražuju kreditnu sposobnost zajmoprimca, što omogućava drugim investitorima na tržištu da dobiju informacije o karakteristikama drugih firmi u okruženju prilikom donošenja investicionih odluka.
- Obavljanje međunarodne trgovine između partnera koji nisu dovoljno upoznati je često uslovljeno postojanjem određenih vrsta osiguranja. Na taj način obezbeđivanje podstiče razvoj međunarodne trgovine.
- Davanjem popusta na premije, preventivnim merama zaštite od požara, povreda na radu i sl., osiguravajuća društva utiču na sprečavanje i smanjenje gubitaka osiguranika ili društva u celini.[8]

Strukturu ulaganja osiguravajućih društava u Republici Srbiji opredeljuju zakonska i podzakonska akta, kao i različiti oblici hartija od vrednosti na finansijskom tržištu. Zakon o osiguranju propisuje vrste imovine u koje se mogu ulagati sredstva osiguranja. Sredstva tehničkih rezervi mogu se ulagati u sredstva propisana zakonom, odvojena za životna i neživotna osiguranja.

[8] Mladenka Balaban, "Role of insurance company as institutional investitors. In: Contemporary trends and prospects of economic recovery", CEMAFI International Association, Nice (France), 2014. pp. 730-744.

Tabela 2. – Pregled pravila ulaganja tehničkih rezervi u Republici Srbiji

Sredstva	Ograničenje
Hartije od vrednosti i instrumenti tržišta novca izdate od strane Republike Srbije, država članica EU ili OECD, centralnih banaka zemalja članica EU/OECD ili za koje garantuje jedan od navedenih subjekata;	Bez ograničenja
Hartije od vrednosti koje su izdale međunarodne finansijske organizacije čiji je član RS;	Bez ograničenja
Dužničke hartije od vrednosti koje izdaju/garantuju autonomne pokrajine ili jedinice lokalne samouprave;[9]	Do 35% sredstava tehničkih rezervi i do 10% u hartijama od vrednosti istog izdavaoca.
Dužničke hartije od vrednosti kojima se trguje na tržištu hartija od vrednosti u skladu sa zakonom;[10]	Do 35% sredstava tehničkih rezervi u hartijama od vrednosti koje izdaje pravno lice sa sedištem u Republici Srbiji i do 5% u hartijama od vrednosti istog izdavaoca.
Dužničke hartije od vrednosti kojima se ne trguje na tržištu hartija od vrednosti ako je njihov izdavalac pravno lice sa sedištem u Republici Srbiji;[11]	Do 3% sredstava tehničkih rezervi i do 0,5% u hartijama od vrednosti istog izdavaoca
Akcije kojima se trguje na tržištu hartija od vrednosti u skladu sa zakonom;[12]	Do 25% sredstava tehničkih rezervi i do 5% u hartijama od vrednosti istog izdavaoca.
Akcije kojima se ne trguje na tržištu hartija od vrednosti ako je njihov izdavalac pravno lice sa sedištem u Republici Srbiji;[13]	Do 5% sredstava tehničkih rezervi i do 1% u hartijama od vrednosti istog izdavaoca.
Vlasnički udeli preduzeća sa sedištem u RS;	Do 5% sredstava tehničkih rezervi i do 1% udela jednog pravnog lica.
Investicione jedinice investicionih fondova;	Do visine obračunate tehničke rezerve za pojedine vrste životnih osiguranja vezanih za investicione jedinice investicionih fondova, a u investicionim jedinicama jednog investicionog fonda - do 50% ovih tehničkih rezervi.

[9] Emitent ili garant hartija od vrednosti mora imati kreditni rejting utvrđen za dugoročno zaduživanje u stranoj valuti koji je najmanje jednak rejtingu RoS-a prema Standard & Poor's, Fitch-IBCA ili Moodi's.

[10] Sredstva tehničkih rezervi su uložena u bilo koje dužničke hartije od vrednosti, moraju imati kreditni rejting koji odgovara najmanje „A" rejtingu Standard & Poor's ili odgovarajućem rejtingu Fitch-IBCA ili Moodi'sa, ili da su hartije od vrednosti navedene na zvanična berzanska kotacija za najmanje dve prethodne godine.

[11] Ako se sredstva tehničkih rezervi ulažu u hartije od vrednosti koje ne kotiraju, društvo za osiguranje mora da izvrši i dokumentuje procenu poslovanja emitenta, s tim da je društvo dužno da najmanje jednom godišnje pregleda svoju procenu poslovanja izdavaoca i da vodi odgovarajuću evidenciju o svoje operacije.

[12] Olyver Wyman, (2024), The Capital Flywheel, European Capital Markets, A business of Marsh McLennan

[13] MAPFRE Economics, (2023), Global savings and insurance industry invesments, Madrid, Fundacion MAPFRE

Nepokretnosti i druga imovinska prava na nepokretnostima, pod uslovom da su upisane u zemljišne ili druge javne knjige u Republici Srbiji, donose prinos, ako je njihova kupoprodajna cena utvrđena na osnovu procene ovlašćenog procenitelja i ako su bez tereta.	Do 30% tehničkih rezervi životnog osiguranja, i do 20% tehničkihrezervi neživotnog osiguranja, s tim da se ulaganja u jednu nekretninu ili više međusobno povezanih nepokretnosti koje čine jednu celinu mogu izvršiti u iznosu do 10% tehničkih rezervi životnog osiguranja i 7% tehničkih rezervi neživotnih osiguranja.
Rezerve za prenosive premije, rezervisane štete i druge tehničke rezerve koje snose suosiguravač, reosiguravač i retroustupitelj.	Povećati knjigovodstvenu vrednost ovih rezervi, utvrđenu s obzirom na kreditnu sposobnost saosiguravača, reosiguravača i retroustupitelja.

Osiguravajuća društva mogu ulagati u inostranstvu samo u izuzetnim okolnostima i pod sledećim uslovima:

Sredstva se ne stiču u zemlji čiji je kreditni rejting S&P, Fitch ili Moodi's snižen tokom prošle godine na rejting jednak ili niži od rejting zemlje;

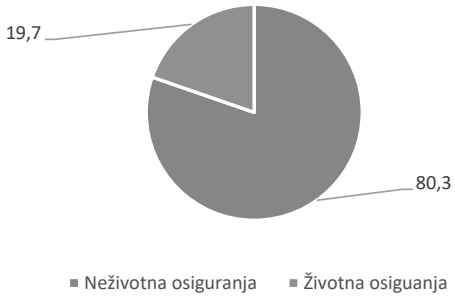
- Do granice od 25% osnovnog kapitala društva za osiguranje;
- Ukoliko se za svaku investiciju dobije prethodna saglasnost NBS.

Na tržištu osiguranja u Srbiji, posluje ukupno 20 osiguravajućih kompanija, od kojih se poslovima osiguranja bavi 16, dok se poslovima reosiguranja bavi 4 kompanije. 15 osiguravajućih kompanija je u stranom vlasništvu. Pokazatelji poslovanja sektora osiguranja u proteklih 10 godina, čak i u uslovima prisustva brojnih izazova, beležili pozitivan trend, kao i da su ukupna imovina, tehničke rezerve, kapital i premija neživotnih i životnih osiguranja više nego udvostručeni.

Na osnovu poslednjeg izveštaja NBS[14] o poslovanju osiguravajućih društava za 2023. godinu, ukupna premija osiguranja u Republici Srbiji je porasla za 15,9% i iznosi 1,3 milijarde evra. Struktura premije osiguranja ide u korist neživotnih osiguranja 80,3%, dok se na premiju životnog osiguranja odnosi 19,7%. Bilansna struktura sektor osiguranja porasla je za 11,6% i iznosi 3,2 milijarde evra. Iako tržište osiguranja beleži rast iz godine u godinu i dalje je tržište na nižem, stepenu razvoja na šta ukazuju podaci da je učešće ukupne premije u bruto društvenom proizvodu u 2023. godini, svega 1,9%, a u zemljama Evropske unije iznosi 6,2%.

[14] https://www.nbs.rs/export/sites/NBS_site/documents/osiguranje/izvestaji/izv_IV_2023.pdf (datum pristupa 03. 09. 2024).

Slika 2 – Struktura premije na tržištu osiguranje u Srbiji za 2023.



Izvor: Autor na bazi podataka
NBS https://www.nbs.rs/export/sites/NBS_site/documents/osiguranje/izvestaji/izv_IV_2023.pdf

Ono što je veoma bitno sa stanovišta tržišta kapitala jesu tehničke rezerve osiguravajućih društava, koje se mogu ulagati u različite oblike imovine. U 2023. godini tehničke rezerve su iznosile 2,2 milijarde evra, što je više za 11,2% u odnosu na prethodnu godinu. Najveće učešće u ukupnim tehničkim rezervama čini matematička rezerva, koja iz godine u godinu raste. Imajući u vidu da je na tržištu kapitala oskudna ponuda hartija od vrednosti, kao i da postoje propisana ograničenja za ulaganja sredstava tehničkih rezervi, osiguravajuća društva su obavezna da sredstva tehničkih rezervi ulažu u sredstva koja se smatraju pouzdanim, raspoloživim tokom dužeg perioda i stabilne realne vrednosti.

Slika 3 – Struktura ulaganja neživotnih osiguranja u 2023. godini

Slika 4. – Struktura ulaganja životnih osiguranja u 2023. godini

Izvor: Autor na bazi podataka
https://www.nbs.rs/export/sites/NBS_site/documents/osiguranje/izvestaji/izv_IV_2023.pdf

Imajući u vidu slabu ponudu finansijskih instrumenata i regulatorna ograničenja, osiguravajuća društva u Republici Srbiji nemaju velike mogućnosti u kreiranju sopstvenih portfolija, pa najveći deo tehničkih rezervi ulažu u državne obveznice. Na to ukazuju i podaci iz izveštaja o poslovanju društava za osiguranja za 2023. godinu, prema kome su tehničke rezerve neživotnih osiguranja uložena u državne obveznice 64,7%, depoziti kod banka i gotovinu 17,3%, tehničke rezerve na teret saosiguravača, reosiguravača i retrocesionara 12,0%, potraživanja za nedospele premije 2,9% i nekretnine 2,5%. Struktura ulaganja matematiče rezerve u 2023. godini ide u korist državnih hartija od vrednosti 90%, depoziti kod banaka 4%, potraživanja po osnovu nedospele premije 3% nekretnine 3%.

Tabela 4. –Struktura ulaganja osiguravajućih društava u svetu i Srbiji u%

Vrsta active	EU		USA		Japan		Velika Britanija		Srbija životno osiguranje		Srbija neživotno osiguranje	
	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
Korporativne obveznice	24,7	23,5	40,9	47,5	6,9	6,5	33,4	32,9	0,0	0,0	0,0	0,0
Državne hartije	28,9	25,6	20,5	14,8	41,2	43,7	18,2	16,6	92,1	89,7	76,0	67,2
Akcije	14,9	18,6	15,0	13,6	6,1	5,9	6,7	5,9	0,0	0,0	0,0	0,0
Kreditiranje	4,9	5,1	10,0	10,5	7,1	7,4	10,0	10,0	0,0	0,0	0,0	0,0
Gotovina i depoziti	1,9	1,9	4,6	4,6	2,9	3,0	9,3	10,2	3,1	5,0	8,1	15,0
Nekretnine	1,6	1,7	0,5	0,5	1,5	1,6	1,7	2,0	3,2	3,4	3,8	3,7
Investicioni fondovi	20,5	20,5	2,2	2,4	20,6	22,3	12,7	12,6	0,0	0,0	0,0	0,0
Ostale investicije	2,6	3,1	8,4	8,5	32,1	29,5	0,1	0,1	1,6	1,9	12,1	14,1

Izvor: Autor na bazi podataka https://documentacion.fundacionmapfre.org/documentacion/publico/es/media/group/1121054.do

Ako analiziramo strukturu ulaganja osiguravajućih društava u zemljama sa razvijenim finansijskih tržištima (zemlje EU, SAD, Japan, Velika Britanija), može se uočiti da u njihovim portfolijima dominiraju različite aktive. Zemlje EU imaju veoma diversifikovan portfolio, jer skoro podjednako ulažu u korporativne obveznice 23,5%, državne obveznice 25,6%, investicione fondove 20,5%, akcije 18,6%, dok se na nekretnine odnosi svega 1,7%. Situacija je potpuno drugačija na najrazvijenijem finansijskom tržištu tj. tržištu SAD, gde osiguravajuća društva dominiraju kao institucionalni investitori sa 47.5% ulaganja u korporativne obveznice, državne obveznice 14.8%, akcije 13,6%, dok se na nekretnine odnosi svega 0,5%, investicioni fondovi 2,4%. Drugačija struktura ulaganja se može uočiti na drugom razvijenom finansijskom tržištu u Japanu, gde u strukturi ulaganja osiguravajućih društava dominiraju državne obveznice sa 43,7%, ulaganja u investicione fondove 22,3%, dok se na korporativne obveznice odnosi samo 6,5%, a na nekretnine 1,6%. U Velikoj Britaniji struktura ulaganja

osiguravajućih društava je raznolika: 32,9% su ulaganja u korporativne obveznice, državne obveznice 16.6%, akcije 10%, investicioni fondovi 12,6% depoziti 10,2% i nekretnine 3,2%. I na kraju struktura ulaganja osiguravajućih društva u Srbiji se svodi uglavnom na državne obveznice (neživotna osiguranja 67,2% i životna osiguranja sa 90% u 2002. godini) i depozite kod banaka, što još jednom ukazuje na potrebu razvoja tržišta kapitala, sa širom lepezom mogućnosti: komercijalne obveznice, municipalne obveznice, komercijalni zapisi i slično.

Tabela 5. Potencijal osiguravajućih društava kao institucionalnih investitora u Srbiji

Društva za (re) osiguranje	Aktiva (RSD)	Aktiva (EUR)	Tehničke rezerve (RSD)	Tehničke rezerve (EUR)	Organizovano tržište (EUR)
Generali	79.140.000.000	676.017.357	56.347.680.000	481.324.358	24.066.217
Dunav	73.001.000.000	623.577.749	51.976.712.000	443.987.357	22.199.367
Wiener	51.033.000.000	435.926.128	36.335.496.000	310.379.403	15.518.970
Grave	37.423.000.000	319.668.910	26.645.176.000	227.604.264	11.380.213
DDOR	29.663.000.000	253.382.649	21.120.056.000	180.408.446	9.020.422
Dunav Re	18.095.000.000	154.568.285	12.883.640.000	110.052.618	5.502.630
Triglav	14.293.000.000	122.091.434	10.176.616.000	86.929.101	4.346.455
Uniqa životno	12.090.000.000	103.273.311	8.608.080.000	73.530.597	3.676.529
AMS	10.218.000.000	87.282.604	7.275.216.000	62.145.214	3.107.260
Wiener Re	9.656.000.000	82.481.976	6.875.072.000	58.727.167	2.936.358
Milenijum	8.740.000.000	74.657.464	6.222.880.000	53.156.114	2.657.805
Globos	7.871.000.000	67.234.427	5.604.152.000	47.870.912	2.393.545
Uniqa neživotno	7.716.000.000	65.910.411	5.493.792.000	46.928.212	2.346.410
Generali Re	6.033.000.000	51.534.151	4.295.496.000	36.692.315	1.834.615
Sava neživotno	5.846.000.000	49.936.788	4.162.352.000	35.554.993	1.777.749
Merkur	5.758.000.000	49.185.089	4.099.696.000	35.019.783	1.750.989
DDOR Re	2.865.000.000	24.472.955	2.039.880.000	17.424.744	871.237
Sava životno	1.854.000.000	15.836.949	1.320.048.000	11.275.908	563.795
OTP	1.566.000.000	13.376.840	1.114.992.000	9.524.310	476.215
Sogaz	1.363.000.000	11.642.805	970.456.000	8.289.677	414.483
Ukupno	**384.224.000.000**	**3.282.058.290**	**273.567.488.000**	**2.336.825.503**	**116.841.275**

Izvor: Autor na bazi podataka: www.nbs.rs

U prethodnoj tabeli se može videti ukupan potencijal osiguravajućih i reosiguravajućih društava, koje oni mogu plasirati na tržištu kapitala. Kao što je već pomenuto, postoji niz propisanih ograničenja koje menadžeri osiguranja moraju da

se pridržavaju, a od kojih neka predstavljaju izazove u investiraju na domaćem tržištu dužničkog kapitala (posebno u korporativne obveznice). Većina emitenata korporativnih obveznica u Srbiji nema rejting niti imaju obveznice na berzi, što praktično otežava osiguravajućim društvima da ulažu u ove obveznice i podrže razvoj tržišta dužničkog kapitala. Pored toga, i tržište kratkoročnih hartija od vrednosti nema u ponudi komercijalnih zapisa, koje bi omogućile menadžerima neživotnih osiguranja da plasiraju sredstva i time obezbede bolju likvidnost ukupnog finansijskog tržišta uz rast profitabilnosti. Razvojem tržišta kapitala obezbedila bi se za osiguravajuća društva bolja alokacija tehničkih rezervi i povećanje njihove profitabilnosti i bolje upravljanje rizikom. S druge strane, u Srbiji postoji pozitivan trend rasta premije životnog osiguranja, čime će se još dodatno povećati tražnja za finansijskim instrumentima, pa samim tim razvoj tržišta kapitala treba da bude glavni oslonac jačanja uloge institucionalnih investitora, koji imaju velike potencijalne izvore za finansiranje privrede.

V Zaključak

Tržište kapitala u Republici Srbiji je u inicijalnoj fazi razvoja, na šta ukazuje i skroman obim trgovanja hartijama od vrednosti, kao i pokazatelj tržišne kapitalizacije koji za 2023. godinu iznosi 5,9% BDP. S obzirom da je od 2021. godine donesena Strategija razvoja tržišta kapitala, pokrenuto je rešavanje niza pitanja u vezi sa uspostavljanjem savremenog tržišta kapitala. Radi se na vraćanju poverenja investitora kroz bolji sistem njihove zaštite, pre svega putem povećanja transparentnosti, uspostavljanje adekvatne zakonske regulative, ali i kroz uspostavljanje saradnje sa regionalnim i međunarodnim berzama, edukaciju potencijalnih učesnika na finansijskom tržištu. Razvojem tržišta kapitala obezbediće se bolja likvidnost i transparetnost finansijskog sistema, ali i bolja alokacija slobodnih novčanih sredstava.

Osiguravajuća društva kao insititucionalni investitori imaju veliku ulogu na finansijskim tržištima u svetu. Oni značajno kreiraju tražnju za različitim oblicima finansijske imovine. Njihova uloga u razvoju finansijskog tržišta zavisi od stepena razvoja tržišta osiguranja u nacionalnoj ekonomiji. Osnovna karatkeristika politike ulaganja osiguravajućih društava u Srbiji je da najviše ulažu u državne obveznice i depozite banaka, jer su nisko rizična aktiva, sa nižim prinosima, obzirom da im finansijsko tržište ne nudi profitabilnije alternative. Vodi se politika konzervatinvnog ulaganja kroz ulaganje u državne obveznice, a veliki je udeo gotovine u portfeljima. S obzirom da poslednju deceniju, tržište osiguranja u Srbiji ima trend rasta, trebalo bi da sa ovim trendom rasta raste i uloga ovih institucionalnih investitora na razvoj tržišta kapitala. Potencijal tržišta osiguranja nije iskorišten u potpunosti, pa samim tim ni potencijal osiguravajućih društva, čija sredstva su značajna za razvoj nacionalne ekonomije.

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THE SIGNIFICANCE OF CAPITAL MARKET DEVELOPMENT FOR INSURANCE COMPANIES AS INSTITUTIONAL INVESTORS IN THE REPUBLIC OF SERBIA

REVIEW ARTICLE

Abstract

Non-bank financial institutions, as significant participants in the global financial market, lack the ability to create diversified portfolios of their assets in the capital market in Serbia. Instead, they hold funds either in deposit accounts with banks or invest in government securities. Considering the importance of capital market development for the economy, the Republic of Serbia has adopted a Capital Market Development Strategy for the period from 2021 to 2026, which aims to foster the development of the corporate bond market. Furthermore, the World Bank has approved a loan to Serbia to support the development of the capital market. This paper aims to highlight the significance of capital market development for institutional investors, particularly insurance companies on one hand, and for the entire financial sector on the other hand. The paper will address the current state of the capital market, specifically the structure of securities in which insurance companies invest, and the opportunities that capital market development could bring for investors and the overall national economy.

Keywords: *capital market, investors, insurance companies, securities, bonds*
JEL Classification: *G22, G34*

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I Introduction

In developed financial markets worldwide, such as the United States, institutional investors represent the largest participants who efficiently mobilize temporarily free funds from the population and the economy. Through a well-developed financial market, these funds are allocated into financial and economic flows within the national economy through various instruments. On the other hand, a developed financial market enables the quick conversion of financial assets into cash, accelerating the flow of financial resources.[3] This further contributes to increased efficiency in economic operations and better overall economic stability. The institutional investor market in Serbia is primarily divided into three sectors: pension funds, insurance companies, and asset managers. Since insurance companies have held the largest share and the highest growth in Serbia's financial market, in recent years, the subject of this paper will be the insurance premium trends, as well as the investment structure of insurance companies in Serbia's financial market, and the analysis of the significance of capital market development for these institutional investors.

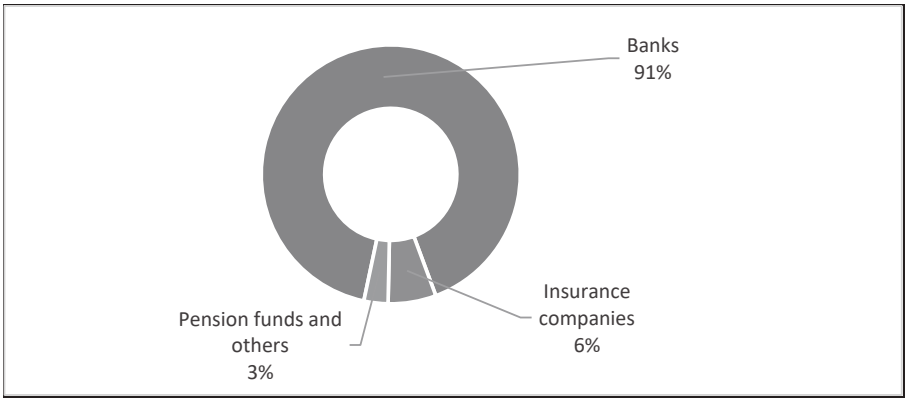
II Capital Market in the Republic of Serbia

1. Current State

In 2023, the largest share of the balance sheet structure of Serbia's financial sector was held by banks with 91%, followed by insurance companies with 5.7%, while pension and investment funds account for 3.3%. Numerous theoretical and empirical studies have shown that the development of the capital market is closely related to the economic development of the national economy. However, the cause--and-effect relationship between the development of capital market development and the growth of the national economy is not one-way and depends on the structure of the country's financial system, the strength of institutional capacities, corporate governance, consumer protection, and other factors.

[3] Milo Marković, „Izazovi tržišta osiguranja u Srbiji na putu ka Solvency II", *Tokovi osiguranja*, No. 2/2024, str. 333-361.

Figure 1. Balance Sheet Structure of the Financial Sector in 2023



Source: Author, based on NBS data

Statistical data and reports indicate that the capital market, i.e. the stock and bond market of the Republic of Serbia, exists with low trading volume and an underdeveloped structure of securities available on the market. The most dominant segment of the financial market is the government bond market, where in 2023, a turnover of 187.3 billion dinars was achieved. The secondary trading of securities in euros amounted to 206.4 million euros (346.6 million euros in 2022). The total turnover of long-term government bonds, included in *the prime listing* of the Belgrade Stock Exchange (in dinars and euros), was 17.8 billion dinars in 2023. Since the financial sector in Serbia is bank-centric, the largest investors in dinar-denominated government bonds over the last 10 years have been banks, whose share in 2023 was 63%. In addition to banks, a smaller share is held by insurance companies and pension funds, which has been increasing slowly year by year.

The corporate bond market is underdeveloped, as evidenced by the fact that only 11 companies issued a total of 32 corporate bonds with a nominal value of 942 million euros between 2020 and 2024. Of these, only one corporate bond issuer (*Energoprojekt Holding a.d. Belgrade*) listed its bonds on the Belgrade Stock Exchange for secondary trading, while other companies opted for private placements. When it comes to the structure of securities in the capital market of Serbia, fixed-income securities dominate.

Table 1. Overview of Available Capital Market Instruments in Serbia

Type of Asset	Securities	Type	Available
Fixed income	Government bonds	Fixed coupon	+
		Indexed-linked	+
		Inflation-linked	-
	Municipal bonds	Fixed coupon	+
		Indexed-linked	-
		Inflation-linked	-
	Corporate bonds	Fixed coupon	+
		Indexed-linked	-
		Inflation-linked	-
	Credit (Securitized)	Asset-Backed Securities (ABS)	-
		Mortgage-Backed Securities (MBS)	-
Derivatives	Futures/Forwards		-
	Swaps	CDS	-
			-
		CDOs	-
	Options	put	-
		Call	-

Source: Analysis based on data from KHOV and the Belgrade Stock Exchange

The key indicator of the development of the capital market in a national economy is the volume of trading on the stock exchange. Data on market capitalization and the turnover of stocks and bonds on the exchange indicate that the capital market of the Republic of Serbia is in a developmental phase, with its main characteristic being the insufficient volume of securities trading. According to the annual report of the National Bank of Serbia (NBS), "the market capitalization of the Belgrade Stock Exchange at the end of 2023 was 425.0 billion dinars (5.2% of GDP). Market capitalization in 2023, compared to 2022, increased by 132.8 billion dinars in the open market segment and by 26.6 billion dinars in the listing segment, while in the MTP175 segment, it decreased by 144.0 billion dinars."[4] Over the observed period of 10 years (2013–2023), it can be concluded that more trading was done in stocks than in bonds on the Belgrade Stock Exchange, which indicates a lack of investor confidence in the financial market, particularly in the corporate bond market.

[4] NBS, *Annual Report on the Stability of the Financial System for 2023*, Belgrade, p. 100, https://www.nbs.rs/export/sites/NBS_site/documents/publikacije/fs/finansijska_stabilnost_23.pdf (date of access 03.09.2024).

Table 2. Trading volume on the Belgrade Stock Exchange for the period 2020–2023

Year	Market Capitalization at the End of the Year (in RSD)	Market Capitalization at the End of the Year (in EUR)	Annual Trading Volume in Stocks (in RSD)	Annual Trading Volume in Stocks (in EUR)	Annual Total Trading Volume (in RSD)	Annual Total Trading Volume (in EUR)	Number of Transactions
2020	523.407.000.000	4.451.200.000	5.030.000.000	42.790.000	48.752.230.000	414.650.000	18.098
2021	533.342.335.066	4.535.914.353	6.482.716.327	55.133.531	41.231.194.976	350.679.870	18.743
2022	409.576.767.229	3.485.794.633	11.421.790.229	97.152.861	38.296.960.114	325.934.839	22.760
2023	424.958.052.044	3.624.461.684	3.097.724.733	26.417.100	20.895.639.056	178.218.633	19.471

Source: Author, based on data from *https://www.belex.rs/trgovanje/izvestaj/godisnji*

A capital market is considered developed if the share of market capitalization in GDP exceeds 50%. However, in concluding, it is important to also rely on other capital market indicators. If we examine these indicators in developed parts of the world and the EU, it becomes evident that we are at the bottom of the ranking and that the capital market is at a lower stage of development.

Table 3. Market Capitalization Value in Selected Countries for 2023

Country	Market Capitalization as a Percentage of GDP
USA	156.5%
Germany	47.9%
United Kingdom	71.3%
Hungary	19.9%
Slovakia	1.8%
Slovenia	14.5%
Croatia	30%
Serbia	5.2%

Source: Author, based on data from https://www.ceicdata.com/en/indicator/european-union/market-capitalization--nominal-gdp

III Perspective for the Development of the Capital Market

"The question arises: what does a "developed" capital market represent? In the absence of a clear and widely accepted definition of the capital market, we will use the definition provided by the American NASDAQ (National Association of Securities Dealers Automated Quotations), according to which the capital market traditionally

refers to a place (platform) for trading long-term debt instruments, i.e. a market where capital is raised. More recently, capital markets have been used in a broader context to refer to markets for stocks, bonds, derivatives, and other instruments."[5]

The prerequisites for the development of the capital market in a national economy are reflected in the following:

- a stable macroeconomic environment;
- a relatively developed and stable financial system;
- a regulated legislative and institutional framework.

Looking at each condition individually, it can be said that Serbia, over the past years, has ensured economic growth and the development of the domestic financial system, especially the non-banking sector. Additionally, the new Capital Market Law has created a regulatory-institutional framework that aligns with EU regulations.

To encourage the growth of the capital market, the Government of Serbia adopted the Capital Market Development Strategy for the period 2021–2026, along with an accompanying action plan to stimulate the development of the corporate bond market and other significant capital market instruments. The goals of the strategy are:

1. optimization of the regulatory system to support greater participation in the capital market;
2. improvement of the quality, attractiveness, and accessibility of investment products and an increase in the number of issuers in the system;
3. attraction of domestic and international investors;
4. creation of an encouraging and efficient institutional framework;
5. strengthening institutional capacities in terms of technology and human resources;
6. promotion and financial education for market participants, including the general population.[6]

In addition, Moody's credit rating agency confirmed the credit rating of the Republic of Serbia at the "Ba2" level and maintained a stable outlook for its further increase. The World Bank approved a $30 million loan for the Republic of Serbia to support the reform and revitalization of the capital market through the implementation of the Capital Market Development Project. The main goals of the project are to support the further development of the legal, regulatory, and economic environment, and strengthen the corporate bond market as an additional method of financing enterprises (including green and other thematic bond issues).

The project is structured around the following two main components:

1. Institutional, legal, and regulatory reforms
   - Strengthening the capacity of relevant institutions: the Securities Commission, the Central Securities Registry, and the Belgrade Stock Exchange

[5] https://www.nasdaq.com/glossary/c/capital-market (date of access 03.09.2024).

[6] https://mfin.gov.rs/sr/dokumenti2-1/strategija-za-razvoj-trita-kapitala-za-period-2021-do-2026-godine-1 (date of access 01.09.2024).

- Development and improvement of the regulatory framework
- Alignment of the work of relevant institutions with international standards
- Reform of the tax system to improve the capital market
- Creation of an interactive web portal with consolidated information relevant to the capital market

2. Support for corporate bond issuance
   - Expanding the offer and base of corporate bond issuers
   - Identification of potential issuers
   - Engaging professional advisors who will work with issuers and provide support during the corporate bond issuance process
   - Special focus on green and other thematic bond issues.

IV Insurance Companies as Institutional Investors in the Capital Market of Serbia

Insurance companies raise funds through insurance premiums, and their investment structure will depend on the sources of collected funds (life and non-life insurance). "Since the liabilities in non-life insurance are less predictable, the funds raised in this segment are primarily invested in short-term placements. The situation is quite different with life insurance premiums, whose fund placements have a long-term character."[7]

The life insurance premium in Serbia has been growing year by year, which means that insurance companies have significant potential for investments in the financial market in the form of technical reserves. To protect policyholders and other insurance beneficiaries, insurance companies are required to form and maintain an adequate level of technical reserves to cover potential claims. Additionally, insurance companies are obliged to invest these technical reserves in accordance with regulations, with the aim of increasing their value, to meet their liabilities. When investing available funds, insurance companies must aim for profits that are at least equal to the average interest rate earned in the capital market. Insurance companies can invest available funds in the following forms:

- real estate
- securities
- bank deposits

There are two principles that insurance companies follow when investing funds:

- providing a high level of protection against risk for their policyholders
- achieving the highest possible return on invested funds.

[7] Miro Sokić, "Insurance Companies as Institutional Investors in the Republic of Serbia", *Tokovi osiguranja*, No. 4/2015, pp. 49–70.

The importance of the activities of insurance companies as participants in financial markets within a national economy is reflected in the following:

- Insurance provides financial stability and reduces uncertainty by compensating those who have suffered losses. In this way, it mitigates the effect of mass bankruptcies that could have catastrophic consequences for production, employment, tax revenues, and the economy as a whole.
- Voluntary pension insurance, as one of the most important types of insurance in terms of investing these funds in financial markets, provides future pensioners with security that their pensions will be paid monthly, steadily, and for life, based on their contributions.
- With the growth of small amounts of money collected as premiums, insurance companies are able to finance large investment projects, thus positively impacting the economic growth of the country.
- Insurance ensures efficient risk management and transforms risk assessments. When investing, insurance companies thoroughly investigate the creditworthiness of borrowers, which allows other investors in the market to obtain information about the characteristics of other companies in the environment when making investment decisions.
- International trade between partners who are not sufficiently familiar with each other is often conditioned by the existence of certain types of insurance. In this way, insurance stimulates the development of international trade.
- By offering premium discounts, preventive measures for fire protection, workplace injuries, etc., insurance companies influence the prevention and reduction of losses for policyholders or the company as a whole.[8]

The investment structure of insurance companies in the Republic of Serbia is determined by legal and subordinate regulations, as well as by various types of securities on the financial market. The Insurance Law stipulates the types of assets in which insurance funds can be invested. The funds from technical reserves may be invested in assets prescribed by the law, separately for life and non-life insurance.

[8] Mladenka Balaban, „Role of insurance company as institutional investitors. Contemporary trends and prospects of economic recovery", CEMAFI International Association, Nice (France), 2014, pp. 730–744.

Table 2. – Overview of Technical Reserves Investment Rules in the Republic of Serbia

Assets	Restrictions
Securities and money market instruments issued by the Republic of Serbia, EU member states or OECD countries, central banks of EU/ OECD member countries, or those guaranteed by any of the aforementioned entities;	No restrictions
Securities issued by international financial organizations of which the Republic of Serbia is a member;	No restrictions
Debt securities issued/guaranteed by autonomous provinces or local government units;[9]	Up to 35% of technical reserves and up to 10% in securities of the same issuer.
Debt securities traded on the securities market in accordance with the law;[10]	Up to 35% of technical reserves in securities issued by a legal entity based in Serbia and up to 5% in securities of the same issuer.
Debt securities not traded on the securities market if the issuer is a legal entity based in the Republic of Serbia;[11]	Up to 3% of technical reserves and up to 0.5% in securities of the same issuer.
Stocks traded on the securities market in accordance with the law;[12]	Up to 25% of the technical reserves and up to 5% in securities of the same issuer.
Stocks not traded on the securities market if the issuer is a legal entity based in the Republic of Serbia;[13]	Up to 5% of the technical reserves and up to 1% in securities of the same issuer.
Ownership stocks in companies based in the Republic of Serbia;	Up to 5% of the technical reserves and up to 1% of the stocks of a single legal entity.
Investment units of investment funds;	Up to the calculated technical reserves for specific types of life insurance related to investment units of investment funds, and within investment units of a single fund – up to 50% of these technical reserves.

[9] The issuer or guarantor of the securities must have a credit rating for long-term foreign currency debt that is at least equal to Serbia's rating according to Standard & Poor's, Fitch-IBCA, or Moody's.

[10] Technical reserve funds invested in any debt securities must have a credit rating of at least "A" from Standard & Poor's, or a corresponding rating from Fitch-IBCA or Moody's, or be listed on an official stock exchange for at least the last two years.

[11] If the technical reserve funds are invested in securities that are not listed, the insurance company must perform and document an assessment of the issuer's operations, ensuring that the company reviews this assessment at least once a year and maintains proper records of its operations. https://www.efama.org/sites/default/files/files/the-capital-flywheel_0.pdf, date of access 03. 09. 2024.

[12] Oliver Wyman, (2024), *The Capital Flywheel, European Capital Markets*, A business of Marsh McLennan.

[13] MAPFRE Economics (2023), Global savings and insurance industry investments, Madrid, Fundación MAPFRE.

Real estate and other property rights on real estate, provided they are registered in land or other public records in the Republic of Serbia and bring returns if their purchase price is based on an appraisal by a certified appraiser and if they are free of encumbrances.	Up to 30% of life insurance technical reserves, and up to 20% of non-life insurance technical reserves, with investments in a single property or multiple interconnected properties forming a unit limited to 10% of life insurance technical reserves and 7% of non-life insurance technical reserves.
Reserves for transferable premiums, reserved claims, and other technical reserves borne by the co-insurer, reinsurer, and retrocessionaire.	Increase the book value of these reserves, based on the creditworthiness of the co-insurer, reinsurer, and retrocessionaire.

Insurance companies can invest abroad only under exceptional circumstances and under the following conditions:

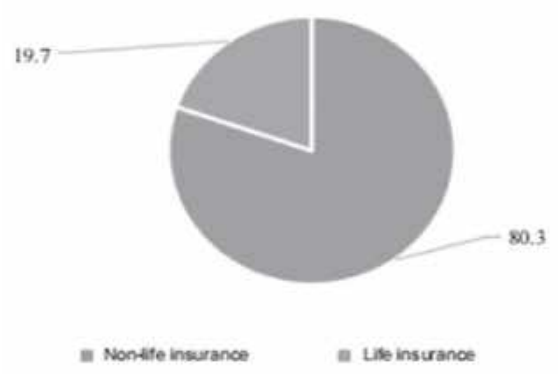
- The funds are not acquired in a country whose credit rating from S&P, Fitch, or Moody's has been downgraded in the previous year to a rating equal to or lower than the rating of the country.
- The investment is limited to 25% of the insurance company's core capital.
- Each investment must be approved in advance by the National Bank of Serbia (NBS).

In the insurance market in Serbia, there are a total of 20 insurance companies, of which 16 are engaged in insurance activities, while 4 are engaged in reinsurance. Fifteen insurance companies are foreign-owned. Over the past 10 years, despite numerous challenges, the performance indicators of the insurance sector have shown a positive trend, with the total assets, technical reserves, capital, and premiums of both life and non-life insurance more than doubled.

According to the latest report by the National Bank of Serbia (NBS)[14] on the performance of insurance companies for 2023, the total insurance premium in the Republic of Serbia has increased by 15.9%, reaching €1.3 billion. The structure of insurance premiums favors non-life insurance, with 80.3% of the total premium, while 19.7% is from life insurance premiums. The balance sheet structure of the insurance sector grew by 11.6%, reaching €3.2 billion. Although the insurance market has been growing year by year, it remains at a lower level of development, as indicated by the data that the share of total premiums in the Gross Domestic Product (GDP) in 2023 was only 1.9%, while in the European Union, it stands at 6.2%.

[14] https://www.nbs.rs/export/sites/NBS_site/documents/osiguranje/izvestaji/izv_IV_2023.pdf (date of access 03.09.2024).

Figure 2 – Insurance Premium Structure in the Serbian Insurance Market for 2023



Source: Author, based on NBS data
https://www.nbs.rs/export/sites/NBS_site/documents/osiguranje/izvestaji/izv_IV_2023.pdf

From the perspective of the capital market, what is very important are the technical reserves of insurance companies, which can be invested in various types of assets. In 2023, the technical reserves amounted to 2.2 billion euros, which is 11.2% higher than the previous year. The largest share of the total technical reserves is made up of the mathematical reserve, which has been growing year by year. Since there is a limited supply of securities on the capital market and there are prescribed restrictions on the investment of technical reserve funds, insurance companies are obligated to invest the technical reserve funds in assets that are considered reliable, available over a long period, and stable in real value.

Figure 3 – Structure of Non-Life Insurance Investments in 2023

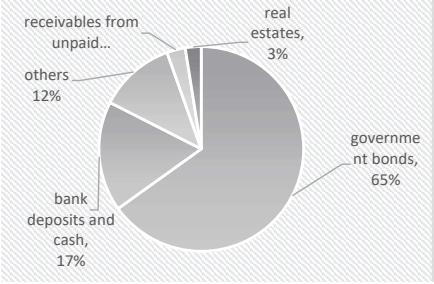
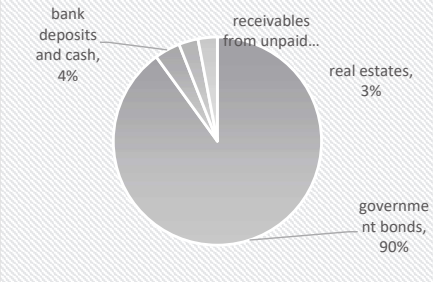


Figure 4 – Structure of Life Insurance Investments in 2023



Source: Author, based on data
https://www.nbs.rs/export/sites/NBS_site/documents/osiguranje/izvestaji/izv_IV_2023.pdf

Considering the limited availability of financial instruments and regulatory restrictions, insurance companies in the Republic of Serbia have limited opportunities to create their own portfolios, so the largest portion of technical reserves is invested in government bonds. This is also indicated by the data from the 2023 report on the insurance companies, according to which the technical reserves of non-life insurance were invested as follows: 64.7% in government bonds, 17.3% in bank deposits and cash, 12.0% in technical reserves for the account of co-insurers, reinsurers, and retrocessionaires, 2.9% in receivables from unpaid premiums, and 2.5% in real estate. The investment structure of the mathematical reserve in 2023 similarly favors government securities – 90%, with 4% in bank deposits, 3% in receivables from unpaid premiums, and 3% in real estate.

Table 4. Investment Structure of Insurance Companies Worldwide and in Serbia (in %)

Type of Asset	EU		USA		Japan		UK		Serbia Life Insurance		Serbia Non-life Insurance	
	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
Corporate Bonds	24,7	23,5	40,9	47,5	6,9	6,5	33,4	32,9	0,0	0,0	0,0	0,0
Government Securities	28,9	25,6	20,5	14,8	41,2	43,7	18,2	16,6	92,1	89,7	76,0	67,2
Stocks	14,9	18,6	15,0	13,6	6,1	5,9	6,7	5,9	0,0	0,0	0,0	0,0
Lending	4,9	5,1	10,0	10,5	7,1	7,4	10,0	10,0	0,0	0,0	0,0	0,0
Cash and Deposits	1,9	1,9	4,6	4,6	2,9	3,0	9,3	10,2	3,1	5,0	8,1	15,0
Real Estate	1,6	1,7	0,5	0,5	1,5	1,6	1,7	2,0	3,2	3,4	3,8	3,7
Investment Funds	20,5	20,5	2,2	2,4	20,6	22,3	12,7	12,6	0,0	0,0	0,0	0,0
Other Investments	2,6	3,1	8,4	8,5	32,1	29,5	0,1	0,1	1,6	1,9	12,1	14,1

Source: Author, based on data from https://documentacion.fundacionmapfre.org/documentacion/publico/es/media/group/1121054.do

If we analyze the investment structure of insurance companies in countries with developed financial markets (EU countries, the USA, Japan, the UK), it is clear that their portfolios are dominated by different types of assets. EU countries have a very diversified portfolio, as they almost equally invest in corporate bonds (23.5%), government bonds (25.6%), investment funds (20.5%), and stocks (18.6%), while real estate accounts for only 1.7%. The situation is quite different in the most developed financial market, the USA, where insurance companies dominate as institutional investors with 47.5% invested in corporate bonds, 14.8% in government bonds, 13.6% in stocks, while real estate only accounts for 0.5%, and 2.4% is invested in investment funds. A different investment structure can be observed in Japan, the second most developed financial market, where government bonds dominate the insurance companies' investment structure with 43.7%, investments in investment

funds are 22.3%, while corporate bonds account for just 6.5% and real estate for 1.6%. In the UK, the investment structure of insurance companies is more diverse: 32.9% are invested in corporate bonds, 16.6% in government bonds, 10% in stocks, 12.6% in investment funds, 10.2% in bank deposits, and 3.2% in real estate. Finally, the investment structure of insurance companies in Serbia is primarily focused on government bonds (67.2% in non-life insurance and 90% in life insurance in 2022) and bank deposits, which further highlights the need for the development of the capital market, with a broader range of investment options, such as corporate bonds, municipal bonds, commercial papers, and similar.

Table 5. Insurance Companies Potential as Institutional Investors in Serbia

Insurance (Re) insurance Companies	Assets (RSD)	Assets (EUR)	Technical Reserves (RSD)	Technical Reserves (EUR)	Organized Market (EUR)
Generali	79.140.000.000	676.017.357	56.347.680.000	481.324.358	24.066.217
Dunav	73.001.000.000	623.577.749	51.976.712.000	443.987.357	22.199.367
Wiener	51.033.000.000	435.926.128	36.335.496.000	310.379.403	15.518.970
Grave	37.423.000.000	319.668.910	26.645.176.000	227.604.264	11.380.213
DDOR	29.663.000.000	253.382.649	21.120.056.000	180.408.446	9.020.422
Dunav Re	18.095.000.000	154.568.285	12.883.640.000	110.052.618	5.502.630
Triglav	14.293.000.000	122.091.434	10.176.616.000	86.929.101	4.346.455
Uniqa Life	12.090.000.000	103.273.311	8.608.080.000	73.530.597	3.676.529
AMS	10.218.000.000	87.282.604	7.275.216.000	62.145.214	3.107.260
Wiener Re	9.656.000.000	82.481.976	6.875.072.000	58.727.167	2.936.358
Milenijum	8.740.000.000	74.657.464	6.222.880.000	53.156.114	2.657.805
Globos	7.871.000.000	67.234.427	5.604.152.000	47.870.912	2.393.545
Uniqa Non-Life	7.716.000.000	65.910.411	5.493.792.000	46.928.212	2.346.410
Generali Re	6.033.000.000	51.534.151	4.295.496.000	36.692.315	1.834.615
Sava Non-Life	5.846.000.000	49.936.788	4.162.352.000	35.554.993	1.777.749
Merkur	5.758.000.000	49.185.089	4.099.696.000	35.019.783	1.750.989
DDOR Re	2.865.000.000	24.472.955	2.039.880.000	17.424.744	871.237
Sava Life	1.854.000.000	15.836.949	1.320.048.000	11.275.908	563.795
OTP	1.566.000.000	13.376.840	1.114.992.000	9.524.310	476.215
Sogaz	1.363.000.000	11.642.805	970.456.000	8.289.677	414.483
Total	**384.224.000.000**	**3.282.058.290**	**273.567.488.000**	**2.336.825.503**	**116.841.275**

Source: Author, based on data from www.nbs.rs

The previous table illustrates the total potential of insurance and reinsurance companies that they can invest in the capital market. As already mentioned, there are numerous regulatory restrictions that insurance managers must adhere to, some of which present challenges when investing in the domestic debt capital market (especially in corporate bonds). Most corporate bond issuers in Serbia do not have a credit rating, nor do their bonds trade on the stock exchange, which makes it

difficult for insurance companies to invest in these bonds and support the development of the debt capital market. Additionally, the short-term securities market lacks commercial papers, which would allow managers of non-life insurance companies to invest funds and as a result ensure better liquidity for the overall financial market along with increased profitability. The development of the capital market would ensure better allocation of technical reserves for insurance companies, increase their profitability, and improve risk management. On the other hand, there is a positive growth trend in life insurance premiums in Serbia, which will further increase the demand for financial instruments. Therefore, the development of the capital market should be the main foundation for strengthening the role of institutional investors, who have significant potential sources for financing the economy.

5. Conclusion

The capital market in the Republic of Serbia is in its initial stage of development, as indicated by the modest trading volume of securities and the market capitalization indicator, which was 5.9% of GDP in 2023. Since the launch of the Capital Market Development Strategy in 2021, efforts have been made to address several issues related to the establishment of a modern capital market. These efforts focus on restoring investor confidence through an improved investor protection system, primarily by increasing transparency, establishing adequate legal regulations, fostering cooperation with regional and international exchanges, and educating potential participants in the financial market. The development of the capital market will ensure better liquidity and transparency of the financial system, as well as better allocation of available financial resources.

Insurance companies, as institutional investors, play a significant role in financial markets worldwide. They significantly create demand for various forms of financial assets. Their role in the development of the financial market depends on the level of development of the insurance market within the national economy. The primary characteristic of the investment policy of insurance companies in Serbia is that they invest primarily in government bonds and bank deposits, as these are low-risk assets with lower returns, due to the fact that the financial market does not offer more profitable alternatives. A conservative investment policy is pursued, focusing on investments in government bonds, with a significant share of cash holdings in their portfolios. Considering that Serbia's insurance market has shown a growth trend over the last decade, it is expected that with this growth, the role of these institutional investors in the development of the capital market should also increase. The potential of the insurance market has not been fully utilized, and therefore, neither has the potential of insurance companies, whose resources are significant for the development of the national economy.

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Milica Goravica[1]

EVROPSKI IZVEŠTAJ

Propisivanjem mogućnosti popunjavanja Evropskog izveštaja u praksi se postavilo pitanje da li se u situacijama kada su učesnici u saobraćajnoj nezgodi popunili Evropski izveštaj može nadoknaditi šteta koja prevazilazi „manju materijalnu štetu", kao i da li se nakon popunjavanja Evropskog izveštaja može nadoknaditi nematerijalna šteta?

Za davanje odgovora se kao prvo postavilo pitanje: Kada se može popuniti Evropski izveštaj i šta se smatra manjom materijalnom štetom?

Prema odredbi člana 172. st.1. tačka 3. Zakona o bezbednosti saobraćaja na putevima vozač odnosno učesnik saobraćajne nezgode u kojoj je nastala samo manja materijalna šteta između ostalog je dužan da popuni Evropski izveštaj o saobraćajnoj nezgodi u slučaju kada ovlašćeno lice ne vrši uviđaj saobraćajne nezgode. Dakle, mogućnost popunjavanja Evropskog izveštaja postoji u situacijama kada nije obavezno obaveštavanje policije i vršenja uviđaja, odnosno u situacijama koje nisu predviđene odredbom čl. 168. Zakona o bezbednosti saobraćaja na putevima, a to su situacije kada u saobraćajnoj nezgodi ni jedno lice nije zadobilo telesne povrede, odnosno poginulo, ili nije nastala velika materijalna šteta. Manjom materijalnom štetom se u smislu člana 7. st. 1 tač. 104 tog zakona smatra se šteta koja je nastala u saobraćajnoj nezgodi i čija vrednost je manja od one za koju je propisana krivična odgovornost. Tumačenjem ove odredbe u vezi sa odredbom čl. 289. Krivičnog zakonika dolazimo do zaključka da se radi o imovinskoj šteti koja ne prelazi iznos od 200.000,00 dinara.

Nasuprot tome, Zakonom o obaveznom osiguranju u saobraćaju je u čl. 106. kao mala šteta propisana šteta za koju odštetni zahtev iznosi manje od 500[2] evra u dinarskoj protivvrednosti i za koju su uz zahtev dostavljeni dokazi na osnovu kojih se može utvrditi obaveza društva.

Dakle postoji kolizija Zakona o bezbednosti saobraćaja na putevima i Zakona o obaveznom osiguranju u saobraćaju u pogledu visine štete koja se smatra malom štetom.

Kako je Zakon o bezbednosti saobraćaja na putevima taj koji propisuje mogućnost popunjavanja Evropskog izveštaja, kao i situacije u kojima je obavezno

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[2] Nakon pridruživanja Republike Srbije Evropskoj Uniji to će biti iznos od 1.000 evra u dinarskoj protivvrednosti. Videti čl. 27. ZOOUS.

pozivanje policije radi vršenja uviđaja, dok se Zakon o obavezom osiguranju u saobraćaju propisivanjem iznosa male štete primarno bavi radi uređenja naknade štete od strane osiguravača oštećenom licu, po skraćenoj proceduri i kraćim rokovima, dok povodom popunjavanja Evropskog izveštaja upućuje na Zakon o bezbednosti saobraćaja na putevima[3], zaključuje se da se Evropski izveštaj može popuniti u situacijama kada u saobraćajnoj nezgodi nema povređenih lica i imovinska šteta iznosi manje od 200.000,00 dinara. Dakle, u kontekstu mogućnosti popunjavanja Evropskog izveštaja malom štetom se smatra iznos koji je manji od 200.000,00 dinara, dok se u kontekstu obaveze osiguravača na naknadu štete u roku od 8 dana od prijema odštetnog zahteva malom štetom smatra iznos od najviše 500 evra.

Kao što je na početku navedeno, u praksi se postavilo pitanje da li je lice, koje je povodom saobraćajne nezgode sa drugim učesnikom popunilo Evropski izveštaj, izgubilo pravo da traži i dobije nadoknadu materijalne štete koja prelazi iznos male štete i nadoknadu nematerijalne štete koja je nastala u vezi sa predmetnim događajem. Sledstveno prethodno navedenom pitanju postavilo se i pitanje da li osiguravajuće društvo koje je nadoknadilo štetu u potpunosti, dakle u iznosu većem od male štete ima pravo regresa, samo do visine male štete ili za celokupan isplaćen iznos. Ova pitanja su opravdano bila sporna, imajući u vidu da u situacijama kada šteta prelazi iznos male štete i kada postoje povrede nekog od učesnika, nije bilo opravdano popunjavati Evropski izveštaj, već je trebalo da se vrši policijski uviđaj.

Opšteprihvaćen stav i sudska praksa je da je svrha popunjavanje Evropskog izveštaja da se oštećenom olakša dokazivanje činjenica od značaja za ostvarivanje odštetnih zahteva i da se ti odštetni zahtevi isplaćuju u krećem vremenskom okviru. Oštećenom se ne može uskratiti pravo na potpunu naknadu samo iz razloga što je sačinilo Evropski izveštaj o saobraćajnoj nezgodi a nije vršen policijski uviđaj, jer svrha sačinjavanja Evropskog izveštaja je da se olakša utvrđivanje činjenica koje se odnose na nastalu saobraćajnu nezgodu, a ne da se utvrđuje visina štete koja se može isplatiti oštećenom licu. Evropskim izveštajem se ni ne može utvrđivati visina nastale štete budući da lice koje sačinjava zapisnik nije stručno da utvrđuje visinu iste. Dakle, to što su učesnici saobraćajne nezgode odokativno procenili da se radi o maloj šteti i popunili Evropski izveštaj ne predstavlja isključivi dokaz da se zaista radi o maloj šteti. Visina zaista pretrpljene materijalne štete se utvrđuje kasnije od strane stručnih lica odnosno od strane ovlašćenih procenitelja osiguravača ili od strane sudskih veštaka tokom sudskog postupka, kada Evropski izveštaj predstavlja samo jedno od dokaznih sredstava koje se ceni zajedno sa ostalim izvedenim dokazima.

Tako je u Odgovorima utvrđenim na sednici Odeljenja za privredne sporove Privrednog apelacionog suda od 07.11.2016. godine i od 08.11.2016. godine navedeno: *„Svrha popunjavanja Evropskog izveštaja o saobraćajnoj nezgodi je da se olakša*

[3] Videti čl. 31. Zakona o obaveznom osiguranju u saobraćaju.

dokazivanje činjenica od značaja za ostvarivanje odštetnih zahteva prema društvu za osiguranje, kod osiguranja vlasnika motornih vozila od odgovornosti za štetu pričinjenu trećim licima. Društva za osiguranje, u svojim opštim uslovima osiguranja, koji su sastavni deo ovakvih ugovora o osiguranju, obično predviđaju da će se male štete isplatiti licu koje poseduje popunjen Evropski izveštaj o saobraćajnoj nezgodi, bez potrebe da se kao dokaz o štetnom događaju i odgovornosti njihovog osiguranika priloži i zapisnik saobraćajne policije...Ovakvo ugovaranje, međutim, ne znači da će osiguranik izgubiti pravo da štetu koju je svojom krivicom prouzrokovao naknadi njegov osiguravač, ako popuni Evropski izveštaj o saobraćajnoj nezgodi i preda ga oštećenom licu, a naknadno se ispostavi da je šteta veća od 500,00 evra u dinarskoj protivvrednosti. Pre svega, članom 918. Zakona o obligacionim odnosima predviđeno je da su ništave odredbe ugovora o osiguranju koje predviđaju gubitak prava na naknadu ili svotu osiguranja, ako osiguranik posle nastupanja osiguranog slučaja ne izvrši neku od propisanih ili ugovorenih obaveza. Takođe, odredbom člana 28. stav 1. Zakona o obaveznom osiguranju u saobraćaju predviđeno je da kad oštećeno lice podnese odštetni zahtev društvu za osiguranje, društvo ne može u odgovoru na takav zahtev isticati prigovore koje bi na osnovu zakona ili ugovora o osiguranju moglo istaći prema osiguraniku, zbog nepridržavanja zakona ili ugovora. Navedenim zakonskim odredbama maksimalno se štite prava oštećenih lica, pa tako i lica koja su im tu štetu isplatila po osnovu "kasko-osiguranja" i koja su na osnovu člana 939. Zakona o obligacionim odnosima stupila u prava oštećenog prema licu odgovornom za štetu, odnosno prema njegovom osiguravaču. Nastanak štete i njena visina se u parničnom postupku ne moraju dokazivati isključivo zapisnikom saobraćajne policije, već svim raspoloživim dokaznim sredstvima i ako iz utvrđenih činjenica bude proizlazila obaveza osiguravača na isplatu štete, on će biti obavezan da tu štetu i naknadi. Naravno da se može dokazivati i da u Evropskom izveštaju nisu navedeni istiniti podaci o saobraćajnoj nezgodi, kao i da su osiguranik i oštećeno lice postupali zlonamerno, ali bi teret dokazivanja takvih činjenica bio na tuženom osiguravajućem društvu."

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Primer:

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1. Osiguranje imovine i osiguranje lica
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1.1.1. Princip obeštećenja

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Primer:

N. Žarković, str. 125.

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Primer:

N. Žarković (2013), str. 25.

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Jasna Pak, „Pravna zaštita korisnika usluga osiguranja“, *Privreda i pravo u tranziciji*, Palić, 2004, str. 35.

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Primer:

Jelena Kočović, Marija Jovović, „Uticaj liberalizacije i privatizacije na razvoj tržišta osiguranja u Srbiji", *Tokovi osiguranja*, br. 1/2016, str. 5.

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Vladimir Kovčić, „Stečaj akcionarskog društva za osiguranje", *Pravo osiguranja u tranziciji* (urednici Predrag Šulejić i Jovan Slavnić), Palić, 2003, str. 56.

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Primer:

Jasna Pak, str. 57.

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Zakon o obaveznom osiguranju u saobraćaju, *Službeni glasnik RS*, br. 51/09, čl. 15.

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Primer:

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ZO, čl. 15.

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Primeri:

nemački Trgovački zakonik iz 1897. godine (*Handelsgesetzbuch*), par. 29.

britanski Kompanijski zakon iz 2006. godine (*Companies Act*; dalje u fusnotama: CA), čl. 53.

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Primer:

Christos Gortsos, The Supervision of Financial Conglomerates under European Financial Law (Directive 2002/87/EC), 2010,

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Primer:

C. Gortsos, The Supervision of Financial Conglomerates under European Financial Law (Directive 2002/87/EC), str. 12.

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Žarković, N., *Pojmovnik osiguranja*, Novi Sad, 2013, str. 100.

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Example:

N. Žarković, pp. 125

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N. Žarković (2013), pp. 25

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Jasna Pak, „Pravna zaštita korisnika usluga osiguranja", *Privreda i pravo u tranziciji*, Palić, 2004, str. 35.

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Example:

Jasna Pak, pp. 57

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Insurance Law, art.15
IL, art.15

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