

ČASOPIS ZA TEORIJU I PRAKSU OSIGURANJA



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Nataša P. Tešić, mast. ek.<sup>1</sup>

## OSIGURANJE KAO ZNAČAJAN FAKTOR ODRŽIVOG RAZVOJA

ORIGINALNI NAUČNI RAD

### Apstrakt

U svetlu savremenih globalnih izazova, od pandemije kovida 19 do ekonomske nestabilnosti, koncept održivosti postaje sve značajniji. Ovaj rad istražuje važnu ulogu osiguranja u postizanju Ciljeva održivog razvoja (engl. *Sustainable Development Goals – SDG*) na globalnom nivou. Uz usredsređivanje na trodimenzionalni pristup održivosti koji obuhvata ekološke, ekonomske i socijalne aspekte, u radu je analizirano kako sektor osiguranja može doprineti održivom razvoju. Rad uključuje komparativnu analizu koja istražuje korelaciju između stope penetracije osiguranja i indeksa održivog razvoja (SDG indeksa) za odabrane zemlje. Ova analiza pruža uvid u to kako razvijenost sektora osiguranja može uticati na sposobnost zemlje da ostvari Ciljeve održivog razvoja. Rad takođe razmatra uticaj osiguranja na ekonomski rast, socijalnu inkluziju i zaštitu životne sredine kroz različite politike i usluge. Analiza ukazuje na potencijal osiguranja da bude katalizator promena, podstičući održive inicijative na svim nivoima – od individualnih domaćinstava do preduzeća i vlada.

**Ključne reči:** *Ciljevi održivog razvoja (SDG), osiguranje, ekonomski rast, zaštita životne sredine, socijalna inkluzija*

### I. Uvod

Pojam održivosti, koji je postao centralni element u oblikovanju budućnosti, dobija na značaju u svetlu savremenih globalnih izazova, uključujući pandemiju kovida 19 i ekonomske krize. Održivi razvoj, definisan kao razvoj koji zadovoljava

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potrebe sadašnjih generacija bez ugrožavanja budućih,<sup>2</sup> oslanja se na sinergiju ekoloških, ekonomskih i socijalnih dimenzija. Sektor osiguranja, kao ključni faktor upravljanja rizicima, ima potencijal da igra centralnu ulogu u promociji održivog razvoja. U ovom radu je prikazano kako osiguranje može doprineti ostvarivanju Ciljeva održivog razvoja, sa fokusom na njegov uticaj na ekonomske, ekološke i socijalne aspekte održivosti.

Suočen s novom stvarnošću i promenjenim društvenim očekivanjima, sektor osiguranja takođe prolazi kroz bitne promene. S jedne strane, pandemija izazvana koronavirusom postavlja niz izazova, a s druge strane, digitalna transformacija koju donosi industrijska revolucija 4.0 unosi dodatnu složenost. Globalne pretnje dovode u pitanje održivost budućnosti svetske populacije, a neodrživa budućnost nije budućnost koja se može osigurati.<sup>3</sup>

## 1. Osiguranje i Ciljevi održivog razvoja

Osiguranje je važan mehanizam zaštite od rizika koji može doprineti ostvarivanju Ciljeva održivog razvoja (SDG) koje je usvojila Generalna skupština Ujedinjenih nacija 2015. godine. SDG predstavljaju ambicioznu viziju transformacije ka održivijoj budućnosti do 2030. godine.<sup>4</sup> Dosadašnja istraživanja pokazuju da osiguranje ima ključnu ulogu u postizanju određenih SDG, pogotovo onih što se odnose na smanjenje siromaštva i gladi, poboljšanje zdravlja i obrazovanja, promovisanje pristojnog rada i ekonomskog rasta te preduzimanje klimatskih akcija.

Među ključnim izvorima koji se bave ovom temom su studije sprovedene od strane „Deutsche Gesellschaft für Internationale Zusammenarbeit“ (GIZ)<sup>5</sup>, „Swiss Re“<sup>6</sup> i Svetske banke.<sup>7</sup> Ti izvori ističu različite aspekte doprinosa osiguranja ostvarivanju SDG, od smanjenja siromaštva i gladi do povećanja ekonomske stabilnosti i klimatskih akcija. Specifične studije, kao što su one sprovedene od strane CISL<sup>8</sup>

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<sup>2</sup> WCED. (1987). *Report of the World Commission on Environmental and Development: Our Common Future – Brundtland Report*. WCED. <https://www.un-documents.net/our-common-future.pdf>.

<sup>3</sup> Tešić, N. (2022). ESG risks in the insurance market. *Development of modern insurance market – constraints and possibilities* (pp. 237–252). Faculty of Economics, University of Belgrade.

<sup>4</sup> United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. United Nations Sustainable Development Summit 2015. New York. <https://sustainabledevelopment.un.org/post2015/summit>.

<sup>5</sup> GIZ. (2017). *Inclusive Insurance and the Sustainable Development Goals*. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

<sup>6</sup> Swiss Re. (2017). Insurance: adding value to development in emerging markets. *Sigma*, 4/2017, Zürich, Swiss Re.

<sup>7</sup> World Bank Group. (2021). *Developing Insurance Markets. The Insurance Sector's Contribution to the Sustainable Development Goals (SDGs)*. <https://doi.org/10.1596/978-1-4648-1715-9>.

<sup>8</sup> Cambridge Institute for Sustainability Leadership (CISL) (2019). *Mutual microinsurance and the Sustainable Development Goals: An impact assessment following Typhoon Haiyan*. Cambridge, UK: Cambridge Institute for Sustainability Leadership.

i „Allianz“-a<sup>9</sup>, fokusiraju se na uticaj mikroosiguranja i korporativnih strategija na postizanje SDG. Ti izvori zajedno ukazuju na širok spektar uticaja koje osiguranje može imati na održivi razvoj, od makro do mikro nivoa.

Napredak u postizanju Ciljeva održivog razvoja prati se pomoću specifičnih SDG indikatora. Svaki od 17 Ciljeva održivog razvoja detaljno je raščlanjen na 169 potciljeva i 231 indikator, koji su integrisani u bazu podataka o SDG indikatorima. Ta baza, koju održavaju Ujedinjene nacije, sadrži obimne podatke o indikatorima za svaku zemlju i svaki cilj, kao i izveštaje o postignutom napretku u svetu.<sup>10</sup> Međutim, globalna statistika koja se tiče sektora osiguranja često je nedovoljno dostupna, što predstavlja značajan izazov za supervizore i regulatore u ovoj oblasti.

Analiza veze između sektora osiguranja i postizanja Ciljeva održivog razvoja može biti inicirana kroz komparativnu studiju napretka različitih zemalja u ostvarenju SDG, uzimajući u obzir njihov nivo razvoja tržišta osiguranja.<sup>11</sup> Taj nivo razvoja najčešće se meri stopom penetracije osiguranja, koja predstavlja indikator razvijenosti sektora osiguranja u odnosu na ukupnu razvijenost ekonomije date zemlje. Konkretno, stopa penetracije osiguranja izračunava se kao odnos ukupnih premija osiguranja i bruto domaćeg proizvoda (BDP) zemlje, izražen u procentima. Ta stopa pruža uvid u stepen prožimanja sektora osiguranja unutar ekonomske strukture zemlje. Kada je stopa penetracije osiguranja veća, to može biti pokazatelj višeg nivoa ekonomske stabilnosti, kao i razvijenosti finansijskih tržišta. Pomoću tog pristupa, moguće je proceniti kako se razvijenost sektora osiguranja može odraziti na sposobnost zemlje da ostvari Ciljeve održivog razvoja, što čini osnovu ove analize.

Grafikon 1 prikazuje korelaciju između indeksa održivog razvoja (SDG indeksa) i stope penetracije osiguranja za odabrane zemlje u 2021. godini. SDG indeks predstavlja procentualni pokazatelj ostvarenja Ciljeva održivog razvoja, sa vrednošću od 100, ukazujući na potpuno postignute sve SDG.

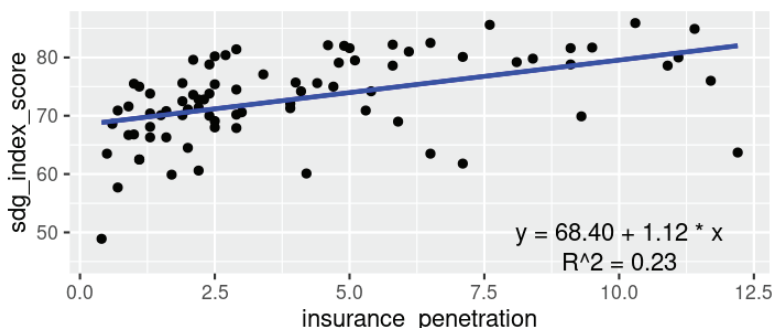
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<sup>9</sup> Allianz. (2019). Review of our contribution to the SDGs. [https://www.allianz.com/content/dam/one-marketing/azcom/Allianz\\_com/responsibility/documents/Allianz\\_SDG\\_Report.pdf](https://www.allianz.com/content/dam/one-marketing/azcom/Allianz_com/responsibility/documents/Allianz_SDG_Report.pdf).

<sup>10</sup> United Nations Statistics Division. (n.d.). Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development. United Nations. Preuzeto sa <https://unstats.un.org/sdgs/indicators/indicators-list/>.

<sup>11</sup> Prema Holliday, S., Remizova, I., & Stewart, F. (2021). The Insurance Sector's Contribution to the Sustainable Development Goals (SDGs). World Bank Group. <https://documents1.worldbank.org/curated/en/560821632197166715/pdf/The-Insurance-Sector-s-Contribution-to-the-Sustainable-Development-Goals-SDGs.pdf>.

**Grafikon 1. Odnos između SDG indeksa i stope penetracije osiguranja (linearni regresioni model)**



Izvor: Kalkulacije autora na bazi podataka iz OECD.stat i SDG Index database 2021 (Online database for the Sustainable Development Report 2021).

Napomena: Analiza je izvršena korišćenjem programskog jezika R.

Analiza, koja obuhvata ukupno 80 zemalja sa odgovarajućim stopama penetracije osiguranja i SDG indeksima (detaljni podaci prikazani su u Prilogu 1), pokazuje tendenciju da zemlje sa višom stopom penetracije osiguranja ostvaruju veći napredak u implementaciji SDG. S druge strane, zemlje s nižom stopom penetracije osiguranja pokazuju slabije performanse u ostvarivanju održivog razvoja. Na osnovu tog prikaza, može se sugerisati da postoji veza između razvijenosti tržišta osiguranja i efikasnosti u postizanju održivog razvoja. U nastavku, u Tabeli 1 prikazane su deskriptivne statistike varijabli korišćenih u analizi. Odnos između stope penetracije osiguranja i SDG indeksa biće dodatno istražen kroz linearnu regresionu analizu u narednom delu rada.

**Tabela 1. Deskriptivna statistika za SDG indeks i stopu penetracije osiguranja za 2021. godinu**

|                              | Broj opservacija (n) | Prosečna vrednost (mean) | Standardna devijacija (sd) | Minimum (min) | Maksimum (max) |
|------------------------------|----------------------|--------------------------|----------------------------|---------------|----------------|
| SDG indeks                   | 80                   | 72.95                    | 7.25                       | 48.9          | 85.9           |
| Penetracija osiguranja (u %) | 80                   | 4.08                     | 3.13                       | 0.4           | 12.2           |

Izvor: Kalkulacije autora na bazi podataka iz OECD.stat i SDG Index database 2021 (Online database for the Sustainable Development Report 2021).

Napomena: Analiza je izvršena korišćenjem programskog jezika R.

Prosečna vrednost SDG indeksa za sve zemlje u uzorku iznosi 72,95, sa standardnom devijacijom od 7,25. Raspon vrednosti kreće se od 48,9 do 85,9, što pokazuje

široku varijabilnost u postignutim Ciljevima održivog razvoja među zemljama. Što se tiče stope penetracije osiguranja, prosečna vrednost je 4,08%, sa standardnom devijacijom od 3,13%. Raspon vrednosti stope penetracije osiguranja kreće se od minimalnih 0,4% do maksimalnih 12,2%.

Detaljnija analiza podataka<sup>12</sup> pokazuje da postoje zemlje sa visokim SDG indeksom i visokom stopom penetracije osiguranja (na primer Finska sa SDG indeksom od 85,9 i stopom penetracije osiguranja od 10,3%, Danska sa SDG indeksom od 84,9 i stopom penetracije osiguranja od 11,4%, i Velika Britanija sa SDG indeksom od 80,0 i stopom penetracije osiguranja od 11,1%). Međutim, postoje i zemlje sa visokim SDG indeksom, ali nižom stopom penetracije osiguranja. Primera radi, Švedska ima visok SDG indeks od 85,6, ali stopa penetracije osiguranja iznosi 7,6%, Norveška ima SDG indeks od 82,0 sa stopom penetracije osiguranja od 4,9%, dok Austrija ima SDG indeks od 82,1 i stopu penetracije osiguranja od 4,6%. S druge strane, postoje zemlje koje imaju niže SDG indekse i nisku stopu penetracije osiguranja. Na primer, Pakistan ima SDG indeks od 57,7 i stopu penetracije osiguranja od 0,7%, Nigerija ima najniži SDG indeks u uzorku od 48,9 sa stopom penetracije osiguranja od 0,4%, dok Bangladeš ima SDG indeks od 63,5 i stopu penetracije osiguranja od 0,5%.

Te varijacije ilustruju kompleksnu prirodu odnosa između razvijenosti tržišta osiguranja i ostvarenja Ciljeva održivog razvoja, što ukazuje na potrebu za daljim istraživanjima ovog fenomena. U cilju procene uticaja penetracije osiguranja na postizanje Ciljeva održivog razvoja, upotrebljen je linearni regresioni model. Rezultati tog modela prikazani su u Tabeli 2.

**Tabela 2. Uticaj penetracije osiguranja na SDG indeks, 2021.**

| Nezavisna promenljiva         | Koeficijent | Std. greška | t-vrednost | p-vrednost |
|-------------------------------|-------------|-------------|------------|------------|
| Penetracija osiguranja        | 1.1151      | 0.2302      | 4.845      | 6.31e-06   |
| Konstanta                     | 68.4007     | 1.1795      | 57.991     | < 2e-16    |
| Dodatne statistike:           |             |             |            |            |
| R <sup>2</sup> = 0.2313       |             |             |            |            |
| F-statistika = 23.47, p < .05 |             |             |            |            |
| SEE = 6.393                   |             |             |            |            |
| n = 80                        |             |             |            |            |

*Izvor: Kalkulacije autora na bazi podataka iz OECD.stat i SDG Index database 2021 (Online database for the Sustainable Development Report 2021).*

*Napomena: Analiza je izvršena korišćenjem programskog jezika R.*

Rezultati linearne regresione analize ukazuju na to da je regresija u celini statistički značajna, što pokazuje F test (F = 23,47, p < 0,05). Korelacija stope penetracije

<sup>12</sup> Pogledati Prilog 1. na kraju rada.

osiguranja i SDG indeksa umereno je jaka pozitivna linearna. Prema koeficijentu determinacije ( $R^2 = 0,2313$ ), oko 23,1% varijacije u SDG indeksu može se objasniti promenama u stopi penetracije osiguranja. Ocena koeficijenta koji stoji uz promenljivu Penetracija osiguranja (1,1151) je statistički značajna na osnovu t-testa ( $t = 4,845$ ,  $p < 0,001$ ). Pozitivan koeficijent nagiba sugerise da se SDG indeks povećava s povećanjem stope penetracije osiguranja. Iako su rezultati statistički značajni, treba napomenuti da je koeficijent determinacije  $R^2$  relativno nizak, što znači da linearni model objašnjava samo deo varijacija u SDG indeksu.

Stavljanjem u odnos stope penetracije osiguranja i SDG indeksa dobijamo uvid u doprinos osiguranja postizanju Ciljeva održivog razvoja, međutim, treba imati u vidu brojne faktore i konceptualne razlike. Na primer, stopa penetracije osiguranja može biti na niskom nivou usled različitih faktora. Tako je u nekim zemljama niska zbog nedovoljne ekonomske aktivnosti i niskog dohotka stanovništva, dok je u drugim zemljama niska stopa penetracije osiguranja posledica nedovoljne svesti o značaju osiguranja ili nedovoljno razvijenog sektora osiguranja.

Odnos između napretka u postizanju Ciljeva održivog razvoja i širenja osiguranja ne može se objasniti isključivo na osnovu nivoa životnog standarda unutar određene zemlje. Izveštaj o održivom razvoju iz 2020. godine pokazuje da čak i zemlje s visokim životnim standardom mogu naići na poteškoće u postizanju određenih Ciljeva održivog razvoja, pogotovo ekoloških (SDG 12-15).<sup>13</sup> Takva situacija se često pripisuje visokom nivou proizvodnje i potrošnje koje doprinose zagađenju okoline. S druge strane, manje razvijene zemlje i zemlje sa nižim SDG indeksom često imaju bolje rezultate u pogledu postizanja nekih ekoloških SDG, upravo zahvaljujući nižem obimu proizvodnje i potrošnje, odnosno manjem uticaju na okolinu. Ipak, te zemlje se uglavnom suočavaju s izazovima u ostvarivanju drugih Ciljeva održivog razvoja (SDG 1-9), poput pristupa osnovnim zdravstvenim i infrastrukturnim uslugama, što je neophodno za obezbeđivanje održivog razvoja i opšte dobrobiti društva. Treba napomenuti da doprinos osiguranja postizanju Ciljeva održivog razvoja nije uvek jasno izražen, te se samim tim teško može metrički iskazati. Iako osiguranje može pružiti značajan doprinos smanjenju rizika od prirodnih katastrofa, zdravstvenih problema i drugih nepredviđenih rizika, postoji mnogo drugih faktora koji utiču na ostvarivanje SDG. Veza između osiguranja i SDG je nesporna, no procena njegovog doprinosa ostvarivanju ovih ciljeva nije jednostavan proces.

Globalno posmatrano, osiguranje igra značajnu ulogu u ostvarivanju Ciljeva održivog razvoja na svim nivoima – od individualnih domaćinstava do preduzeća i vlada. Integracija osiguranja i SDG ilustruje kako finansijska stabilnost i socijalna zaštita mogu doprineti širem održivom razvoju i smanjenju nejednakosti. U tom

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<sup>13</sup> Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., & Fuller, G. (2020). The Sustainable Development Report 2020. Cambridge University Press.

kontekstu, osiguranje može pružiti značajan doprinos postizanju Ciljeva održivog razvoja kroz širok spektar ekonomskih, socijalnih i ekoloških inicijativa. Analiza koja sledi u nastavku rada detaljno će osvetliti uticaj koji osiguravajuće kompanije mogu imati u promociji održivog razvoja, pogotovo kroz razvoj politika i usluga koje podržavaju ekonomski rast, socijalnu inkluziju i zaštitu životne sredine.

## **2. Doprinos osiguranja ekonomskoj komponenti održivog razvoja**

Ekonomska dimenzija održivog razvoja izuzetno je značajna jer podrazumeva efikasnu raspodelu resursa i dugoročan rast i stabilnost. Da bi bio ostvariv, održivi ekonomski razvoj zahteva ravnotežu između ekonomskog rasta, zaštite životne sredine i socijalne pravde. Uloga sektora osiguranja u ostvarivanju ekonomskog aspekta održivog razvoja je višestruka. Osiguranje može doprineti promovisanju održivih investicija, upravljanju rizicima, podršci razvoju malih i srednjih preduzeća, kao i zalaganju za društveno odgovorno poslovanje. Doprinos osiguranja održivom razvoju naročito je izražen u ekonomskoj dimenziji, te je u nastavku ovog poglavlja razmotreno kako osiguranje doprinosi pojedinačnim Ciljevima održivog razvoja iz ekonomske perspektive.

Doprinos osiguranja ekonomskom aspektu održivosti naročito se ističe u kontekstu SDG 13: Akcija za klimu, koji se odnosi na borbu protiv klimatskih promena. Kroz prenos rizika i finansijsku podršku obnovi, osiguranje direktno utiče na taj cilj. Na makroekonomskom nivou, osiguranje pomaže u ublažavanju troškova katastrofa, omogućavajući brži oporavak i smanjenje dugoročnih ekonomskih i socijalnih gubitaka.

Ovde je ključno napomenuti da se male zemlje i zemlje s nižim i srednjim nivoom dohotka brže oporavljaju kada su osigurane od katastrofa.<sup>14</sup> Te zemlje često imaju ograničene resurse za obnovu, a prenos rizika na osiguranje može imati pozitivan makroekonomski uticaj. Beneficije od osiguranja, pogotovo u stimulaciji ekonomske aktivnosti, najizraženije su u roku od tri godine nakon katastrofe.<sup>15</sup>

Pored tih makroekonomskih beneficija, osiguravajuće kuće razvijaju inovativne usluge kao što su mikroosiguranje i parametarsko osiguranje. Te usluge omogućavaju širim slojevima stanovništva da se zaštite od katastrofalnih rizika, doprinoseći ekonomskoj inkluziji i smanjenju siromaštva. Unapređenje pristupa takvim inovativnim rešenjima ima potencijal da proširi i egalizuje osiguravajuće *pulove* za katastrofalne rizike,<sup>16</sup> stvarajući direktan ekonomski doprinos ka postizanju SDG 13. Javno-privatna

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<sup>14</sup> Von Peter, G., Von Dahlen, S., & Saxena, S. (2012). Unmitigated disasters? New evidence on the macroeconomic cost of natural catastrophes. BIS Working Papers No 394. <https://www.bis.org/publ/work394.pdf>.

<sup>15</sup> Ibid.

<sup>16</sup> Churchill, C., & Matul, M. (2012). *Protecting the poor: A microinsurance compendium* (Vol. 2). International Labour Organization.

partnerstva, poput regionalnih *pulova* osiguranja na Karibima i Pacifiku,<sup>17</sup> primeri su ključnih instrumenata u ekonomskim aspektima prilagođavanja na klimatske rizike.

Generalno posmatrano, delatnost osiguranja, svojim aktivnostima određivanja cena, modeliranja rizika i pružanja zaštite od rizika povezanih s prirodnim katastrofama, može aktivno doprineti ekonomskim aspektima SDG 13. S obzirom na svoje sposobnosti, sektor osiguranja može biti važan faktor u tranziciji prema nisko-ugljeničnoj ekonomiji.<sup>18</sup> U cilju postizanja veće otpornosti na katastrofe, delatnost osiguranja treba da nastavi s razvojem novih usluga koje su prilagođene specifičnim potrebama ranjivih zajednica.

Osiguranje ima potencijal da igra značajnu ulogu u borbi protiv globalne gladi, pogotovo u kontekstu SDG 2: Svet bez gladi. Prema Izveštaju o stanju sigurnosti hrane i ishrane u svetu iz 2022. godine, broj ljudi izloženih gladi i nesigurnosti u pogledu hrane je u porastu.<sup>19</sup> U tom kontekstu, osiguranje može pružiti neophodnu zaštitu poljoprivrednim proizvođačima od različitih rizika. To je naročito važno jer se veliki deo siromašnog stanovništva oslanja na poljoprivredu kao primarni izvor prihoda.<sup>20</sup> Osiguranje u poljoprivredi ne pomaže samo u upravljanju rizikom i održavanju proizvodnje hrane, već i podstiče održivu poljoprivrednu praksu.<sup>21</sup>

Na globalnom nivou, vlade širom sveta već prepoznaju vrednost poljoprivrednog osiguranja u obezbeđenju sigurnosti hrane. Zemlje poput SAD i EU daju značajne subvencije za premije osiguranja.<sup>22</sup> Osim što pruža zaštitu od nepredviđenih događaja, osiguranje podstiče i investicije i pristup kreditima, što dodatno stabilizuje izvore prihoda i doprinosi rastu proizvodnje hrane.

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<sup>17</sup> GFDRR. (2017). What Makes Catastrophe Risk Pool Work. Washington DC: World Bank, GFDRR. <https://www.gfdr.org/en/feature-story/what-makes-catastrophe-risk-pools-work>.

<sup>18</sup> Golnaraghi, M., Geneva Association Task Force on Climate Change Risk Assessment for the Insurance Industry. (2021). *Climate Change Risk Assessment for the Insurance Industry*. The Geneva Association. [https://www.genevaassociation.org/sites/default/files/research-topics-document-type/pdf\\_public/climate\\_change\\_risk\\_assessment\\_for\\_the\\_insurance\\_industry.pdf](https://www.genevaassociation.org/sites/default/files/research-topics-document-type/pdf_public/climate_change_risk_assessment_for_the_insurance_industry.pdf).

<sup>19</sup> FAO, IFAD, UNICEF, WFP, & WHO. (2022). The state of food security and nutrition in the world 2022: Repurposing food and agricultural policies to make healthy diets more affordable. <https://doi.org/10.4060/cc0639en>.

<sup>20</sup> World Bank. (n.d.). Agriculture. Preuzeto 15. maja 2023, sa <https://www.worldbank.org/en/topic/agriculture/overview>.

<sup>21</sup> Kalfin, N., Sukono, S., Supian, S., & Mamat, M. (2022). Insurance as an alternative for sustainable economic recovery after natural disasters: A systematic literature review. *Sustainability*, 14(7), 4349. <https://doi.org/10.3390/su14074349>; Mills, E. (2004). *Insurance as an adaptation strategy for extreme weather events in developing countries and economies in transition* (Report No. LBNL-52220). Lawrence Berkeley National Laboratory. <https://escholarship.org/uc/item/5609x12n>.

<sup>22</sup> Glauber, J. W. (2013). The growth of the federal crop insurance program, 1990–2011. *American Journal of Agricultural Economics*, 95(2), 482–488; Möhring, N., Dalhaus, T., Enjolras, G., & Finger, R. (2020). Crop insurance and pesticide use in European agriculture. *Agricultural Systems*, 184, 102902. <https://doi.org/10.1016/j.agsy.2020.102902>; Bielza, M., Stroblmair, J., Gallego, J., Conte, C. G., Dittmann, C. (2007). Agricultural risk management in Europe. *AgEcon Search*, 1-61. <https://ageconsearch.umn.edu/record/9252/>.

Osiguranje može značajno doprineti jačanju i unapređenju održivosti gradova i zajednica (SDG 11: Održivi gradovi i zajednice). Kroz ovaj doprinos, osiguranje može stimulirati sve tri dimenzije održivosti. Iz ekonomskog aspekta, osiguranje ima ključnu ulogu u povećanju otpornosti gradova i urbanih zajednica. To se postiže podrškom infrastrukturnim projektima, preventivnim merama za smanjenje gubitaka, promovisanjem bezbedne vožnje i minimizacijom finansijskih izdataka nakon katastrofe. Kao nosioci rizika, osiguravači igraju ključnu ulogu u proceni i upravljanju rizicima povezanim s infrastrukturnim projektima. S druge strane, kao institucionalni investitori, osiguravači koriste svoj veliki kapacitet za pokrivanje dugoročnog kreditnog rizika kako bi pružili finansijsku podršku tim projektima.<sup>23</sup>Top of Form

Doprinosi svim dimenzijama održivosti, osiguranje može unaprediti zdravstvene sisteme i pomoći društvu u postizanju SDG 3: Dobro zdravlje. Ekonomski doprinos osiguranja ogleda se prvenstveno u smanjenju finansijskog tereta zdravstvene zaštite koji trpi stanovništvo i država. Zahvaljujući zdravstvenom osiguranju smanjuju se, pa čak i ukidaju finansijske prepreke u pružanju zdravstvene zaštite. Domaćinstva koja poseduju zdravstveno osiguranje manje su sklona previsokim zdravstvenim izdacima (troškovi zdravstvene zaštite iz vlastitog džepa koji prelaze 10% ili 25% kućnog budžeta),<sup>24</sup> čime osiguranje ujedno sprečava siromaštvo (SDG 1) i glad (SDG 2).

Osiguranje poseduje veliki potencijal kada je u pitanju doprinos smanjenju nejednakosti, kako unutar zemalja tako i među njima, što je cilj SDG 10: Smanjenje nejednakosti. U kontekstu rastuće nejednakosti i siromaštva,<sup>25</sup> osiguranje može podstaći ekonomsku stabilnost, pogotovo u zemljama u razvoju. Na primer, osiguranje od klimatskih rizika pomaže poljoprivrednicima u zemljama s niskim i srednjim nivoom dohotka da se brže oporave od katastrofa. Investiranje u sektor osiguranja u tim zemljama može dodatno stvoriti radna mesta i smanjiti nejednakost.

Jedan od Ciljeva održivog razvoja, kome osiguranje može značajno doprineti kroz sve tri dimenzije održivosti, jeste SDG 1: Svet bez siromaštva. Iako smo tokom poslednjih decenija bili svedoci stalnog opadanja globalne stope siromaštva, pandemija kovida 19 prekinula je taj napredak 2020. godine. Prema podacima UN, stopa siromaštva se povećala sa 8,3% u 2019. na 9,2% u 2020. godini, što je zaustavilo napredak u smanjenju siromaštva za otprilike tri godine.<sup>26</sup>

<sup>23</sup> IFC. (2018). Crowding-in capital: how insurance companies can expand access to finance. *EM Compass*. Note 52. [https://www.ifc.org/wps/wcm/connect/industry\\_ext\\_content/ifc\\_external\\_corporate\\_site/financiaml+institutions/resources/crowding-in+capital+how+insurance+companies+can+expand+access+to+finance](https://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/financiaml+institutions/resources/crowding-in+capital+how+insurance+companies+can+expand+access+to+finance).

<sup>24</sup> Hoang-Vu Eozenou, P., Neelsen, S., Florina Pirlea, A. (2023). *Universal Health Coverage as a Sustainable Development Goal*. World Bank. <https://datatopics.worldbank.org/world-development-indicators/stories/universal-health-coverage-as-a-sustainable-development-goal.html>.

<sup>25</sup> United Nations. (2022). *The Sustainable Development Goals Report 2022*. <https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022.pdf>.

<sup>26</sup> Ibid.



Osiguranje pruža ključne mehanizme za ekonomsku otpornost u borbi protiv siromaštva. Pomaže u pokrivanju troškova neočekivanih događaja, čime jača finansijsku stabilnost pojedinaca i zajednica. U vremenima kada se ljudi suočavaju s nepredvidivim situacijama, kao što je pandemija kovida 19, osiguranje kroz mehanizme kao što su osiguranje od nezaposlenosti ili osiguranje od posledica bolesti može pružiti finansijsku stabilnost, pomažući ljudima da izbegnu pad u ekstremno siromaštvo. Pored toga, osiguranje može pomoći u smanjenju siromaštva kroz podršku kontinuitetu poslovanja preduzeća, očuvanju radnih mesta i smanjenju potrebe za državnim socijalnim davanjima.

Uloga sektora osiguranja u postizanju SDG 8: Dostojanstven rad i ekonomski rast, postaje sve prepoznatljivija. Glavni zadatak unutar tog cilja Agende UN jeste unapređenje inkluzivnog i održivog ekonomskog rasta, zaposlenosti i dostojanstvenog rada za sve. Zapravo, to je jedini cilj održivog razvoja u kome se osiguranje eksplicitno pominje.<sup>27</sup> Taj potencijalni doprinos osiguranja vidljiv je u svakom aspektu održivosti – ekonomskom, ekološkom i socijalnom. Osiguranje ne samo da podržava preduzetništvo i investicije, već jača produktivnost i ublažava finansijske šokove. Povećanjem otpornosti poslovanja i smanjenjem rizika za preduzetnike i investitore, osiguranje omogućava razvoj novih preduzeća i otvaranje radnih mesta, čime direktno doprinosi promociji dostojanstvenog rada i ekonomskog rasta.

Doprinos osiguranja u postizanju SDG 5: Rodna ravnopravnost, vidljiv je pre svega u pružanju zaštite ženama i devojčicama u različitim aspektima njihovog života, uključujući zdravstvenu zaštitu, finansijsku sigurnost i zaštitu od nasilja. Kao konkretan primer, mikroosiguranje može igrati ključnu ulogu u smanjenju ekonomskih gubitaka za žene, naročito s obzirom na podatak da su žene tokom 2020. godine činile gotovo 45% ukupnog gubitka zaposlenosti.<sup>28</sup> Obezbeđujući finansijsku sigurnost u slučaju bolesti ili smrti bračnog partnera, ta vrsta osiguranja pruža ženama veću ekonomsku stabilnost.

Oснаživanje industrije, inovacija i infrastrukture ključno je za postizanje SDG 9: Industrija, inovacije i infrastruktura. U tom kontekstu, osiguranje može dati značajan doprinos kroz sve tri dimenzije održivosti – ekonomsku, socijalnu i ekološku. Ta delatnost se naročito ističe svojom sposobnošću da preuzme rizike i upravlja rizicima koji prate infrastrukturne projekte, omogućavajući investitorima i preduzećima da smanje potencijalne gubitke i obezbede finansijsku zaštitu u slučaju štete ili neplaniranih događaja.

Poslednji cilj u ovom delu je SDG 17: Partnerstvom do ciljeva, koji se fokusira na jačanje globalnih partnerstava za održivi razvoj. Taj cilj podrazumeva unapređenje međunarodne saradnje i pružanje podrške zemljama u razvoju u ostvarivanju svih

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<sup>27</sup> 8.10 – Ojačati kapacitet domaćih finansijskih institucija kako bi se podstakao i proširio pristup banarstvu, osiguranju i finansijskim uslugama za sve. United Nations. (n.d.-a). *Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all*. Preuzeto 20. maja 2023, sa <https://unric.org/en/sdg-8/>.

<sup>28</sup> United Nations. (2022). *The Sustainable Development Goals Report 2022*.

ciljeva održivosti. Osiguranje, sarađujući s međunarodnim organizacijama, vladama i nevladinim sektorom, može doprineti SDG 17 na više načina. Na primer, trgovinsko kreditno osiguranje omogućava veći protok kapitala i robe, dok osiguravajuće kuće pomažu u privlačenju investicija u ekonomije s niskim i srednjim prihodima, ublažavajući rizike kao što su politička nestabilnost i prirodne katastrofe.<sup>29</sup> Ti mehanizmi omogućavaju da veći deo investicija povezanih sa SDG-om bude usmeren ka najmanje razvijenim zemljama, pružajući tako značajan ekonomski doprinos SDG 17.

### **3. Uloga osiguranja u ostvarivanju ekološki održivog razvoja**

Ekološka održivost je ključna za budućnost planete, pogotovo u svetlu ubrzane klimatske krize. Međunarodni panel o klimatskim promenama (IPCC) upozorava da trenutni naponi nisu dovoljni za suzbijanje klimatskih promena.<sup>30</sup>

Delatnost osiguranja, koja upravlja sa 44 biliona USD globalne imovine,<sup>31</sup> igra bitnu ulogu u tranziciji ka niskougljeničnoj ekonomiji. Ta delatnost ne samo da pomaže u razumevanju klimatskih promena već i podstiče dekarbonizaciju kroz svoje investicione strategije.

Ujedinjene nacije razvile su „Načela za održivo osiguranje“ (engl. *Principles for Sustainable Insurance – PSI*), koja je do sada potpisalo 150 osiguravača.<sup>32</sup> Iako to predstavlja značajan napredak, još uvek postoji prostor za rast i inovacije, naročito stoga što samo jedna trećina globalnih premija dolazi od potpisnika PSI. Kroz inicijative kao što su PSI i Net-Zero Insurance Alliance,<sup>33</sup> kao i primenom koncepta zelenog osiguranja, osiguravajuće kuće postaju ključni akteri u ostvarivanju globalnih Ciljeva održivog razvoja. Dalje u tekstu ovog poglavlja predložen je specifičan doprinos osiguranja u ostvarenju različitih Ciljeva održivog razvoja, s posebnim osvrtom na ekološku dimenziju.

SDG 13: Akcija za klimu otvara prostor za značajan ekološki doprinos osiguravajućeg sektora. Taj sektor može kreirati inovativne usluge poput osiguranja useva i osiguranja od prirodnih katastrofa, koji ne samo da smanjuju ekonomske gubitke, već i podstiču održivo upravljanje resursima. Dodatno, sektor može finansijski podržati tranziciju ka niskougljeničnoj ekonomiji, sa potrebom za godišnjim investicijama

<sup>29</sup> Holliday, S., Remizova, I., & Stewart, F. (2021); Access to Insurance Initiative. (2023). *SDG 17: Partnerships for the Goals*. <https://a2ii.org/en/sdg-17>.

<sup>30</sup> IPCC. (2023). *IPCC Sixth Assessment Report. Climate Change 2023 (AR6)*. Preuzeto sa <https://www.ipcc.ch/report/ar6/syr/>.

<sup>31</sup> International Association of Insurance Supervisors (IAIS). (2022). *2022 Global Insurance Market Report*. Preuzeto sa [www.iaisweb.org](http://www.iaisweb.org).

<sup>32</sup> UNEP Finance Initiative. (n.d.). *Signatory Companies – Principles for Sustainable Insurance*. Preuzeto 20. maja 2023. sa <https://www.unepfi.org/insurance/insurance/signatory-companies/>.

<sup>33</sup> UNEP Finance Initiative. (2022). *Insuring the net-zero transition: Evolving thinking and practices. A white paper produced by the Net-Zero Insurance Alliance convened by UN Environment Programme's Principles for Sustainable Insurance Initiative*. United Nations Environment Programme Finance Initiative.

između 1,6 i 3,8 biliona USD do 2050.<sup>34</sup> godine. Primeri kao što je parametarsko osiguranje koralnih grebena u Meksiku<sup>35</sup> i „Africa Risk View“<sup>36</sup> za upravljanje rizicima od suše, ilustruju kako osiguranje može efikasno upravljati klimatskim rizicima.

Iako 74% svetske populacije ima pristup čistoj vodi, još uvek dve milijarde ljudi nema pristup sigurnim izvorima.<sup>37</sup> To proizvodi ozbiljne posledice na javno zdravlje i ekonomski razvoj, i direktno se odnosi na SDG 7: Čista voda i sanitarni uslovi. U navedenom kontekstu, sektor osiguranja može imati indirektan, ali značajan doprinos. Kroz inovativne proizvode, osiguranje može podržati projekte za unapređenje vodosnabdevanja i sanitacije, kao i održive metode navodnjavanja. Na primer, osiguranje zasnovano na indeksu hidrološke suše u Španiji<sup>38</sup> i federalno pokriće osiguranja useva za održive metode navodnjavanja pirinča u SAD<sup>39</sup> ilustruju kako osiguranje može upravljati rizicima povezanim s vodenim resursima. Ti modeli ne samo da podstiču investicije u sektor vode već i promovišu održive prakse.

U okviru SDG 12: Odgovorna potrošnja i proizvodnja, naglašava se važnost odgovornog postupanja s resursima i proizvodima. Iako veza između osiguranja i pomenutog cilja može delovati nejasno, postoji mnoštvo načina na koje ovaj sektor može ostvariti značajan uticaj. Konkretno, osiguravajuće usluge mogu poslužiti kao snažni stimulansi za promociju ekološki odgovornih praksi. Na primer, osiguranje koje pokriva troškove recikliranja elektronskog otpada ili sanacije zagađenih područja može motivisati kompanije da odgovorno postupaju s otpadom. Dodatno, razvijanjem specijalizovanih osiguravajućih usluga za investitore i preduzeća koja se bave obnovljivim izvorima energije, sektor osiguranja može dodatno podsticati održive inicijative. Primer za to je kompanija „Chubb“, koja nudi osiguravajuće usluge kompanijama koje se bave upravljanjem elektronskim otpadom, pružajući pokriće za potencijalne gubitke povezane s njegovim nepravilnim odlaganjem.<sup>40</sup>

SDG 15: Život na zemlji poziva na zaštitu života na kopnu i bori se protiv ozbiljnog problema deforestacije. Osiguranje može igrati značajnu ulogu u tom kontekstu, pogotovo u smanjenju rizika od prirodnih katastrofa i negativnih uticaja na okolinu. Na primer, osiguravači mogu motivisati poljoprivrednike da usvoje održive

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<sup>34</sup> United Nations. (2022). *The Sustainable Development Goals Report 2022*.

<sup>35</sup> The Nature Conservancy & Willis Towers Watson. (2021). *Wildfire Resilience Insurance: Quantifying the Risk Reduction of Ecological Forestry with Insurance*. Preuzeto sa: <https://www.nature.org/content/dam/tnc/nature/en/documents/FINALwildfire-resilience-insurance-6.27.21.pdf>.

<sup>36</sup> ARC. (2016). *Risk Models. Drought*. Preuzeto sa <https://www.arc.int/drought>.

<sup>37</sup> United Nations. (2022). *The Sustainable Development Goals Report 2022*.

<sup>38</sup> Guerrero-Baena, M.D., & Gómez-Limón, J.A. (2019). Insuring water supply in irrigated agriculture: A proposal for hydrological drought index-based insurance in Spain. *Water*, 11(4), 686. <https://doi.org/10.3390/w11040686>.

<sup>39</sup> Smith, R. (2019). *Newly approved rice irrigation practices aid sustainability*. Farm Progress. Preuzeto sa <https://www.farmprogress.com/rice/newly-approved-rice-irrigation-practices-aid-sustainability>.

<sup>40</sup> Chubb. (2016). *Electronic Waste: Managing the Environmental and Regulatory Challenges*. Preuzeto sa <https://resource-recycling.com/e-scrap/wp-content/uploads/sites/2/2016/06/chubb-e-waste-wp.pdf>.

prakse nudeći odgovarajuće polise. To može biti efikasan način za usporavanje i preokretanje tendencije deforestacije. Dodatno, osiguranje može podstaći održive šumarske prakse i smanjiti rizik od šumskih požara, kao što pokazuje studija *Nature Conservancy* i *Willis Towers Watson*.<sup>41</sup>

SDG 7: Dostupna i obnovljiva energija odnosi se na obezbeđivanje pristupa čistoj i pristupačnoj energiji, što predstavlja ključni preduslov za razvoj poljoprivrede, poslovanja, komunikacija, obrazovanja, zdravstvene zaštite i saobraćaja.<sup>42</sup> Uloga osiguravajuće delatnosti u kontekstu postizanja tog cilja mogla bi uključivati ulaganja u projekte obnovljive energije, kao što su solarni parkovi, vetroparkovi i hidroelektrane. Dinamičan rast sektora obnovljive energije u Indiji služi kao primer. Kako se taj sektor širi, povećava se potreba za adekvatnim osiguranjem koje će ublažiti različite potencijalne rizike povezane s razvojem i eksploatacijom obnovljivih izvora energije. Predviđanja pokazuju da će osiguranje obnovljive energije porasti 15–20% u 2023. godini.<sup>43</sup> Pored toga, osiguravači mogu ponuditi osiguranje za infrastrukturu obnovljivih izvora energije, čime bi se redukovao rizik za investitore i olakšalo finansiranje takvih projekata. Kompanije poput „Allianz“-a nude specijalizovane politike osiguranja za projekte obnovljive energije, pokrivajući rizike poput tehničkih nedostataka, problema s dostavom i prekidima projekata.<sup>44</sup>

Očuvanje okeana i mora ključno je za ljudsku egzistenciju, što je prepoznato u SDG 14: Život pod vodom. Mora i okeani pokrivaju 70% planete i obezbeđuju hranu, energiju i vodu. Istovremeno, okean upija oko četvrtine godišnjih emisija ugljen-dioksida (CO<sub>2</sub>) u svetu, čime ublažava klimatske promene i njihove posledice.<sup>45</sup>

Osiguravajuće kuće igraju raznovrsnu ulogu u postizanju tog cilja, kako direktno tako i indirektno. One mogu podstaći održive prakse u sektorima poput ribarstva, nuditi pokriće za štetu uzrokovanu zagađenjem i finansijski podržavati zaštitu morskih eko-sistema. Primeri uključuju *Caribbean Oceans and Aquaculture Sustainability Facility (COAST)*<sup>46</sup> za održivo ribarstvo i osiguranje „Vessel Pollution Liability“<sup>47</sup>

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<sup>41</sup> The Nature Conservancy & Willis Towers Watson. (2021).

<sup>42</sup> United Nations. (n.d.-b). *Goal 7: Ensure access to affordable, reliable, sustainable, and modern energy for all*. Preuzeto 21. maja 2023, sa <https://unric.org/en/sdg-7/>.

<sup>43</sup> ETEnergyWorld. (2023). *Why insurance in renewable energy sector will see a massive uptick in 2023*. Preuzeto sa <https://energy.economicstimes.indiatimes.com/news/renewable/why-insurance-in-renewable-energy-sector-will-see-a-massive-uptick-in-2023/99081037>.

<sup>44</sup> Allianz. (2014). *Allianz offers customers an increasing number of green solutions*. Preuzeto sa [https://www.allianz.com/content/dam/onemarketing/azcom/Allianz\\_com/responsibility/documents/2014\\_GreenSolutions\\_factsheet.pdf](https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/responsibility/documents/2014_GreenSolutions_factsheet.pdf).

<sup>45</sup> United Nations. (n.d.-c). *Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development*. Preuzeto 21. maja 2023, sa <https://unric.org/en/sdg-14/>.

<sup>46</sup> World Bank. (2019). *Innovative fisheries insurance benefits Caribbean fisherfolk*. Preuzeto sa <https://www.worldbank.org/en/news/feature/2019/09/20/innovative-fisheries-insurance-benefits-caribbean-fisherfolk>.

<sup>47</sup> Great American Insurance Group. (n.d.). *Pollution coverage*. Preuzeto sa <https://www.greatamericaninsurancegroup.com/about-us/business-operations/product/ocean-marine/pollution-coverage>.

za čišćenje zagađenja. Takođe, osnovano je i prvo osiguranje prirodnih resursa na svetu koje štiti koralne grebene u Meksiku.<sup>48</sup>

SDG 1: Svet bez siromaštva stavlja naglasak na iskorenjivanje siromaštva, što je centralni cilj Agende za održivi razvoj. Osiguranje, kao jedan od mehanizama socijalne zaštite, može doprineti postizanju tog cilja i na ekološkom planu. To uključuje podsticanje preventivnih mera, ulaganje u jačanje otpornosti na klimatske promene i pružanje zaštite od potencijalnih finansijskih gubitaka uzrokovanih ekstremnim vremenskim događajima. Pružajući finansijsku sigurnost protiv ekstremnih vremenskih uslova, osiguranje otvara mogućnosti za smanjenje siromaštva i prilagođavanje klimatskim promenama u zemljama u razvoju.<sup>49</sup> Kroz specifične mehanizme kao što su indeksno osiguranje od poplava, testirano u Indiji, osiguranje može pružiti finansijsku zaštitu i smanjiti rizik od siromaštva uzrokovanog klimatskim promenama. Pokazalo se da bi širenje takvih šema osiguranja moglo pomoći u jačanju poljoprivrednih sredstava za život, smanjenju troškova vlada nakon katastrofa te doprineti smanjenju siromaštva, postizanju rodne ravnopravnosti i zaštiti sigurnosti hrane.<sup>50</sup>

Osiguranje poseduje potencijal da iz ekološkog aspekta indirektno doprinese i postizanju SDG 3: Dobro zdravlje, koji se fokusira na promociju zdravog života i dobrobiti za sve uzraste. S jedne strane, osiguravajuće kuće mogu investirati u zelene i održive projekte koji poboljšavaju kvalitet vazduha, vode i zemljišta, smanjujući time izloženost ljudi zagađenju i klimatskim promenama.<sup>51</sup> S druge strane, investicije u održive tehnologije kao što su telemedicina i digitalna zdravstvena tehnologija mogu smanjiti ekološki uticaj tradicionalnih modela zdravstvene zaštite.

Osiguranje može igrati ključnu ulogu u upravljanju klimatskim rizicima i oporavku zajednica nakon ekstremnih vremenskih događaja. Na primer, kroz investicije u bolje sanitarne uslove i klimatsku otpornost, osiguranje može smanjiti incidenciju bolesti kao što je malarija, koja je u 2020. godini odnela 627.000 života.<sup>52</sup> Takođe, osiguranje može pomoći u održavanju zdravstvenih sistema, naročito tokom kriza poput pandemije kovida 19, koja je dodatno pogoršala situaciju sa malarijom.

Ciljevi SDG 9: Industrija, inovacije i infrastruktura i SDG 11: Održivi gradovi i zajednice, zahtevaju otpornije i održivije infrastrukture, kao i smanjenje negativnog

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<sup>48</sup> The Nature Conservancy & Willis Towers Watson. (2021).

<sup>49</sup> Linnerooth-Bayer, J., Surminski, S., Bouwer, L.M., Noy, I., Mechler, R. (2019). Insurance as a Response to Loss and Damage?. In: Mechler, R., Bouwer, L., Schinko, T., Surminski, S., Linnerooth-Bayer, J. (Eds.), *Loss and Damage from Climate Change* (pp. 287-314). Climate Risk Management, Policy and Governance. Springer.

<sup>50</sup> Amarnath, G. (2021). *How a new framework can provide flood insurance guidance to millions of farmers*. PreventionWeb. <https://www.preventionweb.net/news/how-new-framework-can-provide-flood-insurance-guidance-millions-farmers>.

<sup>51</sup> Holliday, S., Remizova, I., & Stewart, F. (2021). *The Insurance Sector's Contribution to the Sustainable Development Goals (SDGs)*. World Bank Group. <https://documents1.worldbank.org/curated/en/560821632197166715/pdf/The-Insurance-Sector-s-Contribution-to-the-Sustainable-Development-Goals-SDGs.pdf>.

<sup>52</sup> United Nations. (2022). *The Sustainable Development Goals Report 2022*.

uticaja na životnu sredinu, tako da u mnogim aspektima ekološki doprinos osiguranja njihovom postizanju može biti sličan. U oba slučaja, osiguravajuće kuće mogu podržati ekološke inicijative putem zelenih osiguranja, pružanja pokrivanja za projekte obnovljive energije, energetske efikasnosti i zelene gradnje, kao i promovisanjem otpornosti na klimatske promene.

Iako su sličnosti između doprinosa osiguranja ekološkoj dimenziji SDG 9 i SDG 11 očigledne, razlike u fokusu omogućavaju osiguravajućim kućama da prilagode svoje proizvode i usluge specifičnim potrebama za ove ciljeve. Na primer, u slučaju doprinosa SDG 9, to bi moglo biti osiguranje namenjeno proizvođačima čistih tehnologija, kao što su proizvođači solarnih panela i vetroturbina, kako bi se podstakao razvoj održivih tehnologija i smanjio uticaj industrije na životnu sredinu. U kontekstu SDG 11, osiguranje može pružiti ekološki doprinos kroz osiguravajuće pakete usmerene na finansiranje i očuvanje ekološki prihvatljivih sistema javnog prevoza, kao što su električni autobusi, tramvaji ili vozovi. To ne samo da efikasno smanjuje zagađenje vazduha i emisiju ugljen-dioksida u urbanim sredinama, već i doprinosi stvaranju održivih urbanih zajednica.

Primer projekta koji demonstrira kako osiguranje može doprineti postizanju cilja SDG 9 jeste projekat *Prins Hendrik Zanddijk (PHZD)* u Holandiji. Osiguranje je ovde igralo ključnu ulogu, ne samo kao mehanizam za nadoknadu troškova i rizika, već i kao podsticaj za investicije i promociju prirodnih rešenja. Projekat je imao značajan ekonomski doprinos, stvarajući dodatnih 0,4–1,07 miliona evra godišnje kroz eko-sistemske usluge.<sup>53</sup> Osiguranje masivnog drveta, koje nudi kompanija „Zürich North America“,<sup>54</sup> primer je zelenog osiguranja koje u isto vreme doprinosi SDG 9 i SDG 11, iz ekološkog aspekta. Kroz promociju održivih građevinskih materijala, osiguranje može doprineti izgradnji gradova koji su otporni na klimatske promene i koji minimiziraju svoj ekološki otisak.

#### **4. Uticaj osiguranja na socijalnu dimenziju održivog razvoja**

Socijalna dimenzija održivog razvoja obuhvata uticaj poslovanja na ljude i zajednice, uključujući radne uslove, ljudska prava i zdravlje.<sup>55</sup> Iako se često stavlja u drugi plan u odnosu na ekonomske i ekološke aspekte, ima ključnu ulogu u celokupnoj održivosti. Osiguravajuća delatnost, sa godišnjim premijama od skoro sedam

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<sup>53</sup> IADC, CEDA, & Vital Ports. (2021). Financing sustainable marine and freshwater infrastructure: A joint study to explore private financing of green coastal, river and port projects. <https://www.financing-smafi.org/wp-content/uploads/2021/09/financing-sustainable-marine-and-freshwater-infrastructure.pdf>.

<sup>54</sup> Zurich North America. (2021). Mass timber is taking root in commercial construction. <https://www.zurichna.com/knowledge/articles/2021/10/mass-timber-is-taking-root-in-commercial-construction>.

<sup>55</sup> OECD. (2022). *Measuring the social performance of firms through the lens of the OECD well-being framework*. <https://www.oecd.org/wise/Measuring-the-Social-Performance-of-Firms-through-the-Lens-of-the-OECD-Well-being-Framework-Policy-Brief-February-2022.pdf>.

biliona dolara,<sup>56</sup> ima veliki potencijal da doprinese globalnoj socijalnoj održivosti, prevazilazeći svoju osnovnu funkciju zaštite od finansijskih gubitaka. U nastavku rada predstavljena je analiza kako osiguranje iz socijalnog aspekta doprinosi konkretnim Ciljevima održivog razvoja.

U okviru SDG 1: Svet bez siromaštva, siromaštvo je uočeno kao višedimenzionalni problem čijem rešavanju osiguranje može doprineti pružanjem finansijske stabilnosti u kritičnim trenucima. Osim što ublažava finansijske posledice nesreća ili bolesti, osiguranje pomaže u jačanju otpornosti zajednica i pruža pristup esencijalnim uslugama kao što su zdravstvena zaštita i obrazovanje. Na primer, kalifornijski program *Medi-Cal* smanjio je stope siromaštva i omogućio zdravstvenu zaštitu za one sa nižim prihodima.<sup>57</sup> U Kini, pilot projekti u Yunnanu i Hebeiu pokazali su kako osiguranje može biti efikasno sredstvo za upravljanje rizikom od siromaštva, pogotovo u kontekstu bolesti i prirodnih katastrofa.<sup>58</sup>

Osiguranje može imati bitnu socijalnu ulogu i u postizanju SDG 3: Dobro zdravlje, koji se fokusira na zdrav život i dobrobit za sve. Pored finansijske zaštite, osiguranje promovise socijalnu inkluzivnost i jednakost pružanjem pristupa zdravstvenim uslugama, pogotovo za ranjive grupe.<sup>59</sup> Na primer, kroz partnerstvo s vladama i nevladinim organizacijama može se unaprediti program vakcinacije i zdravstvena zaštita za majke i novorođenčad. Osiguranje ne samo da služi kao finansijska potpora, već i jača socijalne i zdravstvene sisteme.

Osiguranje ima izrazito značajnu socijalnu komponentu koja direktno doprinosi postizanju SDG 8: Dostojanstven rad i ekonomski rast. Socijalni doprinos osiguranja manifestuje se kroz njegovu sposobnost da poveća socijalnu sigurnost, smanji siromaštvo i nejednakost, te da promovise dostojanstven rad za sve.

Na nivou preduzeća, osiguranje pomaže u očuvanju radnih mesta i zarada, čime se dodatno štite radnici i njihove porodice. Osiguranje takođe promovise inkluzivnost i ravnopravnost na radnom mestu, pružajući svim radnicima, bez obzira na njihov socijalni status, pristup osiguravajućim uslugama. Naročito značajni su programi mikroosiguranja koji se efikasno koriste u borbi protiv dečjeg rada, kao

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<sup>56</sup> Swiss Re Institute. (2022). *World insurance: Inflation risks front and centre* (sigma 4/2022). Swiss Re. <https://www.swissre.com/dam/jcr:4500fe30-7d7b-4bc7-b217-085d7d87a35b/swiss-re-institute-sigma-4-2022.pdf>.

<sup>57</sup> Danielson, C., Malagon, P., & McConville, S. (2023). *The Impact of Health Insurance on Poverty in California*. Public Policy Institute of California. <https://www.ppic.org/publication/the-impact-of-health-insurance-on-poverty-in-california/>.

<sup>58</sup> Swiss Re Institute. (2018). *Insurance in poverty reduction: a case from China*. <https://www.swissre.com/institute/research/topics-and-risk-dialogues/society-and-politics/insurance-in-poverty-reduction-a-case-from-china.html>.

<sup>59</sup> Yokobori, Y., Kiyohara, H., Mulati, N., Lwin, K. S., Bao, T. Q. Q., Aung, M. N., Yuasa, M., & Fujita, M. (2023). Roles of Social Protection to Promote Health Service Coverage among Vulnerable People toward Achieving Universal Health Coverage: A Literature Review of International Organizations. *International Journal of Environmental Research and Public Health*, 20(9), 5754. <https://doi.org/10.3390/ijerph20095754>.

što je ilustrovano studijama iz Pakistana.<sup>60</sup> Ti programi pružaju finansijsku zaštitu porodicama u slučajevima ekonomskih šokova, smanjujući potrebu za angažovanjem dece u radu.

U vreme kada se suočavamo s rastućim ekonomskim i socijalnim nejednakostima, klimatskim promenama, migracijama i rodnom diskriminacijom, uloga osiguranja u pružanju socijalne zaštite postaje sve značajnija. Doprinos osiguranja smanjenju socijalnih nejednakosti i postizanju SDG 10: Smanjenje nejednakosti može se sagledati kroz tri ključne oblasti. Prva je unapređenje pristupačnosti osiguranja, pogotovo za osobe s niskim dohotkom, čime se smanjuje rizik od socijalne isključenosti. Druga oblast uključuje inovacije kao što su mikroosiguranje i osiguranje od klimatskih rizika, koje jačaju socijalnu koheziju i omogućavaju efikasniju adaptaciju na različite vrste šokova. Na primer, *World Food Programme (WFP)* koristi osiguravajuća rešenja za bolju pripremu i oporavak od klimatskih šokova na različitim nivoima.<sup>61</sup> Treća oblast odnosi se na socijalno odgovorno poslovanje, gde osiguravajuće kuće usvajaju ESG kriterijume kako bi podstakle inkluzivnost i smanjile nejednakost.<sup>62</sup> Na taj način, ne samo da se pruža direktna socijalna vrednost, već se i podstiče aktivno uključivanje svih grupa u društvene i ekonomske aktivnosti.

Socijalni doprinos osiguranja u postizanju SDG 11: Održivi gradovi i zajednice takođe je sve izraženiji, naročito u uslovima rastuće urbanizacije, klimatskih promena i socijalnih nejednakosti. U kontekstu urbanizacije i klimatskih promena, zdravstveno osiguranje može ublažiti rizike od zagađenja vazduha, pružajući finansijsku podršku za lečenje i preventivu.<sup>63</sup> Inovacije kao što su telematski programi u vozilima smanjuju broj saobraćajnih nesreća i zagađenje,<sup>64</sup> dok mikroosiguranje i osiguranje nekretnina pružaju finansijsku stabilnost siromašnim domaćinstvima. Dodatno, ulaganje u infrastrukturne projekte ističe ulogu osiguranja u izgradnji održivijih urbanih sredina, naročito u zajednicama s niskim i umerenim prihodima.

U kontekstu SDG 5: Rodna ravnopravnost, osiguranje ima sveprisutnu ulogu u osnaživanju žena i promociji rodne ravnopravnosti na globalnom nivou. Kroz inovativne usluge kao što su mikroosiguranje i osiguranje reproduktivnog

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<sup>60</sup> Landmann, A., & Frölich, M. (2013). Can Microinsurance Help Prevent Child Labor? An Impact Evaluation from Pakistan. *Political Economy - Development: International Development Efforts & Strategies eJournal*.

<sup>61</sup> World Food Programme. (2021). Sovereign Climate Risk Financing and Insurance: Protecting vulnerable people and communities with pre-arranged funding for rapid responses. <https://docs.wfp.org/api/documents/WFP-0000132157/download/>.

<sup>62</sup> The Geneva Association. (2022). *The role of insurance in promoting social sustainability*. [https://www.genevaassociation.org/sites/default/files/2022-11/social\\_sustainability\\_report.pdf](https://www.genevaassociation.org/sites/default/files/2022-11/social_sustainability_report.pdf).

<sup>63</sup> Chen, S., & He, L. (2021). Air Pollution and Medical Insurance: From a Health-Based Perspective. *Sustainability*, 13(23), 13157. <https://doi.org/10.3390/su132313157>.

<sup>64</sup> Stevenson, M., Harris, A., Mortimer, D., Wijnands, J. S., Tapp, A., Peppard, F., & Buckis, S. (2018). The effects of feedback and incentive-based insurance on driving behaviours: study approach and protocols. *Injury Prevention*, 24(1), 89–93. <https://doi.org/10.1136/injuryprev-2016-042280>.



zdravlja,<sup>65</sup> delatnost osiguranja direktno se bori protiv rodne nejednakosti. Te usluge ne samo da pružaju finansijsku podršku i zaštitu, već i omogućavaju ženama da preuzmu kontrolu nad svojim životima i zdravljem. Partnerstva sa organizacijama kao što su ILO i IFC ciljaju na smanjenje „rodnog zaštitnog jaza“<sup>66</sup> i povećanje rodne inkluzivnosti, što je bilo naročito važno tokom pandemije kovida 19. Osiguranje od nasilja u porodici pruža esencijalnu podršku žrtvama, pomažući im da prekinu ciklus zlostavljanja.<sup>67</sup> Te inicijative ne samo da smanjuju ekonomsku ranjivost žena, već i doprinose izgradnji inkluzivnijih društava.

Kada je reč o SDG 9: Industrija, inovacije i infrastruktura, koji fokus stavlja na otpornu infrastrukturu, održivu industrijsku proizvodnju i inovacije, osiguranje može odigrati značajnu ulogu. Ta uloga se ne odnosi samo na ekonomsku i ekološku podršku, već i na socijalne aspekte tog cilja. Socijalni doprinos osiguranja u održivom razvoju može se manifestovati na različite načine, počevši od zaštite radnih mesta u industriji do olakšanja ekspanzije informaciono-komunikacione infrastrukture. U industrijskom sektoru, osiguravajući paketi mogu pružiti finansijsku stabilnost radnicima, pogotovo u zemljama u razvoju, čime se ublažavaju socijalne tenzije i doprinosi socijalnom blagostanju. Kada je reč o informaciono-komunikacionoj infrastrukturi, osiguranje može minimizirati finansijske rizike vezane za razvoj i širenje mreže, što je od suštinskog značaja u manje razvijenim zemljama. Takođe, osiguranje pruža zaštitu od sajber napada, podstičući dalju upotrebu digitalnih resursa.

Osiguranje takođe može pružiti značajan indirektni socijalni doprinos postizanju SDG 4: Kvalitetno obrazovanje. Kroz različite polise, osiguranje pruža finansijsku stabilnost koja omogućava kontinuirano obrazovanje, naročito u siromašnim i ranjivim zajednicama. Na primer, životno osiguranje i specijalizovani planovi osiguranja mogu održavati stabilan novčani tok za porodice, obezbeđujući da obrazovanje dece ne bude ugroženo u kriznim situacijama. Neke usluge čak nude dodatne komponente štednje za obrazovanje, prepoznajući potrebe niskoprihodnih populacija.<sup>68</sup> Osim toga, osiguranje može igrati ulogu u zaštiti obrazovne infrastrukture, od školskih zgrada do digitalnih resursa, čime se omogućava brži oporavak od nepredviđenih događaja i očuvanje integriteta obrazovnih sistema.

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<sup>65</sup> World Health Organization. (2020). *Universal health coverage for sexual and reproductive health: Evidence brief*. <https://www.who.int/publications/i/item/WHO-SRH-20.1>.

<sup>66</sup> International Labour Organization. (2022). *Targeting women in insurance*. [https://www.ilo.org/empent/areas/social-finance/WCMS\\_775545/lang-en/index.htm](https://www.ilo.org/empent/areas/social-finance/WCMS_775545/lang-en/index.htm).

<sup>67</sup> Health Care Insider (2021). *What Are Domestic Violence and Health Insurance Protections?* <https://health-careinsider.com/qle-domestic-violence-abuse-172654>.

<sup>68</sup> GIZ. (2017). *Inclusive Insurance and the Sustainable Development Goals*. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

## **II. Zaključak**

U svetlu globalnih izazova koji oblikuju sadašnjost i budućnost, u ovom radu je istražena uloga osiguranja kao značajnog faktora u postizanju Ciljeva održivog razvoja. Kroz komparativnu analizu na uzorku od 80 zemalja, utvrđena je pozitivna korelacija između razvijenosti tržišta osiguranja i efikasnosti u ostvarivanju SDG, čime se osiguranje ističe kao potencijalni katalizator održivih inicijativa na globalnom nivou.

Osiguranje se pokazuje kao multifunkcionalni mehanizam koji doprinosi ekonomskoj stabilnosti, ekološkoj održivosti i socijalnoj inkluziji. U ekonomskom kontekstu, osiguranje promovise efikasnu raspodelu resursa i dugoročan rast, dok iz ekološkog aspekta podstiče tranziciju ka održivim energetskim rešenjima i upravljanje klimatskim rizicima. Sa socijalne strane, osiguranje prevazilazi svoju tradicionalnu ulogu i postaje instrument za promociju finansijske otpornosti i socijalne pravde. U tom smislu, osiguranje ne samo da ima kapacitet da odgovori na trenutne izazove, već i da oblikuje održivije i inkluzivnije društvo za buduće generacije. Dalja istraživanja i razvoj institucionalne infrastrukture mogli bi dodatno osnažiti tu ulogu osiguranja u ostvarivanju globalnih Ciljeva održivog razvoja.

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### **Prilog 1. Podaci o stopi penetracije osiguranja i SDG indeksu za 80 zemalja u 2021. godini**

| Redni broj | Zemlja         | Penetracija osiguranja | SDG indeks |
|------------|----------------|------------------------|------------|
| 1.         | Finland        | 10.3                   | 85.9       |
| 2.         | Sweden         | 7.6                    | 85.6       |
| 3.         | Denmark        | 11.4                   | 84.9       |
| 4.         | Germany        | 6.5                    | 82.5       |
| 5.         | Belgium        | 5.8                    | 82.2       |
| 6.         | Austria        | 4.6                    | 82.1       |
| 7.         | Norway         | 4.9                    | 82.0       |
| 8.         | France         | 9.5                    | 81.7       |
| 9.         | Slovenia       | 5                      | 81.6       |
| 10.        | Netherlands    | 9.1                    | 81.6       |
| 11.        | Czech Republic | 2.9                    | 81.4       |
| 12.        | Ireland        | 6.1                    | 81.0       |
| 13.        | Croatia        | 2.7                    | 80.4       |
| 14.        | Poland         | 2.5                    | 80.2       |
| 15.        | Switzerland    | 7.1                    | 80.1       |
| 16.        | United Kingdom | 11.1                   | 80.0       |
| 17.        | Japan          | 8.4                    | 79.8       |

**N. Tešić: Osiguranje kao značajan faktor održivog razvoja**

| Redni broj | Zemlja               | Penetracija osiguranja | SDG indeks |
|------------|----------------------|------------------------|------------|
| 18.        | Slovak Republic      | 2.1                    | 79.6       |
| 19.        | Spain                | 5.1                    | 79.5       |
| 20.        | Canada               | 8.1                    | 79.2       |
| 21.        | New Zealand          | 4.8                    | 79.1       |
| 22.        | Hungary              | 2.4                    | 78.8       |
| 23.        | Italy                | 9.1                    | 78.8       |
| 24.        | Portugal             | 5.8                    | 78.6       |
| 25.        | Korea, Rep.          | 10.9                   | 78.6       |
| 26.        | Chile                | 3.4                    | 77.1       |
| 27.        | United States        | 11.7                   | 76.0       |
| 28.        | Malta                | 4                      | 75.7       |
| 29.        | Serbia               | 1.9                    | 75.6       |
| 30.        | Australia            | 4.4                    | 75.6       |
| 31.        | Ukraine              | 1                      | 75.5       |
| 32.        | Greece               | 2.5                    | 75.4       |
| 33.        | Israel               | 4.7                    | 75.0       |
| 34.        | Romania              | 1.1                    | 75.0       |
| 35.        | Uruguay              | 2.9                    | 74.5       |
| 36.        | Luxembourg           | 4.1                    | 74.2       |
| 37.        | Thailand             | 5.4                    | 74.2       |
| 38.        | Bulgaria             | 2.4                    | 73.8       |
| 39.        | Russian Federation   | 1.3                    | 73.8       |
| 40.        | Costa Rica           | 2.1                    | 73.6       |
| 41.        | Vietnam              | 2.3                    | 72.8       |
| 42.        | Argentina            | 2.2                    | 72.8       |
| 43.        | Ecuador              | 1.9                    | 72.5       |
| 44.        | China                | 3.9                    | 72.1       |
| 45.        | Kazakhstan           | 0.9                    | 71.6       |
| 46.        | Tunisia              | 2.2                    | 71.4       |
| 47.        | Brazil               | 3.9                    | 71.3       |
| 48.        | Peru                 | 2                      | 71.1       |
| 49.        | Malaysia             | 5.3                    | 70.9       |
| 50.        | Algeria              | 0.7                    | 70.9       |
| 51.        | Dominican Republic   | 1.6                    | 70.8       |
| 52.        | Colombia             | 3                      | 70.6       |
| 53.        | Turkey               | 1.3                    | 70.4       |
| 54.        | United Arab Emirates | 2.9                    | 70.2       |



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**N. Tešić: Osiguranje kao značajan faktor održivog razvoja**

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| Redni broj | Zemlja              | Penetracija osiguranja | SDG indeks |
|------------|---------------------|------------------------|------------|
| 55.        | Jordan              | 1.9                    | 70.1       |
| 56.        | Oman                | 1.5                    | 70.1       |
| 57.        | Iran, Islamic Rep.  | 2.4                    | 70.0       |
| 58.        | Singapore           | 9.3                    | 69.9       |
| 59.        | Mexico              | 2.5                    | 69.1       |
| 60.        | Jamaica             | 5.9                    | 69.0       |
| 61.        | Egypt, Arab Rep.    | 0.6                    | 68.6       |
| 62.        | Sri Lanka           | 1.3                    | 68.1       |
| 63.        | Panama              | 2.5                    | 68.0       |
| 64.        | El Salvador         | 2.9                    | 67.9       |
| 65.        | Lebanon             | 1                      | 66.8       |
| 66.        | Qatar               | 0.9                    | 66.7       |
| 67.        | Indonesia           | 1.6                    | 66.3       |
| 68.        | Saudi Arabia        | 1.3                    | 66.3       |
| 69.        | Philippines         | 2                      | 64.5       |
| 70.        | South Africa        | 12.2                   | 63.7       |
| 71.        | Trinidad and Tobago | 6.5                    | 63.5       |
| 72.        | Bangladesh          | 0.5                    | 63.5       |
| 73.        | Kuwait              | 1.1                    | 62.5       |
| 74.        | Ghana               | 1.1                    | 62.5       |
| 75.        | Namibia             | 7.1                    | 61.8       |
| 76.        | Kenya               | 2.2                    | 60.6       |
| 77.        | India               | 4.2                    | 60.1       |
| 78.        | Guatemala           | 1.7                    | 59.9       |
| 79.        | Pakistan            | 0.7                    | 57.7       |
| 80.        | Nigeria             | 0.4                    | 48.9       |

Izvor: OECD.stat i SDG Index database 2021 (Online database for the Sustainable Development Report 2021).

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## INSURANCE AS AN IMPORTANT FACTOR OF SUSTAINABLE DEVELOPMENT

SCIENTIFIC PAPER

### Abstract

Considering contemporary global challenges, from the Covid-19 pandemic to economic instability, the concept of sustainability is becoming increasingly important. This paper explores the important role of insurance in achieving the Sustainable Development Goals (SDGs) on a global level. Focusing on a three-dimensional approach to sustainability that includes environmental, economic and social aspects, the paper analyzes how the insurance sector can contribute to sustainable development. The paper includes a comparative analysis exploring the correlation between the insurance penetration rate and the Sustainable Development Index (SDG Index) for selected countries. This analysis provides insight into how development of the insurance sector can affect a country's ability to achieve the SDGs. The paper also considers the impact of insurance on economic growth, social inclusion and environmental protection through various policies and services. The analysis points to the potential of insurance to be a catalyst for changes, encouraging sustainable initiatives at all levels – from individual households to companies and governments.

**Key words:** *Sustainable Development Goals (SDG), insurance, economic growth, environmental protection, social inclusion*

### I. Introduction

The concept of sustainability, which has become a central element in shaping the future, is gaining importance in view of contemporary global challenges, including

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the Covid-19 pandemic and the economic crisis. Sustainable development, defined as development that meets the needs of current generations without endangering future ones,<sup>2</sup> relies on the synergy of environmental, economic and social dimensions. Insurance sector, as a key risk management factor, can have a central role in promotion of sustainable development. This paper shows how insurance can contribute to achieving the SDGs, focusing on its impact on the economic, environmental and social aspects of sustainability.

Faced with the new reality and changed social expectations, the insurance sector is also undergoing significant changes. On one hand, the Covid-19 pandemic posed a number of challenges, and on the other, digital transformation brought by the industrial revolution 4.0 introduced additional complexity. Global threats question future sustainability of the world's population, and an unsustainable future is not an insurable future.<sup>3</sup>

## 1. Insurance and Sustainable Development Goals

Insurance is an important risk protection mechanism that can contribute to achieving the SDGs adopted by the United Nations General Assembly in 2015. SDGs present an ambitious vision of transformation towards a more sustainable future by 2030.<sup>4</sup> Previous research showed that insurance had a key role in achieving certain SDGs, especially those related to reducing poverty and famine, improving health and education, promoting decent work and economic growth, and undertaking climate action.

Among the key sources dealing with this topic are studies conducted by *Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)*<sup>5</sup>, Swiss Re<sup>6</sup> and the World Bank.<sup>7</sup> These sources emphasized various aspects of insurance's contribution to achieving the SDGs, from reducing poverty and famine to increasing economic stability and climate actions. Specific studies, such as those conducted by CISL<sup>8</sup> and

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<sup>2</sup> WCED. (1987). *Report of the World Commission on Environmental and Development: Our Common Future – Brundtland Report*. WCED. <https://www.un-documents.net/our-common-future.pdf>.

<sup>3</sup> Tešić, N. (2022). ESG risks in the insurance market. *Development of modern insurance market – constraints and possibilities* (pp. 237–252). Faculty of Economics, University of Belgrade.

<sup>4</sup> United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. United Nations Sustainable Development Summit 2015. New York. <https://sustainabledevelopment.un.org/post2015/summit>.

<sup>5</sup> GIZ. (2017). *Inclusive Insurance and the Sustainable Development Goals*. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

<sup>6</sup> Swiss Re. (2017). Insurance: adding value to development in emerging markets. *Sigma*, 4/2017, Zürich, Swiss Re.

<sup>7</sup> World Bank Group. (2021). *Developing Insurance Markets. The Insurance Sector's Contribution to the Sustainable Development Goals (SDGs)*. <https://doi.org/10.1596/978-1-4648-1715-9>.

<sup>8</sup> Cambridge Institute for Sustainability Leadership (CISL) (2019). *Mutual microinsurance and the Sustainable Development Goals: An impact assessment following Typhoon Haiyan*. Cambridge, UK: Cambridge Institute for Sustainability Leadership.

Allianz<sup>9</sup> are focused on the impact of microinsurance and corporate strategies on achieving the SDGs. These sources point to a wide range of influence that insurance can have on sustainable development, from the macro to the micro level.

Progress in achieving the Sustainable Development Goals is monitored using specific SDG indicators. Each of 17 SDGs is broken down into 169 sub-goals and 231 indicators, which are integrated into the SDG indicator database. The database, maintained by the United Nations, contains extensive data on indicators for each country and each goal, as well as global progress reports.<sup>10</sup> However, global statistics concerning the insurance sector are often insufficiently available, which presents a significant challenge for supervisors and regulators.

Analysis of the link between the insurance sector and achievement of the SDGs can be initiated through a comparative study of the progress of different countries in achieving the SDGs, taking into account the level of development of their insurance market.<sup>11</sup> This development level is most often measured by the insurance penetration rate, which is an indicator of the insurance sector development in relation to the overall development of the economy of a given country. Specifically, the insurance penetration rate is calculated as the ratio of total insurance premiums to the country's gross domestic product (GDP), expressed as a percentage. That rate provides an insight into the degree of development of the insurance sector within the economic structure of a country. When the insurance penetration rate is higher, it can be an indicator of a higher level of economic stability, as well as development of financial markets. In this manner, it is possible to assess how the insurance sector development can be reflected in a country's ability to achieve the SDGs, which is the basis of this analysis.

Chart 1 shows the correlation between the SDG Index and the insurance penetration rate for selected countries in 2021. SDG index presents a percentage indicator of the achievement of the SDGs, with a value of 100, indicating that all SDGs have been fully realised.

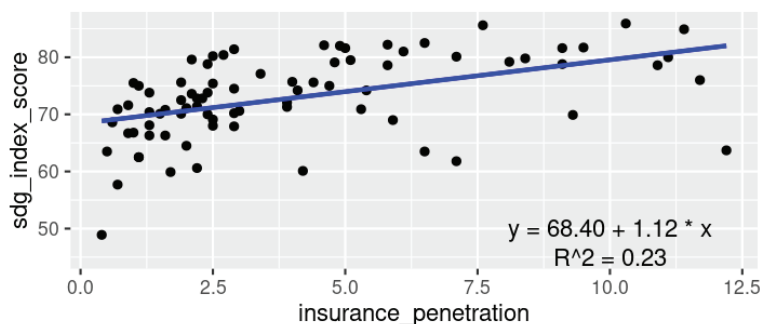
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<sup>9</sup> Allianz. (2019). Review of our contribution to the SDGs. [https://www.allianz.com/content/dam/onemarketing/azcom/Allianz\\_com/responsibility/documents/Allianz\\_SDG\\_Report.pdf](https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/responsibility/documents/Allianz_SDG_Report.pdf).

<sup>10</sup> United Nations Statistics Division. (n.d.). Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development. United Nations. Preuzeto sa <https://unstats.un.org/sdgs/indicators/indicators-list/>.

<sup>11</sup> Holliday, S., Remizova, I., & Stewart, F. (2021). The Insurance Sector's Contribution to the Sustainable Development Goals (SDGs). World Bank Group. <https://documents1.worldbank.org/curated/en/560821632197166715/pdf/The-Insurance-Sector-s-Contribution-to-the-Sustainable-Development-Goals-SDGs.pdf>.

**Chart 1. Relation between the SDG index and the insurance penetration rate (linear regression model)**



Source: Author's calculations based on data from OECD.stat and SDG Index database 2021 (Online database for the Sustainable Development Report 2021).

Note: Programming language R is used for the analysis.

Analysis included 80 countries with corresponding insurance penetration rates and SDG indices (detailed data are shown in Attachment 1) and showed a tendency for countries with higher insurance penetration rates to make more progress in SDGs implementation. On the other hand, countries with a lower insurance penetration rate showed weaker performance in achieving sustainable development. Based on this review, there might be a link between development of the insurance market and the efficiency in achieving sustainable development. Table 1 showed descriptive statistics of the variables used in the analysis. The relation between the insurance penetration rate and the SDG index will be further looked into through linear regression analysis in the next part of the paper.

**Table 1. Descriptive statistics for the SDG index and insurance penetration rate for 2021**

|                              | No. of observations (n) | Average value (mean) | Standard deviation (sd) | Minimum (min) | Maximum (max) |
|------------------------------|-------------------------|----------------------|-------------------------|---------------|---------------|
| SDG index                    | 80                      | 72.95                | 7.25                    | 48.9          | 85.9          |
| Insurance penetration (in %) | 80                      | 4.08                 | 3.13                    | 0.4           | 12.2          |

Source: Author's calculations based on data from OECD.stat and SDG Index database 2021 (Online database for the Sustainable Development Report 2021).

Note: Programming language R is used for the analysis.

Average value of the SDG index for all countries in the sample is 72.95, with a standard deviation of 7.25. Values ranged from 48.9 to 85.9, which showed a

wide variability in achieved SDGs in countries. Regarding the insurance penetration rate, the average value is 4.08%, with a standard deviation of 3.13%. Values of the insurance penetration rate ranged from a minimum of 0.4% to a maximum of 12.2%.

Detailed data analysis<sup>12</sup> showed that there were countries with a high SDG index and a high insurance penetration rate (Finland with an SDG index of 85.9 and an insurance penetration rate of 10.3%; Denmark with an SDG index of 84.9 and an insurance penetration rate of 11.4 %; and the Great Britain with an SDG index of 80.0 and an insurance penetration rate of 11.1%). However, there are countries with a high SDG index but a lower insurance penetration rate. For example, Sweden has a high SDG index of 85.6 and the insurance penetration rate of 7.6%. Norway has the SDG index of 82.0 and the insurance penetration rate of 4.9%, while Austria has the SDG index of 82.1 and the insurance penetration rate of 4.6%. On the other hand, there are countries with lower SDG indices and a low insurance penetration rate. For example, Pakistan has the SDG index of 57.7 and the insurance penetration rate of 0.7%. Nigeria has the lowest SDG index at 48.9 with the insurance penetration rate of 0.4%, while Bangladesh has the SDG index of 63, 5 and the insurance penetration rate of 0.5%.

These variations illustrate a complex nature of the relation between the development of the insurance market and the achievement of the SDGs, which points to the need for further research into this phenomenon. In order to evaluate the impact of insurance penetration on the achievement of the SDGs, a linear regression model was used. Results are shown in Table 2.

**Table 2. Impact of insurance penetration on the SDG index, 2021.**

| Independent variable          | Coefficient | Std. error | t-value | p-value  |
|-------------------------------|-------------|------------|---------|----------|
| Insurance penetration         | 1.1151      | 0.2302     | 4.845   | 6.31e-06 |
| Constant                      | 68.4007     | 1.1795     | 57.991  | < 2e-16  |
| Additional statistics:        |             |            |         |          |
| R <sup>2</sup> = 0.2313       |             |            |         |          |
| F-statistics = 23.47, p < .05 |             |            |         |          |
| SEE = 6.393                   |             |            |         |          |
| n = 80                        |             |            |         |          |

Source: Author's calculations based on data from OECD.stat and SDG Index database 2021 (Online database for the Sustainable Development Report 2021).

Note: Programming language R is used for the analysis.

<sup>12</sup> See Attachment 1 at the end of the paper.

Results of the linear regression analysis indicate that the regression as a whole is statistically significant, as shown by the F test ( $F = 23.47$ ,  $p < 0.05$ ). Correlation between the insurance penetration rate and the SDG index is moderately strong positive linear. According to the coefficient of determination ( $R^2 = 0.2313$ ), about 23.1% of the variation in the SDG index can be explained by changes in the insurance penetration rate. Evaluation of the coefficient with the variable. Insurance penetration (1.1151) is statistically significant based on the t-test ( $t = 4.845$ ,  $p < 0.001$ ). A positive slope coefficient suggested that the SDG index increased with an increase in the insurance penetration rate. Although the results are statistically significant, it should be noted that the coefficient of determination  $R^2$  is relatively low, which means that the linear model explains only part of variations in the SDG index.

By comparing the insurance penetration rate and the SDG index, we can see the contribution of insurance to the realisation of the SDGs, however, numerous factors and conceptual differences should be taken into account. For example, the insurance penetration rate may be low due to various factors. Thus, in some countries it is low due to insufficient economic activity and low income of the population, while in other countries the low insurance penetration rate is a consequence of insufficient awareness of the importance of insurance or an insufficiently developed insurance sector.

Relation between progress in realising the SDGs and the expansion of insurance cannot be explained solely based on the level of the living standard in a country. The 2020 Sustainable Development Report showed that even countries with a high standard of living may encounter difficulties in realising certain SDGs, especially environmental ones (SDGs 12-15).<sup>13</sup> Such situation is often attributed to high levels of production and consumption that contribute to environmental pollution. On the other hand, less developed countries and countries with a lower SDG index often have better results in terms of achieving some environmental SDGs, precisely owing to a lower volume of production and consumption, i.e. a lower impact on the environment. However, those countries mostly face challenges in realising other SDGs (SDGs 1-9), such as access to basic healthcare and infrastructure services, which is necessary to ensure sustainable development and general well-being of a society. It should be noted that the contribution of insurance to realisation of the SDGs is not always clearly stated, and thus it is difficult to express it metrically. Although insurance can significantly contribute to reducing the risk of natural disasters, health problems and other unforeseen risks, there are many other factors affecting realisation of SDGs. The connection between insurance and SDGs is indisputable, but assessing its contribution to realisation of these goals is not a simple process.

Globally, insurance has a significant role in realising SDGs at all levels – from individual households to companies and governments. Integration of insurance

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<sup>13</sup> Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., & Fuller, G. (2020). The Sustainable Development Report 2020. Cambridge University Press.

and SDGs illustrates how financial stability and social protection can contribute to a broader sustainable development and the reduction of inequality. In this context, insurance can provide a significant contribution to realisation of SDGs through a wide range of economic, social and environmental initiatives. The analysis in the paper will show in detail the influence that insurance companies can have in promotion of sustainable development, especially through development of policies and services that support economic growth, social inclusion and environmental protection.

## **2. Contribution of Insurance to the Economic Component of Sustainable Development**

Economic dimension of sustainable development is extremely important because it implies efficient distribution of resources and long-term growth and stability. In order to achieve it, sustainable economic development requires a balance between the economic growth, the environmental protection and the social justice. Role of the insurance sector in realising the economic aspect of sustainable development is multiple. Insurance can contribute to promotion of sustainable investments, risk management, support for development of small and medium-sized enterprises, as well as advocacy for socially responsible business. Contribution of insurance to sustainable development is particularly present in the economic dimension, and this chapter will explore how insurance contributes to individual SDGs from an economic perspective.

Contribution of insurance to the economic aspect of sustainability is particularly expressed in the SDG 13: Action to Combat Climate Change. Through risk transfer and financial support for reconstruction, insurance directly affects that goal. At the macroeconomic level, insurance helps mitigate the costs of disasters, enabling faster recovery and reducing long-term economic and social losses.

It is crucial to note here that small countries and lower- and middle-income countries recover faster when they are insured against disasters.<sup>14</sup> These countries often have limited resources for reconstruction, and the transfer of risk to insurance can have a positive macroeconomic impact. Benefits of insurance, especially in stimulation of economic activity, are most pronounced within three years after a disaster.<sup>15</sup>

In addition to these macroeconomic benefits, insurance companies develop innovative services such as microinsurance and index insurance. These services enable wider segments of the population to protect themselves from catastrophic risks, contributing to economic inclusion and poverty reduction. Improving access to such innovative solutions has the potential to expand and equalize insurance pools

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<sup>14</sup> Von Peter, G., Von Dahlen, S., & Saxena, S. (2012). Unmitigated disasters? New evidence on the macroeconomic cost of natural catastrophes. BIS Working Papers No 394. <https://www.bis.org/publ/work394.pdf>

<sup>15</sup> Ibid.



for catastrophic risks<sup>16</sup> by creating a direct economic contribution towards realisation of the SDG 13. Public-private partnerships, such as regional insurance pools in the Caribbean and the Pacific<sup>17</sup> are examples of key instruments in the economic aspects of adapting to climate risks.

The insurance sector can actively contribute to the economic aspects of the SDG 13 through its pricing, risk modeling and natural disaster protection activities. Given its capabilities, the insurance sector can be an important factor in the transition to a low-carbon economy.<sup>18</sup> In order to achieve greater disaster resilience, the insurance sector should continue to develop new services that are adapted to the specific needs of vulnerable communities.

Insurance has the potential to play a significant role in actions against global famine, especially in the context of the SDG 2 End Hunger. According to the State of Food Security and Nutrition in the World 2022, the number of people exposed to famine and food insecurity is on the rise.<sup>19</sup> In this context, insurance can provide necessary protection to agricultural producers against various risks. This is important because a large part of the poor population relies on agriculture as their primary source of income.<sup>20</sup> Agricultural insurance not only helps manage risk and sustain food production, but also encourages sustainable agricultural practices.<sup>21</sup>

Globally, governments around the world have already recognised the value of agricultural insurance in ensuring food security. Countries like the USA and the EU provide significant subsidies for insurance premiums.<sup>22</sup> In addition to protection against

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<sup>16</sup> Churchill, C., & Matul, M. (2012). *Protecting the poor: A microinsurance compendium* (Vol. 2). International Labour Organization.

<sup>17</sup> GFDRR. (2017). What Makes Catastrophe Risk Pool Work. Washington DC: World Bank, GFDRR. <https://www.gfdr.org/en/feature-story/what-makes-catastrophe-risk-pools-work>.

<sup>18</sup> Golnaraghi, M., Geneva Association Task Force on Climate Change Risk Assessment for the Insurance Industry. (2021). *Climate Change Risk Assessment for the Insurance Industry*. The Geneva Association. [https://www.genevaassociation.org/sites/default/files/research-topics-document-type/pdf\\_public//climate\\_change\\_risk\\_assessment\\_for\\_the\\_insurance\\_industry.pdf](https://www.genevaassociation.org/sites/default/files/research-topics-document-type/pdf_public//climate_change_risk_assessment_for_the_insurance_industry.pdf).

<sup>19</sup> FAO, IFAD, UNICEF, WFP, & WHO. (2022). The state of food security and nutrition in the world 2022: Repurposing food and agricultural policies to make healthy diets more affordable. <https://doi.org/10.4060/cc0639en>.

<sup>20</sup> World Bank. (n.d.). Agriculture. Preuzeto 15. maja 2023, sa <https://www.worldbank.org/en/topic/agriculture/overview>.

<sup>21</sup> Kalfin, N., Sukono, S., Supian, S., & Mamat, M. (2022). Insurance as an alternative for sustainable economic recovery after natural disasters: A systematic literature review. *Sustainability*, 14(7), 4349. <https://doi.org/10.3390/su14074349>; Mills, E. (2004). *Insurance as an adaptation strategy for extreme weather events in developing countries and economies in transition* (Report No. LBNL-52220). Lawrence Berkeley National Laboratory. <https://escholarship.org/uc/item/5609x12n>.

<sup>22</sup> Glauber, J. W. (2013). The growth of the federal crop insurance program, 1990–2011. *American Journal of Agricultural Economics*, 95(2), 482–488; Möhring, N., Dalhaus, T., Enjolras, G., & Finger, R. (2020). Crop insurance and pesticide use in European agriculture. *Agricultural Systems*, 184, 102902. <https://doi.org/10.1016/j.agsy.2020.102902>; Bielza, M., Stroblmair, J., Gallego, J., Conte, C. G., Dittmann, C. (2007). Agricultural risk management in Europe. *AgEcon Search*, 1-61. <https://ageconsearch.umn.edu/record/9252/>.

unforeseen events, insurance encourages investments and access to credits, which further stabilizes income sources and contributes to the growth of food production.

Insurance can significantly contribute to strengthening and improving the sustainability of cities and communities (SDG 11 Sustainable Cities and Communities). Insurance can stimulate all three dimensions of sustainability. From the economic aspect, insurance plays a key role in increasing the resilience of cities and urban communities. This is achieved by supporting infrastructure projects, preventive measures for loss reduction, promoting safe driving and minimizing financial expenses after a disaster. As risk bearers, insurers are key players in assessing and managing risks associated with infrastructure projects. On the other hand, as institutional investors, insurers use their great capacity to cover long-term credit risk to provide financial support to these projects.<sup>23</sup>

By contributing to all sustainability dimensions, insurance can improve healthcare systems and help society in achieving the SDG 3 Good Health and Well-being. Economic contribution is reflected primarily in reducing the financial burden of health care. Health insurance led to reduction and even abolishment of financial barriers in provision of healthcare. Households that have health insurance are less prone to too high healthcare expenses (costs of healthcare from their own pocket exceeding 10% or 25% of the home budget)<sup>24</sup> – thus insurance prevents poverty (SDG 1) and famine (SDG 2).

Insurance has a great potential when it comes to contribution to reducing inequality, both in countries and among them, which is a goal of the SDG 10 Reduce Inequalities. In the context of growing inequality and poverty,<sup>25</sup> insurance can encourage economic stability, especially in developing countries. For example, climate risk insurance helps farmers in countries with low and medium-sized income levels to recover faster from disasters. Investing in the insurance sector in these countries can further create jobs and reduce inequality.

One of the goals, to which insurance can contribute significantly through all three dimensions of sustainability, is the SDG 1 No Poverty. Although we witnessed a constant decrease in the global poverty rate over time, Covid-19 interrupted this progress in 2020. According to the UN, the poverty rate increased from 8.3% in 2019 to 9.2% in 2020, which stopped progress in poverty reduction in approximately three years.<sup>26</sup>

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<sup>23</sup> IFC. (2018). Crowding-in capital: how insurance companies can expand access to finance. *EM Compass*. Note 52. [https://www.ifc.org/wps/wcm/connect/industry\\_ext\\_content/ifc\\_external\\_corporate\\_site/financia-l+institutions/resources/crowding-in+capital+how+insurance+companies+can+expand+access+to+finance](https://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/financia-l+institutions/resources/crowding-in+capital+how+insurance+companies+can+expand+access+to+finance).

<sup>24</sup> Hoang-Vu Eozenou, P., Neelsen, S., Florina Pirlea, A. (2023). *Universal Health Coverage as a Sustainable Development Goal*. World Bank. <https://datatopics.worldbank.org/world-development-indicators/stories/universal-health-coverage-as-a-sustainable-development-goal.html>.

<sup>25</sup> United Nations. (2022). *The Sustainable Development Goals Report 2022*. <https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022.pdf>.

<sup>26</sup> Ibid.

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## ***N. Tešić: Insurance as an Important Factor of Sustainable Development***

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Insurance provides key mechanisms for economic resilience in fight against poverty. It helps cover costs of unexpected events, which strengthens the financial stability of individuals and communities. When people face unpredictable situations, such as Covid-19, insurance through unemployment insurance or insurance against disease, can provide financial stability, helping people avoid falling in extreme poverty. In addition, insurance can help reduce poverty through support for continuous business operations, preservation of jobs and reducing the need for state social benefits.

Role of the insurance sector in realising the SDG 8 Decent Work and Economic Growth is becoming more recognised. The main task of the UN Agenda is to promote inclusive and sustainable economic growth, employment and decent work for all. In fact, it is the only SDG where insurance is explicitly mentioned.<sup>27</sup> This potential contribution is visible in every aspect of sustainability – economic, environmental and social. Insurance not only supports entrepreneurship and investments, but also strengthens productivity and relieves financial shocks. By increasing business resilience and risk reduction for entrepreneurs and investors, insurance enables development of new companies and job creation, which directly contributes to the promotion of decent work and economic growth.

Contribution of insurance to achieving the SDG 5 Gender Equality is visible in providing protection to women and girls in different aspects of their lives, including healthcare, financial security and protection against violence. For example, microinsurance can play a key role in reducing economic losses for women, especially given the fact that women in 2020 made almost 45% of the total loss of employment.<sup>28</sup> By providing financial security in case of a disease or death of a spouse, this type of insurance provides women greater economic stability.

Strengthening of industry, innovations and infrastructure are crucial for realisation of the SDG 9 Industry, Innovations and Infrastructure. In this context, insurance can significantly contribute to all three dimensions of sustainability – economic, social and environmental. This sector is able to take and manage risks in infrastructure projects, enabling investors and companies to reduce potential losses and ensure financial protection in case of damages or unplanned events.

The last goal here is the SDG 17 Partnerships for the Goals that focuses on strong global partnerships and cooperation. That means improvement of international cooperation and support to developing countries in realising all goals of sustainability. Insurance in cooperation with international organizations, governments and the

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<sup>27</sup> 8.10 – Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all. United Nations. (n.d.-a). *Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all*. Taken on 20<sup>th</sup> May 2023, from <https://unric.org/en/sdg-8/>.

<sup>28</sup> United Nations. (2022). *The Sustainable Development Goals Report 2022*.

non-governmental sector, can contribute to the SDG 17 in several ways. For example, credit insurance provides a greater flow of capital and goods, while insurance companies help attract investments in economies with low and medium-sized revenues, mitigating risks such as political instability and natural disasters.<sup>29</sup> These mechanisms allow for most of the SDG-related investments to be directed towards the least developed countries thus providing a significant economic contribution to the SDG 17.

### **3. Role of Insurance in Achieving Environmentally Sustainable Development**

Environmental sustainability is crucial for the planet's future, especially in view of accelerated climate crisis. Intergovernmental Panel on Climate Change (IPCC) warns that current efforts are not sufficient to mitigate climate changes.<sup>30</sup>

Insurance sector, which manages 44 trillion USD of global property,<sup>31</sup> has an important role in transition to a low-carbon economy. This sector not only helps understand climate changes but also encourages decarbonization through its investment strategies.

The United Nations launched Principles for Sustainable Insurance (PSI), a document signed by 150 insurers.<sup>32</sup> Although it is a significant progress, there is room for growth and innovation, especially because only one third of global premiums comes from PSI signatories. With initiatives like PSI and Net-Zero Insurance Alliance,<sup>33</sup> and by applying the concept of green insurance, insurance companies become key players in realising global SDGs. Further, a specific contribution of insurance is presented in achieving different SDGs, with special reference to the environmental dimension.

SDG 13 Climate Action opens a space for a significant environmental contribution of the insurance sector. The sector can create innovative services such as crop insurance and natural disaster insurance, which not only reduce economic losses, but encourage sustainable resource management. In addition, the sector can financially support the transition to a low-carbon economy, with annual investments

<sup>29</sup> Holliday, S., Remizova, I., & Stewart, F. (2021); Access to Insurance Initiative. (2023). *SDG 17: Partnerships for the Goals*. <https://a2ii.org/en/sdg-17>.

<sup>30</sup> IPCC. (2023). *IPCC Sixth Assessment Report. Climate Change 2023 (AR6)*. Preuzeto sa <https://www.ipcc.ch/report/ar6/syr/>.

<sup>31</sup> International Association of Insurance Supervisors (IAIS). (2022). *2022 Global Insurance Market Report*. Preuzeto sa [www.iaisweb.org](http://www.iaisweb.org).

<sup>32</sup> UNEP Finance Initiative. (n.d.). Signatory Companies – Principles for Sustainable Insurance. Preuzeto 20. maja 2023. sa <https://www.unepfi.org/insurance/insurance/signatory-companies/>.

<sup>33</sup> UNEP Finance Initiative. (2022). *Insuring the net-zero transition: Evolving thinking and practices*. A white paper produced by the Net-Zero Insurance Alliance convened by UN Environment Programme's Principles for Sustainable Insurance Initiative. United Nations Environment Programme Finance Initiative.

between USD 1.6 and 3.8 trillion by 2050.<sup>34</sup> Examples such as index insurance of coral reefs in Mexico<sup>35</sup> and Africa Risk View<sup>36</sup> for drought risk management, illustrate how insurance can effectively manage climate risks.

Although 74% of the world's population has access to clean water, two billion people still do not have access to safe sources.<sup>37</sup> It has serious consequences for public health and economic development, and is directly related to the SDG 6 Clean Water and Sanitation. In this context, the insurance sector can have an indirect but significant contribution. Insurance can support projects to improve water supply and sanitation, as well as sustainable irrigation methods with innovative products. For example, insurance based on the hydrological drought index-based insurance in Spain<sup>38</sup> and federal crop insurance for sustainable rice irrigation methods in the USA<sup>39</sup> show how insurance can manage the risks associated with water resources. These models not only encourage investments in the water sector but also promote sustainable practices.

SDG 12 Responsible Consumption and Production – emphasis is on importance of responsible handling of resources and products. Although the link between insurance and this goal may seem vague, there are many ways for the sector to have a significant impact. In particular, insurance services can serve as powerful incentives to promote environmentally responsible practices. For example, insurance that covers the costs of e-waste recycling or restoration of polluted areas can motivate companies to handle waste responsibly. In addition, by developing specialized insurance services for investors and renewable energy companies, the insurance sector can further encourage sustainable initiatives. An example of this is the company *Chubb*, which offers insurance services to companies dealing with electronic waste management, providing coverage for potential losses associated with its improper disposal.<sup>40</sup>

SDG 15 Life on Land calls for the protection of life on land and fight against a serious problem of deforestation. Insurance can have an important role, especially in reducing the risk of natural disasters and negative impacts on the environment. For example, insurers can encourage farmers to adopt sustainable practices by of-

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<sup>34</sup> United Nations. (2022). *The Sustainable Development Goals Report 2022*.

<sup>35</sup> The Nature Conservancy & Willis Towers Watson. (2021). *Wildfire Resilience Insurance: Quantifying the Risk Reduction of Ecological Forestry with Insurance*. Preuzeto sa: <https://www.nature.org/content/dam/tnc/nature/en/documents/FINALwildfireresilienceinsurance6.27.21.pdf>

<sup>36</sup> ARC. (2016). *Risk Models. Drought*. Preuzeto sa <https://www.arc.int/drought>.

<sup>37</sup> United Nations. (2022). *The Sustainable Development Goals Report 2022*.

<sup>38</sup> Guerrero-Baena, M.D., & Gómez-Limón, J.A. (2019). Insuring water supply in irrigated agriculture: A proposal for hydrological drought index-based insurance in Spain. *Water*, 11(4), 686. <https://doi.org/10.3390/w11040686>.

<sup>39</sup> Smith, R. (2019). *Newly approved rice irrigation practices aid sustainability*. Farm Progress. Preuzeto sa <https://www.farmprogress.com/rice/newly-approved-rice-irrigation-practices-aid-sustainability>.

<sup>40</sup> Chubb. (2016). *Electronic Waste: Managing the Environmental and Regulatory Challenges*. Preuzeto sa <https://resource-recycling.com/e-scrap/wp-content/uploads/sites/2/2016/06/chubb-e-waste-wp.pdf>.

fering appropriate insurance. It can be an effective way to slow down and reverse the deforestation trend. In addition, insurance can encourage sustainable forestry practices and reduce the risk of wildfires, as shown by a study by the Nature Conservancy and Willis Towers Watson.<sup>41</sup>

SDG 7 Affordable and Clean Energy ensures access to clean and affordable energy, which is a key prerequisite for the development of agriculture, business, communications, education, healthcare and transport.<sup>42</sup> The role of the insurance sector in realising that goal could include investments in renewable energy projects, such as solar parks, wind farms and hydropower plants. Dynamic growth of India's renewable energy sector serves as an example. As the sector expands, the need for adequate insurance that will mitigate various potential risks associated with the development and exploitation of renewable energy sources increases. Forecasts show that renewable energy insurance will grow by 15–20% in 2023.<sup>43</sup> In addition, insurers can offer insurance for renewable energy infrastructure, which would reduce the risk for investors and facilitate financing of such projects. Companies like *Allianz* offer specialized insurance for renewable energy projects covering risks such as technical defects, delivery problems and project interruptions.<sup>44</sup>

Preservation of oceans and seas is crucial for human existence and recognized in the SDG 14 Life below Water. Seas and oceans cover 70% of the planet and provide food, energy and water. At the same time, the ocean absorbs about a quarter of the world's annual carbon dioxide (CO<sub>2</sub>) emissions, thereby mitigating climate changes and their consequences.<sup>45</sup>

Insurance companies have various roles in achieving that goal, both directly and indirectly. They can encourage sustainable practices in sectors such as fisheries, offer cover for damage caused by pollution and financially support the protection of marine ecosystems. Examples include *Caribbean Oceans and Aquaculture Sustainability Facility (COAST)*<sup>46</sup> for sustainable fishery and *Vessel Pollution Liability Insurance*<sup>47</sup> for

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<sup>41</sup> The Nature Conservancy & Willis Towers Watson. (2021).

<sup>42</sup> United Nations. (n.d.-b). *Goal 7: Ensure access to affordable, reliable, sustainable, and modern energy for all*. Preuzeto 21. maja 2023, sa <https://unric.org/en/sdg-7/>.

<sup>43</sup> ETEnergyWorld. (2023). *Why insurance in renewable energy sector will see a massive uptick in 2023*. Preuzeto sa <https://energy.economicstimes.indiatimes.com/news/renewable/why-insurance-in-renewable-energy-sector-will-see-a-massive-uptick-in-2023/99081037>

<sup>44</sup> Allianz. (2014). *Allianz offers customers an increasing number of green solutions*. Preuzeto sa [https://www.allianz.com/content/dam/onemarketing/azcom/Allianz\\_com/responsibility/documents/2014\\_GreenSolutions\\_factsheet.pdf](https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/responsibility/documents/2014_GreenSolutions_factsheet.pdf).

<sup>45</sup> United Nations. (n.d.-c). *Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development*. Preuzeto 21. maja 2023, sa <https://unric.org/en/sdg-14/>.

<sup>46</sup> World Bank. (2019). *Innovative fisheries insurance benefits Caribbean fisherfolk*. Preuzeto sa <https://www.worldbank.org/en/news/feature/2019/09/20/innovative-fisheries-insurance-benefits-caribbean-fisherfolk>.

<sup>47</sup> Great American Insurance Group. (n.d.). *Pollution coverage*. Preuzeto sa <https://www.greatamericaninsurancegroup.com/about-us/business-operations/product/ocean-marine/pollution-coverage>

cleaning of pollution. In addition, the world's first natural resource insurance was established to protect coral reefs in Mexico.<sup>48</sup>

SDG 1 No Poverty. Emphasis is on the eradication of poverty, which is a central goal of the Agenda for Sustainable Development. Insurance, as one of the social protection mechanisms, can contribute to realisation of that goal in the environmental field. This includes preventive measures, investing in building resilience to climate changes and providing protection against financial losses caused by extreme weather events. By providing financial security against extreme weather conditions, insurance opens options for poverty reduction and climate change adaptation in developing countries.<sup>49</sup> Index insurance against flood (tested in India) can provide financial protection and reduce the risk of poverty caused by climate changes. It has been shown that expanding such insurance schemes could help strengthen agricultural livelihoods, reduce post-disaster costs for governments and contribute to poverty reduction, gender equality and food security protection.<sup>50</sup>

Insurance has the potential to contribute indirectly to achieving the SDG 3 Good Health and Well-being, which focuses on promoting healthy lifestyle and well-being for all. On one hand, insurance companies can invest in green and sustainable projects that improve quality of air, water and land, reducing the exposure of people to pollution and climate changes.<sup>51</sup> On the other hand, investments in sustainable technologies such as telemedicine and digital healthcare technology can reduce the environmental impact of traditional healthcare models.

Insurance can have a key role in managing climate risks and community recovery after extreme weather events. For example, by investing in better sanitation conditions and climate resilience insurance can reduce disease incidence such as malaria, which took 627,000 lives in 2020.<sup>52</sup> In addition, insurance can help maintain healthcare systems, especially in crises like a Covid-19 pandemic, which further deteriorated the situation with malaria.

SDG 9 Industry, Innovation and Infrastructure, and SDG 11 Sustainable Cities and Communities require more resilient and more sustainable infrastructure, as well as reduction of the negative impact on the environment, so in many aspects, environmental contribution of insurance to their realisation can be similar. In both

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<sup>48</sup> The Nature Conservancy & Willis Towers Watson. (2021).

<sup>49</sup> Linnerooth-Bayer, J., Surminski, S., Bouwer, L.M., Noy, I., Mechler, R. (2019). Insurance as a Response to Loss and Damage?. In: *Mechler, R., Bouwer, L., Schinko, T., Surminski, S., Linnerooth-Bayer, J. (Eds.), Loss and Damage from Climate Change* (pp. 287-314). Climate Risk Management, Policy and Governance. Springer.

<sup>50</sup> Amarnath, G. (2021). *How a new framework can provide flood insurance guidance to millions of farmers*. PreventionWeb. <https://www.preventionweb.net/news/how-new-framework-can-provide-flood-insurance-guidance-millions-farmers>

<sup>51</sup> Holliday, S., Remizova, I., & Stewart, F. (2021). *The Insurance Sector's Contribution to the Sustainable Development Goals (SDGs)*. World Bank Group. <https://documents1.worldbank.org/curated/en/560821632197166715/pdf/The-Insurance-Sector-s-Contribution-to-the-Sustainable-Development-Goals-SDGs.pdf>

<sup>52</sup> United Nations. (2022). *The Sustainable Development Goals Report 2022*.

cases, insurance companies can support environmental initiatives through green insurance, providing coverage for renewable energy projects, energy efficiency and sustainable building, as well as promoting resilience to climate changes.

Although similarities of the contribution of insurance to the environmental dimension of the SDG 9 and the SDG 11 are obvious, differences in focus allow insurance companies to adapt their products and services to specific needs for these goals. For example, in case of the SDG 9 it could be insurance for producers of clean technologies, such as solar panels and wind turbines, in order to encourage development of sustainable technologies and reduce the impact of industry on the environment. Regarding the SDG 11, insurance can provide environmental contribution through packages aimed at financing and preserving environmentally friendly public transport systems, such as electric buses, trams or trains. This not only effectively reduces air pollution and carbon dioxide emissions in urban areas, but also contributes to creating sustainable urban communities.

A project that shows how insurance can contribute to achieving the SDG 9 is *Prins Hendrikzanddijk* in the Netherlands. Insurance had a key role here, not only as a mechanism for damage compensation but also as an incentive for investment and promotion of natural solutions. The project had a significant economic contribution, creating an additional 0.4-1.07 million Euros a year through eco-systemic services.<sup>53</sup> Mass timber insurance offered by *Zürich North America*<sup>54</sup> is an example of a green insurance, which in terms of environment, contributes to the SDG 9 and the SDG 11 at the same time. By promoting sustainable building materials, insurance can contribute to the construction of cities resilient to climate changes that minimize their environmental imprint.

#### **4. Influence of Insurance on the Social Dimension of Sustainable Development**

Social dimension of sustainable development includes the impact of business on people and communities, including working conditions, human rights and health.<sup>55</sup> Although it is not a priority in relation to economic and environmental aspects, it has a key role in overall sustainability. Insurance sector with annual premiums of almost seven trillion dollars<sup>56</sup> has a great potential to contribute to global

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<sup>53</sup> IADC, CEDA, & Vital Ports. (2021). Financing sustainable marine and freshwater infrastructure: A joint study to explore private financing of green coastal, river and port projects. <https://www.financing-smafi.org/wp-content/uploads/2021/09/financing-sustainable-marine-and-freshwater-infrastructure.pdf>

<sup>54</sup> Zurich North America. (2021). Mass timber is taking root in commercial construction. <https://www.zurichna.com/knowledge/articles/2021/10/mass-timber-is-taking-root-in-commercial-construction>.

<sup>55</sup> OECD. (2022). *Measuring the social performance of firms through the lens of the OECD well-being framework*. <https://www.oecd.org/wise/Measuring-the-Social-Performance-of-Firms-through-the-Lens-of-the-OECD-Well-being-Framework-Policy-Brief-February-2022.pdf>.

<sup>56</sup> Swiss Re Institute. (2022). *World insurance: Inflation risks front and centre* (sigma 4/2022). Swiss Re. <https://www.swissre.com/dam/jcr:4500fe30-7d7b-4bc7-b217-085d7d87a35b/swiss-re-institute-sigma-4-2022.pdf>



social sustainability, overcoming its basic function of protection against financial losses. In the paper, an analysis of how insurance from the social aspect contributes to specific SDGs will be shown.

SDG 1 No Poverty. Poverty was observed as a multidimensional problem and insurance can contribute by providing financial stability in crucial moments. In addition to mitigating financial consequences of accidents or diseases, insurance helps strengthen community resilience and provides access to basic services such as healthcare and education. For example, California Medi-Cal programme reduced poverty rates and enabled healthcare for those with lower income.<sup>57</sup> In China, pilot projects in Yunnan and Hebei showed how insurance can be an effective poverty risk management, especially regarding diseases and natural disasters.<sup>58</sup>

Insurance can have an important social role in realising the SDG 3 Good Health and Well-being, which is focused on healthy lifestyle and well-being for all. In addition to financial protection, insurance promotes social inclusion and equality by providing access to healthcare services, especially for vulnerable groups.<sup>59</sup> For example, partnerships with governments and NGOs can improve vaccination programs and healthcare for mothers and newborns. Insurance not only serves as a financial support, but also strengthens social and healthcare systems.

Insurance has a distinctly significant social component that directly contributes to achieving the SDG 8 Decent Work and Economic Growth. Social contribution of insurance is manifested through its ability to increase social security, reduce poverty and inequality, and to promote decent work for all.

At the company level, insurance helps preserve jobs and earnings, which further protects workers and their families. Insurance also promotes inclusion and equality in the workplace, providing all workers, regardless of their social status, access to insurance services. Microinsurance programmes are significant since they are used effectively in fight against child labour, as shown by studies from Pakistan.<sup>60</sup> These programs provide financial protection to families in cases of economic shocks, reducing the need for child labour.

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<sup>57</sup> Danielson, C., Malagon, P., & McConville, S. (2023). *The Impact of Health Insurance on Poverty in California*. Public Policy Institute of California. <https://www.ppic.org/publication/the-impact-of-health-insurance-on-poverty-in-california/>.

<sup>58</sup> Swiss Re Institute. (2018). *Insurance in poverty reduction: a case from China*. <https://www.swissre.com/institute/research/topics-and-risk-dialogues/society-and-politics/insurance-in-poverty-reduction-a-case-from-china.html>.

<sup>59</sup> Yokobori, Y., Kiyohara, H., Mulati, N., Lwin, K. S., Bao, T. Q. Q., Aung, M. N., Yuasa, M., & Fujita, M. (2023). Roles of Social Protection to Promote Health Service Coverage among Vulnerable People toward Achieving Universal Health Coverage: A Literature Review of International Organizations. *International Journal of Environmental Research and Public Health*, 20(9), 5754. <https://doi.org/10.3390/ijerph20095754>.

<sup>60</sup> Landmann, A., & Frölich, M. (2013). Can Microinsurance Help Prevent Child Labor? An Impact Evaluation from Pakistan. *Political Economy - Development: International Development Efforts & Strategies eJournal*.

SDG 10 Reduced Inequalities. We are faced with growing economic and social inequalities, climate changes, migrations and gender discrimination, the role of insurance in providing social protection is becoming more important. Reducing inequality can be viewed through three key areas. The first is to improve the accessibility of insurance, especially for low-income persons, thus reducing the risk of social exclusion. The second includes innovation such as microinsurance and climate risk insurance, which strengthen social cohesion and allow efficient adaptation to different types of shocks. For example, World Food Program (WFP) uses insurance for better preparation and recovery from climatic shocks at different levels.<sup>61</sup> The third area refers to social responsible business, where insurance companies adopt the ESG criteria to encourage inclusion and reduce inequality.<sup>62</sup> In this way, insurance not only provides direct social value, but also encourages active involvement of all groups in social and economic activities.

SDG 11 Sustainable Cities and Communities. Social contribution of insurance is increasingly prominent especially in growing urbanization, climate changes and social inequalities. Considering urbanization and climate changes, health insurance can mitigate risks of air pollution by providing financial support for treatment and prevention.<sup>63</sup> Innovations such as telematics programs in vehicles reduce the number of traffic accidents and pollution,<sup>64</sup> while microinsurance and real estate insurance provide financial stability to poor households. Moreover, investment in infrastructure projects highlights the role of insurance in building more sustainable urban environments, particularly in low- and moderate-income communities.

SDG 5 Gender Equality. Insurance has an extensive role in the empowerment of women and the promotion of gender equality at the global level. Insurance sector directly fights against gender inequality through innovative services such as microinsurance and insurance of reproductive health.<sup>65</sup> These services not only provide financial support and protection, but empower women to take control of their lives and health. Partnerships with organizations such as the ILO and the IFC aim to reduce the gender protection gap<sup>66</sup> and increase gender inclusion, which was

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<sup>61</sup> World Food Programme. (2021). Sovereign Climate Risk Financing and Insurance: Protecting vulnerable people and communities with pre-arranged funding for rapid responses. <https://docs.wfp.org/api/documents/WFP-0000132157/download/>.

<sup>62</sup> The Geneva Association. (2022). *The role of insurance in promoting social sustainability*. [https://www.genevaassociation.org/sites/default/files/2022-11/social\\_sustainability\\_report.pdf](https://www.genevaassociation.org/sites/default/files/2022-11/social_sustainability_report.pdf).

<sup>63</sup> Chen, S., & He, L. (2021). Air Pollution and Medical Insurance: From a Health-Based Perspective. *Sustainability*, 13(23), 13157. <https://doi.org/10.3390/su132313157>.

<sup>64</sup> Stevenson, M., Harris, A., Mortimer, D., Wijnands, J. S., Tapp, A., Peppard, F., & Bucks, S. (2018). The effects of feedback and incentive-based insurance on driving behaviours: study approach and protocols. *Injury Prevention*, 24(1), 89–93. <https://doi.org/10.1136/injuryprev-2016-042280>.

<sup>65</sup> World Health Organization. (2020). *Universal health coverage for sexual and reproductive health: Evidence brief*. <https://www.who.int/publications/i/item/WHO-SRH-20.1>.

<sup>66</sup> International Labour Organization. (2022). *Targeting women in insurance*. [https://www.ilo.org/empent/areas/social-finance/WCMS\\_775545/lang-en/index.htm](https://www.ilo.org/empent/areas/social-finance/WCMS_775545/lang-en/index.htm).

important during the Covid-19 pandemic. Domestic violence insurance provides basic support to victims, helping them break the cycle of abuse.<sup>67</sup> These initiatives not only reduce women's economic vulnerability, but also contribute to building societies that are more inclusive.

SDG 9 Industry, Innovations and Infrastructure. Focus is on resilient infrastructure, sustainable industrial production and innovation and insurance can have an important role. That role does not only refer to economic and environmental support, but also to social aspects of that goal. Social contribution of insurance in sustainable development can be manifested in different ways, starting from protecting jobs in industry to facilitating the expansion of information and communication infrastructure. In the industrial sector, insurance packages can provide financial stability to workers, especially in developing countries, thereby easing social tensions and contributing to social welfare. Regarding information and communication infrastructure, insurance can minimize financial risks related to network development and expansion, which is essential in less developed countries. In addition, insurance provides protection against cyber attacks, encouraging further use of digital resources.

Insurance can also provide a significant indirect social contribution to achieving the SDG 4 Quality Education. Various insurance policies provide financial stability that enables continued education, especially in poor and vulnerable communities. For example, life insurance and specialized insurance plans can maintain a stable cash flow for families, ensuring that children's education is not compromised in times of crisis. Some services even offer additional education savings, recognizing the needs of low-income populations.<sup>68</sup> In addition, insurance can have a role in protecting education infrastructure, from school buildings to digital resources, enabling faster recovery from unforeseen events and preserving the integrity of educational systems.

## II. Conclusion

In terms of global challenges shaping the present and the future, this paper explores the role of insurance as a significant factor in realising Sustainable Development Goals. A comparative analysis of a sample of 80 countries established a positive correlation between the development of the insurance market and efficiency in realising SDGs, thus highlighting insurance as a potential catalyst for sustainable initiatives at the global level.

Insurance proves to be a multifunctional mechanism that contributes to economic stability, environmental sustainability and social inclusion. In the economic

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<sup>67</sup> Health Care Insider (2021). *What Are Domestic Violence and Health Insurance Protections?* <https://healthcareinsider.com/qle-domestic-violence-abuse-172654>.

<sup>68</sup> GIZ. (2017). *Inclusive Insurance and the Sustainable Development Goals*. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

context, insurance promotes efficient allocation of resources and long-term growth, while from the environmental aspect it encourages transition to sustainable energy solutions and management of climate risks. Regarding social aspect, insurance goes beyond its traditional role and becomes an instrument for promotion of financial resilience and social justice. In this sense, insurance not only has the capacity to respond to current challenges, but also to shape a more sustainable and more inclusive society for future generations. Further researches and development of institutional infrastructure could strengthen the role of insurance in achieving global Sustainable Development Goals.

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**Attachment 1 – Data on insurance penetration rate and SDG index for 80 countries in 2021**

| No. | Country         | Insurance penetration | SDG index |
|-----|-----------------|-----------------------|-----------|
| 1.  | Finland         | 10.3                  | 85.9      |
| 2.  | Sweden          | 7.6                   | 85.6      |
| 3.  | Denmark         | 11.4                  | 84.9      |
| 4.  | Germany         | 6.5                   | 82.5      |
| 5.  | Belgium         | 5.8                   | 82.2      |
| 6.  | Austria         | 4.6                   | 82.1      |
| 7.  | Norway          | 4.9                   | 82.0      |
| 8.  | France          | 9.5                   | 81.7      |
| 9.  | Slovenia        | 5                     | 81.6      |
| 10. | Netherlands     | 9.1                   | 81.6      |
| 11. | Czech Republic  | 2.9                   | 81.4      |
| 12. | Ireland         | 6.1                   | 81.0      |
| 13. | Croatia         | 2.7                   | 80.4      |
| 14. | Poland          | 2.5                   | 80.2      |
| 15. | Switzerland     | 7.1                   | 80.1      |
| 16. | United Kingdom  | 11.1                  | 80.0      |
| 17. | Japan           | 8.4                   | 79.8      |
| 18. | Slovak Republic | 2.1                   | 79.6      |
| 19. | Spain           | 5.1                   | 79.5      |
| 20. | Canada          | 8.1                   | 79.2      |
| 21. | New Zealand     | 4.8                   | 79.1      |
| 22. | Hungary         | 2.4                   | 78.8      |
| 23. | Italy           | 9.1                   | 78.8      |

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**N. Tešić: Insurance as an Important Factor of Sustainable Development**

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| No. | Country              | Insurance penetration | SDG index |
|-----|----------------------|-----------------------|-----------|
| 24. | Portugal             | 5.8                   | 78.6      |
| 25. | Korea, Rep.          | 10.9                  | 78.6      |
| 26. | Chile                | 3.4                   | 77.1      |
| 27. | United States        | 11.7                  | 76.0      |
| 28. | Malta                | 4                     | 75.7      |
| 29. | Serbia               | 1.9                   | 75.6      |
| 30. | Australia            | 4.4                   | 75.6      |
| 31. | Ukraine              | 1                     | 75.5      |
| 32. | Greece               | 2.5                   | 75.4      |
| 33. | Israel               | 4.7                   | 75.0      |
| 34. | Romania              | 1.1                   | 75.0      |
| 35. | Uruguay              | 2.9                   | 74.5      |
| 36. | Luxembourg           | 4.1                   | 74.2      |
| 37. | Thailand             | 5.4                   | 74.2      |
| 38. | Bulgaria             | 2.4                   | 73.8      |
| 39. | Russian Federation   | 1.3                   | 73.8      |
| 40. | Costa Rica           | 2.1                   | 73.6      |
| 41. | Vietnam              | 2.3                   | 72.8      |
| 42. | Argentina            | 2.2                   | 72.8      |
| 43. | Ecuador              | 1.9                   | 72.5      |
| 44. | China                | 3.9                   | 72.1      |
| 45. | Kazakhstan           | 0.9                   | 71.6      |
| 46. | Tunisia              | 2.2                   | 71.4      |
| 47. | Brazil               | 3.9                   | 71.3      |
| 48. | Peru                 | 2                     | 71.1      |
| 49. | Malaysia             | 5.3                   | 70.9      |
| 50. | Algeria              | 0.7                   | 70.9      |
| 51. | Dominican Republic   | 1.6                   | 70.8      |
| 52. | Colombia             | 3                     | 70.6      |
| 53. | Turkey               | 1.3                   | 70.4      |
| 54. | United Arab Emirates | 2.9                   | 70.2      |
| 55. | Jordan               | 1.9                   | 70.1      |
| 56. | Oman                 | 1.5                   | 70.1      |
| 57. | Iran, Islamic Rep.   | 2.4                   | 70.0      |
| 58. | Singapore            | 9.3                   | 69.9      |
| 59. | Mexico               | 2.5                   | 69.1      |
| 60. | Jamaica              | 5.9                   | 69.0      |

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**N. Tešić: Insurance as an Important Factor of Sustainable Development**

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| No. | Country             | Insurance penetration | SDG index |
|-----|---------------------|-----------------------|-----------|
| 61. | Egypt, Arab Rep.    | 0.6                   | 68.6      |
| 62. | Sri Lanka           | 1.3                   | 68.1      |
| 63. | Panama              | 2.5                   | 68.0      |
| 64. | El Salvador         | 2.9                   | 67.9      |
| 65. | Lebanon             | 1                     | 66.8      |
| 66. | Qatar               | 0.9                   | 66.7      |
| 67. | Indonesia           | 1.6                   | 66.3      |
| 68. | Saudi Arabia        | 1.3                   | 66.3      |
| 69. | Philippines         | 2                     | 64.5      |
| 70. | South Africa        | 12.2                  | 63.7      |
| 71. | Trinidad and Tobago | 6.5                   | 63.5      |
| 72. | Bangladesh          | 0.5                   | 63.5      |
| 73. | Kuwait              | 1.1                   | 62.5      |
| 74. | Ghana               | 1.1                   | 62.5      |
| 75. | Namibia             | 7.1                   | 61.8      |
| 76. | Kenya               | 2.2                   | 60.6      |
| 77. | India               | 4.2                   | 60.1      |
| 78. | Guatemala           | 1.7                   | 59.9      |
| 79. | Pakistan            | 0.7                   | 57.7      |
| 80. | Nigeria             | 0.4                   | 48.9      |

Source: OECD.stat and SDG Index database 2021 (Online database for the Sustainable Development Report 2021).

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## **ANALIZA TENDENCIJE UČESTALOSTI POPLAVA U SVETU**

ORIGINALNI NAUČNI RAD

### **Apstrakt**

U radu se polazi od hipoteze da poplave poslednjih nekoliko decenija beleže intenzivan rast učestalosti. Kako je analiza kretanja broja događaja prvi korak u procesu modeliranja rizika od poplava, sprovedeno je empirijsko istraživanje na osnovu podataka iz baze o prirodnim katastrofama Katoličkog univerziteta Luven u Belgiji. Na vremenskoj seriji – broj poplava u periodu od 1960. do 2022. godine u svetu, testiranjem statističkih hipoteza, primenom Man-Kendalovog testa, izvršena je provera slučajnosti u njenim varijacijama, odnosno utvrđivanje činjenice da li vremenska serija ima tendenciju. Testom je utvrđeno da je tendencija učestalosti poplava statistički značajna. Na osnovu mera reprezentativnosti tendencije, standardne greške i srednjeg prosečnog odstupanja, izabrana je eksponencijalna regresiona kriva uz koeficijent determinacije od 0,8807. Uz relativno visoku vrednost koeficijenta determinacije, model daje solidnu osnovu za predviđanje tih događaja u budućnosti, ali bi se svakako njegovim unapređivanjem to svojstvo moglo unaprediti

***Ključne reči:*** osiguranje od poplava, katastrofalni vremenski događaji, poplave, funkcija tendencije učestalosti poplava

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## I. Uvod

Poplave su svakako jedan od najrazornijih prirodnih katastrofalnih događaja i zbog teških ekonomsko-političkih posledica u fokusu su gotovo svih država, ali i najznačajnijih međunarodnih organizacija. Prema podacima Kancelarije Ujedinjenih nacija za smanjenje rizika od katastrofa (*UN Office for Disaster Risk Reduction*), u poslednjih dvadeset godina se od ukupnog broja katastrofalnih događaja 90% odnosilo na vremenske događaje hidrološke prirode, od čega su 44% poplave.<sup>5</sup> Poplave mogu biti primorske, rečne, bujične i one uzrokovane pojavom leda u vodotoku. Izuzetno destruktivnim se smatraju bujične poplave, pogotovo ukoliko se u vidu ima kratak vremenski raspon između početka padavina i vrha poplavnog talasa. Najčešće su uzrokovane intenzivnim padavinama lokalnog karaktera, zbog čega je njihovo predviđanje znatno otežano. Poplave su najučestaliji događaj u prethodne dve decenije, a činjenica da su Kina i Indija zemlje najizloženije ovom riziku u a ujedno i najmnogoljudnije čini ih najvećom pretnjom po imovinu i ljudske živote na području Azije. Ono što dodatno zabrinjava jesu rezultati istraživanja koje je sprovedeno u okviru Kancelarije Ujedinjenih nacija za smanjenje rizika od katastrofa, po kome je u periodu 2000–2019. godine broj poplava dva i po puta veći nego što je bio u periodu 1980–1999. godine.<sup>6</sup>

Pored rasta učestalosti katastrofalnih vremenskih događaja, utvrđen je i porast ekonomskih gubitaka koje oni prouzrokuju, pri čemu postoji velik jaz između stvarno nastalih šteta i onih pokrivenih osiguranjem.<sup>7</sup> Kako bi osiguravači bili u stanju da ravnomerno rasporede rizik i pruže uslugu osiguranicima, moraju biti u stanju da valjano modeliraju osigurane rizike. Poplave su jedan od najskupljih prirodnih katastrofalnih događaja, što je slučaj i u Australiji.<sup>8</sup> Rast učestalosti i višestruki negativni efekti razlozi su što za tu prirodnu opasnost naročito interesovanje iskazuju institucije Evropske unije. Naime, 2007. godine Evropski parlament je usvojio Direktivu o proceni i upravljanju rizicima od poplava (Direktiva 60/2007), koja u prvi plan ističe neophodnost izrade karata (mapa) rizika od poplava s procenama očekivanih šteta za različite scenarije. Pored ekstremnih događaja, čija je verovatnoća pojavljivanja mala, procene bi trebalo da sadrže i događaje srednje verovatnoće (period ponovnog pojavljivanja manji od sto godina). Događaji čija je verovatnoća pojavljivanja velika mogu ali i ne moraju biti obuhvaćeni ovim procenama.

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<sup>5</sup> UNISDR, *The Human Cost of Weather-Related Disasters 1995-2015*, 2015., str. 5, [http://www.unisdr.org/2015/docs/climatechange/COP21\\_WeatherDisastersReport\\_2015\\_FINAL.pdf](http://www.unisdr.org/2015/docs/climatechange/COP21_WeatherDisastersReport_2015_FINAL.pdf)

<sup>6</sup> UNDRR, *The Human Cost of Disasters-an overview of the last 20 years 2000/2019*, United Nations, 2020, str. 7. <https://www.un-ilibrary.org/content/books/9789210054478/read> (15.08.2023.)

<sup>7</sup> Jelena Doganjić, Marija Paunović, „Upravljanje rizicima od prirodnih katastrofa“, *Tokovi osigaranja* 3/2021, Dunav osiguranje, str. 38.

<sup>8</sup> Najdana N. Spasojević, „Uticaj klimatskih promena na osiguranje (katastrofalne poplave u Brizbejnu u Australiji)“, *Tokovi osigaranja* 2/2011, Dunav osiguranje, str. 26.

Procena rizika od poplava bi, prema odredbama Direktive, trebalo da sadrži:

1. karte vodnog područja odgovarajuće razmere, koje uključuju granice rečnih slivova i priobalnog područja, s detaljnim prikazom topografije, strukture i namene zemljišta;
2. pregled i opis do sada zabeleženih poplava, uključujući i analizu oticanja poplavnih voda, kao i procenu ukupne prouzrokovane štete;
3. opis najvećih do sada zabeleženih poplava, s posebnim akcentom na događaje koji bi se mogli ponoviti i imati velike štetne posledice;
4. procenu mogućih štetnih posledica budućih poplava, s posebnim akcentom na uzrocima kao što su topografija, položaj vodotoka, hidrološke i geomorfološke karakteristike, te efikasnosti postojeće infrastrukture za zaštitu položaja naseljenih i privrednih područja u odnosu na plavna područja, kao i klimatskih promena na intenzitet i učestalost poplava.<sup>9</sup>

Imajući u vidu da su obilne padavine najčešći uzročnik rečnih poplava, Direktivom je predviđeno da opseg poplava, dubina vode ili vodostaj, brzina toka ili protok vode budu obavezni elementi analize.<sup>10</sup>

Procena rizika, mapiranje i predviđanje poplava predmet su različitih naučnih disciplina i autora. Američka geofizička unija (American Geophysical Union) objavila je svakako jednu od najznačajnijih studija u kojoj je, pored analize upotrebljivosti i dostupnosti različitih nizova podataka, na sistematičan način prikazana analiza do sada primenjenih hidroloških modela predviđanja poplava, uključujući i predviđanja uslovljena klimatskim promenama.<sup>11</sup> Svetska meteorološka organizacija je 2011. godine pokrenula Inicijativu za predviđanje poplava i formirala Savetodavnu grupu čiji je cilj utvrđivanje smernica o osnovnim elementima budućih modela predviđanja poplava, ali i koordinacija raznih tela i inicijativa. Rastuća tendencija učestalosti poplava, ali i njihovog intenziteta, polazna su osnovu u kreiranju francuskog modela nadoknade šteta od ovih događaja.<sup>12</sup> Uticajem različitih vremenskih uslova na učestalost poplava bavila se grupa autora analizirajući ove fenomene na području Italije.<sup>13</sup> Analizom tendencije u broju poplava na području SAD bavilo se više autora, pri čemu Kartrajt Loren ukazuje na to da se analizom šteta od poplava

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<sup>9</sup> Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks, *Official Journal of the European Union*, L 288, str. 189. <http://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:32007L0060&from=EN>

<sup>10</sup> Ibid.

<sup>11</sup> Guy J-P. Schumann, et al., *Global Flood Hazard: Applications in Modeling, Mapping, and Forecasting*, American Geophysical Union and Wiley, 2018.

<sup>12</sup> Flora Guillier, "French Insurance and Flood Risk: Assessing the Impact of Prevention Through the Rating of Action Programs for Flood Prevention", *International Journal of Disaster Risk Reduction* 8(2017), Springer, 2017.

<sup>13</sup> Alessandro Messeri, Marco Marabito Gianni Messeri, Giada Brandini, Martina Petralli, Francesca Natali et al., "Weather-Related Flood and Landslide Damage: A Risk Index for Italian Regions", *PLoS ONE* 10(12): e0144468, 2015.

na regionalnom nivou stvaraju preduslovi za bolje razumevanje tendencije u SAD.<sup>14</sup> Procena rizika od poplava i šteta koje pričinjavaju na primeru osiguranja useva i plodova tema je kojom su se bavili srpski autori.<sup>15</sup>

Analiza vremenske serije – broj poplava od 1960. do 2022. godine u svetu ključni je predmet ovog rada. Na osnovu empirijskih podataka o broju poplava u svetu preuzetih iz baze podataka EM-DAT, biće testirane statističke hipoteze o postojanju tendencije njihove učestalosti, što je hipoteza koju je iznelo više autora, ali bez njenog empirijskog potvrđivanja. Pored sagledavanja osnovnih karakteristika serije, biće modelirana funkcija tendencije, kao prvi polazni korak u budućem predviđanju broja poplava, što je cilj predmetnog istraživanja. Rad će pružiti uputstva i iz praktičnog aspekta, jer će poslužiti osiguravačima kao osnova za adekvatnije sagledavanje i modeliranje rizika od poplava.

## II. Metodologija istraživanja i polazne pretpostavke

Polazeći od statističke definicije rizika i modela koji je razvio Furnijer Dalb (Fournier d'Albe), Kancelarija Ujedinjenih nacija za smanjenje rizika od katastrofa je, devedesetih godina, definisala koncept rizika od prirodnih katastrofa, koji još uvek predstavlja referentnu tačku svih savremenih modela. Rizik od prirodnih katastrofa, prema pomenutom modelu, determinišu hazard, izloženost i ranjivost i definisan je kao:

$$R_k = (E)(R_s) = (E)(X.V), \quad (1)$$

a za različite elemente pod rizikom kao:

$$R_k = \sum(E)(R_s) = (E)(X.V), \quad (2)$$

$R_k$  – rizik od prirodnih katastrofa,  
(E) – element pod rizikom,  
 $R_s$  – specifični rizik,  
X – prirodni hazard,  
V – ranjivost.<sup>16</sup>

Prirodni hazard označava verovatnoću pojavljivanja potencijalno štetnog prirodnog fenomena na određenom prostoru u definisanom periodu, dok ranjivost

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<sup>14</sup> Lauren Cartwright, "An Examination of Flood Damage Data Trends in the United States", *Journal Of Contemporary Water Research & Education*, Issue 130, 2005.

<sup>15</sup> Boban Gajić, Ivan Radojković, „Metodologija procene šteta u osiguranju biljne proizvodnje“, *Tokovi osigaranja 2/2019*, Dunav osiguranje, 2019.

<sup>16</sup> UNDR0, *Mitigating Natural Disasters (Phenomena, Effects and Options)*, United Nations, 1991., str. 91.

odražava potencijalni stepen štete na nekom od elemenata pod rizikom i kreće se u rasponu od 0 do 1. Element pod rizikom označava stanovništvo, objekte, infrastrukturu i ekonomsku aktivnost koji su izloženi riziku od prirodnih katastrofa u određenoj geografskoj oblasti. Rizik od prirodnih katastrofa predstavlja očekivanu vrednost ukupnih šteta u određenoj oblasti, dok je specifični rizik očekivana vrednost štete nad određenom vrstom elemenata pod rizikom.

Da bi se određena prirodna pojava smatrala hazardom, mora imati potencijalno negativno dejstvo na društvo, te se u pomenutom modelu pod prirodnim hazardom podrazumevaju „geofizički, atmosferski i hidrološki događaji koji imaju potencijal da uzrokuju štetu na imovini i gubitak života“. Na osnovu prethodne definicije hazarda, uočava se međusobna pojmovna uslovljenost hazarda i elemenata pod rizikom, tako da bez elemenata pod rizikom nema hazarda i obrnuto.<sup>17</sup>

Modeliranje katastrofalnih vremenskih rizika kompleksan je proces, čiji uspeh prevashodno zavisi od dostupnosti i kvaliteta kvantitativnih i kvalitativnih inputa, koji na najbolji način reflektuju obeležja prirodne pojave.<sup>18</sup> Pri proceni i eventualnom modeliranju direktnih šteta prouzrokovanih katastrofalnim vremenskim događajima, jedan od realnih problema predstavlja činjenica da su podaci o štetama uglavnom nedostupni, pogotovo u slabo razvijenim zemljama. U EM-DAT, trenutno najkompletnijoj bazi podataka o direktnim štetama prouzrokovanim prirodnim katastrofama, ne postoje podaci o štetama kod 63% registrovanih događaja, dok u zemljama s niskim nivoom bruto društvenog proizvoda nedostaju podaci o štetama kod 83% registrovanih događaja. Takođe, treba imati u vidu činjenicu da su u Okeaniji dostupni podaci kod 51%, a u Africi za samo 14% registrovanih događaja.<sup>19</sup>

Pored procene rizika, katastrofalni modeli koriste se i prilikom unapređenja strateških dokumenata upravljanja vremenskim rizicima. Modeli se kreiraju na osnovu frekvencije pojavljivanja nekog događaja, vremena i intenziteta pojave i prouzrokovanih šteta, a u cilju predviđanja verovatnoće pojave događaja u budućnosti.

Poplave poslednjih nekoliko decenija beleže rast učestalosti, kao što je istaknuto u uvodnom delu rada. Analiza kretanja broja takvih događaja prvi je analitički korak u procesu sagledavanja i modeliranja ovih rizika, pogotovo ukoliko se u vidu ima nedostatak podataka o ostvarenim štetama. Za potrebe empirijskog istraživanja je na osnovu baze podataka o prirodnim katastrofama Katoličkog univerziteta Luven

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<sup>17</sup> Stefan Hochrainer, *Macroeconomic Risk Management Against Natural Disasters*, Deutscher Universitäts-Verlag, 2006., str. 15.

<sup>18</sup> Patricia Grossi, Howard Kunreuther, Don Windeler, „An Introduction to Catastrophe Models and Insurance“, in Patricia Grossi, Howard Kunreuther, 2005., *Catastrophe modeling: a new approach to managing risk*, Springer, 2005.

<sup>19</sup> UNISDR, *Economic Losses, Poverty and Disasters 1998-2017*, 2017., str. 3. [https://www.unisdr.org/2016/iddr/CRED\\_Economic%20Losses\\_10oct\\_final.pdf](https://www.unisdr.org/2016/iddr/CRED_Economic%20Losses_10oct_final.pdf) (5. 9. 2023.)



formirana vremenska serija – broj poplava od 1960. do 2022. godine u svetu.<sup>20</sup> Najpre će biti analizirane osnovne karakteristike vremenske serija, nakon čega će biti izvršena provera slučajnosti u varijacijama, odnosno utvrđivanje činjenice da li vremenska serija imaju tendenciju. U cilju testiranja hipoteza o postojanju tendencije koristiće se Man-Kendalov test. Pomenuti neparametarski test se bazira na rangiranju članova u vremenskoj seriji, pri čemu se poredbe podaci kako slede u vremenu, po formuli:

$$S = \sum_{k=1}^{n-1} \sum_{j=k+1}^n \text{sgn}(X_j - X_k) \quad (3)$$

gde je

$$\text{sgn}(x) = \begin{cases} 1 & \text{ako } x > 0 \\ 0 & \text{ako } x = 0 \\ -1 & \text{ako } x < 0 \end{cases} \quad (4)$$

Matematičko očekivanje testa jednako je nuli, dok je varijanca

$$\sigma^2 = \frac{\{n(n-1)(2n+5) - \sum_{j=1}^p t_j(t_j-1)(2t_j+5)\}}{18} \quad (5)$$

Statistika  $S$  je približno normalno raspodeljena i sledeća transformacija je primenjiva:

$$Z = \begin{cases} \frac{S-1}{\sigma} & \text{ako je } S > 0 \\ 0 & \text{ako je } S = 0 \\ \frac{S+1}{\sigma} & \text{ako je } S < 0 \end{cases}$$

pri čemu je  $Z$  standardizovano normalno raspoređena.

Na osnovu mera reprezentativnosti tendencije, standardne greške i srednjeg prosečnog odstupanja, izvršiće se izbor odgovarajućeg modela, nakon čega će biti izvršena ocena parametara modela.<sup>21</sup>

### III. Rezultati i diskusija

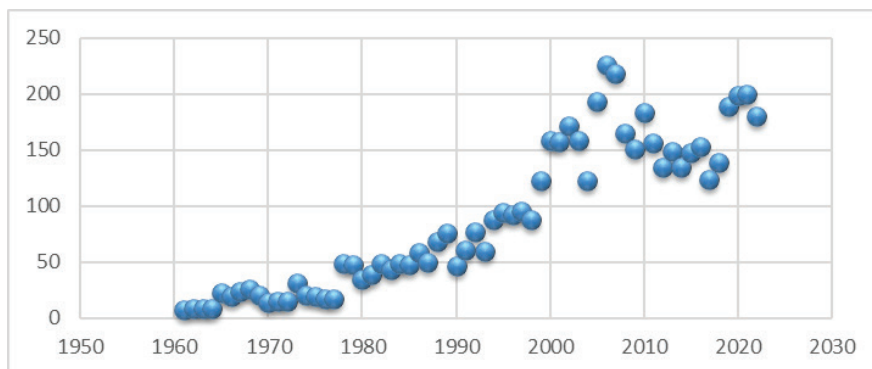
Na Grafikonu 1 dat je prikaz, dok je u Tabeli 1 predstavljena osnovna statistika vremenske serije.

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<sup>20</sup> EM-DAT: The CRED/OFDA International Disaster Database – [www.emdat.be](http://www.emdat.be) – Université Catholique de Louvain – Brussels – Belgium, File creation: Tue, 07 Feb 2023 11:16:49 CET.

<sup>21</sup> Za potrebe izračunavanja koristiće se programi XLSTAT i SPSS.

Grafikon 1. Broj poplava od 1960. do 2022. godine u svetu



Izvor: Na osnovu podataka iz baze podataka EM-DAT (2023.)

Kao što se može videti na Grafikonu 1, broj poplava ima rastuću tendenciju koja je naročito izrazita u periodu od 1999. do 2010. godine, kada je udvostručena. Najveći broj poplava zabeležen je 2006. godine. Te godine su zabeležene poplave u svim delovima sveta, a one naročito razorne pogodile su Severnu Ameriku, Filipine, centralnu i istočnu Evropu.

Tabela 1. Osnovna statistika vremenske serije

| Statistika                  | Broj poplava |
|-----------------------------|--------------|
| Broj posmatranja            | 62           |
| Minimum                     | 7,000        |
| Maksimum                    | 226,000      |
| 1. Kvartil                  | 27,250       |
| Medijana                    | 72,000       |
| 3. Kvartil                  | 150,500      |
| Srednja vrednost            | 89,177       |
| Varijanca (n-1)             | 4366,476     |
| Standardna devijacija (n-1) | 66,079       |

Izvor: Izračunato na osnovu podataka iz baze podataka EM-DAT (2023.)

Definisaćemo nultu i alternativnu hipotezu:

Ho: Tendencija poplava ne postoji, odnosno ispoljene varijacije vremenske serije su samo slučajne

Ha: Tendencija poplava je statistički značajna, odnosno ispoljene varijacije vremenske serije nisu samo slučajne

Primenom Man-Kendalovog testa dobijamo sledeće rezultate:

**Tabela 2. Rezultati Man-Kendalovog testa**

|                        |                   |
|------------------------|-------------------|
| Kendalov rep           | 0,776             |
| S                      | 1463              |
| Var(S)                 | 27091,667         |
| p-vrednost (dvostrana) | <b>&lt;0,0001</b> |
| alfa                   | 0,05              |

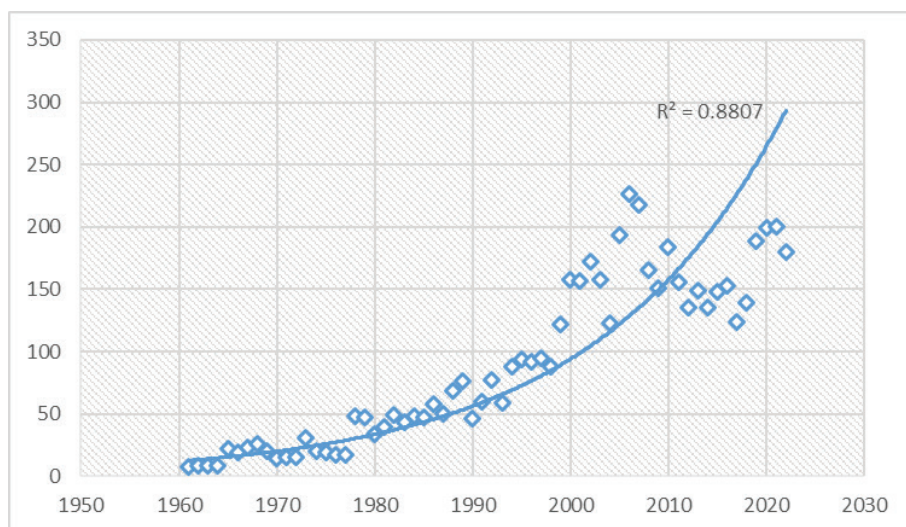
Izvor: Izračunato na osnovu podataka iz baze podataka EM-DAT (2023.)

Kako je izračunata p-vrednost manja od nivoa značajnosti alfa, odbacujemo nultu hipotezu i prihvatamo alternativnu, to jest da je tendencija poplava statistički značajna i da ispoljene varijacije vremenske serije nisu samo slučajne.

Na osnovu vrednosti koeficijenta determinacije i standardne greške tendencije, izračunato je i srednje apsolutno odstupanje koje ima najmanju vrednost u slučaju eksponencijalne funkcije. Na osnovu ocene parametara, dobijamo funkciju tendencije broja poplava:

$$Y=11,883e^{0,0517x} \quad (6)$$

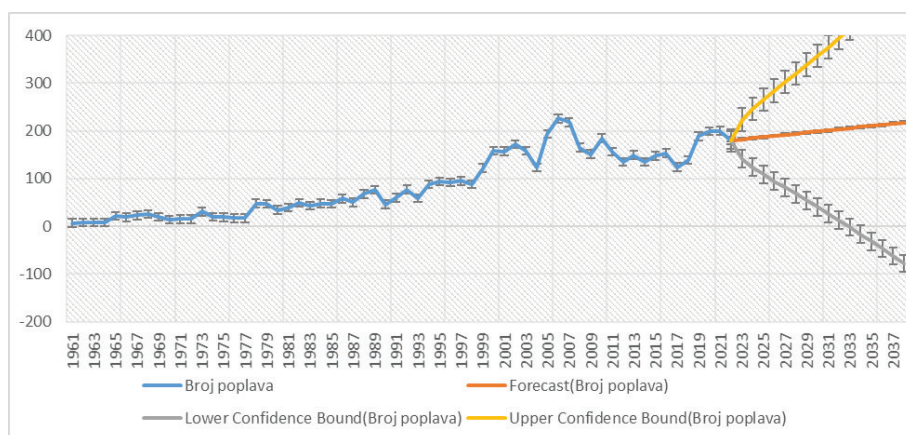
**Grafikon 2. Funkcija tendencije broja poplava u svetu**



Izvor: Izračunato na osnovu podataka iz baze podataka EM-DAT (2023.)

Na osnovu izračunate regresione krive, moguće je izvršiti predviđanje broja poplava u budućnosti. Predviđanje je urađeno pomoću SPSS alata *Forecasting* i to uz upotrebu *Expert Modeler* i *Exponential smoothing*. Rezultati su prikazani na Grafikonu 3 i u Tabeli 3.

**Grafikon 3. Predviđanje broja poplava do 2032. godine**



Izvor: sopstveni proračun

**Tabela 3. Predviđanje broja poplava do 2032. godine**

| Model           |         | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 |
|-----------------|---------|------|------|------|------|------|------|------|------|------|------|
| Poplave Model_1 | Procena | 185  | 186  | 186  | 187  | 188  | 188  | 189  | 189  | 190  | 191  |
|                 | UCL     | 243  | 260  | 274  | 287  | 299  | 309  | 320  | 330  | 339  | 348  |
|                 | LCL     | 133  | 121  | 112  | 104  | 97   | 91   | 86   | 81   | 76   | 72   |

Izvor: sopstveni proračun

Može se reći da je nivo značajnosti od 0,003 za ponuđeni model prihvatljiv, međutim, kako je on manji od 0,05, može se zaključiti da u samom modelu postoji mesta za unapređenje.

## IV. Zaključak

U poslednje dve decenije, od ukupnog broja katastrofalnih događaja, najveći broj njih odnosio se na vremenske događaje hidrološke prirode, prouzrokovane pojavom, kretanjem i naletima površinskih i potpovršinskih slatkih i slanih voda. Kako, trenutno, ne postoji univerzalni i opšteprihvaćeni metodološki okvir merenja svih

efekata poplava, većina zemalja ne sprovodi njihovo kvantifikovanje na sistematičan i konzistentan način, što značajno otežava njihovo modeliranje i predviđanje. Pored sublimiranja dosadašnjih napisa o karakteristikama rizika od poplava, u radu je na bazi empirijskih podataka sprovedeno istraživanje o osnovnim karakteristikama ovog fenomena.

Najpre su na osnovu podataka prikupljenih iz EM-DAT baze podataka Centra za epidemiologiju katastrofa Katoličkog univerziteta Luven analizirani podaci o srednjim vrednostima, minimumu, maksimumu, modusu i medijani broja poplava u svetu u periodu od 1960. do 2022. godine. Utvrđeno je da je maksimalna vrednost od 226 poplava zabeležena 2006. godine, a da je broj poplava u toj deceniji više od dva puta veći nego što je bio u deceniji koja joj je prethodila. Činjenica da je najniži broj poplava zabeležen u prvim godinama merenja ukazuje na manjkavosti u njihovom evidentiranju i analiziranju njihovih efekata. Svakako je nedostatak podataka jedna od osnovnih prepreka za adekvatno modeliranje katastrofalnih vremenskih događaja uključujući i poplave. Utvrđeno je da u EM-DAT bazi podataka, trenutno najkompletnijoj bazi podataka o direktnim štetama prouzrokovanim prirodnim katastrofama, ne postoje podaci o štetama kod 63% registrovanih događaja, dok u zemljama s niskim nivoom bruto društvenog proizvoda nedostaju podaci o štetama kod 83% registrovanih događaja.

Na osnovu formirane vremenske serije, najpre je primenom Man-Kendalovog testa potvrđeno prisustvo tendencije u broju poplava. Sa koeficijentom determinacije od 0.8807 za modeliranje regresione linije, izabrana je eksponencijalna funkcija. Model daje solidnu osnovu za prognozu, ali kako je nivo značajnosti od 0.003 manji od 0.05, sam model je moguće dodatno unaprediti.

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## FLOOD FREQUENCY ANALYSIS IN THE WORLD

### SCIENTIFIC PAPER

#### Abstract

The paper deals with the hypothesis that floods in the last few decades recorded an extreme increase in frequency. As analysis of the number of events is the first step in the flood risk modelling, an empirical study was conducted based on data from the natural disaster database of the *Université Catholique de Louvain* in Belgium. The Mann Kendall Trend Test is used to identify a tendency in a series (the number of floods from 1960 to 2022 in the world) by testing statistical hypotheses and a randomness check in its variations, i. e. determining whether the time series has a tendency. The test determined that the flood frequency tendency is statistically significant. Based on measures of representativeness of the tendency, standard error and mean average deviation, an exponential regression curve was chosen with a coefficient of determination of 0.8807. With a relatively high coefficient of determination value, the model gives a solid basis for predicting those events in the future, but this property could certainly be improved.

**Key words:** *flood insurance, catastrophic weather events, floods, flood frequency tendency*

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## I. Introduction

Floods are certainly one of the most destructive natural catastrophic events, and due to severe economic and political consequences, they are the focus of almost all countries, as well as the most important international organizations. According to data of the UN Office for Disaster Risk Reduction, in the last twenty years, 90% of the total number of catastrophic events were related to weather events of a hydrological nature, of which 44% were floods.<sup>5</sup> Floods can be coastal, river, torrential and those caused by appearance of ice in the watercourse. Torrential floods are extremely destructive, since time span between the beginning of rainfall and the peak of the flood wave is short. Most often, they are result of intense local rainfall, which is why their prediction is much more difficult. Floods are the most frequent event in the past two decades, and the fact that China and India are the countries most exposed to this risk and densely populated makes them the greatest threat to property and human lives in Asia. What is even more worrying are the results of the research conducted within the UN Office for Disaster Risk Reduction, according to which in the period 2000-2019, the number of floods was two and a half times higher than in the period 1980-1999.<sup>6</sup>

In addition to the increase in the frequency of catastrophic weather events, an increase in the economic losses caused by them was also recorded, with a large gap between the actual damages and those covered by insurance.<sup>7</sup> In order for insurers to spread risk evenly and provide service to insureds, they have to be able to properly model insured risks. Floods are one of the most expensive natural disaster events, which is the case in Australia.<sup>8</sup> The increase in frequency and multiple negative effects are the reasons why the institutions of the EU show particular interest in this natural hazard. Namely, the European Parliament and the Council adopted the Directive 2007/60/EC on the assessment and management of flood risks that focuses on preparation of flood hazard maps and flood risk maps, with estimates of expected damages in various scenarios. In addition to extreme events, whose likelihood is small, assessments should also include events of medium likelihood (recurrence period is less than one hundred years). Events with a high likelihood may or may not be included in these assessments.

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<sup>5</sup> UNISDR, *The Human Cost of Weather-Related Disasters 1995-2015*, 2015, p. 5, [http://www.unisdr.org/2015/docs/climatechange/COP21\\_WeatherDisastersReport\\_2015\\_FINAL.pdf](http://www.unisdr.org/2015/docs/climatechange/COP21_WeatherDisastersReport_2015_FINAL.pdf)

<sup>6</sup> UNDRR, *The Human Cost of Disasters-an overview of the last 20 years 2000/2019*, United Nations, 2020, p. 7. <https://www.un-ilibrary.org/content/books/9789210054478/read> (15.08.2023.)

<sup>7</sup> Jelena Doganjić, Marija Paunović, "Natural Catastrophe Risk Management", *Tokovi osigaranja* 3/2021, Dunav osiguranje, p. 54.

<sup>8</sup> Najdana N. Spasojević, "Utjecaj klimatskih promena na osiguranje (katastrofalne poplave u Brizbejnu u Australiji)", *Tokovi osigaranja* 2/2011, Dunav osiguranje, p. 26.



Flood risk assessment should include:

1. maps of the river basin district at the appropriate scale including the borders of the river basins, sub-basins and, where existing, coastal areas, showing topography and land use;
2. a description of the floods which have occurred in the past, including an analysis of runoff of water and an assessment of the total damage;
3. a description of the significant floods which have occurred in the past, where significant adverse consequences of similar future events might be envisaged;
4. an assessment of the potential adverse consequences of future floods, taking into account issues such as the topography, the position of water-courses and their general hydrological and geo-morphological characteristics, including the effectiveness of existing man-made flood defence infrastructures, the position of populated areas, areas of economic activity and impacts of climate change on the occurrence of floods.<sup>9</sup>

Having in mind that heavy precipitation is the most common cause of river floods, the Directive stipulates that the extent of floods, water depth or water level, flow speed or water flow are mandatory elements of the analysis.<sup>10</sup>

Risk assessment, mapping and flood forecast are subject of various scientific disciplines and authors. The American Geophysical Union published one of the most significant studies in which, in addition to the analysis of usability and availability of various data sets, a systematic analysis of the hydrological flood forecasting models applied so far, including forecasts conditioned by climate changes was presented.<sup>11</sup> In 2011, the World Meteorological Organization launched the Flood Forecasting Initiative and formed an Advisory Group whose goal was to establish guidelines on the basic elements of future flood forecasting models, as well as the coordination of various bodies and initiatives. Increasing tendency of the flood frequency and intensity is the starting point in creating the French model of claim indemnity.<sup>12</sup> A group of authors analysed influence of various weather conditions on the frequency of floods in Italy.<sup>13</sup> Several authors analysed the tendency of floods in the USA, and

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<sup>9</sup> Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks, *Official Journal of the European Union*, L 288, p. 189. <http://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:32007L0060&from=EN>

<sup>10</sup> *Ibid.*

<sup>11</sup> Guy J-P. Schumann, at all, *Global Flood Hazard: Applications in Modeling, Mapping, and Forecasting*, American Geophysical Union and Wiley, 2018

<sup>12</sup> Guillier Flora, "French Insurance and Flood Risk: Assessing the Impact of Prevention Through the Rating of Action Programs for Flood Prevention", *International Journal of Disaster Risk Reduction* 8(2017), Springer, 2017

<sup>13</sup> Alessandro Messeri, Marco Marabito Gianni Messeri, Giada Brandini, Martina Petralli, Francesca Natali et al., "Weather-Related Flood and Landslide Damage: A Risk Index for Italian Regions", *PLoS ONE* 10(12): e0144468, 2015.

Cartwright L. pointed out that the analysis of flood damage at the regional level created prerequisites for a better understanding of the tendency in the USA.<sup>14</sup> Serbian authors discussed assessment of the risk of floods and the damage they cause to crop and fruit.<sup>15</sup>

Time series analysis - the number of floods from 1960 to 2022 in the world is the key topic of this paper. Based on empirical data on the number of floods in the world from the EM-DAT database, statistical hypotheses about the existence of a tendency of their frequency will be tested – a hypothesis presented by several authors – but without its empirical confirmation. In addition to the main characteristics of the series, the tendency function will be modelled as the first step in future prediction of the number of floods, which is the goal of the concerned research. The paper will present practical instructions and insurers will use them as a basis for a more adequate understanding and modelling of flood risks.

## II. Methodology of Research and Initial Assumptions

Starting with the statistical definition of risk and the model developed by Fournier d'Albe, the UN Office for Disaster Risk Reduction, in the nineties, defined the concept of natural disaster risk, which still is the reference point of all modern models. Natural disaster risk, according to the model, is determined by hazard, exposure and vulnerability and is defined:

$$R_k = (E)(R_s) = (E)(X.V), \quad (1)$$

and for different elements at risk:

$$R_k = \sum(E)(R_s) = (E)(X.V), \quad (2)$$

$R_k$  – natural catastrophe risk,  
(E) – element at risk,  
 $R_s$  – specific risk,  
X – natural hazard,  
V – vulnerability.<sup>16</sup>

Natural hazard indicates the likelihood of occurrence of a potentially harmful natural phenomenon in a certain area in a defined period, while vulnerability reflects

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<sup>14</sup> Lauren Cartwright, "An Examination of Flood Damage Data Trends in the United States", *Journal Of Contemporary Water Research & Education*, Issue 130, 2005.

<sup>15</sup> Boban Gajić, Ivan Radojković, "Risk Assessment Methodology in Crop Insurance", *Tokovi osiguranja* 2/2019, p. 49

<sup>16</sup> UNDRO, *Mitigating Natural Disasters (Phenomena, Effects and Options)*, United Nations, 1991, p. 91.

the potential degree of damage to one of the elements at risk and ranges from 0 to 1. Element at risk means the population, facilities, infrastructure and economic activity exposed to the natural disaster risk in a certain geographical area. Natural disaster risk is the expected value of total damages in a certain area, while the specific risk is the expected value of damages to a certain type of elements at risk.

In order for a certain natural phenomenon to be deemed a hazard, it must have a potential negative effect on society, and in the aforementioned model a natural hazard is defined as "geophysical, atmospheric and hydrological events that have the potential to cause damage to property and loss of life." Based on the previous definition of hazard, the mutual conceptual relation between a hazard and elements at risk can be observed, so that without elements at risk there is no hazard and vice versa.<sup>17</sup>

Modelling of catastrophic weather risks is a complex process, whose success primarily depends on availability and quality of quantitative and qualitative inputs, which best reflect the features of natural phenomena.<sup>18</sup> When assessing and modelling direct damages caused by catastrophic weather events, one of the real problems is the fact that damage data is mostly unavailable, especially in underdeveloped countries. In EM-DAT, currently the most complete database on direct damages caused by natural disasters, there is no data on damages in 63% of registered events, while in countries with a low GDP, data on damages is missing in 83% of registered events. In addition, we should take into account that in Oceania data is available for 51%, and in Africa for only 14% of registered events.<sup>19</sup>

In addition to risk assessment, catastrophe models are used for improvement of strategic weather risk management documents. Models are based on the frequency of occurrence of an event, the time and intensity of the occurrence and damages, with the aim of predicting the likelihood of occurrence of the event in future.

In the last few decades floods recorded increase in frequency, as it was pointed out in the introductory part of the paper. Analysis of the trend of such events is the first analytical step in understanding and modelling of these risks, especially concerning the lack of data on actual damages. For an empirical research, a time series was created based on the database on natural disasters of the *Université Catholique de Louvain* - the number of floods from 1960 to 2022 in the world.<sup>20</sup> First,

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<sup>17</sup> Hochrainer S., *Macroeconomic Risk Management against Natural Disasters*, Deutscher Universitäts-Verlag, 2006, p. 15.

<sup>18</sup> Patricia Grossi, Howard Kunreuther, Don Windeler, An Introduction to Catastrophe Models and Insurance, in Patricia Grossi, Howard Kunreuther, 2005, *Catastrophe modeling: a new approach to managing risk*, Springer, 2005.

<sup>19</sup> UNISDR, *Economic Losses, Poverty and Disasters 1998-2017*, 2017, p. 3 [https://www.unisdr.org/2016/iddr/CRED\\_Economic%20Losses\\_10oct\\_final.pdf](https://www.unisdr.org/2016/iddr/CRED_Economic%20Losses_10oct_final.pdf) (5. 9. 2023.)

<sup>20</sup> EM-DAT: The CRED/OFDA International Disaster Database – [www.emdat.be](http://www.emdat.be) – Université Catholique de Louvain – Brussels – Belgium, File creation: Tue, 07 Feb 2023 11:16:49 CET.

the main characteristics of the time series will be analysed, after which the randomness in variations will be checked, that is, whether the time series has a tendency. The Mann-Kendall test will be used to test hypotheses about the existence of a tendency. The said non-parametric test ranks members in the time series, where data is compared as they appear in time, according to the formula:

$$S = \sum_{k=1}^{n-1} \sum_{j=k+1}^n \text{sgn}(X_j - X_k) \quad (3)$$

where

$$\text{sgn}(x) = \begin{cases} 1 & \text{ako } x > 0 \\ 0 & \text{ako } x = 0 \\ -1 & \text{ako } x < 0 \end{cases} \quad (4)$$

Mathematical expectation of the test equals zero, while variance is

$$\sigma^2 = \frac{\{n(n-1)(2n+5) - \sum_{j=1}^p t_j(t_j-1)(2t_j+5)\}}{18} \quad (5)$$

Statistics  $S$  is approximately normally distributed and the next transformation is applicable:

$$Z = \begin{cases} \frac{S-1}{\sigma} & \text{ako je } S > 0 \\ 0 & \text{ako je } S = 0 \\ \frac{S+1}{\sigma} & \text{ako je } S < 0 \end{cases}$$

where  $Z$  is standardised normally distributed.

Based on measures of representativeness of the tendency, standard error and mean average deviation, the appropriate model will be selected, after which the model parameters will be evaluated.<sup>21</sup>

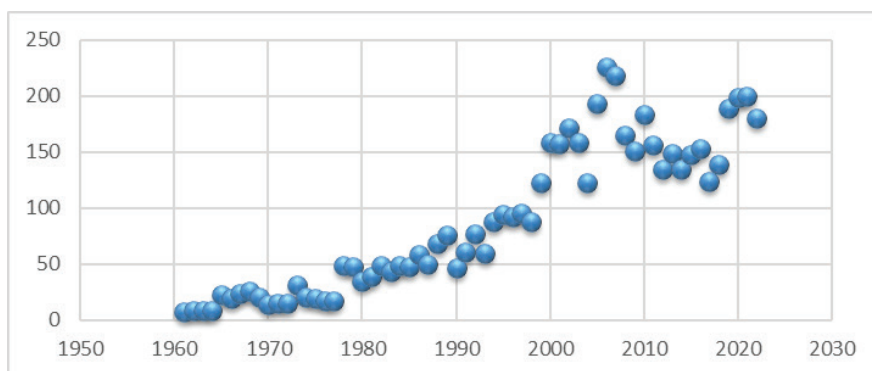
### III. Results and Discussion

Chart 1 shows the overview, while Table 1 presents the basic statistics of the time series.

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<sup>21</sup> Programmes XLSTAT and SPSS will be used for calculation.

**Chart 1 Number of floods from 1960 to 2022 in the world**



Source: EM-DAT database (2023)

As can be seen in Chart 1, the number of floods has an increasing tendency, which is particularly prominent in period from 1999 to 2010 when it doubled. The highest number of floods was recorded in 2006. In 2006, floods were recorded in all parts of the world, and devastating ones hit North America, the Philippines, and Central and Eastern Europe.

**Table 1 Basic statistics of the time series**

| Statistics               | No. of floods |
|--------------------------|---------------|
| No. of observations      | 62            |
| Minimum                  | 7,000         |
| Maximum                  | 226,000       |
| 1. Quartile              | 27,250        |
| Median                   | 72,000        |
| 3. Quartile              | 150,500       |
| Mean value               | 89,177        |
| Variance (n-1)           | 4366,476      |
| Standard deviation (n-1) | 66,079        |

Source: EM-DAT database (2023)

We will define the null and the alternative hypothesis:

Ho: Tendency of floods does not exist, that is, manifested variations of the time series are random

Ha: Tendency of floods is statistically significant, that is, manifested variations of the time series are not random

Mann-Kendall test gives the next results:

**Table 2 Mann-Kendall test results**

|                  |                   |
|------------------|-------------------|
| Kendall's tau    | 0,776             |
| S                | 1463              |
| Var(S)           | 27091,667         |
| p-value (double) | <b>&lt;0,0001</b> |
| alpha            | 0,05              |

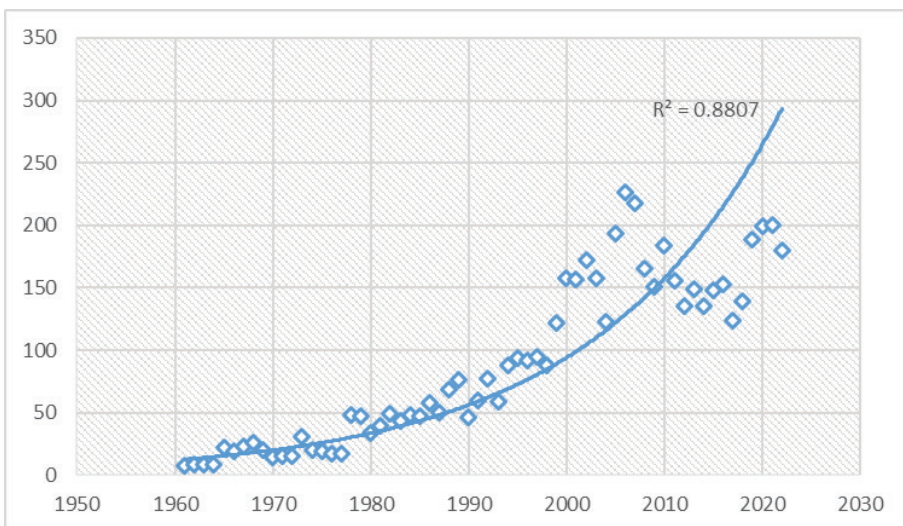
Source: EM-DAT database (2023)

Calculated p-value is less than the alpha significance level, we reject the null hypothesis and accept the alternative hypothesis, i.e. the flood tendency is statistically significant and manifested time series variations are not random.

Based on the value of the coefficient of determination and the standard error of tendency, the mean absolute deviation was calculated, which has the smallest value in case of an exponential function. Based on the estimate of the parameters, we obtain the tendency function of the number of floods:

$$Y=11,883e^{0,0517x} \tag{6}$$

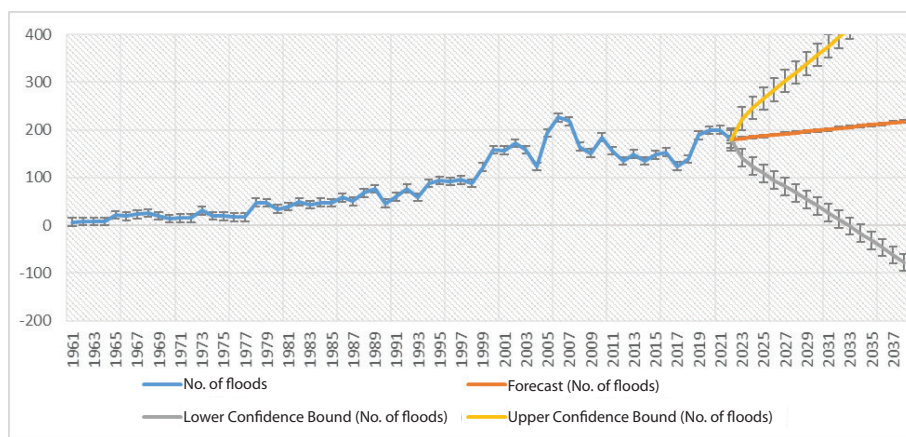
**Chart 2 Tendency function of the number of floods in the world**



Source: EM-DAT database (2023)

Based on the calculated regression curve, it is possible to predict the number of floods in future. Prediction was done by using the SPSS Forecasting tool with Expert Modeler and Exponential smoothing. The results are shown in Chart 3 and Table 3.

**Chart 3 Prediction of the number of floods until 2032**



Source: own calculation

**Table 3 Prediction of the number of floods until 2032**

| Model         |          | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 |
|---------------|----------|------|------|------|------|------|------|------|------|------|------|
| floodsModel_1 | Estimate | 185  | 186  | 186  | 187  | 188  | 188  | 189  | 189  | 190  | 191  |
|               | UCL      | 243  | 260  | 274  | 287  | 299  | 309  | 320  | 330  | 339  | 348  |
|               | LCL      | 133  | 121  | 112  | 104  | 97   | 91   | 86   | 81   | 76   | 72   |

Source: own calculation

It can be said that the significance level of 0.003 for the proposed model is acceptable, however, as it is less than 0.05 it can be concluded that there is room for improvement in the model itself.

## IV. Conclusion

In the last two decades, of total number of catastrophic events, the largest number of related to weather events of a hydrological nature, caused by appearance, movement and surges of surface and subsurface fresh and salt water. As there is no universal and generally accepted methodological framework for measuring all effects of floods, most countries do not quantify them in a systematic and consistent manner, which significantly complicates their modelling and forecasting. In addition

to characteristics of the risk of floods, the paper conducted research on the main characteristics of this phenomenon on the basis of empirical data.

First, based on data collected from EM-DAT database of the Centre for Research on the Epidemiology of Disasters of the *Université Catholique de Louvain*, data on mean values, minimum, maximum, mode and median number of floods in the world in the period from 1960 to 2022 were analysed. Maximum value of 226 floods was recorded in 2006, and the number of floods in that decade was more than twice as high as in the previous decade. The fact that the lowest number of floods was recorded in the first years of measurement indicates deficiencies in their recording and analysis of their effects. Lack of data is one of the main obstacles for adequate modelling of catastrophic weather events, including floods. EM-DAT database, currently the most complete database on direct damages caused by natural disasters, does not have data on damages in 63% of registered events, while in countries with a low GDP, data on damages is missing in 83% of registered events.

Based on the formed time series, the Mann-Kendall test confirmed the presence of a tendency in the number of floods. With a coefficient of determination of 0.8807 for modelling of the regression line, an exponential function was chosen. The model gives a solid basis for forecasting, but since the significance level of 0.003 is lower than 0.05, the model itself can be further improved.

*Translated by  
Jelena Rajković*

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**Doc. dr Snežana D. Videnović<sup>1</sup>**

## PRIMENA METODE KOUČINGA U OSIGURAVAJUĆIM DRUŠTVIMA

STRUČNI RAD

### Apstrakt

Većina privrednih i osiguravajućih društava spremna je da prihvati promene, ali nerado prihvata modele, pristupe i metode visokorazvijenih zemalja zbog specifičnosti kulturno-socijalnih uslova.

Polazeći od saznanja dobijenih analizom relevantne literature iz te oblasti, osnovna svrha ovog rada je da prikaže trend primene metode koučinga u osiguravajućim društvima u Srbiji. Kompanije koje primenjuju tu metodu beleže povećanje performansi u više dimenzija merenja rasta i razvoja – kako zaposlenih, tako i organizacije u celosti. Primena koncepta koučinga razmatrana je na uzorku od 10 osiguravajućih kuća, pomoću anketnog upitnika.

U radu je predstavljeno u kojoj su meri osiguravajuća društva u Srbiji prihvatila koncept koučinga kao uspešnog metoda za razvoj zaposlenih, ali i za povećanje efikasnosti organizacije u celosti. Iz dobijenih rezultata anketnog upitnika može se zaključiti da osiguravajuća društva koriste koučing kao metodu za razvijanje zaposlenih i evidentiraju njegov pozitivan uticaj, ali da još uvek nisu uspostavila koučing klimu u organizaciji.

Zaključci do kojih se došlo kako na osnovu teorijskih navoda tako i na osnovu razmatranja rezultata popunjenog anketnog upitnika ukazuju na potrebu za uvođenjem metode koučinga u osiguravajućim društvima u kojima taj koncept do sada nije praktikovan.

***Ključne reči:*** metoda koučinga, edukacija, osiguravajuća društva, razvoj zaposlenih, performanse.

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Rad je prihvaćen: 16. oktobra 2023.

## Uvod

Nesumnjivo je da je metoda koučinga jedna od najbrže rastućih poslovnih pojava na svetu. Sve više se koristi kao profesionalni alat za razvoj i obuku zaposlenih, ali isto tako postaje i sve jače ukorenjena u organizacioni život na različite načine.

Osiguranje je uslužna privredna delatnost, a uspešnost osiguravajućih društava zavisi isključivo od kompetencija i valjanosti ljudskog kapitala. Obukom se zaposleni osposobljavaju za rad tako što stiču adekvatne veštine i znanja za doprinos efikasnosti organizacije i suočavanje s promenama u okruženju.<sup>2</sup> Koučing kao metoda razvojne obuke pojedinca ili grupe podrazumeva i podržava inicijative promena u načinu razmišljanja, ponašanja i delovanja. Preciznije rečeno, to je koncept koji povećava verovatnoću sprovođenja istinskih promena ponašanja, jer omogućuje jasno komuniciranje u pogledu vrednovanja rada, usklađivanje interesovanja i ciljeva pojedinca sa organizacijskim, kao i razvoj međusobnog poverenja, poštovanja i motivacije za postizanje najboljih performansi.<sup>3</sup> I možda najvažnije, koučing je jedan od načina da se kontrolišu strahovi, vreme, obeshrabrenja, kako bi ljudi u potpunosti ostvarili svoje talente i ciljeve.<sup>4</sup>

Isto tako, nesumnjivo je da se primenom metode koučinga utiče na efikasno ostvarenje ciljeva i dostizanje nove vrednosti. Bozer i Jones<sup>5</sup> napravili su sistematsku integraciju 117 empirijskih studija u kontekstu koučinga i potvrdili da je koučing na radnom mestu efikasan. Ne samo to, oni su utvrdili da su determinante efektivnosti koučinga sledeće: samoeфикаsnost, motivacija za koučing, orijentacija ka cilju, poverenje, međuljudska privlačnost, povratna intervencija i nadzorna podrška. Upravo te determinante, smatraju oni, omogućavaju da se u kompanijama uspostavi koučing klima. Praćenjem i istraživanjem uloge i doprinosa koučinga koji je neprestano rastao od 2012. godine, autori naglašavaju verovanje u njegove potencijalne koristi i ističu da kontinuirane koučing aktivnosti u organizacijama mogu ukazivati na kretanje ka nastanku koučing kulture.

Prednosti razvoja koučing kulture su uočene, a ogledaju se u boljoj motivaciji, angažovanju, veće je zadržavanje zaposlenih i pojačana je produktivnost, osnaživanje i učenje. Koučing kao prilagodljiva metodologija može biti korisna u upravljanju lokalnim i globalnim turbulencijama i stvaranju mogućnosti za nova razmišljanja

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<sup>2</sup> Snežana Videnović, Snežana Vranić, „Образovanje i edukacija na polju osiguranja“, Savetovanje sa međunarodnim učešćem, Zlatibor, 2022, str. 171-179.

<sup>3</sup> Anthony M. Grant, „An Integrated Model of Goal-Focused Coaching“, *International Coaching Psychology Review*, Vol. 7, br. 2, septembar 2012.

<sup>4</sup> James Flaherty, *Coaching Evoking Excellence in Others*, London, 2022.

<sup>5</sup> Gil Bozer & Rebecca J. Jones, „Understanding the factors that determine workplace coaching effectiveness: a systematic literature review“, *European Journal of Work and Organizational Psychology*, 27(3), London, 2018, str. 342–361.

i oblike ponašanja koji dovode do veće konkurentnosti na tržištu. Razvijanje kulture koučinga je izazov kao i svaka inicijativa za promenu.<sup>6</sup>

Jedna od najbitnijih komponenata prilikom uspostavljanja koučing klime jeste ta da poruke o važnosti koučinga dolaze od najvišeg rukovodstva u kompaniji. Menadžeri na najvišim pozicijama treba da budu uzor za koučing ponašanje. Koučing kompetencije treba da budu dodate kompetencijama poslovanja i da se kao takve vrednuju i nagrađuju. Iako neki menadžeri mogu da budu izvrsni u koučing veštinama, ipak je njihovo dejstvo ograničeno, a stvaranje šire koučing kulture zahteva njeno promovisanje od strane operativnih i strateških lidera. Prilikom pokretanja koučing kulture, bitno je da se utvrdi ko veruje u koučing i ko je spreman da govori o tome. Pre pokretanja koučing kulture, važno je razjasniti šta je cilj koučinga.<sup>7</sup> Uspostavljanjem jasnih ciljeva, koji su obično u vezi s razvojem zaposlenih, pomaže se razumevanje veze koučinga sa organizacijskim strateškim ciljevima i potrebama.

Kreiranje koučing kulture jedan je od najmoćnijih procesa organizacionih promena koje stvaraju kulturu „visokih performansi“.<sup>8</sup>

Koučing kultura je na delu kada su svi članovi organizacije uključeni u iskrene koučing razgovore pune poverenja i poštovanja, nesputane hijerarhijskim odnosima, o tome kako mogu da poboljšaju svoje međusobne odnose na poslu i povećaju performanse individualnog i kolektivnog rada. Svi u organizaciji su naučili da cene i efikasno koriste povratnu spregu kao moćno sredstvo učenja za lični i profesionalni razvoj, odnosi na poslu se zasnivaju na visokoj pouzdanosti, stalno se poboljšavaju performanse i sve je veće zadovoljstvo klijenata sa kojima organizacija saraduje.

### Analiza ankete

U prethodnih deset godina metoda koučinga se sve više primenjuje u domaćim kompanijama, kao i u državnim ustanovama. Na početku tog procesa, međunarodne kompanije su angažovale eksterne saradnike kako bi predstavile metodu koučinga, da bi se kasnije, na lokalnom nivou, razvijali zaposleni sa ovim sposobnostima, zahvaljujući različitim međunarodnim koučing asocijacijama.

Anketni upitnik je priređen imajući u vidu teorijske osnove predstavljene u radovima autora koji se bave metodom koučinga (Whithmore, Peter Hawkins, Lucy West, Mike Milan, Carole Pemberton, Anthony M. Grant, Gil Bozer, Rebecca Jones, David Clutterbuck),<sup>9</sup> kao i rezultatima sličnih istraživanja u svetu.

<sup>6</sup> Alison Whybrow & Siobhain O’Riordan, *Cognitive Behavioural Coaching in Action*, London, 2021, str. 34.

<sup>7</sup> Snežana Videnović, Doktorska disertacija: *Mogućnost primene coachinga u Srbiji*, Beograd, 2013, str. 90.

<sup>8</sup> [http://www.wabccoaches.com/bcw/2005\\_v1\\_i1/feature.html](http://www.wabccoaches.com/bcw/2005_v1_i1/feature.html)

<sup>9</sup> John Whithmore, *Trening za postizanje učinkovitosti*, Zagreb, 2006.

Peter Hawkins, *Creating a Coaching Culture: Developing a Coaching Strategy*, London, 2012.

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U nastojanju da se dobije realna slika zastupljenosti primene metode koučinga u osiguravajućim društvima u Srbiji, anketni upitnikom obuhvaćena su ključna pitanja vezana za sam status, kao i za rezultate njegove primene.

Rezultati ankete prikupljeni su u deset osiguravajućih društava na teritoriji Srbije u periodu od maja do septembra 2023. godine. Osnovni skup anketiranih čine zaposleni kojima je garantovana anonimnost, odnosno stroga poverljivost u pogledu ličnog identiteta i imena osiguravajuće kuće.

Uzorak za anketiranje je nameran, pristupilo mu je 100% ispitanika, tj. 10 od 10 osiguravajućih društava kojima je poslat anketni upitnik, što je dovoljan broj za donošenje relevantnih zaključaka. U cilju realizacije ovog istraživanja, konstruisan je upitnik koji sačinjava 11 otvorenih pitanja.

Na prvo pitanje „Da li se kod vas u kompaniji sprovodi koučing?“, osam respondenata je odgovorilo da se sprovodi, a dva ispitanika su odgovorila da još uvek nisu praktikovali koučing kao razvojnu obuku zaposlenih.

Na drugo pitanje „Ako je odgovor da, od kada se sprovodi?“ raspon odgovora se kreće od 2008. do danas.

Treće pitanje bilo je upućeno samo onim respondentima koji su naveli da se u njihovim kompanijama ne sprovodi koučing. Na pitanje „Ako je odgovor ne, zašto ne?“ respondenti su bili zamoljeni da unesu sopstveno mišljenje šta je razlog neuvođenja koučinga u njihovoj kompaniji.

Prvi respondent je odgovorio da rukovodstvo nije zainteresovano za bilo koju metodu edukacije zaposlenih koja nije tehnička, odnosno stručna priprema za obavljanje poslova na koje su raspoređeni.

Drugi respondent je istakao da je odgovor rukovodstva na predlog iz odeljenja za ljudske resurse da se uvede timski koučing kako bi se poboljšali rezultati prodaje bio „A koliko to košta?“ Nakon sagledavanja cene uvođenja koučinga, usledio je negativan odgovor rukovodstva.

U nastavku su bila pitanja samo za ispitanike iz osiguravajućih društava koja sprovode koučing:

Na pitanje da li se sprovodi timski, individualni ili i timski i individualni koučing, pet respondenata odgovorilo je da se sprovodi timski i individualni koučing, dva je odgovorilo da se sprovodi samo koučing najviših menadžera, dok je jedan odgovorio da se sprovodi samo timski koučing.

Na pitanje kako i ko identifikuje potrebe za koučingom, dobijeni su sledeći odgovori: „Kad god se ukaže potreba; zaposleni inicira; sektor za ljudske resurse;

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Carole Pemberton, *Coaching to solutions*, London, 2006.

Anthony M. Grant, „An Integrated Model of Goal-Focused Coaching“, *International Coaching Psychology Review*, Vol. 7, br. 2, septembar 2012.

Gil Bozer & Rebecca J. Jones, „Understanding the factors that determine workplace coaching effectiveness: a systematic literature review“, *European Journal of Work and Organizational Psychology*, 27(3), London, 2018.

David Clutterbuck, *Coaching the team at work 2: The definitive guide to team coaching*. London, 2020.

obuhvaćeno je planom edukacije; trening planom je određeno unapred ko će te godine i u kom intenzitetu da prolazi kroz proces koučinga; određuje se nakon godišnje ocene performansi i analize rezultata rada zaposlenih.“ Iz dve osiguravajuće kuće smo dobili odgovor da proces inicira direktor.

Na pitanje da li se koučing sprovodi planski ili po potrebi, 50% ispitanika je odgovorilo planski, a druga polovina da se sprovodi *ad hoc*.

Na pitanje da li angažuju eksternog ili imaju internog kouča, dve kompanije su odgovorile da imaju internog kouča, a preostalih šest kompanija odgovorile su da angažuju koučing agencije sa tržišta.

Na pitanje da li zaposleni aktivno učestvuje u postavljanju ciljeva koučinga, svih osam ispitanika odgovorili su potvrdno.

Na pitanje da li su merili rezultate koučing procesa, jedan respondent odgovorio je da jesu, a sedam ispitanika odgovorili su da nisu merili, ali je primećeno poboljšanje, uz navođenje svega onoga šta je ustanovljeno. Tih sedam respondenata ističe da je došlo do poboljšanja u sledećim domenima:

- Primećen je pozitivan uticaj u pogledu motivacije i angažovanosti na radnom mestu;
- Prevaždeni su sukobi koji su postojali u timu i u međusektorskoj saradnji;
- Koučing je identifikovao koji su pravi pravci obuka za zaposlene koji bi značajno doprineli poboljšanju rezultata rada;
- Prevažden je stres i uspostavljen balans posla i privatnog života;
- Ostvaren je pozitivan uticaj na komunikaciju i međuljudske odnose;
- Povećanje zadovoljstva;
- Povećanje efikasnosti zaposlenih.

Na deseto pitanje, „Ako ste merili učinak koučinga, do kojih ste rezultata došli“, iscrpan odgovor respondenta u čijoj se kompaniji merio uticaj koučinga bio je:

„Kod nas se koučing sprovodi od 2012. godine i predstavlja deo liderskog programa. Pre nego što smo obavili konkretno merenje, utvrdili smo da koučing daje rezultate u rešavanju specifičnih problema u ponašanju i pomaže novopostavljenim menadžerima da se razviju u lidere. Merenje uticaja koučinga smo obavili tako što smo vrednovali rezultate rada zaposlenih pre i nakon procesa koučinga. Primetan je trend da su svi zaposleni ocenjeni višim ocenama nego u godini kada nisu imali koučing. Dakle, ostvarili su poboljšanje.“

Na pitanje smatrate li da u vašoj kompaniji postoji koučing kultura, sedam respondenata je odgovorilo da smatra da u njihovoj kompaniji ne postoji koučing kultura. Jedan respondent je napisao da smatra da je insistiranje na koučing kulturi od strane najvišeg rukovodstva doprinelo da zaposleni ostvaruju bolje rezultate na poslu uz povećano zadovoljstvo sobom, ali i bolje razumevanje svog položaja u osiguranju i osiguranja kao biznisa.

Razlozi za tako mali procenat odgovora o postojanju koučing kulture nisu navedeni, ali na osnovu do sada objavljenih istraživanja<sup>10</sup> možemo zaključiti da se oni nalaze u nedovoljno strukturisanim i kontinuiranim koučing aktivnostima ili u nedostatku nekih od karakteristika koučing kulture.

## **Karakteristike koučing kulture**

Rezultati ankete sprovedene u osiguravajućim društvima, ali i teorijska razmatranja mogu da ukažu na osnovne karakteristike koučing kulture.

### **1. Lideri su pozitivni uzori**

Organizaciona kultura potiče od lidera na vrhu. Oni postavljaju pravila igre: tempo, očekivanja, šta je ispravno a šta pogrešno – šta je prihvatljivo a šta ne. Kada lideri postanu vešti koučevi u praksi, oni transformišu svoj stil liderstva od toga da su šefovi zaposlenima do toga da su koučevi svojim ljudima.<sup>11</sup>

Koučing je „primenjeno liderstvo“ i zahteva najbolje od savremenog liderstva. Koučing lideri kreiraju moćne, emotivno inteligentne razgovore kojima se zaposleni produktivno menjaju i nadahnjuju na akciju.

### **2. Svaki član je fokusiran na povratnu spregu klijenta**

Većina modernih kompanija ima povratne kanale kojima se snabdevaju informacijama o klijentima koje uslužuju. To nije novost. Međutim, u koučing kulturi, postoji veliki naglasak na širenje tih povratnih kanala, čineći ih veoma efikasnim u onome što su u stanju da urade. Od svakog člana koučing kulture očekuje se da postane odgovoran za širenje proaktivnog pristupa, da nastoji da razume, a ne da defanzivno reaguje na povratne informacije i klijenta. Svako razume značaj njegove uloge koji se odnosi na misiju služenja (internim i eksternim) klijentima.

### **3. Koučing teče u svim pravcima – gore, dole i bočno**

U koučing kulturi, podučavanje se dešava u svim pravcima, na svim stranama, pravljenjem mreža u organizaciji koja se sastoji od više veza između ljudi u istim odeljenjima, preko odeljenja, između timova, gore i dole u okviru hijerarhijskog poretka. Ključ tog bogatog protoka komunikacije je uspostavljanje jasnih koučing odnosa.

Poznato je da uspešni lideri i menadžeri obezbeđuju treninge za razvoj performansi svojim zaposlenima. To je neophodno za dostizanje visokih performansi,

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<sup>10</sup> G. Bozer, R. J. Jones, str. 342–361.

<sup>11</sup> Snežana Videnović, *Koučing*, Beograd, 2014, str. 25.

ali samo po sebi nije dovoljno da stvori uslove za razvoj kulture istinske vrednosti u današnjim organizacijama.

Koučing istih u hijerarhijskom nivou – „vršnjaka“, zauzima drugo mesto u stvaranju dobrih koučing odnosa. Koučing odnosi širom organizacije zasnovani su da podrže dalje učenje, dijalog, rešavanje problema, kao i poboljšavanje uslova rada. Koučing vršnjaka je neprocenjiv element koji podržava učenje, rast i poboljšanje produktivnosti.

Koučing „odozdo nagore“ je treći element, a često i najveći izazov da se uspostavi. Postoje mnogi razlozi što je to tako. Lideri/menadžeri često nisu ni svesni da ne žele da primaju uzlazne povratne informacije. Zaposleni koji su im direktno podređeni mogu se osećati nesigurnim za svoj položaj, te im iz tog razloga ne pružaju iskrene povratne informacije. Bilo koji razlog da je u pitanju, priroda odnosa mora dramatično da se transformiše, a povratna informacija treba da slobodno teče između menadžera i podređenih. Sigurnost, poverenje, poštovanje i prisnost u odnosima stvara se ukoliko jedni drugima postanu koučevi.

#### **4. Timovi postaju energičniji**

Proces koučinga stvara timove u kojima se odnosi zasnivaju na visokoj pouzdanosti i time se prevazilazi tradicionalna postavka bazirana na hijerarhijskoj osnovi.

U kulturi visokih performansi, ljudi se osećaju kao deo celine. Taj poboljšani osećaj povezanosti javlja se zato što timovi rade na tome da se dijalogom istraži kako sarađuju zajedno. Timovi su fokusirani na stvaranje odnosa visokog poverenja. Poverenje direktno podržava ljude da rade zajedno efikasnije i efektivnije, što dovodi do viših performansi.

Odnosi koje timovi stvaraju u koučing kulturi karakterišu se visokim stepenom posvećenosti uspehu članova tima. Interna konkurencija, konkursi, promocije i priznanja za određene članove tima više nisu destruktivni. Uverenje da svi članovi rade za isti cilj i u istoj kompaniji je osnovno. Oni su deo istog uspeha. Svako na tom velikom brodu povlači svoju težinu i odgovoran je za svoje performanse, ali u isto vreme misli na to da su svi zajedno odgovorni. Oni prihvataju ovu istinu: „Ne možemo pobediti ako svi ne pobedimo. Moj posao je da učinim da saigrači budu uspešni.“

#### **5. Dešava se učenje, efikasnije se donose odluke, brže se ide ka promenama**

Koučing ubrzava lično i timsko učenje. Timovi u daljem radu često koriste pouke koje su stekli u prethodnim akcijama. Ljudi postaju nestrpljivi da podele mudrost i znanje timu. Ljudi uče bez straha od neuspeha ukoliko rade u koučing okruženju.



U koučing kulturi uobičajena je praksa da se svi uključuju u donošenje odluka da se napravi promena, a svakako u planiranju implementacije. Koučing je čin angažovanja ljudi u bezbednom dijalogu gde se očekuje da svi dele svoju iskrenost s poštovanjem zabrinutosti, tako da su iskustva svih učesnika deo procesa i imaju svoju vrednost, ma kakva ona bila.

## **6. Sistemi upravljanja ljudskim resursima su u ravni i potpuno integrisani**

Sistemi ljudskih resursa sastoje se od privlačenja talenata (evaluacije i selekcije), orijentacije novozaposlenih, ocene rezultata rada, obuka, promocija i kompenzacija. Koučing mora potpuno biti integrisan u sve sisteme koji utiču na zaposlene.

Većina organizacija ima organizacione vrednosti koje, uramljene ili ne, stoje okačene na zidovima kancelarija. Koučing kultura aktivno prihvata osnovne vrednosti kao kompas koji će voditi ljude i poslovne odluke. Članovi te kulture poštuju ove vrednosti i koučingom doprinose da ponašanje kolega bude podudarno s osnovnim vrednostima organizacije. Time čine da relevantne vrednosti budu korisne i da imaju smisla za organizaciju.

Svi članovi kulture imaju lične planove razvoja koji se godišnje sa pažnjom pregledaju, a u konačnom oni služe da se utiče na efikasnost pojedinaca i timova.

Opisi posla imaju jasno definisane zahteve o koučing veštinama koje su potrebne da bi pojedinac bio uspešan na poslu. Od svakog se očekuje da bude uspešan kouč i da se kontinuirano bavi učenjem o tome šta znači biti kouč.

## **7. Kompanija ima jedinstvenu praksu i komunikaciju**

Koučing možemo definisati kao „proces koji pomaže drugima da poboljšaju svoju efikasnost.“ Koučing kultura usvaja jedinstven pristup i metodologiju tako da ovaj način komunikacije postaje opšteprihvaćen pristup.

Ako cela kultura ima razumevanja kako se komunikacija odvija, onda koučing razgovori počinju lakše, ljudi se povezuju i komuniciraju sa manje smetnji, čineći komunikaciju mnogo efikasnijom. To povećava verovatnoću da će zaposleni početi da dobijaju više od onoga što žele, a manje od onoga što ne žele.

## **Zaključak**

Metoda koučinga se sve više koristi kao profesionalni alat za razvoj i obuku zaposlenih u svim poslovnim organizacijama, te postaje sve jače ukorenjen i u osiguravajućim društvima u Srbiji.

Osiguravajuća društva u Srbiji sve više prepoznaju moć podučavanja na individualnom ili grupnom nivou i sve više praktikuju da metodom koučinga razvijaju

svoje zaposlene kako bi ostvarili prednost na tržištu. Evidentno je da značaj i uticaj metode koučinga kao koncepta raste, zahvaljujući pre svega uočljivim pozitivnim rezultatima koji su verifikovani u osiguravajućim kućama koje primenjuju koučing.

Evidentno je da su osiguravajuća društva u Srbiji prepoznala metodu koučinga kao način da se izbore sa pritiscima čiji su koreni u spoljašnjim i unutrašnjim izvorima. Analiza rezultata do kojih su osiguravajuća društva došla nakon primene koučinga treba u budućnosti da pokažu koliko je taj metod delotvoran za povećanje produktivnosti kroz motivaciju zaposlenih, kao i za očuvanje ključnih kompetencija organizacije, što je osnovna pretpostavka za dalji razvoj.

Jedan od najbitnijih argumenata koji opravdavaju tu tvrdnju jesu i rezultati sprovedene ankete koji su pokazali da kod ispitanika dominira uverenje da se primenom koučinga u organizacijama bitno doprinosi povećanju zadovoljstva, motivacije zaposlenih, njihove efikasnosti. Samim tim stvaraju se preduslovi za pogodnu klimu koja je spremna da podrži potpunu primenu ovog pristupa u upravljanju i napredovanju zaposlenih.

Očekivani uticaj ovog rada ogledao bi se u tome što bi isticanje rezultata i prednosti društava u kojima se koučing koncept primenjuje moglo poslužiti kao primer „dobre prakse“, a promovisanje i razvoj koučing kulture doprineo bi povećanju svih poslovnih efekata.

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**S. Videnović: Primena metode koučinga u osiguravajućim društvima**

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## COACHING METHOD IN INSURANCE COMPANIES

### PROFESSIONAL PAPER

#### Abstract

Majority of business entities and insurance companies are ready to accept changes, but reluctantly accept models, approaches and methods of highly developed countries due to specific cultural and social conditions.

Starting with information obtained by analysing relevant literature in that field, the main purpose of this paper is to show the trend of implementing the coaching method in insurance companies in Serbia. Companies implementing this method recorded an increase in performance in several dimensions of growth and development – employees and the company. Implementation of the coaching method was considered on a sample of 10 insurance companies by using a survey.

The paper presented the extent to which insurance companies in Serbia accepted the coaching as a successful method for employees' development, but also for increasing the efficiency of a company. Survey results showed that insurance companies used coaching as a method for employees' development and recorded its positive impact, but that they have not yet established a coaching climate in a company.

Conclusions based on theoretical statements and considerations of the survey results indicated the need to introduce the coaching method in insurance companies where this concept has not been practiced so far.

**Key words:** *coaching method, education, insurance companies, employees' development, performances.*

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## Introduction

There is no doubt that the coaching method is one of the fastest growing business phenomena in the world. It is increasingly used as a professional tool for development and training of employees, but is also becoming more and more deeply rooted in companies in various ways.

Insurance is in a service sector and success of insurance companies depends only on competences and adequate personnel. Through training, employees are trained to work by acquiring adequate skills and knowledge to contribute to the efficiency of a company and cope with changes in the environment.<sup>2</sup> Coaching as a method of development training of an individual or a group implies and supports the initiatives of changes in thinking, behaviour and action. More precisely, it is a concept that increases the likelihood of implementing true behavioural changes as it enables clear communication regarding the evaluation of work, harmonisation of individual and company interests and goals, as well as development of mutual trust, respect and motivation to achieve the best performance.<sup>3</sup> And perhaps most importantly, coaching is one way to control fear, time, and discouragement so that people can fully realise their talents and goals.<sup>4</sup>

Likewise, there is no doubt that the coaching method influenced effective achievement of goals and new values. Bozer and Jones<sup>5</sup> made a systematic integration of 117 empirical studies in the context of coaching and confirmed that workplace coaching was effective. In addition, they ascertained that determinants of coaching effectiveness were the following – self-efficacy, coaching motivation, goal orientation, trust, interpersonal attraction, feedback intervention and supervisory support. They believed that these determinants enabled establishment of a coaching climate in companies. By monitoring and researching the role and contribution of the coaching that has grown continuously since 2012, the authors emphasized the belief in its potential benefits and pointed out that continuous coaching in companies may indicate a trend towards the emergence of a coaching culture.

Benefits of developing a coaching culture were recorded and reflected in better motivation, engagement, higher employee retention, increased productivity, empowerment and learning. Coaching as an adaptive methodology can be useful in managing local and global turbulences and creating opportunities for new thinking

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<sup>2</sup> Snežana Videnović, Snežana Vranić, „Obrazovanje i edukacija na polju osiguranja”, *Savetovanje sa međunarodnim učesćem*, 2022, pp.171-179.

<sup>3</sup> Anthony M. Grant, „An Integrated Model of Goal-Focused Coaching”, *International Coaching Psychology Review*, Vol. 7, No. 2, September 2012.

<sup>4</sup> James Flaherty, *Coaching Evoking Excellence in Others*, London 2022.

<sup>5</sup> Gil Bozer & Rebecca J. Jones, „Understanding the factors that determine workplace coaching effectiveness: a systematic literature review”, *European Journal of Work and Organizational Psychology*, 2018, 27(3), pp. 342–361.

and behaviours that lead to greater competitiveness in the market. Developing a coaching culture is as challenging as any change initiative.<sup>6</sup>

One of the most important components when establishing a coaching climate is that messages about the importance of the coaching come from the top management in a company. Top-level managers should model coaching behaviour. Coaching competencies should be added to business competencies and as such valued and rewarded. Although some managers may have excellent coaching skills their effectiveness is limited, and a broader coaching culture requires its promotion by operational and strategic leaders. When starting a coaching culture, it is important to determine who believes in coaching and who is willing to talk about it. Before starting a coaching culture, it is important to clarify the goal of coaching.<sup>7</sup> Establishing clear goals, which are usually related to employees' development, helps to understand the link between the coaching and organizational strategic goals and needs.

Creating a coaching culture is one of the most powerful organizational change processes that create a culture of high performances.<sup>8</sup>

In a coaching culture all members of a company are involved in honest coaching conversations full of trust and respect, unimpeded by hierarchy, about how they can improve their mutual relations at work and increase performance of individual and collective work. Everyone in a company learned to appreciate and effectively use feedback as a powerful learning tool for a personal and professional development; work relations are based on high reliability, performance is continuously improving, and the satisfaction of clients is increasing.

### Survey Analysis

In the past ten years, the coaching method has been implemented increasingly in domestic companies and in the state institutions. At the beginning, international companies outsourced experts to present the coaching method, and later locally employees developed these abilities through various international coaching associations.

The survey was prepared having in mind theoretical foundations presented in the papers of authors dealing with the coaching method (Whitmore, Peter Hawkins, Lucy West, Mike Milan, Carole Pemberton, Anthony M. Grant, Gil Bozer, Rebecca Jones, David Clutterbuck),<sup>9</sup> and results of similar researches in the world.

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<sup>6</sup> Alison Whybrow, Siobhain O'Riordan, *Cognitive Behavioural Coaching in Action, Chapter: Developing a coaching culture at work*, London, 2021, p. 34.

<sup>7</sup> Snežana Videnović, *Doktorska disertacija: Mogućnost primene coachinga u Srbiji*, Beograd, 2013, p. 90.

<sup>8</sup> [http://www.wabccoaches.com/bcw/2005\\_v1\\_i1/feature.html](http://www.wabccoaches.com/bcw/2005_v1_i1/feature.html)

<sup>9</sup> John Whitmore, *Trening za postizanje učinkovitosti*, Mate Zagreb, 2006;

Peter Hawkins, *Creating A Coaching Culture: Developing a Coaching Strategy*, London, 2012;

In order to get a realistic picture of the representation of the coaching method in insurance companies in Serbia, the survey included key questions related to the status itself as well as results of its implementation.

Survey results were collected from ten insurance companies in Serbia in the period from May to September 2023. The main set of participants consisted of employees who are guaranteed anonymity, that is, strict confidentiality regarding the personal identity and the name of an insurance company.

The sample for the survey was intentional, 100% of participants (i.e. 10 out of 10 insurance companies to whom the survey was sent) took part, which was a sufficient number to make relevant conclusions. In order to conduct this research, a survey of 11 open questions was made.

The first question was: Was the coaching implemented in your company? Eight participants gave an affirmative answer, and two participants answered that they have not yet practiced the coaching as a development training for employees.

The second question was: If the answer was yes, since when has it been implemented? The answers ranged from 2008 to the present day.

The third question addressed only those participants who stated that the coaching was not implemented in their companies. The question was: If the answer was no, why not? Participants were asked to write their own opinion for not introducing the coaching in their company.

The first participant answered that the management was not interested in any method of employee education that is not technical, that is, professional for performing their tasks.

The second participant pointed out that management's response to a proposal from the HR department to introduce a team coaching to improve sales results was: What was the price? After looking at the cost of introducing the coaching, a negative response came from the management.

In continuation were questions only for participants from insurance companies that implemented the coaching.

When asked whether a team, an individual or both team and individual coaching was implemented, five participants answered that both team and individual coaching was implemented; two answered that only coaching of top managers was implemented, while one answered that only team coaching was implemented.

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Lucy West & Mike Milan, *The Reflecting Glass*, London, 2001;

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When asked how and who identified the need for the coaching, the following answers were received – when it was necessary; an employee initiated it; human resources department; it was part of the education plan; the training plan determined in advance who would attend the coaching process that year; it was determined after the annual performance evaluation and analysis of the employees' work results. Two insurance companies stated that the process is initiated by the director.

When asked whether the coaching was implemented according to a plan or as needed the answer was 50-50.

When asked whether they outsourced a coach or had an internal coach, two companies had an internal coach, and the remaining six companies outsourced coaching agencies.

When asked whether an employee actively participated in setting coaching goals, all eight participants gave an affirmative answer.

When asked if they measured the results of a coaching process, one respondent answered affirmatively, and seven respondents answered that they did not measure, but an improvement was noticed, citing everything that was concluded. Those seven participants pointed out that there has been improvement in the following areas:

- A positive impact was recorded regarding motivation and engagement at the workplace;
- Existing conflicts in the team and in interdepartmental cooperation were overcome;
- Coaching identified the right training courses for employees that would significantly contribute to improving business results;
- Stress was overcome and a balance between work and private life was established;
- A positive impact on communication and interpersonal relations was achieved;
- Increase of satisfaction;
- Increase of employees' efficiency.

The tenth question was: If you measured the impact of the coaching, what results did you get? The detailed answer of a participant in whose company the impact of the coaching was measured:

In our company, the coaching has been implemented since 2012 and was a part of the leadership program. Before measurements, we found that the coaching resulted in solving specific behavioural problems and helping newly appointed managers grow into leaders. We measured the impact of the coaching by evaluating the results of employees' work before and after the coaching process. There was a noticeable trend that all employees were rated higher than in the year when they did not have the coaching. Therefore, they improved.



When asked if they thought there was a coaching culture in their company, seven participants answered that there was no coaching culture in their company. One participant wrote that the insistence on a coaching culture by the top management contributed to employees achieving better results at work with increased self-satisfaction, but also a better understanding of their position in insurance and insurance as a business.

Reasons for such small percentage of answers about the existence of a coaching culture were not stated, but based on the published researches<sup>10</sup> (Bozer and Jones 2018) we could conclude that they were in insufficiently structured and continuous coaching activities or in the absence of some of the coaching culture characteristics.

## Characteristics of a Coaching Culture

Results of the survey conducted in insurance companies and theoretical considerations can indicate the main characteristics of a coaching culture.

### 1. Leaders are Positive Role Models

Organizational culture starts with top leaders. They set the rules of the game – dynamics, expectations, what is right and what is wrong – what is acceptable and what is not. When leaders become skilled coaches in practice they transform their leadership style from being bosses to being coaches to their employees<sup>11</sup> (Videnović, 2014).

Coaching is “applied leadership” and requires the best of modern leadership. Coaching leaders create powerful, emotionally intelligent conversations that transform employees productively and inspire to action.

### 2. Each Member is Focused on Client Feedback

Most modern companies have feedback channels. That is not new. However, in a coaching culture, there is a great emphasis on expanding those feedback channels making them more effective. Each member of a coaching culture is expected to become responsible for spreading a proactive approach, seeking to understand and not react defensively to feedback and a client. Everyone understands the importance of their roles as it relates to the mission of serving (internal and external) clients.

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<sup>10</sup> G. Bozer, R. J. Jones, p. 342–361.

<sup>11</sup> Snežana Videnović, *Monografija Koučing*, Beograd, 2014, p. 25.

### **3. Coaching Flows in all Directions**

In a coaching culture, education flows in all directions by building networks in a company consisting of multiple connections between people in the same departments, across departments, between teams, up and down the hierarchy. The key to that rich flow of communication is establishing clear coaching relations.

Successful leaders and managers are known to provide performance development trainings to their employees. It is necessary to achieve high performances, but it is not sufficient to create the conditions for development of a true value culture in today's companies.

Coaching of peers is in the second place in creating good coaching relations. Coaching relations in a company are designed to support further learning, dialogue, problem solving, and improvement of working conditions. Coaching of peers is a crucial element that supports learning, growth and improvement of productivity.

Bottom-up coaching is the third element, and often the most challenging to establish. There are many reasons for this. Leaders/managers are often not aware that they do not want to receive upward feedback. Employees who report directly to them may feel insecure about their position and therefore do not provide an honest feedback. Whatever the reason, the nature of relations must be radically transformed, and feedback must flow freely between managers and employees. Security, trust, respect and closeness in relations are created if they become each other's coaches.

### **4. Teams Become more Energetic**

Coaching creates teams where relations are based on high reliability and thereby the traditional hierarchy is overcome.

In a high-performance culture, people feel as a part of the entity. That enhanced sense of connectedness occurs because teams work to explore through dialogue how they work together. Teams are focused on creating high trust relations. Trust directly encourages people to work together more efficiently and more effectively leading to higher performances.

Relations that teams create in a coaching culture have a high degree of commitment to the success of team members. Internal competition, contests, promotions and recognition for certain team members are no longer destructive. Belief that all members work for the same goal and in the same company is fundamental. They are a part of the same success. Everyone on that big ship pulls own weight and is responsible for own performances, but at the same time they think they are all accountable together. They accept this truth – We cannot win unless we all win. My job is to make my teammates successful.

### **5. Learning Takes Place, Decisions are Made more Efficiently and Changes are Made Faster**

Coaching accelerates personal and team education. Teams often use lessons learned in previous activities. People become eager to share wisdom and knowledge with the team. People learn without fear of failure if they work in a coaching environment.

In a coaching culture, it is a common practice to involve everyone in making decisions regarding changes, and certainly in planning the implementation. Coaching means engaging people in a safe dialogue where everyone is expected to share their honesty and respectful concerns, so that the experiences of all participants are a part of the process and have their own value, whatever they may be.

### **6. Human Resource Management Systems are Aligned and Fully Integrated**

Human resource systems consist of talent attraction (evaluation and selection), orientation of new employees, evaluation of work results, trainings, promotions and compensations. Coaching must be fully integrated in all systems involving employees.

Most companies have values that, framed or not, hang on office walls. A coaching culture actively embraces core values as a compass to guide people and business decisions. Members of that culture respect these values and by coaching contribute to making colleagues' behaviour consistent with the core values of a company. Thus, they make relevant values useful and meaningful to a company.

All members of a coaching culture have personal development plans that are carefully reviewed annually, and ultimately serve to influence the effectiveness of individuals and teams.

Job descriptions have clearly defined requirements for the coaching skills needed for an individual to be successful on the job. Everyone is expected to be a successful coach and to continuously learn about what it means to be a coach.

### **7. Company has a Unique Practice and Communication**

Coaching can be defined as "the process of helping others improve their efficiency." Coaching culture adopts a unique approach and methodology so that this communication method becomes a generally accepted approach.

If the entire culture has an understanding of communication flows, then coaching conversations start more easily, people connect and communicate with fewer distractions, thus making communication much more effective. This increases the likelihood that employees will start getting more of what they want and less of what they do not want.

## **Conclusion**

The coaching method is increasingly used as a professional tool for development and training of employees in all business entities, and it is becoming more and more rooted in insurance companies in Serbia.

Insurance companies in Serbia increasingly recognise the power of teaching an individual or a group and increasingly practice coaching to educate their employees in order to gain an advantage in the market. It is obvious that the importance and influence of the coaching method is growing, primarily owing to noticeable positive results that are verified in insurance companies implementing coaching.

It is obvious that insurance companies in Serbia recognized the coaching method as a way to deal with pressure rooted in external and internal sources. Analysis of results achieved by insurance companies after implementation of the coaching method should in the future show effectiveness of this method for increasing productivity through employee motivation, as well as for preserving a company's key competencies, which is a basic assumption for further development.

One of the most important arguments justifying this claim are results of the conducted survey, which showed that participants mainly believed that coaching in companies significantly contributed to the increase of satisfaction, motivation of employees, and their efficiency. This creates prerequisites for a suitable climate that would support a full implementation of this approach in management and employee advancement.

The expected impact of this paper would be reflected in the fact that highlighting the results and advantages of companies where the coaching method is applied could serve as an example of good practice, and the promotion and development of the coaching culture would contribute to the increase of all business effects.

*Translated by  
**Jelena Rajković***

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PRIKAZ SAVETOVANJA

## 26. BUDVANSKI PRAVNIČKI DANI IZ UGLA PRAVA OSIGURANJA

Savez udruženja pravnika Srbije i Republike Srpske organizovali su 26. savetovanje Budvanski pravnički dani. Savetovanje pravnika održano je u Budvi od 2. do 6. juna 2023. godine sa tradicionalnom temom „Aktuelna pitanja savremenog zakonodavstva i pravosuđa“. U sklopu opšte teme ovogodišnje savetovanje odvijalo se sa podtemama: (1) Promene u pravosudnom zakonodavstvu i sudskoj praksi; (2) Novine u Prednacru građanskog zakonika Republike Srbije; (3) Aktuelna pitanja izvršnog, stečajnog i notarijalnog prava; (4) Evolucija upravnog prava; (5) Inovacije u krivičnom materijalnom i procesnom pravu; (6) Tendencije u razvoju evropskog i ekološkog prava; (7) Usavršavanje radnog i prava socijalnog osiguranja. Sa savetovanja je publikovan zbornik radova, čiji je glavni i odgovorni urednik **prof. dr Miodrag V. Orlić**.

**1.** Iz zbornika radova najpre su prikazana tri rada, koji su neposredno obrađivali teme iz oblasti prava osiguranja.

**1.1. Prof. dr Vladimir Čolović**, naučni savetnik u Institutu za uporedno pravo u Beogradu, izložio je rad na temu **Osiguranje ratnih rizika**. Uvodeći čitaoca u temu, autor je izneo da su ga inspirisali ratovi u raznim delovima sveta i dejstva zaostalih bombi i mina iz Drugog svetskog rata, uključujući i aktuelnu intervenciju u Ukrajinu. U istraživanju osiguranja ratnih rizika autor je našao polazište u širem pravnom tumačenju člana 931 Zakona o obligacionim odnosima (ZOO). U tom članu navode se ratne operacije i pobune, s tim što osiguravač nije dužan da naknadi štetu prouzrokovanu ratnim operacijama i pobunama, osim ako je drukčije ugovoreno. U istom članu ZOO osiguravač je dužan da dokaže da je šteta prouzrokovana nekim od navedenih događaja. Iz tog člana autor je izveo pitanje da li ratni rizik treba da bude vezan za ratni sukob ili se ratni rizik može realizovati i posle prestanka ratnog sukoba. U odgovoru na to pitanje autor je precizirao da bi osiguravač u opštim uslovima mogao da predvidi da se ratni rizik osigurava, u kome

<sup>1</sup> Član Predsedništva Udruženja pravnika Srbije

slučaju zaključen ugovor o osiguranju osiguraniku može da obezbedi osiguranje od ratnih rizika. Uz to rezonovanje autor je podsetio da je u vreme stupanja na snagu čl. 931 ZOO (1978. godine) bilo nerealan da se pomišlja na osiguranje ratnih rizika, a da su se u međuvremenu dogodili ratni sukobi na tlu bivše SFRJ, od kojih neki nisu završeni. Navedeno rezonovanje i zaostale bombe i mine iz Drugog svetskog rata bile su povod da se prokomentarišu dva predmeta iz hrvatske sudske prakse. (1) U prvom predmetu iz hrvatske sudske prakse činjenično stanje oličeno je u situaciji kada je na putu aktivirana mina koja potiče iz ratnog sukoba devedesetih godina XX veka, a poginuli je, po osnovu zaposlenja u preduzeću, posle dva meseca od prestanka ratnog dejstva još bio osiguranik po osnovu kolektivnog ugovora o osiguranju. Obrazlažući svoju presudu, najviši sud u Hrvatskoj zasnovao ju je na premisama da se nije radilo o ratnoj šteti, već o nesrećnom slučaju, te da je porodica imala pravo na naknadu po osnovu kolektivnog ugovora o osiguranju. U opštim uslovima osiguravača sa kojim je preduzeće zaključilo kolektivni ugovor o osiguranju, stajalo je da se osiguravač oslobađa svoje obaveze ako je nesrećni slučaj nastao kao posledica ratnih događaja, građanskog rata, revolucije, terorizma itd, u kojima je osiguranik učestvovao. Najviši sud u Hrvatskoj je smatrao da okolnost što je šteta nastala aktiviranjem mine ne daje dovoljno osnova da se radi o ratnoj šteti, bez obzira na to što se šteta dogodila dva meseca posle prestanka ratnih dejstava. U sudskom postupku pred nižim sudovima utvrđeno je da se osiguranik kritičnom prilikom kretao poljskim putem, da nije postavljao mine i da na poljskom putu nije bilo oznaka da se radi o minskom polju, kao i da sve to ne ukazuje na zaključak da je posredi ratna šteta. (2) U drugom sudskom predmetu činjenično stanje ticalo se demontiranja mina zaostalih iz Drugog svetskog rata, i to u okolini Rijeke. Na toj činjeničnoj osnovi autor je izneo mišljenje da je polaganje mina bio ratni rizik, kao i izbacivanje bombi iz aviona. Iz navedenih sudskih predmeta autor je izveo saznanje da hrvatski osiguravači u opštim uslovima osiguranja bez izuzetka isključuju štete od ratnih operacija, odnosno ratnih rizika. Povodom stava hrvatskih opštih uslova osiguranja, autor je postavio pitanje: da li protek vremena briše svojstvo ratnog rizika i da li bi takve štete trebalo da budu uključene u osiguranje, budući da se prema statističkim podacima za takve rizike može lako utvrditi premija? Prema autoru, neujednačena sudska praksa u Hrvatskoj u pogledu ratnog rizika pobuđuje nesigurnost kod građana, koji mogu da osiguraju ili ne osiguraju svoje kuće, stanove i druge nepokretnosti. Dalje istražujući ratne rizike, autor je konstatovao da oni spadaju u rizike koji se mogu preneti na osiguravača, ali samo ako su predviđeni u opštim uslovima osiguranja. Posle toga autor je izložio sledeće konstatacije: prvo, ratni rizici su subjektivni rizici, jer čovek utiče na njihovu realizaciju. Drugo, ratni rizici su promenljivi rizici, s obzirom na to da je veoma teško unapred odrediti obim štete njihovim nastupanjem. Treće, ratni rizici su čisti rizici, budući da imaju efekat u gubitku imovine. Četvrto, ratni rizici mogu da budu opšti i pojedinačni, što znači

da oni pogađaju pojedini objekt ili više pojedinačnih objekata. Autor je podvukao i sledeće karakteristike: da će osigurani slučaj kod ratnog rizika postojati ako je ostvaren rizik pokriven zaključenim ugovorom o osiguranju i ako je pokriveni ratni rizik prouzrokovao gubitak ili oštećenje osiguranog predmeta. Sledilo je izlaganje o graničnim pojmovima sa osiguranjem od ratnog rizika. Autor je pošao od pojma rata. Rat je definisao kao oružani sukob sa međunarodnim obeležjem. Rat kao osiguranjem pokriven rizik, prema ovom autoru, postoji i kad države nisu u zaraćenom odnosu, ali među sobom preduzimaju akte neprijateljstva. Sledeći granični pojam ratnom riziku bio je pojam građanskog rata. Njega je autor odredio kao oružani sukob unutar granica neke države, koji nema velike razmere. Pojam građanskog rata autor je uporedio sa ustankom ili pobunom, s tim što građanski rat ima veće razmere od ustanka ili pobune. U nastavku izlaganja o pojmovima graničnim ratnom riziku na redu je bio pojam revolucije. Za nju je autor precizirao da predstavlja organizovano, naglo i nasilno (uz upotrebu sile) obaranje postojeće vlasti neke države od strane stanovništva te države, kao i zamena jedne vlasti drugom, sa preuzimanjem uprave i kontrolom nad teritorijom i stanovništvom. Jedan od pojmova graničnih ratnom riziku bio je i pojam ustanka. Ustanak je autor definisao kao organizovani oružani otpor uperen protiv postojeće vlasti od strane građana, pa i onda kada je organizovan iz inostranstva. Cilj revolucije i ustanka je isti, podvukao je autor, a to je obaranje postojeće vlasti ili sprečavanje te vlasti da vlada na određenoj teritoriji. Najzad, autor se izjasnio o pojmu pobune. Pobuna predstavlja oružani revolt protiv postojeće vlasti neke države od strane njenih državljana, uz ocenu autora da je teško razlikovati pojam pobune od pojma ustanka, odnosno da pojam pobune ne uključuje akcije stranih državljana. Prelazeći na druge pojmove granične ratnom riziku, s obzirom na sadržaj člana 931 ZOO, autor je prešao na političke rizike. Sa stanovišta prava osiguranja autor je razlikovao dve vrste političkih rizika. Jednu vrstu političkih rizika čine politički nemiri, kao što su štrajk, demonstracija, pobuna, a drugu vrstu predstavljaju mere nadležnih državnih organa, kao što su zabrana izvoza, zabrana ulaska brodova u luku itd. S gledišta osiguranja, podvukao je autor, važno je pažljivo kvalifikovati svaki događaj koji može predstavljati rizik, pa tek za taj događaj vezati posledice. Autor je prešao na istraživanje odnosa između ratnih rizika i terorističkih rizika. Taj odnos sa stanovišta osiguranja suočava se s nizom nepoznanica. Autor je konstatovao da nema modela u osiguranju koji se odnosi na procenu verovatnoće nastanka štete od rizika terorizma, kao što razlozi nacionalne bezbednosti državu sprečavaju da objavljuje detaljne podatke o posledicama terorističkih rizika. Dalje je konstatovao da protiv terorističkih rizika nema preventivnih mera, budući da ponuda osiguranja zavisi od preduzimanja preventivnih mera. Nastavljajući izlaganje u ovom radu, autor je istraživao odnos između katastrofalnih rizika, s jedne strane, i ratnih, političkih i rizika od terorizma, s druge strane. O tom odnosu autor je izložio stanovište da postoji čitav dijapazon različitih modela u osiguranju



u zavisnosti iz koje države dolazi, zatim modeli po fazama itd. Kod katastrofalnih rizika najveći je problem, po tom autoru, što nema mogućnosti da se uspostavi homogena zajednica rizika sa dovoljnim brojem osiguranika na većoj teritoriji. Autor je istraživao kako osiguravač treba da izračuna premiju za ratne rizike, pa je pošao od pojma portfelja osiguranja. Naime, prema autoru, portfelj osiguranja predstavlja skup prava i obaveza po ugovorima o osiguranju u okviru jedne vrste osiguranja, odnosno istih ili srodnih rizika. Drugo ime za portfelj osiguravača jeste kapital tog osiguravača, istakao je autor. Završni aspekt istraživanja ratnih rizika odnosio se na određivanje premije za osiguranje od ratnih rizika. Autor je istakao da se ratni rizici mogu osigurati kao i svi drugi. Zatim se osvrnuo i na aspekte ratnih rizika u osiguranju robe u prevozu. U zaključku tog rada autor je pošao od konstatacije da je pokušao prikazati svu složenost osiguranja od ratnih rizika i opravdati stav osiguravača da se radi o rizicima za koje je teško pružiti osiguravajuće pokriće. Svoju kritiku člana 931 ZOO sveo je na to da taj član reguliše ratne operacije ili pobune. Zakonski izraz za ratne operacije vuče ka ratnim rizicima, a zakonski izraz pobuna ka političkim rizicima. U istom članu i stavu ZOO, naglasio je autor, obuhvaćeni su rizici koji se odnose na rizik od rata i ratne rizike, a mogu se odnositi na demonstracije, proteste i druge događaje direktno povezane s trenutnim političkim okolnostima. Kritiku čl. 931 ZOO autor zaokružuje konstatacijom da takav način regulisanja i stavljanja u isti član ratnih i političkih rizika predstavlja prvu grešku ZOO. Drugu grešku čl. 931 ZOO čini to što nije regulisao obavezu osiguravača da isplati štetu nastupanjem navedenih rizika. Autor je predložio da iz druge greške ZOO proizlazi da treba precizirati tu odredbu. To preciziranje se svodi na sledeće: ako bi osiguravač hteo da stavi navedene rizike u osiguravajuće pokriće, to bi osiguravač mogao da ostvari kroz opšte uslove osiguranja.

**1.2.** Naučni saradnik u Institutu za uporedno pravo **dr Mirjana Glintić** podnela je rad pod naslovom **Nedostaci dobrovoljnog osiguranja od zemljotresa**. Uvodeći u problematiku osiguranja od zemljotresa, autorka je istakla da su od 70-ih godina XX veka u različitim delovima sveta zabeleženi snažni zemljotresi. Osiguranje od zemljotresa se od tada pokazalo kao rešenje koje je omogućilo da se obešteti osiguranik. Izlažući osnovne karakteristike osiguranja od zemljotresa, navela je da zemljotres spada u prirodne katastrofe. Zemljotres preko šest stepeni Merkalijeve skale ima razorno dejstvo na osiguranim stvarima. Osiguranje od zemljotresa je rasprostranjenije više na zapadnoj hemisferi, nego na azijskom kontinentu. Osiguranje od zemljotresa spada u imovinska osiguranja, gde isplata sume osiguranja omogućava očuvanje vrednosti u onom stanju imovine koje je postojalo pre zemljotresa. Zapaža se da se ugovor o osiguranju od zemljotresa ne pojavljuje kao samostalan predmet osiguranja, već se uvek javlja uz neke osigurane rizike. Autorka je precizirala da se katastrofalni rizici po pravilu pokrivaju ili kao dodatno osiguranje ili je više rizika obuhvaćeno jednom polisom. To se čini stoga što bi razdvajanje rizika povuklo

za sobom previsoke premije za samostalno osiguranje od zemljotresa, pa i veliki obim štete koja nastaje kao posledica ostvarenja osiguranog slučaja zemljotresa. To razmatranje o osnovnim karakteristikama osiguranja od zemljotresa zaokruženo je konstatacijama da polisa pokriva direktan seizmički udar zemljotresa, zatim posledice zemljotresa u vidu požara ili eksplozije, kao i udar delova predmeta ili objekata koje je zemljotres odbacio na osiguranu imovinu. Prelazeći na nedostatke dobrovoljnog osiguranja od zemljotresa, autorka je ukazala na podatak da se premija u Republici Srbiji za osiguranje od zemljotresa kreće godišnje od 50 evra u zavisnosti od područja. Autorka je prešla na izlaganje nedostataka osiguranja od zemljotresa najpre sa stanovišta osiguravača, a zatim sa stanovišta osiguranika. Izlaganje nedostataka dobrovoljnog osiguranja od zemljotresa sa stanovišta osiguravača ukazalo je na sledeće. Osiguravač nije u mogućnosti da ponudi i pruži celokupnu zaštitu od zemljotresa, s obzirom na to da je šteta prevelikog obima. U teoriji ima mišljenja da zemljotres spada u neosigurljive rizike. Da bi osiguravači obezbedili pokriće za rizik od zemljotresa, odnosno za neizvestan događaj, naglasila je autorka, potrebno je identifikovati rizike i premiju vezati za rizike. Poblize je objasnila uslove koje osiguravač mora da obezbedi: prvo, verovatnoću nastanka zemljotresa i obim štete koja se očekuje. Rizik od zemljotresa mora da bude odredljiv, i drugo, mora biti računski odredljivo premiju vezati za svakog potencijalnog kupca ili grupu kupaca. Ta dva uslova kumulativno osiguravač jednostavno ne može da ispuni, pa stoga određenu zgradu osiguravač ne može da osigura, jer je rizična u uslovima zemljotresa. Dalje, porast saznanja u svetu za predviđanje zemljotresa može da opredeli nekog osiguravača da objekte osigura od zemljotresa, odnosno da postoji vrlo mala verovatnoća da će se zemljotres dogoditi unutar roka na koji je zaključen ugovor o osiguranju. Ako se zemljotres ipak dogodi, budući da još ne postoji način da se potpuno i pouzdano zemljotres predvidi, onda se veliki broj osiguranika od zemljotresa, od požara i od eksplozija javlja sa odštetnim zahtevima pred tim osiguravačem, pri čemu ne bivaju razrušene ili opečarene samo zgrade već i uništena infrastruktura naseljenog mesta, grada. Sve to zahteva veliki kapital od osiguravača, podvučeno je u radu. U osiguranju od zemljotresa, uz osiguranje od požara i eksplozije, važnu ulogu igra reosiguranje. Prelazeći na izlaganje nedostataka dobrovoljnog osiguranja od zemljotresa iz ugla osiguranika, potencijalni osiguranici se interesuju za osiguranje od zemljotresa tek kad se zemljotres zaista dogodi. Najpre, nepoznavanje značaja zaključenog ugovora o osiguranju, zanemarivanje ozbiljnosti rizika i preveliko oslanjanje na pomoć države dovodi do toga, u svetu i kod nas, da mali procenat štete nastale usled zemljotresa bude pokriven osiguranjem, istakla je autorka. Potom, osiguranici koji poseduju zaključene ugovore o osiguranju, sa uključenim rizikom zemljotresa, ugovaraju franžize i ne preduzimaju preventivne mere na osiguranim objektima, računajući da će osiguravači obezbediti dovoljna sredstva za pokriće štete od zemljotresa. Najzad, opštine, razvojne kompanije i drugi investitori ne osiguravaju svoje zgrade i druge

objekte, čime daju negativan primer ostalim potencijalnim osiguranicima. Autorka je predložila više načina da se uvede obavezno osiguranje od zemljotresa: tako što bi država osnovala osiguravača za prirodne katastrofe, ili tako što bi učestvovala u premiji, ili tako što bi se pojavila u ulozi osnivača društva za reosiguranje, ili tako što bi osnovala poseban fond kao pravno lice za prirodne katastrofe, ili tako što bi osnovala pul osiguravača ili reosiguravača za prirodne katastrofe itd.

**1.3.** Grupa autora u sastavu **prof. dr Vladimir Kozar**, Pravni fakultet za privredu i pravosuđe Univerziteta Privredna akademija u Novom Sadu, **Vladimir Vrhovšek**, sudija Višeg suda u Beogradu, **Sandra Đorđević**, master pravnik, objavila je u zborniku rad pod naslovom **Odgovornost vlasnika i Garantnog fonda za štetu prouzrokovanu neosiguranim vozilom i odgovornost poslodavca za štetu prouzrokovanu radnjama zaposlenog**. Osnovna ideja ovog rada zasnovana je na dobro poznatoj maksimi ugovornog prava da svako odgovara za štetu koju pričinii drugome i ta se odgovornost ogleda u naknadi štete, odnosno u vraćanju oštećene stvari u ono materijalno stanje u kojem se nalazila pre nastanka štete. Prva tema ovog rada tretira posledice propuštanja vlasnika motornog vozila da zaključi ugovor o obaveznom osiguranju od auto-odgovornosti. Te posledice propisane su u članu 91 Zakona o obaveznom osiguranju u saobraćaju (*Službeni glasnik RS*, 55/2009, 78/2011, 101/2011, 93/2012, 7/2013) (dalje u tekstu: Zakon). U članu 91 st. 1 Zakona propisano je, između ostalog, da se šteta prouzrokovana upotrebom motornog vozila, čiji vlasnik nije zaključio ugovor o obaveznom osiguranju, a bio je dužan da se osigura prema odredbama ovog zakona, nadoknađuje u istom obimu i prema istim uslovima kao da je, na dan nastanka štetnog događaja, bio zaključen ugovor o obaveznom osiguranju. Šteta se nadoknađuje iz sredstava Garantnog fonda, koji se osniva radi ekonomske zaštite putnika u javnom prevozu i trećih oštećenih lica, ali samo u slučajevima kada je šteta pričinjena upotrebom neosiguranog ili nepoznatog prevoznog sredstva, kao i u slučaju kada je odgovorno društvo za osiguranje nad kojim je pokrenut stečajni postupak. Po isplati naknade štete regresni zahtev se ostvaruje od vlasnika motornog vozila koji nije zaključio ugovor o obaveznom osiguranju, i to za plaćen iznos naknade štete, kamatu i troškove. Grupa autora istakla je da je pravo na regres koje osiguravač ima prema licu odgovornom za nastalu štetu u osnovi postulirano na subrogaciji, jer osiguravač tako stupa u položaj osiguranika, u obimu koliko je isplatio naknadu iz osiguranja. Grupa autora ukazala je na stav pravne nauke: ispunjenje sa subrogacijom nastaje u slučaju ispunjenja tuđe obaveze, kada je ispunilac sa poveriocem pre ili prilikom ispunjenja ugovorio da ispunjeno potraživanje pređe na njega, sa svim ili nekim sporednim potraživanjima. Po pravilu, solidarni dužnik isplatom celog duga poveriocu ne ispunjava tuđu, nego svoju obavezu iz solidarne obligacije. Grupa autora je zaokružila da prelazak osiguranikovih prava prema odgovornom licu na osiguravača po svojoj pravnoj prirodi predstavlja zakonsku personalnu subrogaciju, a objašnjava se načelom nekumulacije štete. Druga tema ovog rada

bila je osnov odgovornosti štetnika. Štetnik, koji je obavezno osiguran, branio se u parnici time da je osiguravač kod koga je osiguran trebalo da snosi štetu, ali ako je osiguravač pod stečajem, odgovara Garantni fond. Ovo stoga što je Zakonom o obaveznom osiguranju u saobraćaju predviđeno da se sredstva Garantnog fonda koriste za isplatu osigurane sume, odnosno za naknadu štete oštećenim licima, i to prouzrokovane upotrebom motornog vozila ili drugog prevoznog sredstva za koje je zaključen ugovor o obaveznom osiguranju sa društvom za osiguranje nad kojim je pokrenut stečajni postupak. Treća tema tog rada bio je rok zastarelosti za naknadu štete od neosiguranog vozila. ZOO je propisao subjektivni rok zastarelosti, odnosno da potraživanje naknade štete zastareva za tri godine od saznanja za štetu i štetnika, a propisao je i objektivni rok zastarelosti od pet godina računajući od nastanka štete (čl. 376 ZOO). Ako je šteta prouzrokovana krivičnim delom, a za krivično gonjenje je predviđen duži rok zastarelosti, zahtev za naknadu štete prema odgovornom licu zastareva kad istekne vreme određeno za zastarelost krivičnog gonjenja (čl. 377 ZOO). Prema važećem pravnom shvatanju, regresno potraživanje Garantnog fonda prema odgovornom licu takođe zastareva u rokovima iz čl. 376 ZOO ili iz čl. 377 ZOO. Četvrta tema grupe autora tiče se subrogacije i solidarne odgovornosti preduzeća i zaposlenog. Precizirano je da za štetu koju je zaposleni u radu ili u vezi sa radom prouzrokovao trećem licu odgovara preduzeće u kome je zaposleni radio u trenutku prouzrokovanja štete, osim ako dokaže da je u datim okolnostima postupao onako kako je trebalo. Oštećeno lice ima pravo da zahteva naknadu štete i neposredno od radnika koji je štetu prouzrokovao namerno. U tom slučaju odgovornost preduzeća i radnika je solidarna, naglasila je grupa autora. U Zakonu o radu je propisano da je zaposleni, koji je na radu ili u vezi sa radom, namerno ili krajnjom nepažnjom prouzrokovao štetu trećem licu, a koju je naknadio poslodavac, dužan da poslodavcu naknadi iznos isplaćene štete. Grupa autora je tu temu zaokružila konstatacijom da treće lice, koje je pretrpelo štetu prouzrokovanu od zaposlenog na radu ili u vezi sa radom, može da tuži ili samo poslodavca zaposlenog ili poslodavca i zaposlenog.

**2.** U ovoj tački biće prikazana dva rada iz zbornika. Oni razmatraju teme iz obligacionog prava, koje se, *mutadis mutandis*, mogu primeniti i u pravu osiguranja.

**2.1.** Iz ugla prava osiguranja pojam opasne stvari asocira na motorno vozilo, a opasna delatnost na upotrebu ili pogon motornog vozila u svakodnevnom saobraćaju. S gledišta prava osiguranja, motorno vozilo i njegova upotreba ili pogon spadaju u najrazvijeniji sistem osiguranja, kako kod nas tako i u svetu. Opasnu stvar i opasnu delatnost, ali ne u smislu motornog vozila (na parking, u javnoj garaži i sl.) i njegove upotrebe ili pogona (na parking, u javnoj garaži i sl.), **prof. dr Ilija Babić** obradio je u radu kao obligaciono-pravnu temu. Naslov njegovog rada glasi **Odgovornost za štetu od opasne stvari ili delatnosti poverene drugom licu prema ZOO i Prednacrtu građanskog zakonika**. Izlaganje navedene teme sprovedeno je kroz sedam delova. Oni su koncipirani tako da svaki deo pojedinačno predstavlja

obrazloženje za završni predlog izložen u sedmom delu u vidu formulisanog člana 321 Prednacrta građanskog zakonika Republike Srbije. Prvi deo je označen kao opasna stvar i opasna delatnost – izvorna i izvedena odgovornost. U okviru te teme izlaganje je obuhvatilo dve tačke. Jedna tačka se odnosila na opasnu stvar i opasnu delatnost uopšte, a druga se ticala izvorne i izvedene odgovornosti. Druga tema je sadržala četiri tačke. Prva tačka se odnosila na prodaju i razmenu, a druga na službenost, kao i zalogu. Treća tačka je obuhvatila izlaganje o ugovoru o zakupu, a pred kraj te tačke bilo je reči o ugovoru o doživotnom izdržavanju. Četvrta tačka obradila je ugovor o posluži, kao i prekoračenje naloga. Treća tema se odnosila na lice koje je dužno da čuva („nadgleda“) stvar. Četvrta tema bila je posvećena skrivenoj mani opasne stvari ili opasne delatnosti. Peta tema je razmatrala odnos između imaoca i držaoca opasne stvari, odnosno terminološke nedoumice. Šesta tema objasnila je isključenje odgovornosti za štetu, a sedma tema je sadržala obrazloženje primedaba na rešenja u članu 321 Prednacrta građanskog zakonika Republike Srbije. U zaključku je formulisan nadnaslov iznad člana 321 Prednacrta građanskog zakonika Republike Srbije, koji glasi – Poveravanje stvari trećem licu. Predlog člana 321. st. 1 Prednacrta građanskog zakonika Republike Srbije glasio bi: „Umesto imaoca opasne stvari i isto kao on, odgovara i lice koje je ovlašćeno da stvar koristi, odnosno upotrebljava (na primer, imalac prava službenosti, zakupac, poslugoprimac, lice kome je stvar predata na probu), ili je inače dužno da čuva, a nije kod njega na radu (na primer lice kome je stvar predata na osnovu ugovora o delu).“ Član 321 st. 2 Prednacrta građanskog zakonika Republike Srbije glasio bi: „Ali će pored njega odgovarati i imalac stvari ako je šteta proizašla iz neke skrivene mane ili skrivenog svojstva stvari, na koje mu imalac nije skrenuo pažnju.“ Član 321 st. 3 Prednacrta građanskog zakonika Republike Srbije glasio bi: „U tom slučaju odgovorno lice koje je isplatilo naknadu oštećeniku ima pravo da zahteva ceo njen iznos od imaoca opasne stvari.“

**2.2.** Pored ugovora o osiguranju, koji se zaključuju na rok od jedne godine, na srpskom tržištu osiguranja sve više se zaključuju višegodišnji ugovori o osiguranju, bilo iz oblasti obaveznog osiguranja, bilo iz oblasti dobrovoljnog osiguranja. S tim u vezi može da bude od značaja da li su se posle zaključenja ugovora promenile okolnosti i da li su zbog promenjenih okolnosti ugovorne strane zainteresovane za raskid ili za izmenu tog ugovora. Taj obligacionopravni institut razmatrala je u radu doktorand Pravnog fakulteta Univerziteta u Beogradu **Ivana Radomirović**. On se *mutadis mutandis* može primeniti i u pravu osiguranja. Ivana Radomirović podnela je rad pod naslovom **Raskid ili izmena ugovora zbog promenjenih okolnosti – aktuelna pitanja**. Autorka je uvela čitaoca navodeći da su ugovorne strane sa načelom pouzdanja pristupile ugovoru. Međutim, događaji i okolnosti mogu da posluže kao razlog da se zahteva izmena ili raskid tog ugovora. U prvom poglavlju institut je razmatran sa stanovišta Opštih uzansi za promet robe, kao pravnog izvora u ranijem pravnom sistemu savezne države. Opšte uzanse za promet robe bile su

u primeni pre 1978. godine, odnosno pre donošenja Zakona o obligacionim odnosima (ZOO). Institut raskida ili izmene ugovora zbog promenjenih okolnosti bio je regulisan u tim uzansama br. 2, 55, 56 i 58. Taj deo izlaganja autorka je zaokružila polemišući sa formulacijama citiranih uzansi. Drugo poglavlje obradilo je taj institut prema ZOO i Prednacrta građanskog zakonika Republike Srbije. Institut raskida ili izmene ugovora zbog promenjenih okolnosti regulisan je u čl. 133–136 ZOO. Te odredbe ZOO istraživala je najpre po pitanju odakle potiču. U tom pogledu navedeno je da vode poreklo iz nemačke i engleske obligacionopravne teorije. Potom je autorka razmatrala komponente tog instituta u zakonima o obligacionim odnosima Crne Gore, Hrvatske, Federacije BiH i Republike Srpske. Završne rečenice tog poglavlja odnosile su se na odredbe Prednacrta građanskog zakonika Republike Srbije. Četvrto poglavlje razmatralo je polje primene pravila o raskidu ili izmeni ugovora zbog promenjenih okolnosti. Polazište je bilo da promenjene okolnosti moraju da nastupe u periodu posle zaključenja ugovora, a pre nego što budu izvršene ugovorne obaveze, iz čega je izvedeno da se ovaj institut odnosi prevashodno na dvostrane ugovora sa odloženim izvršenjem prestacija. Peto poglavlje uzelo je za predmet postupak primene pravila o raskidu ili izmeni ugovora zbog promenjenih okolnosti. U tom poglavlju pošlo se od konstatacije da na sudu treba dokazati da su nastupile promenjene okolnosti. U tom pravcu navedena je presuda Privrednog apelacionog suda iz 2017. godine, citirana u fusnoti, u kojoj tužilac nije dokazao činjenicu da su nastupile promenjene okolnosti, odnosno da sud činjenicu da je postojala svetska ekonomska kriza nije smatrao opštepoznatom činjenicom. To je u referatu bio način da se prigovori odredbama tadašnjeg Zakona o parničnom postupku. Naredna teza u referatu istakla je da su promenjene okolnosti imale za posledicu da je obaveza iz ugovora za jednu ugovornu stranu postala otežana, što je predvideo ZOO. Autorka je podvukla da ZOO ne sadrži formulaciju kako je za jednu ugovornu stranu „preterano otežano“ ispunjenje ugovora, što su predviđale Opšte uzanse za promet robe. Najzad, svrha ugovora je dovedena u vezu s promenjenim okolnostima, odnosno promenjene okolnosti osujetile su nameravani cilj ugovora. U zaključku, autorka je odala priznanje Komisiji za izradu građanskog zakonika Republike Srbije što je regulišući institut raskida ili izmene ugovora zbog promenjenih okolnosti uzela sve ono što je bilo najbolje od Opštih uzansi za promet robe i od ZOO.

**3.** Iz ugla prava osiguranja može se konstatovati da je dvadeset šesto savetovanje Budvanski pravnički dani tretiralo aktuelne teme. Tradicija je održana i u novim uslovima, uz dobru posetu.

UDK: [368.8:355.4]+368.172+[368.212+347.515.2](049.32)

**Slobodan N. Ilijić, LL.M.<sup>1</sup>**

CONFERENCE REVIEW

## **INSURANCE LAW AT 26<sup>TH</sup> LEGAL DAYS IN BUDVA**

The Association of Jurists of Serbia and Republika Srpska organized the 26<sup>th</sup> Legal Days in Budva. The Conference was held in Budva from 2<sup>nd</sup> to 6<sup>th</sup> June 2023, with the traditional topic *Current Issues of Modern Legislation and Justice*. Within the general topic, this year's conference included sub-topics (1) Changes in judicial legislation and case law; (2) Novelties in the Draft Civil Code of the Republic of Serbia; (3) Current issues of enforcement, bankruptcy and notarial law; (4) Evolution of administrative law; (5) Innovations in criminal substantive and procedural law; (6) Tendencies in development of European and environmental law; (7) Improvement of labour and social insurance rights. Proceedings from the Conference was published, whose editor-in-chief is professor Miodrag V. Orlić, PhD.

1. Three papers that directly dealt with the insurance law were first presented.

**1.1. Professor Vladimir Čolović, PhD**, a research fellow at the Institute for Comparative Law in Belgrade, presented a paper on the topic of **war risk insurance**. The author stated that he was inspired by wars in various parts of the world and the effects of unexploded bombs and mines from the WW II, including the current situation in Ukraine. While researching war risk insurance, the author found a starting point in the broader legal interpretation of Article 931 of the Law of Contracts and Torts. War operations and rebellions are mentioned in that article, however, an insurer is not obliged to compensate for damages caused by war operations and rebellions, unless otherwise agreed. The same article stipulates that an insurer is obliged to prove that the damage was caused by one of the said events. Therefore, the issue is whether the war risk should be linked to the war conflict or the war risk can be realized even after the end of the war conflict. The author specified that under general terms and conditions an insurer could envisage that the war risk is insured, in which case the insurance contract can provide insurance against war risks to the insured. The author reminded that at the time of entry into force of Article 931 of

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<sup>1</sup> Author is a member of the Presidency of the Association of Jurists of Serbia

the Law of Contracts and Torts (in 1978) it was unrealistic to think of war risk insurance, and in the meantime war conflicts had taken place on the territory of the former SFRY, some of which have not ended. The aforementioned and the unexploded bombs and mines from the WWII were the reason to comment on two cases from the Croatian case law. (1) In the first Croatian case, a landmine was activated on the road, originating from the war conflict in the nineties of the 20<sup>th</sup> century, and the deceased, based on his employment in a company, was still insured under the collective insurance contract two months after cessation of the war. The Supreme Court in Croatia based the judgement on the premise that it was not a war damage, but an accident, and that the family was entitled to compensation based on the collective insurance contract. According to the insurer's general terms and conditions with whom a company concluded the collective insurance contract, the insurer is not liable if the accident occurred because of war, civil war, revolution, terrorism, etc., in which the insured participated. The Supreme Court in Croatia concluded that the damage caused by the activation of a mine did not provide sufficient grounds for it to be a war damage, regardless of the fact that the damage occurred two months after the cessation of war. In the court proceedings before the lower courts it was determined that the insured was traveling on a dirt road at that moment, that he did not lay mines and that there were no markings on the road indicating that it was a minefield, as well as that all this did not point to the conclusion that there was a war damage. (2) The second case was about the dismantling of mines left from the WWII near Rijeka. The author expressed the opinion that laying mines was a war risk, as was dropping bombs from airplanes. From the aforementioned court cases, the author concluded that Croatian insurers excluded damages from war operations, i.e. war risks, without exception in the general insurance terms and conditions. Regarding the Croatian general insurance terms and conditions, the author posed the question: Does the passage of time erase the property of a war risk and should such damages be included in insurance, since according to statistical data, a premium can be easily determined for such risks? According to the author, the uneven case law in Croatia regarding war risk arouses insecurity among citizens, who may or may not insure their houses, apartments and other real estate. According to researches about war risks, the author concluded that they were the risks that can be transferred to an insurer, but only if they were envisaged in the general insurance terms and conditions. Then, the author presented the following statements – first, war risks are subjective risks, because people influence their realization. Second, war risks are variable, given that it is very difficult to determine in advance the extent of damage they cause. Third, war risks are pure risks since they can lead to the loss of property. Fourth, war risks can be general and individual, which means that they affect a single object or several individual objects. The author also stressed the following characteristics – the insured event for war



risk will exist if the realized risk was covered by a concluded insurance contract and if the covered war risk caused the loss or damage to the insured object. A presentation on concepts related to war risk insurance followed. The author explained the concept of war. He defined the war as an armed conflict with an international dimension. War as a risk covered by insurance, according to this author, exists even when states are not at war, but undertake acts of hostility among themselves. The next concept was the civil war. The author defined it as a small-scale armed conflict within the borders of a country. The author compared the civil war to an uprising or a rebellion, whereby a civil war is larger than an uprising or a rebellion. The revolution – according to the author the revolution was an organized, sudden and violent (with the use of force) overthrow of the existing government of a country by the population of that country, as well as the replacement of one government by another, with the taking over of administration and control over the territory and population. The next was an uprising. The author defined it as an organized armed resistance directed against the existing government by the citizens even if organized from abroad. The author emphasised that the goal of revolution and uprising is the same – to overthrow the existing government or prevent that government from ruling in a certain territory. Finally the author discussed a rebellion – an armed revolt against the existing government of a country by its citizens, with the author's opinion that it was difficult to distinguish the rebellion from the uprising, that is, that rebellion did not include actions of foreign citizens. The author then explained political risks. Regarding insurance law, the author distinguished two types of political risks. One type is a political unrest, such as a strike, a demonstration, a rebellion, and the other type is a set of measures of competent state authorities, such as banning exports, banning ships from entering the port, etc. The author emphasised that, regarding insurance, it is important to qualify carefully each event that may present a risk, and only then attach consequences to that event. The author moved on to research a relation between war risks and terrorism risks. This relation is unclear with regard to insurance. The author stated that there is no model in insurance referring to the assessment of the likelihood of damage from the risk of terrorism, as the national security prevents the state from publishing detailed data on the consequences of terrorism risks. He further stated that there are no preventive measures against terrorism risks, since the insurance offer depended on preventive measures. The author then explored a relation between catastrophe risks, on one hand, and war, political and terrorism risks, on the other. The author stated that there is a range of different models in insurance depending on the country, then models by stages, etc. The biggest problem with catastrophe risks, according to that author, is that there is no option to establish a homogeneous community of risks with a sufficient number of insured persons on a larger territory. The author researched how an insurer should calculate the premium for war risks, so he started from the insurance

portfolio. Namely, according to the author, the insurance portfolio is a set of rights and obligations under insurance contracts within one insurance type, i.e. the same or related risks. Another name for an insurer's portfolio is the insurer's capital, the author pointed out. The final aspect of the war risk research was related to the determination of the war risk insurance premium. The author pointed out that war risks can be insured. Then he referred to the war risk aspects in insurance of goods in transit. He concluded the paper with the statement that he tried to show the complexity of war risk insurance and justify the insurers' opinion that these risks are difficult to insure. He criticised Article 931 of the Law of Contracts and Torts that it regulated war operations or rebellions. The legal term for war operations is linked to war risks, and the legal term for rebellion to political risks. The author emphasized that in the Article 931 of the Law of Contracts and Torts, risks related to the war are covered and may refer to demonstrations, protests and other events directly linked to current political circumstances. The author criticised the Article 931 of the Law of Contracts and Torts by stating that such regulation and putting war and political risks in the same article is the first mistake of the Law. The second mistake of Article 931 of the Law of Contracts and Torts is that it did not regulate the insurer's obligation to pay damages due to occurrence of the said risks. The author suggested that this provision should be specified according to the second mistake of the Law of Contracts and Torts. Namely, if the insurer wanted to include specified risks in the insurance cover, the insurer could do so through the general insurance terms and conditions.

**1.2.** A research fellow at the Institute of Comparative Law **Mirjana Glinti-ić, PhD**, submitted the paper entitled **Disadvantages of voluntary earthquake insurance**. Introducing the issue of earthquake insurance, the author pointed out that strong earthquakes were recorded in various parts of the world since the 1970s. Earthquake insurance has since proven to be a solution that enabled compensation to the insured. She explained the main features of earthquake insurance and stated that earthquakes are natural disasters. An earthquake of over six degrees intensity of the Mercalli scale has a devastating effect on insured items. Earthquake insurance is more widespread in the Western Hemisphere than in the Asian continent. Earthquake insurance is a property insurance, where payment of the sum insured enables the value of the property to be preserved in the condition that existed before the earthquake. It is noted that the earthquake insurance is not an independent subject matter of insurance, but always with certain insured risks. The author specified that, as a rule, catastrophe risks are covered either as additional insurance or multiple risks are included in one policy. This is done because the separation of risks would entail excessively high premiums for independent earthquake insurance, and a large amount of damage due to an earthquake. This consideration of the main characteristics of the earthquake insurance is rounded off by statements that a policy covered a direct seismic impact of an earthquake, then consequences of an

earthquake such as fire or explosion, and the impact of parts of objects or objects thrown by an earthquake onto the insured property. Moving on to disadvantages of voluntary earthquake insurance, the author pointed out that the premium in the Republic of Serbia for the earthquake insurance ranged from 50 euros per year, depending on the area. The author then presented disadvantages of earthquake insurance, first from the point of view of the insurer, and then from the point of view of the insured. Presentation of disadvantages of voluntary earthquake insurance from the insurer's point of view pointed to the following conclusions. The insurer cannot offer and provide full protection against earthquakes, given that the damage is too extensive. In theory, there are opinions that earthquakes are uninsurable risks. In order for insurers to provide cover for the earthquake risk, that is, for an uncertain event, it is necessary to identify the risks and link the premium to the risks. She explained in more detail the conditions that an insurer must provide – first, the probability of an earthquake and the extent of the expected damage. Earthquake risk must be determinable and computed as to attach a premium to each potential client or a group of clients. The insurer simply cannot fulfill those two conditions cumulatively, and therefore the insurer cannot insure a certain building, because it is risky in case of an earthquake. Furthermore, increasing earthquake prediction capabilities may lead an insurer to insure buildings against earthquakes, that is, there is a small likelihood that an earthquake will occur in the insurance period. If an earthquake occurred, since there is still no way to fully and reliably predict an earthquake, then a large number of insureds with earthquake, fire and explosion insurance would file claims to that insurer, and not only the buildings are destroyed or burned but also the infrastructure of a place, a city. This requires a lot of capital from the insurer. Reinsurance has an important role in earthquake insurance, along with fire and explosion insurance. Moving on to disadvantages of voluntary earthquake insurance from the point of view of the insured, potential insureds are interested in earthquake insurance only when an earthquake occurs. First of all, not recognising the importance of an insurance contract, neglect of the risk seriousness and excessive reliance on the state aid leads to the fact that, in the world and in our country, a small percentage of damages caused by earthquakes is covered by insurance, the author pointed out. Then, insureds with insurance contracts, with included earthquake risk, contract deductibles and do not undertake preventive measures on insured buildings, relying on insurers to provide sufficient funds to cover damages due to earthquakes. Finally, municipalities, development companies and other investors do not insure their buildings and other facilities, thus setting a negative example for other potential insureds. The author proposed several ways to introduce compulsory earthquake insurance – the state should establish an insurance company for natural disasters, or participate in the premium, or establish a reinsurance company, or establish a special fund as a legal entity for natural disasters, or establish a pool of insurers or reinsurers for natural disasters, etc.

**1.3.** A group of authors including a **professor Vladimir Kozar, PhD**, the Faculty of Law for Commerce and Judiciary in Novi Sad; **Vladimir Vrhovšek**, a judge of the Higher Court in Belgrade; **Sandra Đorđević**, Master of Laws, published in the Proceedings a paper entitled **Liability of the owner and the Guarantee Fund for damages caused by an uninsured vehicle and an employer's responsibility for damages caused by an employee's actions**. The main idea of this paper is based on the well-known maxim of the contract law that everyone is liable for the damage they cause to a third party and this liability is reflected in claim indemnity, i.e. in returning the damaged item to the condition before the damage. The first topic in this paper deals with the consequences of the motor vehicle owner's failure to conclude a compulsory motor third-party liability insurance. Those consequences are prescribed in Article 91 of the Law on Compulsory Traffic Insurance (*the Official Gazette of the RS*, 55/2009, 78/2011, 101/2011, 93/2012, 7/2013) (hereinafter referred to as the Law). Article 91 paragraph 1 of the Law stipulates that any damages caused by the use of a motor vehicle in cases when the owner failed to contract a compulsory insurance, and they were required to do so pursuant to this Law, shall be paid in the same amount and under the same terms as if the compulsory insurance was contracted on the date of the loss event. Compensation of damages shall be done from the Guarantee Fund that is established for the purpose of financial protection of passengers in public transport and third party claimants in cases where the damage has been caused by the use of uninsured or unidentified means of transport, as well as for damages payable by the insurance company in respect of which bankruptcy proceedings have been initiated under this Law. After the compensation is paid, the recourse shall be claimed from the owner of a motor vehicle, who failed to contract compulsory insurance in the amount equal to the amount of compensation paid out, interest accruing since the payment of compensation and expenses. The group of authors pointed out that the right to recourse that the insurer has from the party responsible for the damage is basically required by subrogation, because the insurer thus becomes the insured, to the extent that it has paid compensation. The group of authors indicated the opinion of jurisprudence – fulfillment with subrogation occurs in case of fulfillment of a third-party's obligation, when the fulfiller agreed with the creditor before or during fulfillment that the fulfilled claim is transferred to him, with all or any secondary claims. As a rule, by paying the entire debt to the creditor, the joint and several debtor does not fulfill someone else's obligation, but own obligation from the joint and several liability. The group of authors concluded that the transfer of the insured's rights to the insurer by its legal nature is a legal personal subrogation, and is explained by the principle of non-accumulation of damage. The second topic of this paper was the basis of the tortfeasor's liability. Tortfeasor, that was insured, defended himself in the lawsuit by saying that his insurer should have borne the damage, but if the insurer was bankrupt, the Guarantee Fund was

responsible. The Law on Compulsory Traffic Insurance stipulates that the funds of the Guarantee Fund be used for payment of the sum insured, i.e. for compensation of damages to claimants caused by the use of a motor vehicle or other means of transport for which a compulsory insurance was concluded with the insurance company against which bankruptcy proceedings were initiated. The third topic of that paper was the statute of limitations for claim compensation from an uninsured vehicle. The Law of Contracts and Torts prescribed a subjective limitation period, that is, that the claim for damages will expire three years after a party sustaining injury or loss became aware of the injury or loss and of the tortfeasor. In any event, such claim will expire five years after the occurrence of injury or loss (Article 376 of the Law of Contracts and Torts). If a loss is caused by a criminal offence, and a longer statute of limitations is prescribed for the criminal prosecution, the claim for compensation against the liable party shall expire upon the expiration of the limitation period set forth in the statute of limitations of the criminal prosecution (Article 377 of the Law of Contracts and Torts). According to the current legal understanding, the recourse claim of the Guarantee Fund against the liable party also expires within the terms of Article 376 or Article 377 of the Law of Contracts and Torts. The fourth topic concerns subrogation, joint and several liability of the company and the employee. Liable for damage caused by an employee while working or in relation to work, to a third person shall be the company at which the employee was employed at the moment of causing the loss, unless it is proved that the employee, in given circumstances, had proceeded as he should have. A claimant is entitled to demand recovery directly from the employee, if he caused the damage wilfully. In that case, the liability of the company and the employee is joint and several – emphasized the group of authors. The Labour Law stipulated that an employee who caused damage to a third party at work or in relation to work, with intent or by gross negligence, which damage was compensated by the employer, is obliged to compensate the employer the amount of damages paid. The group of authors concluded that a third party that sustained damage caused by an employee at work or in relation to work can sue either the employer or both the employer and the employee.

**2.** In this section, two papers from the Proceedings will be presented. They discussed topics from the Law of Obligations, which, *mutatis mutandis*, can be applied in the law of insurance.

**2.1.** Insurance law associated a dangerous object with a motor vehicle, and a dangerous activity with the use or operation of a motor vehicle in everyday traffic. Motor vehicle and its use or operation belong to the most developed insurance system, both in our country and in the world. **Professor Ilija Babić, PhD**, discussed in the paper a dangerous object and a dangerous activity not in relation to a motor vehicle (in a parking lot, in a public garage, etc.) and its use or operation (in a parking lot, in a public garage, etc.), but in relation to obligations. The title of

his paper was **Liability for damage caused by dangerous objects or activities entrusted to a third party according to the Law of Contracts and Torts and the Draft Civil Code of the Republic of Serbia**. The topic was presented in seven parts. They are designed so that each part individually presents an explanation for the final proposal presented in the seventh part in the form of Article 321 of the Draft Civil Code of the Republic of Serbia. The first part dealt with a dangerous object and a dangerous activity – original and derivative liability. That topic covered two sections. One section referred to a dangerous object and a dangerous activity in general, and the second one referred to original and derivative liability. The second topic contained four sections. The first section related to sale and exchange, and the second to usufruct and guarantee. The third section covered a discussion about a lease agreement and a life support agreement. The fourth section dealt with the contract of use and transgressing. The third topic dealt with the party obliged to keep (supervise) the object. The fourth topic covered the hidden flaw of a dangerous object or a dangerous activity. The fifth topic covered a relation between the owner and the holder of a dangerous object, that is, terminological confusion. The sixth topic explained the exclusion of liability for damages, and the seventh topic referred to an explanation of objections to solutions in Article 321 of the Draft Civil Code of the Republic of Serbia. In conclusion, the title above Article 321 of the Draft Civil Code of the Republic of Serbia was formulated – Entrusting objects to a third party. Proposal of Article 321, paragraph 1 of the Draft Civil Code of the Republic of Serbia would be: "An owner of a dangerous object shall be liable as well as a party authorized to use an object (for example, the usufructuary, the tenant, the bailee, the party to whom the object was given for testing ) or is otherwise obliged to keep, but is not with him at work (for example, a party to whom the object was given on the basis of a temporary service contract)." Article 321 paragraph 2 of the Draft Civil Code of the Republic of Serbia would be: "However, in addition to him, the owner of the object will also be liable if the damage resulted from a hidden defect or a hidden property of the object, to which the owner did not draw his attention." Article 321 paragraph 3 of the Draft Civil Code of the Republic of Serbia would be: "In that case, the liable party that paid the compensation to the claimant is entitled to demand the entire amount from the owner of a dangerous object."

**2.2.** In addition to insurance contracts concluded for one year, long-term compulsory or voluntary insurance contracts are increasingly concluded on the Serbian insurance market. In this regard, it may be important whether the circumstances changed after concluding of a contract and whether, due to changed circumstances, the contracting parties are interested in terminating or amending a contract. **Ivana Radomirović**, a PhD student at the Faculty of Law at the University of Belgrade, considered this law of obligations in her paper. It can also be applied *mutatis mutandis* in insurance law. Ivana Radomirović submitted a paper entitled

**Termination or amendment of a contract due to changed circumstances - current issues.** The author stated that the contracting parties entered into the contract with the principle of trust. However, events and circumstances may serve as a reason to request amendment or termination of a contract. In the first chapter, the law of obligations was discussed in terms of the general practices for trade in goods, as a legal source in the former legal system of the federal state. General practices for trade in goods were applied before 1978, that is, before the adoption of the Law of Contracts and Torts. Termination or amendments to a contract due to changed circumstances were regulated by those practices no. 2, 55, 56 and 58. The author rounded off that part by discussing the wording of the cited practices. The second chapter compared the law of obligations to the Law of Contracts and Torts and the Draft Civil Code of the Republic of Serbia. Termination or amendments to a contract due to changed circumstances were regulated in Article 133–136 of the Law of Contracts and Torts. First she researched the origin of those provisions in the Law of Contracts and Torts. In this regard, it was stated that they originated from German and English legal theory of obligations. Then the author considered the components in the laws of obligations of Montenegro, Croatia, the Federation of Bosnia and Herzegovina and the Republika Srpska. The final sentences of that chapter referred to the provisions of the Draft Civil Code of the Republic of Serbia. The fourth chapter discussed the application of rules on termination or amendments to contracts due to changed circumstances. The starting point was that changed circumstances must occur after the conclusion of a contract and before the contractual obligations are realised. Therefore, this law of obligations referred primarily to bilateral contracts with delayed fulfilment of obligations. The fifth chapter discussed the procedure of application of the rules on termination or amendments to contracts due to changed circumstances. In that chapter, it was concluded that it was necessary to prove in court that changed circumstances occurred. The judgment of the Commercial Court of Appeal from 2017, cited in the footnote, stated that the plaintiff failed to prove that changed circumstances occurred, i.e. that the court did not recognise the fact that there was a global economic crisis. That was a way to object to the provisions of the Civil Procedure Code in that period. The next thesis pointed out that changed circumstances caused the contractual obligation for one contracting party to become more difficult, which was stipulated by the Law of Contracts and Torts. The author emphasised that the Law of Contracts and Torts did not contain the wording that it was "excessively difficult" for one contracting party to fulfill a contract, which was stipulated by the general practices for trade in goods. Finally, the purpose of a contract was linked to changed circumstances, that is, changed circumstances thwarted the intended purpose of a contract. In conclusion, the author gave recognition to the Commission for drafting Civil Code of the Republic of Serbia for regulating the termination or amendments to contracts due to changed circumstances, including

in the wording all that was best from the general practices for trade in goods and from the Law of Contracts and Torts.

3. From the point of view of insurance law, it can be stated that the twenty-sixth conference of Budva Legal Days dealt with current topics. The tradition was held under new conditions and with a good attendance.

*Translated by*  
***Jelena Rajković***



**Dragan G. Stojić<sup>1</sup>**

PRIKAZ KNJIGE

**INSURANCE AND REINSURANCE FOR THE 21<sup>ST</sup>  
CENTURY: FROM DISRUPTION TO EVOLUTION  
(OSIGURANJE I REOSIGURANJE ZA 21. VEK: OD  
POREMEĆAJA DO EVOLUCIJE)**

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Teoriju osiguranja danas obrađuje veliki broj udžbenika s tematikom osiguranja. Nedostaju, međutim, monografije koje se bave specifičnim oblastima i problemima koji su od velikog značaja kako za teoriju tako i praksu osiguranja. Monografija *Insurance and Reinsurance for the 21st Century: from Disruption to Evolution (Osiguranje i reosiguranje za 21. vek: od poremećaja do evolucije)* autora prof. Vladimira Njegomira, objavljena u izdanju Fakulteta za turizam i ugostiteljstvo u Ohridu, Univerziteta „Sv. Kliment Ohridski“ u Bitolju, pisana je na engleskom jeziku i jedna je od uspešnijih koje povezuju teoriju i praksu osiguranja. Nastala je kao rezultat težnje autora da se popuni identifikovana nepokrivenost literaturom u pogledu izazova koji opredeljujuće utiču na promene u osiguranju i reosiguranju. Monografija obezbeđuje teorijsku podlogu i daje praktičan uvid u faktore koji utiču na poremećaje u obavljanju delatnosti osiguranja, kao i na prilagođavanja te delatnosti ovim izazovima. Ona ukazuje na sve relevantne tokove koji karakterišu osiguranje i reosiguranje i koji će odrediti njihovu budućnost u čitavom 21. veku. Ova knjiga namenjena je prvenstveno profesionalcima u oblasti osiguranja i reosiguranja, ali i

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preduzetnicima, privrednicima, studentima, kao i svima onima koji žele da spoznaju tokove koji će opredeljivati razvoj osiguranja i reosiguranja u 21. veku.

Knjiga predstavlja skladno komponovanu celinu od 18 poglavlja. Takođe, sadrži predgovor, sadržaj, napomene, literaturu i kratke informacije o autoru. Autor je materiju obradio na 456 stranica A4 formata, zajedno s korišćenom literaturom od 440 dela.

*U prva tri poglavlja* autor se bavi izazovima koje katastrofalni događaji imaju na osiguranje i reosiguranje, s posebnim naglaskom na događaje uzrokovane klimatskim promenama, kao i na uticaj pandemije. Autor uvodi pojam katastrofalnih šteta, determinante katastrofalnih rizika, određenje uticaja katastrofalnih događaja, rizike koji uzrokuju nastanak katastrofalnih događaja, modeliranje i upravljanje katastrofalnim događajima, rizicima i štetama, kao i pretpostavke mogućih budućih katastrofa.

*Četvrto poglavlje* odnosi se na analizu integracionih procesa u osiguranju i reosiguranju. Ovo poglavlje *čitaocu osvetljava pojmove* globalizacije, stvaranje globalnog osiguravanih i globalnog rizika, konsolidaciju i konvergenciju osiguranja i drugih finansijskih usluga.

*Peto poglavlje* odnosi se na inkluzivnost osiguranja. U okviru tog poglavlja autor razmatra određenje i značaj inkluzivnosti u osiguranju i analizira inovativne oblike inkluzivnosti osiguranja – mikroosiguranje i takaful i retakaful.

*U poglavljima šest, sedam i osam* autor obrađuje uticaj demografskih promena, digitalizacije i društvene odgovornosti na osiguranje i reosiguranje.

*Deveto, deseto i jedanaesto poglavlje* obrađuju metode upravljanja i strategije u osiguranju, s naglaskom na korporativno preduzetništvo i permanentnu edukaciju.

*Dvanaesto poglavlje* posvećeno je trendovima upravljanja rizicima i osiguranju poljoprivrede. U okviru tog poglavlja autor razmatra značaj poljoprivredne proizvodnje, rizike kojima je ugrožena poljoprivredna proizvodnja i metode upravljanja proizvodnim rizicima poljoprivredne proizvodnje, specifičnosti osiguranja poljoprivrede i vrste osiguranja poljoprivrede, tradicionalne i alternativne.

*U trinaestom poglavlju* obrađuje se energetika i osiguranje. Autor u okviru tog poglavlja razmatra energetske izvore i vrste osiguranja energetike.

*Četrnaesto, petnaesto i šesnaesto poglavlje* obrađuju investicione aktivnosti osiguravača kroz strukturu finansijskog sistema i poziciju osiguravajućih društava, regulaciju institucionalnog investiranja osiguravača i Solventnost II, značaj institucionalnog investiranja, pitanja optimizacije portfelja reosiguranja osiguravača za ekonomski rast, kao i problematiku konkurentnosti u osiguranju i reosiguranju.

*U sedamnaestom poglavlju* autor obrađuje ulogu države na tržištu osiguranja.

*U poslednjem, osamnaestom poglavlju* autor razmatra rizike koji utiču na osiguranje i reosiguranje u 21. veku, i to političke rizike, rizik od terorizma, ekonomske rizike, tehnološke rizike, rizike od prekida kontinuiteta poslovanja, rizike od prekida lanaca snabdevanja, rizike od profesionalne odgovornosti, rizik od odgovornosti za proizvode, kao i rizik od odgovornosti za okruženje.

Pozitivnu ocenu monografija je dobila od tri ugledna recenzenta, doajena u oblasti osiguranja: prof. emeritus dr Borisa Marovića, akademika prof. dr. Volfganga Rorbaha i prof. dr Zdravka Petrovića. Recenzenti su istakli da je autor analizirao, ukazao i opisao ključne izazove koji karakterišu savremenu delatnost osiguranja i reosiguranja i koji oblikuju evoluciju poslovanja osiguravača i reosiguravača. Recenzenti su istakli međunarodni karakter tematike monografije.

Ova monografija predstavlja izvorni autorski doprinos, materija je izložena logički, jednostavnim ali stručnim jezikom. Teorijska utemeljenost i praktična primenljivost izloženih problema, u kombinaciji s dugogodišnjim uspešnim profesionalnim iskustvom i akademskim istraživanjima autora, garantuju njenu teorijsku i praktičnu vrednost.

Knjiga *Osiguranje i reosiguranje za 21. vek: od poremećaja do evolucije* pruža sveobuhvatan prikaz svih ključnih izazova za delatnost osiguranja i reosiguranja. Složenost delatnosti osiguranja i reosiguranja će se verovatno dalje povećavati, što od teoretičara i praktičara vezanih za ovu delatnost zahteva širu perspektivu. Ovo delo pruža upravo to i stoga osiguravačima i reosiguravačima nudi razumevanje izazova i načina prilagođavanja, što omogućava da ostanu uspešni u svetu koji je sve više ispunjen izazovima.

UDK: 368.1/.9"20"(049.32)

**Dragan G. Stojic<sup>1</sup>**

BOOK REVIEW

## **INSURANCE AND REINSURANCE FOR THE 21<sup>ST</sup> CENTURY – FROM DISRUPTION TO EVOLUTION**

*Author: Professor Vladimir Njegomir, PhD**Publisher: Faculty of Tourism and Hospitality – Ohrid,  
University St. Kliment Ohridski in Bitola**Year: 2023**Number of pages: 456 pages*

Insurance theory is covered today by a large number of insurance-related textbooks. However, not many monographs deal with specific areas and issues of great importance both for insurance theory and practice. Monograph *Insurance and Reinsurance for the 21<sup>st</sup> Century – from Disruption to Evolution* by professor Vladimir Njegomir, published by the Faculty of Tourism and Hospitality in Ohrid, University St. Kliment Ohridski in Bitola, is written in English and is one of the more successful ones that connects insurance theory and practice. The book was a result of the author's desire to fill the identified lack of coverage in the literature regarding the challenges that affect changes in insurance and reinsurance. The monograph provides a theoretical basis and gives a practical overview of the factors affecting disruptions in the insurance sector, as well as the adaptation of that sector to these challenges. It points to all relevant trends in insurance and reinsurance that will determine their future in the 21<sup>st</sup> century. This book is intended primarily for insurance and reinsurance experts, but also for entrepreneurs, businessmen, students, and for all who want to learn about trends that will determine development of insurance and reinsurance in the 21<sup>st</sup> century.

The book contains 18 chapters. It also contains a preface, table of contents, notes, bibliography and brief information about the author. The author discussed the topic on 456 pages of A4 format, and the literature included 440 works.

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*In the first three chapters*, the author dealt with the challenges that catastrophe events had on insurance and reinsurance, with special emphasis on events caused by climate changes and the impact of a pandemic. The author introduced the concept of catastrophe damages, determinants of catastrophe risks, the impact of catastrophe events, risks that cause the catastrophe events, modelling and management of catastrophe events, risks and damages, as well as assumptions of possible future disasters.

*The fourth chapter* referred to the analysis of integration processes in insurance and reinsurance. This chapter explained the concepts of globalization, the creation of a global insured and global risk, consolidation and convergence of insurance and other financial services.

*The fifth chapter* referred to the inclusive insurance. In that chapter, the author discussed the definition and importance of inclusive insurance and analysed innovative forms of inclusive insurance – microinsurance and takaful and retakaful.

*In chapters six, seven and eight*, the author dealt with the impact of demographic changes, digitization and social responsibility on insurance and reinsurance.

*The ninth, the tenth and the eleventh chapters* dealt with management methods and strategies in insurance, with an emphasis on corporate entrepreneurship and continuous education.

*The twelfth chapter* covered trends in risk management and agricultural insurance. In that chapter, the author discussed the importance of agricultural production, the risks threatening agricultural production and methods of managing agricultural production risks, the specifics of agricultural insurance and types of agricultural insurance, both traditional and alternative.

*The thirteenth chapter* dealt with energy and insurance. In that chapter, the author considered energy sources and types of energy insurance.

*The fourteenth, the fifteenth and the sixteenth chapters* dealt with the insurers' investment activities through the financial system and the position of insurance companies, the regulation of institutional investments by insurers and Solvency II, the importance of institutional investments, issues in optimizing the insurer's reinsurance portfolio for the economic growth, as well as the issue of competitiveness in insurance and reinsurance.

*In the seventeenth chapter*, the author dealt with the role of the state in the insurance market.

In the last, *eighteenth chapter*, the author discussed the risks affecting insurance and reinsurance in the 21<sup>st</sup> century – political risks, terrorism risks, economic risks, technological risks, business interruption risks, supply chain disruption risks, professional liability risks, product liability risks and environmental liability risks.

The monograph received a positive review from three distinguished reviewers, doyens in insurance – a professor emeritus Boris Marović, PhD, an academician

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***D. Stojić: Book Review “Insurance and Reinsurance for the 21<sup>st</sup> Century: from Disruption to Evolution”***

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professor Wolfgang Rohrbach, PhD, and professor Zdravko Petrović, PhD. Reviewers pointed out that the author analysed, indicated and described the key challenges of modern insurance and reinsurance that shape the evolution of business operations of insurers and reinsurers. Reviewers emphasized the international character of the monograph's topic.

This monograph presents the original author's contribution, the material is presented in a logical, simple but professional language. Theoretical foundation and practical applicability of presented issues, combined with long-term successful professional experience and academic researches of the author, guarantee its theoretical and practical value.

The book *Insurance and Reinsurance for the 21<sup>st</sup> Century – from Disruption to Evolution* provides a comprehensive overview of key challenges for insurance and reinsurance sector. Complexity of insurance and reinsurance will probably continue to increase, which requires a broader perspective from theorists and practitioners. This book provides just that and therefore offers insurers and reinsurers an understanding of the challenges and ways to adapt, enabling them to remain successful in an increasingly challenging world.

*Translated by*  
***Jelena Rajković***

**Mr Nikola L. Filipović<sup>1</sup>**

INOSTRANA SUDSKA PRAKSA

## **PRESUDA EVROPSKOG SUDA PRAVDE U PREDMETU C-32/11**

### **1. Uvod**

Pravno pitanje kojim se Evropski sud pravde bavio u predmetu C-32/11 *Allianz Hungary* (presuda od 14. 3. 2013. godine) postavljeno je vezi s ugovorom između osiguravajućih društava i auto-mehaničarskih radionica tj. servisa (koje su istovremeno i distributivni kanal osiguranja, tj. posrednici osiguranja), a prema kojima su cene radnog sata za popravku vozila (koji je radionica naplaćivala osiguravajućem društvu) zavisile *inter alia* i od toga koliko je ugovora o osiguranju zaključeno preko servisa, odnosno od toga da li takvi ugovori između osiguravajućih društava i servisa, iz aspekta prava konkurencije, imaju za cilj ograničenje konkurencije na tržištu.

### **2. EU pravni okvir**

Član 101 stav 1 Ugovora o funkcionisanju Evropske unije (UFEU) zabranjuje kao nespojive s unutrašnjim tržištem sve sporazume između učesnika na tržištu, odluke udruženja učesnika na tržištu, kao i usaglašene prakse koje mogu uticati na trgovinu između država članica a koji imaju za cilj ili posledicu sprečavanje, ograničavanje ili narušavanje konkurencije, te naročito one kojima se:

- neposredno ili posredno utvrđuju kupovne ili prodajne cene ili drugi uslovi trgovine;
- ograničava ili kontroliše proizvodnja, tržište, tehnički razvoj ili investicije;
- deli tržište ili izvori nabavki;
- primenjuju nejednaki uslovi poslovanja na iste poslove u odnosu na različite učesnike na tržištu, čime se učesnici na tržištu dovode u nepovoljniji položaj u odnosu na konkurente;

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<sup>1</sup> Savetnik za usklađenost poslovanja

- uslovljava zaključivanje ugovora ili sporazuma prihvatanjem dodatnih obaveza koje, s obzirom na svoju prirodu i trgovačke običaje i praksu, nisu u vezi s predmetom sporazuma.

### **2.1. Mađarsko pravo**

Zakon No LVII id 1996. o zabrani nepoštene poslovne prakse i ograničavanja konkurencije, članom 11 zabranjuje sporazume kojima se ograničava konkurencija na tržištu, tako što zabranjuje sve sporazume između učesnika na tržištu, sve odluke udruženja učesnika na tržištu, javnopravnih tela i drugih sličnih subjekata [...] koji za cilj ili posledicu imaju, ili će verovatno imati, sprečavanje, ograničavanje ili narušavanje konkurencije (sa izuzetkom sporazuma između učesnika na tržištu koji nisu nezavisni jedan od drugog, tj. pripadaju istoj grupaciji):

Zabrana se naročito odnosi na:

- neposredno ili posredno utvrđivanje kupovne ili prodajne cene ili drugih uslova trgovine;
- ograničavanje ili kontrolu proizvodnje, tržišta, tehničkog razvoja ili investicija;
- deljenje tržišta ili izvora nabavki i isključivanje određenih vrsta potrošača od kupovina dobara;
- sprečavanje pristupa tržištu;
- situacije kada se u odnosu na transakcije iste vrednosti ili vrste diskriminiše druga ugovorna strana, a naročito u pogledu cene, rokova plaćanja, usluga i načina prodaje odnosno kupovine, što drugu ugovornu stranu dovodi u nepovoljniji položaj u odnosu na konkurente;
- uslovljavanje zaključenja ugovora ili sporazuma prihvatanjem dodatnih obaveza koje po prirodi i trgovačkim običajima i praksi nisu u vezi s predmetom ugovora.

## **3. Predmet spora i pravna pitanja**

Mađarski osiguravači, prvenstveno „Allianz“ (ali i „Generali“), pregovarali su jednom godišnje sa auto-mehaničarskim radionicama o cenama koje će osiguravajuća društva plaćati radionicama za popravku štete nastale od nezgoda u kojima su učestvovali osigurani automobili. Na osnovu tih sporazuma, radionice mogu odmah izvršiti popravku oštećenog automobila prema dogovorenim uslovima i cenama.

Od 2002. godine mnogi ovlašćeni trgovci automobila (auto-dileri), koji istovremeno imaju i servise sa popravku automobila, zatražili su od svog trgovačkog udruženja GEMOSZ (Gépjármű Márkakereskedők Országos Szövetsége) da u ime članova pregovara sa osiguravajućim društvima o satnicama koje bi ovi servisi primenjivali prilikom popravke oštećenih automobila.



Prema takvom modelu poslovanja, trgovci automobilima odnosno njihovi servisi bi istovremeno bili i pružalac usluge popravke automobila, i distributivni kanal osiguranja (kao posrednici ili zastupnici osiguranja), nudeći svojim klijentima zaključenje ugovora o osiguranju prilikom prodaje ili popravke automobila.

Tokom 2004. i 2005. GEMOSZ je zaključio okvirni ugovor sa „Allianz osiguranjem“, a na osnovu tog okvirnog ugovora Udruženje je usvojilo preporuku, a pojedini ovlašćeni trgovci automobilima (članovi udruženja) potpisali su individualne ugovore sa „Allianz osiguranjem“. Prema tim individualnim ugovorima, servisi tih trgovaca su mogli da naplaćuju od osiguranja veće satnice za popravku automobila ukoliko su dostignuti ugovoreni prodajni ciljevi (npr. definisani procenat „Allianz“ polisa osiguranja u ukupnom broju prodatih polisa osiguranja od strane trgovaca odnosno njihovog servisa). Slične sporazume, samo ne u pismenoj formi, imalo je i osiguravajuće društvo „Generali“.

Stav Mađarske Agencije za zaštitu konkurencije (Gazdasági Versenyhivatal) bio je da takvi sporazumi krše član 11 Zakona o zabrani nepoštene poslovne prakse i ograničavanju konkurencije, odnosno da odluka udruženja GEMSOZ o preporučenim cenama (satnicama) ovlašćenim trgovcima za popravku automobila koje se naplaćuju osiguravajućim društvima predstavlja horizontalni sporazum između učesnika na tržištu, dok individualni sporazumi zaključeni između osiguravajućeg društva „Allianz“ i ovlašćenih trgovaca prema kojima satnice za popravku automobila zavise od obima prodaje polisa osiguranja ovog osiguravajućeg društva predstavlja vertikalni sporazum između učesnika na tržištu, a da i jedan i drugi sporazum predstavljaju sporazume koji imaju za cilj ograničavanje konkurencije na tržištu osiguranja, i na tržištu popravki automobila. Posledično, Agencija je izrekla kazne učesnicima u tim sporazumima – kako osiguravajućim društvima tako i trgovcima automobilima koji su imali zaključene takve ugovore i njihovom udruženju, koje je pregovaralo o okvirnom ugovoru i usvojilo odluku o preporučenim cenama popravke.

Nakon serije žalbi, predmet se našao pred Vrhovnim sudom Mađarske. Sud je na temelju činjenica da je član 11 Zakona o zabrani nepoštene poslovne prakse i ograničavanju konkurencije suštinski identičan članu 101 UFEU (kao posledica harmonizacije nacionalnog prava Mađarske s pravnim tekovinama EU u postupku pridruživanja EU), a imajući u vidu da postoji potreba za ujednačenim tumačenjem prava EU, odlučio da Evropskom sudu pravde pošalje prethodno pitanje da li bilateralni sporazumi između osiguravajućeg društva i pojedinačnih servisa automobila, odnosno između osiguravajućeg društva i udruženja servisa automobila, prema kojima cena popravke po satu koju osiguravajuće društvo plaća servisu za popravku vozila osiguranih kod osiguravajućeg društva zavisi, između ostalog, i od broja i procenta polisa osiguranja zaključenih sa osiguravajućim društvom preko servisa, koji istupa kao posrednik u osiguranju dotičnog osiguravajućeg društva, može da se smatra sporazumom čiji je cilj sprečavanje, ograničavanje odnosno narušavanje konkurencije.

### **3.1. Stav Evropskog suda pravde**

Evropski sud pravde je najpre razmotrio pitanja u vezi sa sopstvenom nadležnosti. Nadležnost Evropskog suda je bilo potencijalno sporno pitanje zato što ograničenja konkurencije iz predmeta nisu imala uticaj na trgovinu između država članica, već samo na nacionalno tržište Mađarske. Stoga član 101 UFEU nije bio direktno primenjiv na sporno pitanje.

Međutim, prema članu 276 TFEU, kada nacionalni sud uputi pitanje Evropskom sudu pravde u pogledu tumačenja odredaba prava EU, Evropski sud je načelno dužan da pruži odgovor. Imajući u vidu da je član 11 Mađarskog zakona praktično identičan članu 101 UFEU, da je svrha člana 11 Mađarskog zakona zabrana onih oblika ponašanja obuhvaćenih članom 101 UFEU, a naročito imajući u vidu da u preambuli zakona mađarski zakonodavac pojašnjava da je svrha zakona harmonizacija s propisima EU između ostalog i u oblasti konkurencije, te na kraju da sam Vrhovni sud Mađarske smatra da član 11 nacionalnog zakona treba tumačiti na isti način kao član 101 UFEU, sud je odlučio da postoji nadležnost za odlučivanja odnosno da odgovori na postavljeno pitanje.

Dalje, Evropski sud pravde posvećuje se konkretnom pitanju odnosno razmatra da li se opisani sporazumi mogu kvalifikovati kao sporazumi kojima je cilj sprečavanje, ograničavanje ili narušavanje konkurencije.

Sud podseća na dihotomiju zabranjenih sporazuma prema evropskom komunitarnom pravu konkurencije, tj. da su prema članu 101 UFEU zabranjeni sporazumi čiji je cilj ili posledica narušavanje ili ograničavanje konkurencije (tzv. restriktivni sporazumi). Cilj ili posledica predstavljaju alternativne uslove za kvalifikaciju sporazuma kao restriktivnog i samim tim zabranjenog.

Prema prethodnoj praksi Suda, kada se smatra da sporazum ima za cilj narušavanje ili ograničavanje konkurencije, takav sporazum je *per se* zabranjen, i ne mora se utvrđivati efekat (posledica) takvog sporazuma na tržište. Takvi sporazumi su po samoj svojoj prirodi štetni za pravilno funkcionisanje tržišta i konkurencije (npr. kartelni sporazumi o cenama) i samo zaključenje takvog sporazuma je kršenje pravila konkurencije.

S druge strane, kada cilj sporazuma nije ograničavanje ili narušavanje konkurencije, sporazum i dalje za posledicu može imati ograničavanje ili narušavanje konkurencije i takav sporazum bi bio u suprotnosti s članom 101 UFEU, po osnovu drugog uslova (posledica sporazuma je ograničenje konkurencije). Međutim, u ovom slučaju nadležni organ mora izvršiti kompleksnu ekonomsku analizu i utvrditi efekte sporazuma na tržište i konkurenciju kako bi dokazao povredu člana 101 UFEU.

Kako je postavljeno pitanje u vezi sa sporazumima koji za cilj imaju ograničenje ili narušavanje konkurencije, sud podseća da je prilikom utvrđivanja ovakve povrede neophodno uzeti u obzir sadržaj odredaba, kao i ekonomski i pravni kontekst

sporazuma, te da kod sporazuma koji za cilj imaju ograničavanje ili narušavanje konkurencije, namera ugovornih strana (učesnika na tržištu) nije relevantna.

Sud dalje zaključuje da sporazumi stvaraju „vezu“ između naknade za popravku automobila i provizija za posredovanje u osiguranju, te da je u pitanju vertikalni sporazum između učesnika na različitom nivou distribucije, ali ta činjenica (da je sporazum vertikalni) ne znači da takav sporazum ne može biti po svom cilju usmeren na ograničenje ili narušavanje konkurencije (što je bio jedan od argumenata stranaka u postupku).

Sud smatra da takav sporazum može biti *per se* povreda prava konkurencije (odnosno da sporazum može imati ograničenje konkurencije kao svoj cilj) u slučaju kada sud koji je uputio zahtev utvrdi da je verovatno da bi, s obzirom na ekonomski kontekst, konkurencija na datom tržištu bila eliminisana ili znatno oslabljena nakon zaključenja takvog sporazuma. Kako bi se utvrdila verovatnoća nastupanja takvih posledica, trebao bi da sud posebno uzme u obzir strukturu tržišta, postojanje alternativnih distributivnih kanala i tržišnu snagu učesnika u sporazumu.

Dalje, u konkretnom slučaju, Sud navodi da su bilateralni sporazumi između osiguravača i trgovaca automobilima (tj. njihovih servisa) zaključeni na osnovu odluke Udruženja trgovaca automobilima GEMSOZ o preporučenim satnicama za popravke automobila. Ukoliko nacionalni sud smatra da odluka udruženja ima za cilj ograničenje konkurencije, onda se i prateći individualni (bilateralni) ugovori između osiguravajućeg društva i servisa, zaključeni na osnovu krovnog ugovora i odluke Udruženja, moraju smatrati sporazumima kojima je cilj ograničavanje konkurencije, te da takvi ugovori mogu biti u suprotnosti sa članom 101 UFEU ukoliko je nakon konkretnog i pojedinačnog ispitivanja teksta i cilja tih sporazuma te ekonomskog i pravnog konteksta očigledno da su oni, po samoj svojoj prirodi, štetni za pravilno funkcionisanje konkurencije na jednom od dva navedena tržišta.

#### 4. Kratak osvrt na presudu

U teoriji prava konkurencije ova presuda smatra se upitnom, stoga što je rezonovanje suda u ovom predmetu donekle zamutilo granicu između sporazuma koji za cilj imaju narušavanje konkurencije od onih sporazuma koji kao posledicu imaju narušavanje konkurencije.<sup>2</sup> Premda se smatra da je u meritumu odluka suda ispravna, upitan je način na koji je sud došao do zaključka.

Ovo stoga što je sud u odluci naveo da se sporazumi mogu smatrati *per se* zabranjenim (tj. antikonkurentski po cilju) ukoliko se „utvrdi da je verovatno da će, s obzirom na ekonomski kontekst, konkurencija na datom tržištu biti eliminisana ili

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<sup>2</sup> J. Faull and A. Nikpay, *Faull and Nikpay: The EU Law of Competition 3<sup>rd</sup> edition*, Oxford University Press, 2014, str. 241–243.

znatno oslabljena nakon zaključenja takvog sporazuma“. Međutim, takva analiza se obično vrši kada je neophodno proceniti *posledice* sporazuma, odnosno kada sud ili nadležni organ dokazuju da je u pitanju sporazum koji za svoj cilj nema ograničenje ili narušavanje konkurencije, ali kao posledicu može imati ograničenje ili narušavanje konkurencije. To je u suprotnosti s prethodnom praksom suda da nema potrebe dokazivati posledice (efekte) sporazuma na tržište i konkurenciju ukoliko se utvrdi da je cilj sporazuma ograničavanje konkurencije. Drugim rečima, deluje kao da sud procenjuje cilj sporazuma preko analize efekta sporazuma. Ukoliko bi se takav način razmišljanja primenio na sve restriktivne sporazume, nadležni organi ili sudovi u EU morali bi sprovoditi ekonomsku analizu čak i za „očigledne“ povrede konkurencije poput kartelnog utvrđivanja cena među učesnicima na tržištu.

Međutim, domašaj ove presude je nešto uži, pošto se konkretan predmet odnosi na one sporazume kod kojih cilj jeste ograničenje konkurencije, ali takav cilj nije vidljiv „na prvi pogled“. U tom smislu ne treba smatrati da je ova presuda uspostavila dodatne uslove za kvalifikaciju sporazuma kao povrede konkurencije po cilju, već da se odnosi na one sporazume kod kojih se antikonkurentski cilj otkriva tek kada se sporazum posmatra u kontekstu tržišta i uslova konkurencije na konkretnom tržištu, odnosno kada i naizgled bezopasne strategije poput podsticanja servisa da nude veći obim posredničkih usluga osiguranja, kako bi bolje naplatili svoje primarne usluge od osiguravajućeg društva, usled strukture tržišta, alternativnih distributivnih kanala i tržišnog udela stranaka u sporazumu, mogu imati za cilj ograničenje konkurencije.

UDK: [368+339.137]:341.645(4-672EU)(439)

**Nikola L. Filipović, LL.M.<sup>1</sup>**

FOREIGN COURT PRACTICE

## **JUDGEMENT OF THE EUROPEAN COURT OF JUSTICE IN THE CASE C-32/11**

### **1. Introduction**

The legal issue dealt with by the European Court of Justice in the case C-32/11 *Allianz Hungary* (judgement made on 14<sup>th</sup> March 2013) was placed in the context of agreements concluded between insurance companies and car repairers and/or repair shops (that were also distribution channels of insurance, i.e. insurance intermediaries). According to agreements, hourly rates for vehicle repair (prices charged by a repair shop to an insurance company) depended on, among other things, the number of insurance agreements concluded via repair shops, i.e. whether such agreements between insurance companies and repair shops, in terms of competition law, aimed to limit competition on the market.

### **2. EU Regulatory Framework**

Article 101 paragraph 1 of the Treaty on the Functioning of the European Union (TFEU) prohibited as incompatible with the internal market all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition, and in particular those which:

- directly or indirectly fix purchase or selling prices or any other trading conditions;
- limit or control production, markets, technical development, or investment;
- share markets or sources of supply;

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<sup>1</sup> Compliance Advisor

- apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
- make the conclusion of agreements subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such agreements.

### **2.1. Hungarian Law**

Article 11 of the Law No. LVII id 1996 on the Prohibition of Unfair Market Practices and Restriction of Competition prohibits agreements limiting market competition by prohibiting all agreements between undertakings, decisions by associations of undertakings, public corporations, or other similar organisations [...] which have as their object or effect the prevention, restriction or distortion of competition (except for agreements between undertakings that are not independent of each other, i.e. they do not qualify as such kind of agreements).

This prohibition applies, in particular, to:

- the direct or indirect fixing of purchase or selling prices or other business terms and conditions;
- the limitation or control of production, market, technical development or investments;
- the allocation of markets or sources of supply, exclusion of a specified group of consumers from purchasing certain goods;
- the hindering of market entry;
- cases, where, given transactions of the same value or character, there is discrimination between trading parties, including the application of prices, periods of payment, discriminatory selling or purchase terms and conditions or methods placing certain trading parties at a competitive disadvantage;
- making the conclusion of agreements subject to the acceptance of obligations which, by their nature or according to commercial usage do not belong to the subject of such agreements.

## **3. Subject Matter of the Proceedings and Legal Issues**

Hungarian insurers, primarily *Allianz* (but also *Generali*), negotiated once a year with car repairers about prices that insurance companies would pay to car repairers for repairing damage caused by accidents involving insured vehicles. According to these agreements, car repairers could immediately repair the damaged car in line with agreed terms and prices.

Since 2002, many authorized car dealers, that at the same time have repair shops, requested from their trade association GEMOSZ (*Gépjármű Márkakereskedők Országos Szövetsége*) to negotiate on behalf of members with insurance companies about the hourly rates that these repair shops would apply when repairing damaged cars.

According to such business model, car dealers or their repair shops, would at the same time provide repairs and act as an insurance distribution channel (insurance brokers or agents) offering their clients conclusion of an insurance contract when selling or repairing a car.

In 2004 and 2005, GEMOSZ concluded a framework agreement with *Allianz Insurance*, and according to that agreement, the Association adopted a recommendation, and certain authorized car dealers (members of the Association) signed individual agreements with *Allianz Insurance*. According to those individual agreements, repair shops of those dealers could charge higher hourly rates to the insurance company for repairs if the agreed sales targets were reached (e.g. a defined percentage of *Allianz* insurance policies in the total number of policies sold by dealers or their repair shops). *Generali* insurance also had similar agreements, but not in written form.

Hungarian Competition Authority (*Gazdasági Versenyhivatal*) stated that such agreements violated the Article 11 of the Law on the Prohibition of Unfair Market Practices and Restriction of Competition. The decision by the Association GEMSOZ on recommended prices (hourly rates) for authorised car repairers charged to insurance companies was a horizontal agreement between undertakings, while individual agreements concluded between the *Allianz* and authorised trading companies where hourly rates depended on the number and scale of written insurance policies were vertical agreements between undertakings. Both types of agreements aim to limit insurance market competition and car repair market. As a result, the Hungarian Competition Authority imposed penalties to parties to such agreements - both insurance companies and car dealers that concluded such agreements and their Association, which negotiated the framework agreement and adopted the decision on recommended repair prices.

After a series of appeals, the case was brought before the Supreme Court of Hungary. The court concluded that Article 11 of the Law on the Prohibition of Unfair Market Practices and Restriction of Competition is essentially identical to Article 101 of the TFEU (as a result of harmonization of the Hungarian national law with the European Union *acquis* in the process of joining the EU). Having in mind that there is a need for uniform interpretation of the EU law, the Supreme Court of Hungary decided to refer the question to the European Court of Justice of whether bilateral agreements between an insurance company and individual car repairers, or between an insurance company and a car repairers' association, under which the hourly repair charge paid by the insurance company to the repairer for the repair of

vehicles insured by the insurance company depends, among other things, on the number and scale of insurance policies taken out with the insurance company by the repairer, as the insurance broker for the insurance company in question, qualify as agreements which have as their object the prevention, restriction or distortion of competition.

### **3.1. Opinion of the European Court of Justice**

The European Court of Justice first considered issues related to its own jurisdiction. The jurisdiction of the European Court of Justice was a potentially controversial issue because the restrictions on competition in the case did not affect trade between Member States, but only the national market of Hungary. Therefore, Article 101 of the TFEU was not directly applicable to the question at issue.

However, according to Article 276 of the TFEU, when a national court refers a question to the European Court of Justice regarding the interpretation of provisions of the EU law, the European Court is obliged to provide an answer. Having in mind that Article 11 of the Hungarian Law is practically identical to Article 101 of the TFEU and that the purpose of Article 11 of the Hungarian Law is to prohibit those forms of behaviour covered by Article 101 of the TFEU. Considering that in the preamble of the law, the Hungarian legislator clarifies that the purpose of the law is harmonization with the EU regulations, including competition, and that the Supreme Court of Hungary considers that Article 11 of the national law should be interpreted in the same way as the Article 101 of the TFEU, the European Court of Justice decided that there is jurisdiction to decide.

Furthermore, the European Court of Justice considered whether the said agreements qualify as agreements that have as their object to prevent, limit or distort competition.

The court reminded of the dichotomy of prohibited agreements according to the Antitrust Law in the European Economic Community i.e. that according to Article 101 of the TFEU, agreements whose aim or consequence is to distort or restrict competition (so-called restrictive agreements) are prohibited. Aim or consequence is an alternative condition to qualify an agreement as a restrictive and therefore prohibited.

According to the Court's previous practice, when it is deemed that an agreement aims to distort or limit competition, such an agreement is *per se* prohibited, and the effect (consequence) of such an agreement on the market does not have to be determined. Such agreements are by their nature harmful to proper functioning of the market and competition (e.g. cartel agreements on prices) and the conclusion of such an agreement is a violation of competition rules.

On the other hand, when the aim of an agreement is not to restrict or distort competition, the agreement may still restrict or distort competition and as



such would be contrary to Article 101 of the TFEU under the second condition (the effect of the agreement is a restriction of competition). However, in this case, the competent authority must perform a complex economic analysis and determine the effects of the agreement on the market and competition in order to prove a violation of Article 101 of the TFEU.

Regarding agreements whose aim is to restrict or distort competition, the court reminded that when determining such violation it is necessary to take into account the content of provisions, as well as the economic and legal context of the agreement. In case of agreements whose aim is to restrict or distort competition, the intention of the contracting parties (market participants) is not relevant.

The court further concluded that the agreements created a link between the car repair fee and insurance brokerage fees – vertical agreements between participants at different levels of distribution. That fact (that the agreement is vertical) did not mean that such agreement could not be aimed at restricting or distorting competition (which was one of the arguments of the parties to the proceedings).

The court deemed that such an agreement may be *per se* a violation of competition law (the agreement may aim at a restriction of competition) when the requesting court determined that it was likely that, given the economic context, competition in the concerned market would be eliminated or significantly weakened after the conclusion of such an agreement. In order to determine the likelihood of such consequences, the court should take into account the structure of the market, the existence of alternative distribution channels and the market power of the participants in the agreement.

Furthermore, the Court stated that bilateral agreements between insurers and car dealers (i.e. their repair shops) were concluded based on the decision of the Association of Car Dealers GEMSOZ about recommended hourly rates for car repairs. If the national court deemed that the Association's decision is aimed to limit competition, then the accompanying individual (bilateral) agreements between an insurance company and a repair shop (concluded according to the framework agreement and the decision of the Association) must be considered as agreements aimed at limiting competition. Such agreements may be in conflict with Article 101 of the TFEU if, after a specific and individual examination of the text and purpose of those agreements and the economic and legal context, it was obvious that they were, by their nature, harmful to proper functioning of competition on one of the two listed markets.

#### **4. Brief Overview of Judgement**

The competition law considered this judgment as questionable, because the court's reasoning in this case somewhat blurred the line between agreements

aiming to distort competition and agreements aiming to distort competition.<sup>2</sup> Although it is considered that the court's decision is essentially correct, the manner of reaching the conclusion was questionable

The court stated that agreements can be deemed prohibited *per se* (anti-competitive) if "it is determined that it is likely, given the economic context, that competition in the concerned market would be eliminated or significantly weakened after the conclusion of such agreement". However, such analysis is usually done when it is necessary to assess consequences of the agreement, i.e. when the court or competent authority proved that it was an agreement that did not aim at a restriction or distortion of competition, but may cause a restriction or distortion of competition. This is contrary to previous practice of the court that there is no need to prove the consequences (effects) of the agreement on the market and competition if it is determined that the aim of the agreement was to limit competition. In other words, it seemed as if the court evaluated the aim of the agreement by analysing the effect of the agreement. If such mode of thinking were applied to all restrictive agreements, competent authorities or courts in the EU would have to conduct an economic analysis even for obvious violations of competition such as cartel price fixing among market participants.

However, the scope of this judgement is somewhat narrower, since the case refers to the agreements aiming to limit competition, but such aim is not visible at first sight. Therefore, it should not be considered that this judgment created additional conditions to qualify the agreement as a violation of competition, but that it referred to agreements where the anti-competitive aim is revealed only when the agreement is viewed in the context of the market and the conditions of competition on the market. When seemingly harmless strategies such as encouraging repair shops to offer a larger volume of intermediary insurance services, in order to better charge their primary services from an insurance company, due to the structure of the market, alternative distribution channels and the market share of the parties to the agreement, may aim to limit competition.

*Translated by*  
**Jelena Rajković**

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<sup>2</sup> J. Faull and A. Nikpay, *Faull and Nikpay: The EU Law of Competition 3<sup>rd</sup> edition*, Oxford University Press, 2014, str. 241–243.

## GRČKA: ODŠTETE ZA ŠUMSKE POŽARE U LETO 2023. PROCENJUJU SE NA 49 MILIONA EVRA

Nakon šumskih požara koji su letos zahvatili Grčku, prijavljene su 403 štete, a ukupne naknade iznose 48,78 miliona evra, objavila je Unija osiguravajućih društava Grčke (EAAE).

Podaci su izračunati korišćenjem informacija što su ih pružila osiguravajuća društva koja su učestvovala u istrazi EAAE o prvoj proceni naknada grčkog tržišta osiguranja za gubitke u osiguranju imovine i automobila od šumskih požara u leto 2023.

Napominje se da istraga uključuje štete uzrokovane dvema teškim epizodama šumskih požara koji su se razbuktili u Grčkoj:

17–28. jul 2023. (požar u Saronidi, na Rodosu, u Lutrakiju, Aghialosu) – procenjeni gubici pre izuzeća 33,47 miliona evra;

19–31. avgust 2023. (u Pili, Aspropirgosu, Boiotiji, Kavali i Evrosu) – procenjeni gubici pre izuzeća 15,31 miliona evra.

Od 387 gubitaka povezanih s imovinskim osiguranjem (ukupni procenjeni gubici pre izuzeća 48,65 miliona evra) potiču iz sledećih kategorija:

- Domaćinstva – procenjena šteta: 4,04 miliona evra
- Komercijalni rizici – procenjeni gubitak: 26,69 miliona evra
- Fotonapon – procenjena šteta: 0,5 miliona evra
- Tehnički radovi – procenjeni gubitak: 0,58 miliona evra
- Industrijske opasnosti – procenjeni gubitak: 16,84 miliona evra.

Osim toga, evidentirano je devet šteta kod auto-osiguranja (procenjene štete od 43 hiljade evra) i sedam šteta kod transportnih osiguranja (procenjenih 85 hiljada evra).

Predsednik Odbora za imovinu, saobraćaj i reosiguranje, Erikos Matsos, rekao je u tom pogledu: „Račun šumskih požara u 2023. bio je naročito težak, i rezultira time da će 2023. Grčka biti na vrhu popisa evropskih zemalja u smislu ozbiljnosti požara. Grčko tržište osiguranja započelo je proces kompenzacije od prvog trenutka, a ukupan iznos koji sektor treba da plati najveći je iznos za šumske požare do sada. Nažalost, katastrofa nije završila požarima, jer smo u septembru imali katastrofalno nevreme Danijel. Očekuje se da će istraga o proceni tih naknada biti dovršena i objavljena u bliskoj budućnosti.“

Izvor: <https://osiguranje.hr/ClanakDetalji.aspx?22460>

## FRANCUSKA: ŠTETA OD OLUJA PROCENJENA NA VIŠE OD MILIJARDU EVRA

Šteta nastala u olujama Kijaran i Domingos, koje su pogodile Francusku početkom meseca, procenjena je na 1,3 milijarde evra, saopšteno je iz francuskog udruženja osiguravajućih društava.

– Nakon oluja Kijaran i Domingos koje su pogodile Francusku od 1. do 5. novembra, osiguravajuće kuće su u kontaktu s vlasnicima polisa osiguranja. Šteta se procenjuje na oko 1,3 milijarde evra za 517.000 zahteva za odštetu, navodi se u medijskom saopštenju.

Te oluje bile su najrazornije u Francuskoj tokom poslednjih 30 godina. Najveća šteta je registrovana u slučajevima poplavljenih kuća, uništenih krovova usled jakog vetra i oštećenja automobila, a 91 posto štete je na privatnoj imovini.

Oluja Kijaran pogodila je Francusku 1. novembra, prvenstveno regije atlantske obale, i to najviše područja Bretanje, Normandije, Pa de Kalea, zatim Novu Akvitaniju i Korziku. Oko 1,2 miliona domaćinstava ostalo je bez struje, tri osobe su poginule, a najmanje 47 ih je povređeno. Oluja Domingos pogodila je Francusku 4. novembra.

Izvor: <https://osiguranje.hr/ClanakDetalji.aspx?22481>

## BROJ ŽRTAVA RANSOMWARE-a PORASTAO ZA ČAK 143 POSTO NA GLOBALNOM NIVOU TOKOM PRVOG KVARTALA 2023.

Osiguravač „Alijanc“ objavio je studiju o tendencijama kibernetičke sigurnosti u kojoj analizira najnovije pretnje i donosi najbolje prakse pre, tokom i nakon hakovanja.

U 2023. godini kibernetičke pretnje nastavljaju da se razvijaju pa je tako zabeležen zabrinjavajući porast pretnji od ucenjivačkih zloćudnih programa (ransomware). „Alijancova“ analiza velikih kibernetičkih gubitaka pokazuje da se broj slučajeva izvlačenja podataka povećava svake godine – udvostručivši se sa 40 odsto u 2019. na gotovo 80 posto u 2022, s tim da je 2023. godine gubitak znatno veći.

Ulaganja u kibernetičku bezbednost se isplate, ali će opseg pretnji koji se razvija zahtevati mnogo veći fokus na sposobnosti ranog otkrivanja i odgovora. Poboljšanja u kibernetičkoj sigurnosti i kontinuitetu poslovanja pomažu u borbi protiv napada takvih virusa koji se temelje na enkripciji, ali opseg kibernetičkih pretnji neprestano se razvija. U 2023. došlo je do zabrinjavajućeg ponovnog porasta

upotrebe *ransomware*-a i iznuda, što je rezultiralo porastom broja skupih incidenata, pokazujući da, iako je postignut napredak, pretnja koju predstavlja *zloćudni iznuđivački virus* pokazuje malo znakova smanjenja.

U izveštajima se navodi da je broj žrtava tih zlonamernih softvera porastao za čak 143 odsto na globalnom nivou tokom prvog kvartala 2023, a u januaru i februaru zabeležen je najveći broj slučajeva hakovanja i curenja informacija u poslednje tri godine. Predviđa se da će samo *ransomware* do 2031. koštati svoje žrtve približno 265 milijardi dolara godišnje.

Hakeri sve više ciljaju IT i fizičke lance snabdevanja, pokreću masovne kibernetičke napade i pronalaze nove načine za iznuđivanje novca od velikih i malih firmi. Većina takvih napada sada uključuje krađu ličnih ili osetljivih komercijalnih podataka u svrhu iznude, stvarajući dodatne troškove i komplikacije, kao i povećanu opasnost od narušavanja ugleda i odgovornosti treće strane. „Alijancova“ analiza niza velikih kibernetičkih gubitaka u osiguravajućoj delatnosti pokazuje da se udeo slučajeva u kojima su podaci izvučeni povećava svake godine – sa 40 odsto u 2019. na oko 77 posto u 2022, a 2023. na putu je da to premaši.

Zaštita organizacija od upada ostaje igra mačke i miša u kojoj prednost imaju sajber kriminalci. Akteri pretnji sada istražuju načine korišćenja veštačke inteligencije (AI) za automatizaciju i ubravanje napada, stvaranje efikasnijeg zlonamernog softvera i krađe identiteta koji pokreće AI. U kombinaciji s eksplozijom povezanih mobilnih uređaja i interneta stvari sa dostupnom mrežom 5G, izgleda da će se u nadolazećim godinama mogućnosti kibernetičkih napada samo povećati.

Sprečiti kibernetički napad postaje sve teže, a ulozi su sve veći. Kao rezultat toga, mogućnosti ranog otkrivanja i odgovora postaju sve važnije. Upad može brzo eskalirati, a nakon što su podaci šifrirani i/ili ukradeni, posledice i troškovi mogu biti ogromni – troškovi mogu biti čak 1.000 puta veći nego što bi bili da je incident otkriven i obuzdan rano, pokazuje „Alijancova“ analiza.

Mogućnosti ranog otkrivanja i učinkovitog odgovora biće ključne za ublažavanje uticaja kibernetičkih napada i osiguravanje održivog tržišta osiguranja u budućnosti.

Izvor: <https://www.svijetosiguranja.eu/broj-zrtava-ransomwarea-porastao-za-cak-143-posto-na-globalnoj-razini-tijekom-prvog-kvartala-2023/>

## **PROSEČAN SLOVENAC LANE POTROŠIO 1.329 EVRA NA OSIGURANJE IMOVINE I ŽIVOTA**

Premije osiguranja u Sloveniji činile su 4,7 odsto BDP-a, što je najniži procenat od 2000. godine. Razvoj osiguranja lane je pao za 0,3 postotna boda, nakon pada od 0,5 postotnih bodova godinu dana ranije. To je rezultat većeg rasta BDP-a, koji je dosegao najveću apsolutnu vrednost do sada.

Osiguranje je, uprkos tome, još jedan od najvažnijih sektora u Sloveniji. Prošle godine ukupne premije osiguranja koje su zaračunale članice slovenačkog udruženja porasle su za 7,1 odsto, na 2.801,3 miliona evra, što je najveći iznos do sada. Nakon dve godine negativnih rezultata, tržište životnih osiguranja beleži rast od 3,5 posto, dok tržište neživotnih osiguranja osmu godinu zaredom beleži rast (8,5 procenata u 2022. godini). Udeo neživotnih osiguranja u ukupnoj premiji osiguranja porastao je za 1,3 odsto, na rekordni nivo od 72,4 posto.

U grupi neživotnih osiguranja premija osiguranja najviše je porasla u zdravstvenom osiguranju (za 24,2 odsto), u kasko osiguranju motornih vozila (za 13,4 posto) i u osiguranju od automobilske odgovornosti (za 10,4 procenta). U vrsti životnih osiguranja premija je najviše porasla kod životnih osiguranja vezanih za investicione fondove (10,5 posto). Premije ličnih osiguranja, koja uključuju nezgodu, zdravstvena i životna osiguranja, porasle su za 4,2 procenta, na 1.557,8 miliona evra, što je činilo 55,6 odsto ukupnog prometa članica udruženja (pad od 1,6 postotnih bodova u odnosu na 2021). Dopunsko zdravstveno osiguranje zabeležilo je pozitivan rast od 3,8 odsto u 2022. godini i činilo je 22,6 posto svih prikupljenih premija osiguranja (0,8 postotnih bodova manje nego 2021. godine).

Prosečan stanovnik Slovenije lane je potrošio 1.329 evra na osiguranje imovine i života. To je najveća brojka do danas. Prosečan stanovnik poseduje 8,6 posto od svih neživotnih vrsta osiguranja i na njih potroši 963 evra. Prosečno, stanovnik Slovenije ima 3,6 posto životnih osiguranja i prosečno za njih daje 367 evra, što je ujedno i najveći nivo do sada.

*Izvor: <https://osiguranje.hr/ClanakDetalji.aspx?22450>*

## **ISTRAŽIVANJE „EUROSTAT“: RAST BROJA NEZGODA NA RADNOM MESTU**

U 2021. gotovo 2,88 miliona nezgoda na radu bez smrtnog ishoda u EU rezultiralo je izostankom s posla od četiri ili više dana. Broj nezgoda bio je za šest posto veći u poređenju sa 2020. To povećanje verovatno je povezano s privrednim

oporavkom koji je usledio nakon opšteg usporavanja u 2020. u vezi s pandemijom kovida 19, zaključak je koji donose i osiguravači.

Ukupno 3.347 nesreća na radu u 2021. bilo je sa smrtnim ishodom (0,1 posto od ukupnog broja nesreća), što je za 11 slučajeva manje u odnosu na 2020. godinu.

U 2021. godini, kao i u 2020, ozlede koje su rezultirale izostankom s posla od 7 do 13 dana bile su najučestalija vrsta ozleđa, ukupno 761.988 njih (26 procenata od ukupnog broja povreda).

Nesreće koje su rezultirale izostankom s posla od jednog do tri meseca bile su druga po učestalosti vrsta nesreća u 2021. (543.076; 19 posto od ukupnog broja ozleđa). Najlakše vrste nezgoda (četiri do šest dana izostanka s posla) bile su treće po učestalosti (487.049; 17 posto od ukupnog broja).

U 2021. nesreće sa smrtnim ishodom bile su najređe vrste nesreća. Isključujući nesreće „nespecifične“ težine, nesreće s posledicom trajne nesposobnosti za rad bile su druga po učestalosti vrsta ozleđa (136.290, pet odsto od ukupnog broja) u 2021. godini. U toj godini gotovo svi privredni sektori doživeli su porast povreda u poređenju sa 2020. Konkretno, oblast „umetnosti, zabave i rekreacije“ zabeležila je značajan porast u broju nesreća (21 odsto), a odmah iza nje su „administrativne aktivnosti i usluge podrške“ (19 odsto) i „promet i skladištenje“ (15 posto).

U EU su 2021. godine zabeležene dve naročito česte vrste povreda: površinske rane i ozlede (28 posto od ukupnog broja), te iščašenja, uganuća i istegnuća (26 procenata). Slede druga dva relativno česta tipa povreda: potres mozga i unutrašnje ozlede (19,5 posto), te prelomi kostiju (11 odsto). Nijedna druga vrsta ozleđa nije imala dvocifren udeo u ukupnom broju ozleđa u EU.

Izvor: <https://osiguranje.hr/ClanakDetalji.aspx?22472>

## **„ASA CENTRAL OSIGURANJE“ POSTALO VLASNIŠTVO „NOVOTELA“**

Kompanije „ASA Central osiguranje“ Sarajevo i „Tehnoservis d.o.o.“ Donja Mahala ušle su u vlasničku strukturu najmlađeg telekomunikacionog operatera u Bosni i Hercegovini, „Novotela“. Ta dva društva stekla su po deset posto vlasništva u kompaniji „Novotel“ d.o.o. Sarajevo, pa sada ovaj pružalac usluga mobilne telefonije ukupno ima četiri vlasnika.

Osnivač „Novotela“, Ivan Kožul, ostao je većinski vlasnik kompanije. Njegova firma „Pro Futuro“ d.o.o. Mostar sada ima 77 posto vlasničkog udela u „Novotelu“, dok Kožul ima udeo od tri posto. Prethodno je firma „Pro Futuro“ kontrolisala 90 posto, a Ivan Kožul 10 posto udela.

Upisani kapital „Novotela“ iznosi 30.000 konvertibilnih maraka KM.

„ASA Central osiguranje“ Sarajevo vodeći je osiguravač u Bosni i Hercegovini u vlasništvu ASA grupacije. Drugi novi suvlasnik „Tehnoservis“ d.o.o. Donja Mahala je mala firma u vlasništvu Marka Maskaljevića koja se bavi tehničkim ispitivanjem i analizom, a radi na području regije Orašje. U 2022. godini imala je prihod od 732,9 hiljada KM.

„Novotel“ je u 2022. godini imao tržišni udeo u mobilnoj telefoniji na tržištu Bosne i Hercegovine od 0,27 posto, mereno po broju korisnika.

„Novotel,“ je najmlađi telekomunikacioni operater u Bosni i Hercegovini, počeo je s radom u septembru 2021. godine, a poslovanje je zasnovao na infrastrukturi m: tela, koju je zakupio.

Izvor: <https://www.osiguranje.hr/ClanakDetalji.aspx?22489>

## LAQO UVODI DIGITALNO OSIGURANJE KUĆNIH LJUBIMACA

LAQO, digitalni brend „Kroacija osiguranja“ koji deluje u „Adris grupi“, slavi treći rođendan i lidersku poziciju na tržištu digitalnih osiguranja u Hrvatskoj. U samo tri godine LAQO je uveo niz inovacija na hrvatskom i svetskom tržištu osiguranja, a sada najavljuje još jednu: prvi uvodi u potpunosti digitalno osiguranje kućnih ljubimaca u Hrvatskoj.

Od lansiranja do danas, LAQO veb-stranica beleži više od 7,6 miliona pregleda, a proračunavanje cene osiguranja obavljeno je više od 1,2 miliona puta. Sjajne rezultate LAQO ostvaruje i u programu prevencije LaqoZaštita, koji klijente podstiče na sigurniju vožnju, te ih je nagradio s više od 2.200 nagrada. Zabeleženo je i značajno interesovanje za novo putno osiguranje koje je na LAQO vebu od lansiranja pregledano više od 180 hiljada puta. LAQO GPT, digitalni asistent razvijen u saradnji s Infobipom, uspešno je odgovorio na većinu upita korisnika od svog lansiranja. LAQO je predstavio prvi muzej osiguranja na svetu na platformi Decentralend. Prvi je i među osiguranjima u Hrvatskoj uveo plaćanje kriptovalutama.

„Lansirajući LAQO, odlučili smo da preuzmemo ulogu predvodnika digitalnih promena i inovacija na našem tržištu, na tome kontinuirano i uspešno radimo, što potvrđuju i rezultati. Naši su procesi jednostavni, proizvodi su jasni i pristupačni klijentima. LAQO se smatra jednim od najbrže rastućih veb-platfomi u Evropi, to je brend koji ne prati, nego stvara trendove. U tom smeru, povodom trećeg rođendana, odlučili smo da najavimo još jednu inovaciju: u potpunosti digitalno osiguranje kućnih ljubimaca,“ ističe Ana Zovko, direktor Sektora za digitalni razvoj „Kroacija osiguranja“.



Tržište osiguranja kućnih ljubimaca u Evropi procenjeno je na gotovo tri milijarde evra, a prema predviđanjima, trebalo bi da dosegne vrednost veću od 5,5 milijardi evra do 2028. godine.

U 2022. bilo je oko 145 miliona kućnih ljubimaca samo u Evropskoj uniji, a prema podacima „Evropa pet osiguranja“, psi i mačke su najpopularniji među njima. Nakon polisa obaveznog i kasko osiguranja za vozila i putnog osiguranja, LAQO uvodi novu uslugu – u potpunosti digitalno osiguranje kućnih ljubimaca u Hrvatskoj.

LAQO osiguranje primenljivo je na ljubimce, tačnije pse i mačke, sa pedigreom ili bez njega, koji su čipovani i stari između osam nedelja i deset godina. Osiguranje traje godinu dana, a korisnik može osigurati više ljubimaca.

Osnovno osiguranje uključuje privatnu odgovornost (odnosi se na uništenu imovinu koju kućni ljubimac prouzrokuje drugome, te na štetu nanесenu drugoj osobi), i pokrće posledica nesrećnog slučaja. Svi ugovarači mogu koristiti veterinarsku stanicu po izboru širom Hrvatske, a polisa osiguranja za isplatu štete uvek im je dostupna u LAQO aplikaciji. U ponudi digitalnog osiguranja je pokrće za dijagnostiku, lečenje, preglede i lekove, kao i pokrće za prevenciju raznih zaraznih bolesti. LAQO osiguranje za kućne ljubimce biće dostupno krajem oktobra na LAQO vebu.

Izvor: <https://osiguranje.hr/ClanakDetalji.aspx?22406>

Priredila: **Ana V. Vodineić, MA**

## TEŠKO DELO PROTIV BEZBEDNOSTI JAVNOG SAOBRAĆAJA

**Obaveza vozača da preduzme potrebne mere da vozilo što pre ukloni s kolovoza auto-puta nije vremenski opredeljena, niti je njeno nepoštovanje propisano kao saobraćajni prekršaj, tako da je bez uticaja na nastanak saobraćajne nezgode to koliko vremena je kombi vozilo provelo zaustavljeno na zaustavnoj traci pre saobraćajne nezgode.**

*Iz obrazloženja:*

Pobijajući prvostepenu presudu zbog pogrešnog zaključka prvostepenog suda da nije bilo doprinosa vozača kombija u nastanku saobraćajne nezgode, žalbom branioca optuženog se ukazuje na pogrešno utvrđeno činjenično stanje, pa su ovakvi žalbeni navodi ocenjeni kao neosnovani. Naime, prvostepeni sud je pravilno utvrdio da je PMV folksvagen, kojim je upravljao sada pokojni D. R., zbog kvara bio zaustavljen u zaustavnoj traci auto-puta Beograd–Niš, u smeru ka Nišu, da je celim svojim gabaritom bio na zaustavnoj traci, te da je D. R. pozvao šlep službu, čiji su dolazak čekali, zbog čega se ne može zaključiti da on nije preuzeo mere da vozilo što pre ukloni s puta u smislu člana 105 stav 3 ZOBS-a. Navodi žalbe da je vozilo bilo zaustavljeno na 10-12 km od Niša, koji ima veći broj šlep službi, koje bi došle za 30 minuta na lice mesta i da onda ne bi došlo do nezgode, ocenjeni su kao neosnovani. Obaveza vozača propisana odredbom člana 105 stav 3 ZOBS-a da preduzme potrebne mere da vozilo što pre ukloni sa kolovoza auto-puta, nije vremenski opredeljena, niti je njeno nepoštovanje propisano kao saobraćajni prekršaj, tako da je bez uticaja na nastanak saobraćajne nezgode to koliko vremena je kombi vozilo provelo zaustavljeno na zaustavnoj traci pre saobraćajne nezgode.

*(Presuda Apelacionog suda u Nišu, Kž1 32/22 od 15. III 2022)  
(Izbor sudske prakse br. 5-6/2023, str. 37.)*

## **ODGOVORNOST IZVOĐAČA ZA NEDOSTATKE GRAĐEVINE**

**U pogledu odgovornosti izvođača za nedostatke građevine primenjuju se odgovarajuće odredbe ugovora o delu.**

*Iz obrazloženja:*

Odredbom člana 641 ZOO propisano je da se, ukoliko u ovoj glavi nije drugačije određeno, za odgovornost za nedostatke građevine primenjuje odgovarajuća odredba ugovora o delu. Odgovornost za nedostatke građevine o kojoj je reč u ovom članu odnosi se na odgovornost izvođača za one nedostatke građevine koje ne ugrožavaju njenu solidnost i stabilnost, odgovornost se odnosi na kvalitet tzv. malih radova kao što su fasada, drvenarija, grejanje, kanalizacija i slični radovi. Prema samoj definiciji ugovora o građenju (član 630. ZOO) ova vrsta ugovora predstavlja ugovor o delu, pa je zato u ovom članu određeno da se u pogledu odgovornosti izvođača za nedostatke građevine primenjuju odgovarajuće odredbe ugovora o delu.

Izvođač radova odgovara za one nedostatke građevine, odnosno izvedenih građevinskih radova koji su nastupili zbog toga što se nije pridržavao ugovora, tehničke dokumentacije, odgovarajućih standarda i pravila struke. Izvođač radova odgovara ako su nedostaci građevine rezultat greške u projektu jer je bio dužan da sa stručnom pažnjom pregleda projekat i da na greške u projektu upozori naručioca ili projektanta, on odgovara i za nedostatke građevine koji su posledica mane materijala (materijal neodgovarajućeg kvaliteta), bez obzira na to da li je materijal za izgradnju dao on ili naručilac. Izvođač radova dužan je u izvršavanju obaveze iz svoje profesionalne delatnosti postupati sa povećanom pažnjom, prema pravilima struke i običajima. On odgovara i za greške lica kome je poverio obavljanje jednog dela posla (tzv. podizvođača). U tom smislu ocenjen je i iskaz svedoka G. G. da je tužilac sam pribavio akt o urbanističkim uslovima kojima je predviđeno da objekat može da se priključi na planiranu infrastrukturu, da se ti urbanistički uslovi odnose na lokaciju odnosno objekat ali to ne znači da će objekat sigurno biti priključen već samo ukoliko bude izgrađena infrastruktura. Prava naručioca prema izvođaču zbog mane građevine proizlaze iz načela jednake vrednosti davanja kod obostrano obavezujućih ugovora (član 15 ZOO) u koji spada i ugovor o građenju, pa proizlazi da za ugovorenu cenu naručilac treba da dobije ispravnu građevinu. U konkretnom slučaju do nedostataka na građevini i na stanovima došlo je zato što izvođač u vezi sa izvršavanjem obaveze iz ugovora o građenju nije postupao sa pažnjom dobrog stručnjaka (član 18 stav 2 ZOO).

Tužiocu nisu izgubili pravo na sudsku zaštitu za nedostatke na građevini iako su pisanim putem obavestili tuženog o nedostacima na stanu 4. 3. 2010. godine, a tužbu podneli 31. 10. 2011. godine, dakle nakon isteka roka od jedne godine,

u smislu člana 616 ZOO kojim je predviđeno da naručilac koji je poslenika na vreme obavestio o nedostacima izvršenog posla ne može svoje pravo ostvarivati sudskim putem po isteku od jedne godine od učinjenog obaveštenja. Odredbom člana 617 ZOO određeno je da se poslenik ne može pozivati na neku odredbu prethodnih članova kada se nedostatak odnosi na činjenice koje su mu bile poznate ili mu nisu mogle ostati nepoznate, a nije ih saopštio naručiocu. U ovom članu primenjeno je načelo savesnosti i poštenja u materiji odgovornost za nedostatke kod ugovora o delu pa je predviđen gubitak prava poslenika iz čl. 614-616 ZOO ukoliko je on nesavestan, tj. ukoliko se nedostatak odnosi na činjenice koje su mu bile poznate ili mu nisu mogle ostati nepoznate, a nije ih saopštio naručiocu. Tuženom su bile poznate činjenice koje se odnose na nekvalitetno izvedene radove, odnosno nisu mu mogle ostati nepoznate, a nije ih saopštio tužiocima. Ovo posebno iz razloga što je tuženi preduzimao određene radnje u cilju otklanjanja nedostataka na zgradi i stanovima pre a i po dobijanju obaveštenja od 4. 3. 2010. godine a što je trajalo i u leto 2011. godine.

*(Presuda Apelacionog suda u Beogradu, Gž. 4905/18 od 3. II 2022)  
(Izbor sudske prakse br. 5-6/2023, str. 49.)*

## **GUBITAK PRAVA IZ UGOVORA O OSIGURANJU OD AUTO-ODGOVORNOSTI**

**Vozač koji je upravljao motornim vozilo i u trenutku saobraćajne nezgode bio pod dejstvom alkohola, gubi prava iz ugovora o osiguranju od auto-odgovornosti.**

*Iz obrazloženja:*

Prvostepeni sud najpre zaključuje da su na tužioca kao osiguravača, isplatom naknade štete oštećenim licima, prešla sva prava oštećenih prema licu odgovornom za štetu i imajući u vidu činjenicu da je u konkretnom slučaju došlo do gubitka prava iz ugovora o osiguranju od auto-odgovornosti jer je vozač u trenutku saobraćajne nezgode bio pod dejstvom alkohola, i donosi odluku o usvajanju tužiočevog regresnog zahteva prema tuženom.

Neosnovani su žalbeni navodi kojima tuženi osporava osnov tužbenog zahteva u smislu odgovornosti za nastanak štetnog događaja. Ovo iz razloga što je tuženi pravosnažnom presudom Osnovnog suda u senti poslovni broj K. 734/2014 od 6. 3. 2015. godine (koja je postala pravosnažna 17. 4. 2015. godine), oglašen krivim da je izvršio krivično delo teško delo protiv bezbednosti javnog saobraćaja iz člana 297 stav 1

u vezi sa članom 289 stav 1 KZ, za šta mu je izrečena uslovna osuda, kazna zatvora u trajanju od deset meseci koja se neće izvršiti ako okrivljeni za vreme od dve godine ne učini novo krivično delo, kao i mera bezbednosti zabrane upravljanja motornim vozilom E kategorije u trajanju od četiri meseca računajući od dana pravosnažnosti krivične presude. Izrekom krivične presude, tuženi kao okrivljeni je oglašen krivim za nastanak saobraćajne nezgode jer je usled alkoholisanosti izgubio kontrolu nad vozilom kojim je upravljao i prešao na levu kolovoznu traku namenjenu za kretanje vozila iz suprotnog smera i naleteo na putničko vozilo u kojem su se nalazila treća oštećena lica. U smislu člana 13 ZPP, u parničnom postupku, sud je u pogledu postojanja krivičnog dela i krivične odgovornosti učinioca vezan za pravosnažnu presudu krivičnog suda kojom se optuženi oglašava krivim. S tim u vezi su neosnovani i žalbeni navodi kojima se osporava učešće veštaka saobraćajne struke M. M. u parničnom postupku, s obzirom na to da su se parnične stranke na ročištu održanom 10. 2. 2020. godine i 22. 7. 2020. godine saglasile da se u parnici koristi nalaz i mišljenje ovog veštaka saobraćajne struke i da isti bude saslušan. Na navedeni način neosporno je raspravljena i utvrđena isključiva odgovornost tuženog za nastanak štetnog događaja, pa su svi žalbeni navodi kojima se utvrđena tuženog osporava, neosnovani.

Neosnovani su žalbeni navodi kojima se osporava pasivna legitimacija tuženog. Za rešavanje konkretnog spora po zahtevu tužioca za regresnu isplatu, od značaja su odredbe iz člana 29 stav 1 tačka 4 i stav 3 Zakona o obaveznom osiguranju u saobraćaju, kojim je propisano da osigurano lice gubi prava iz osiguranja ako je vozač upravljao motornim vozilom pod uticajem alkohola iznad dozvoljene granice, a društvo za osiguranje koje naknadi štetu oštećenom licu iz stava 2 ovog člana, stupa u prava oštećenog lica prema licu koje je odgovorno za štetu, za iznos isplaćene naknade, kamatu od isplate naknade i troškove postupka. Tuženi je u konkretnom slučaju solidarni dužnik sa vlasnikom vozila, ali i krajnji dužnik u smislu člana 163 stav 7 Zakona o radu, prema kojem zaposleni koji je na radu ili u vezi s radom namerno ili krajnjom nepažnjom prozrokovao štetu trećem licu, a koju je naknadio poslodavac, dužan je da poslodavcu naknadi iznos isplaćene štete (pri čemu se u konkretnom slučaju ne može očekivati da poslodavac tuženog ispuni obavezu prema tužiocu, jer je, prema javno dostupnim podacima iz registra privrednih društava, brisan iz registra i prestao da postoji).

Neosnovano je žalbeno pozivanje na odredbe člana 939 ZOO kojima se reguliše stupanje osiguravača u prava svog osiguranika (nrp. kasko osiguranje), jer u konkretnom slučaju tužilac stupa u prava oštećenog lica prema licu odgovornom za štetu shodno članu 28 stav 2 Zakona o obaveznom osiguranju u saobraćaju, kojom odredbom se reguliše slučaj prelaska na osiguravača svih prava osiguranika prema licu odgovornom za štetu.

*Presuda Apelacionog suda u Novom Sadu, Gž. 2840/20 od 16. VI 2021)  
(Izbor sudske prakse br. 5-6/2023, str. 50.)*

## VALUTNA ODREDBA

Valutna odredba / Novčana odredba (engl. *currency clause*, nem. *Währungsklausel*) – 1. zaštitna ugovorna stavka kojom se određeni novčani iznos vezuje uz tečaj neke stabilne valute ili valutne korpe kako bi se očuvala njegova vrednost. To je slučaj, recimo, u osiguranju života kod osigurane svote ili premije osiguranja. Na taj način se ugovornici štite od mogućeg službenog smanjenja (poverilac) ili povećanja (dužnik) vrednosti novca, koje prouzrokuje povećanje odnosno smanjenje ugovorenog iznosa plaćanja. U uslovima nepostojanosti domaće valute, zbog visokih inflacijskih stopa i netačnih pokazatelja rasta cena, valutna odredba se pojavila kao sredstvo obezbeđenja od mogućih rizika koje koriste osiguravajuća društva. 2. u reosiguranju, kad su izvorne premije osiguranja i štete iskazane u različitim valutama, obračun između reosiguravača i reosiguranika izvodi se u jednoj valuti pa je novčanom odredbom neophodno utvrditi koja će to valuta biti i koji će se tečaj primenjavati.

Izvor: Nebojša Žarković, *Pojmovnik osiguranja*, Novi Sad, 2013, str. 21.

## DIJAGNOSTIČKI IZVEŠTAJ

Dijagnostički izveštaj (engl. *due diligence*, nem. *gebührende Sorgfalt, gebotene Sorgfalt*) – opsežno proveravanje preduzeća, obično pre njegove kupovine. Mogući kupci tim izveštajem dobijaju saznanja o novčanom i pravnom položaju preduzeća, o njegovom mestu na tržištu, unutrašnjem ustrojstvu, proizvodima ili uslugama koje pruža te o drugim pojedinostima. Izvori obaveštenja su poslovne isprave samog preduzeća, isprave iz spoljnog okruženja, kao i posete i razgovori sa zaposlenima na licu mesta. Težnja je da se utvrdi činjenično stanje, a pogotovo skriveni nedostaci koji bi mogli ometati kupovinu. U osiguravajućoj delatnosti to bi, recimo, predstavljala moguća naknadna izdvajanja za rezervisane štete u osiguranju od odgovornosti. Dijagnostički izveštaj pojačava valjanost odluke o kupovini i poboljšava tačnost ocene vrednosti preduzeća. Krupni nedostaci mogu odbiti zainteresovanog kupca ili dovesti do snižavanja cene, odnosno ugradnje prodavčevog jemstva u kupoprodajni ugovor. Izrada dijagnostičkog izveštaja je visokostručni posao koji izvode pre svega

pravnici, računospitači i poreski savetnici, ali i inženjeri, posrednici u osiguranju, stručnjaci za zaštitu životne sredine i drugi.

Izvor: Nebojša Žarković, *Pojmovnik osiguranja*, Novi Sad, 2013, str. 58–59.

### **ISCURENJE (LEKAŽA)**

Iscurenje / lekaža (engl. *leakage*, nem. *Auslaufen, Auslauf, Leckage*) – gubitak tečnosti usled isticanja kroz pukotine ili naprsline iz različitih posuda, brodova ili železničkih kola i slično. U osiguranju tereta kod prevoznog osiguranja razlikuju se redovno iscurenje kao samostalna pojava (ovakve štete su izričito isključene odgovarajućim institutskim odredbama) i vanredno iscurenje kao posledica osiguranog rizika, kao što su recimo sudar, udar ili požar na prevoznom sredstvu. U osiguranju od požara, dopunskim osiguranjem je pokriveno isticanje tečnosti, odnosno gasova iz nepokretnih sudova – cisterni, cevovoda i slično, ako do iscurenja dođe iznenadnim prskanjem suda ili neočekivanim kvarom na ugrađenom uređaju za istakanje i utakanje tečnosti. Iscurenje se sreće kao osigurana opasnost i u osiguranju domaćinstva, odnosno u osiguranju stambenih zgrada.

Izvor: Nebojša Žarković, *Pojmovnik osiguranja*, Novi Sad, 2013, str. 123.

### **OSIGURANJE PUTNIKA U AUTOMOBILU OD NEZGODE**

Osiguranje putnika u automobilu od nezgode (engl. *motor vehicle passenger insurance, passenger accident insurance*, nem. *Kraftfahrtun-fallversicherung, Insassenun-fallversicherung*) – za razliku od osiguranja od auto-odgovornosti prema trećim licima koja se najčešće nalaze izvan motornog vozila, ovim osiguranjem se obuhvata opasnost od nastanka nesrećnog slučaja putnika i vozača u samom vozilu. Ono je poseban oblik osiguranja od nesrećnog slučaja koje se sprovodi kao dobrovoljno osiguranje. Mesto osiguranja tačno je određeno: putnici su zaštićeni tokom vožnje, te za vreme ulaska i silaska s vozila. Merodavni su opšti uslovi osiguranja od posledica nezgode i posebne dopunske odredbe. Može se zaključiti kao osiguranje za slučaj smrti, invalidnosti, osiguranje dnevne naknade i obezbeđenje troškova lečenja. Sklapa se posebno, osiguranjem lica, ili uz polis osiguranja od auto-odgovornosti ili kasko-osiguranja motornih vozila.

Izvor: Nebojša Žarković, *Pojmovnik osiguranja*, Novi Sad, 2013, str. 334-335.

## Odabrani članci

**Simon Dicks: How insurtech is transforming fleet risk calculations. – Kako tehnologije u osiguranju transformišu procenu rizika voznih parkova.** Osiguravači se oduvek suočavaju sa izazovom preciznog izračunavanja rizika, pogotovo u oblasti komercijalnih voznih parkova, gde različiti faktori doprinose proceni štete. Da bi te niti povezali i videli celokupnu sliku, osiguravačima je potreban pristup preciznim podacima. Deo problema leži u alatu koji se koristi za prikupljanje podataka o vozačima i riziku od nesreća, a koji često pruža fragmentarnu ili retroaktivnu sliku.

Trenutni pristup prvom obaveštenju o šteti (FNOL) zasniva se na tradicionalnoj tehnologiji telematike, koja identifikuje okidače G sile poput naglog kočenja ili udara. Iako je to ubrzalo informacije o nezgodama, nedostaje smanjenje neopodnog rizika. FNOL ostaje reaktivan, nudeći uvide tek nakon što nastupi događaj, ostavljajući osiguravače nesvesne potencijalnih rizika, poput vozača koji konzumira cigarete, koji koristi mobilni telefon ili ne nosi sigurnosni pojas, a otrežnjenje dolazi kada se desi ozbiljan incident.

Inovativne tehnologije u osiguranju integracijom mašinskog vizuelnog prepoznavanja (MV) i veštačke inteligencije (AI) menjaju oblast procene rizika. MV analizira slike u stvarnom vremenu kako bi identifikovao različite obrasce vožnje, dok AI procenjuje rizik povezan s tim obrascima. Na primer, može otkriti znakove umora, distrakcije ili konzumiranja hrane i pića tokom vožnje. Nakon identifikacije, vozači dobijaju upozorenja kako bi ispravili svoje ponašanje u datom trenutku. Ponovljeni slučajevi rizičnog ponašanja zatim se evidentiraju kao deo prvog obaveštenja o riziku (FNOR), omogućavajući proaktivno obaveštavanje o riziku rukovodiocima voznih parkova i osiguravačima mnogo ranije nego što se dogodi incident. FNOR omogućava osiguravačima pristup ključnim informacijama na vreme, uz poštovanje sporazuma o deljenju podataka. Kada voznim parkovima omoguće direktan pristup tim informacijama, osiguravači mogu posmatrati svakodnevne aktivnosti, identifikovati obrasce rizičnog ponašanja u realnom vremenu i pružiti bliže praćenje i podršku. Taj prelazak sa FNOL na FNOR, vođen naprednim tehnologijama kao što je veštačka inteligencija, ne samo da smanjuje nagađanja već i eliminiše potrebu za oslanjanjem isključivo na istoriju podatka kako bi se procenio rizik i odredila premija. Ta transformacija zahteva promenu mentalnog sklopa, naglašavajući potencijal inovativnih tehnologija u osiguranju da štede vreme, novac i, što je najvažnije, živote.

(Insurance Post, oktobar 2023)



**The economics of digitalisation in insurance. – Ekonomija digitalizacije u osiguranju.** Digitalna tehnologija u potpunosti je promenila stvaranje vrednosti. Danas „neopipljive imovine“, uključujući digitalne podatke, čine značajan deo ekonomske vrednosti i izvor su novih rizika. Digitalizacija takođe omogućava značajne operativne efikasnosti. Ipak, slično produktivnom paradoksu koji je pogodio globalnu ekonomiju tokom poslednjih 20 godina, potpuni transformacioni uticaj digitalne tehnologije na delatnost osiguranja ostaje nerešen. Novi Indeks digitalizacije osiguranja sugeriše da su napredna tržišta s relativno jakom fizičkom infrastrukturom, i gde veći broj ljudi ima pristup internetu, najviše napredovala u digitalizaciji svojih sektora osiguranja. Nove tržišne potencijale imaju zemlje u razvoju koje su ih brzo sustigle tokom poslednjih 10 godina. Za društvo, digitalizacija predstavlja snagu za pružanje pristupa osiguranju većem broju ljudi. Za osiguravajuće kuće, dobiti od boljeg procenjivanja rizika i njegovog smanjenja digitalizacijom osiguranja poboljšavaju kvalitet i efikasnost njihovog rada, kaže Jerome Haegeli, glavni ekonomista Grupe „Swiss Re“.

Digitalizacija je temeljno preoblikovala korporativni sektor. Kako su se preduzeća prebacila sa proizvodnje fizičkih dobara na pružanje informacija i usluga, promenila se i struktura njihovih bilansa. Takozvana neopipljiva sredstva predstavljaju glavnu priliku za rast u delatnosti osiguranja. Globalna vrednost neopipljivih sredstava kompanija povećala se pet puta u poslednjih 20 godina, i gotovo 80% te vrednosti nije osigurano. Procenjuje se da se globalno tržište sajber osiguranja povećalo za 60% u poslednje dve godine, a prognozira se rast od preko 50% u narednih pet godina.

Nove tehnologije takođe se mogu koristiti za unapređenje procesa smanjenja rizika. Povećana upotreba podataka i analitike podataka, pogotovo senzorskih tehnologija i umrežavanja fabrika, zgrada, mašina i drugih fizičkih objekata, može smanjiti učestalost i ozbiljnost nesreća. Digitalna transformacija ostaje visoko pozicionirana na agendi delatnosti. Početni fokus investicija bio je na digitalnim distributivnim kanalima, ali pažnja se od tada preusmerila na druge delove lanca vrednosti osiguranja, uključujući procese procene rizika. Dalja transformacija delatnosti putem digitalizacije biće dugoročan proces. Pre svega na makronivou, prelazak na digitalno zahteva izgradnju i upravljanje različitim infrastrukturnim sredstvima. A za same osiguravače, uspešna primena digitalne tehnologije zavisi od dostupnosti podataka, zahteva za interpretacijom i kompleksnosti sistema.

(Swiss Re, oktobar 2023,  
<https://www.swissre.com/institute/research/sigma-research/sigma-2023-05-digitalisation.html>)

**Helen Challis: AmTrust International’s Challis on supporting mothers working in insurance. – Challis iz „AmTrust International“-a o podršci majkama**

**koje rade u osiguranju.** Helen Challis, šef ljudskih resursa u grupi „AmTrust International“, deli ključni izazov povratka na posao nakon porodijskog odsustva i napore koje ulaže kako bi se sektor učinio inkluzivnijim za majke.

Danas više žena radi u osiguranju nego ikada pre, i većina kompanija je svesna potrebe za većom raznolikošću i inkluzijom. Međutim, kada sam bila prvi put mama, vremena su bila drugačija, a majke koje rade poput mene suočavale su se sa značajnim preprekama. Radim u delatnosti osiguranja od 2014. godine i posvećena sam pomaganju ženama i drugima da prevaziđu prepreke uspostavljanjem grupa za raznolikost i inkluziju. Bila sam deo originalne radne grupe koja je osnovala Dive In Festival 2015. godine, koji promovise svest o raznolikosti i inkluziji u osiguranju. Da bi zadržale vredne zaposlene, osiguravajuće kuće moraju podržavati zaposlene koji se odluče da imaju decu, a radno okruženje trebalo bi da im omogući da to učine tako da se to ne odrazi negativno na njihov karijerni razvoj. Kolege treba obučiti o inkluzivnosti i neophodnosti privlačenja, zadržavanja i promovisanja raznovrsnije grupe ljudi. U „AmTrust“-u smo organizovali obuku za prepoznavanje nesvesnih predrasuda za naše više rukovodioce, a Izvršno veće za raznolikost osnovano je 2020. godine kao deo naših napora u strategiji raznolikosti i inkluzije i sastoji se od izvršnih i senior poslovnih lidera. Kompanija takođe ima niz mreža resursa koje vode zaposleni i koje deluju kao podrška unutar „AmTrust“-a. Da bi podstakao raznovrsnost, jednakost i inkluziju u široj zajednici i podržao naše socijalne inicijative brige, osnovana je inicijativa pod nazivom AmTrust Cares, koja omogućava zaposlenima da odvoje osam radnih sati za volonterski rad, bilo da je reč o lokalnim bankama hrane, Crvenom krstu, skloništim za životinje ili čišćenju smeća u lokalnim parkovima. Iako u „AmTrust International“-u radi više žena nego muškaraca, tržište i dalje nema dovoljno žena na visokim pozicijama i mi u „AmTrust“-u radimo svoj deo kako bismo to promenili. Cilj nam je da osiguramo raznoliku listu kandidata za naše visoke pozicije, iako se uspešni kandidati biraju na osnovu njihove sposobnosti i prikladnosti za ulogu. Znamo da raznolika radna snaga poboljšava donošenje odluka i rešavanje problema. Posvećeni smo daljem unapređenju napora za raznolikost i inkluziju u osiguravajućoj delatnosti i želimo videti više saveznika i zagovornika koji aktivno podržavaju rodnu ravnopravnost na radnom mestu. Promene se ne dešavaju preko noći i još mnogo toga treba učiniti, ali mora se dogoditi da bi naša delatnost postala mesto gde svi koji rade ovde mogu napredovati, zaključuje Helen Challis.

*(Insurance Post, oktobar 2023)*

**Karim Derrick: Open insurance: A reality or a pipe dream? – Otvoreno osiguranje: Stvarnost ili pusti snovi?** Osiguravajuće kuće su dobro upoznate sa izazovima pokušaja primene procesa inovacija podataka, pogotovo kada je u pitanju

vlasništvo i usklađivanje sa zakonskim regulativama. Ta oblast predstavlja dugoročan izazov za sektor osiguranja, i uprkos rečima regulatora, čini se da se malo toga menja. Upravljanje podacima je uslovljeno GDPR regulativama, i ne iznenađuje to što osiguravači izbegavaju deljenje podataka iz komercijalnih razloga. Kao rezultat, stvarna podrška za stvaranje otvorenijeg okruženja podataka u osiguranju stagnira. Iako Kancelarija poverenika za informacije i Advokatsko regulatorno telo prepoznaju te izazove, ne pružaju jasne smernice koje stručnjaci za podatke i inovacije traže. Možda je vreme da se stvari razmotre iz drugačije perspektive. Retko se u razgovorima o otvorenim podacima pominju krajnji korisnici, stoga je važno promeniti pristup. Postoje primeri, poput Nacionalne zdravstvene službe (NHS) tokom pandemije, koji pokazuju da se veliki skupovi podataka mogu deliti brzo i u skladu sa zakonima o privatnosti, čime se postiže opšte dobro. U domenu finansija, otvoreno bankarstvo od 2018. godine omogućava korisnicima i malim preduzećima bezbedno deljenje informacija o tekućim računima s trećim stranama, koje potom koriste te podatke kako bi prilagodile svoje aplikacije i usluge specifičnim finansijskim okolnostima i potrebama ljudi. Ključ uspeha u tom procesu je standardizacija, stoga je potrebna saradnja celokupne delatnosti kako bi se definisali standardi. Primeri poput IFRS 17 u osiguranju ili otvorenog formata dokumenata koji podržava *Google* pokazuju da se veliki ciljevi mogu postići samo otvorenom saradnjom. I dok inicijative poput istraživačkog centra Open Insurance nastoje da pospeše razvoj inovativnih tehnologija u osiguranju, pravi fokus treba da bude na tome da se osiguravačima pomogne da naprave korak dalje. Izveštaj Accenture-a iz 2020. godine o otvorenom osiguranju ukazuje na značajne koristi koje ono može doneti osiguravačima, omogućavajući im da unaprede proizvode i usluge, da stvaraju nove izvore prihoda i da iskoriste tokove podataka u realnom vremenu. Kao delatnost, potrebno je da razmotrimo širu sliku kako bismo ostvarili bolju budućnost sa poboljšanim podacima, što podrazumeva donošenje odluka zasnovano na temeljnijim uvidima, sa unapređenim korisničkim iskustvom i besprekornim procesom prijavljivanja šteta. Ako jedna aplikacija može agregirati moje investicije, zašto onda ne bi mogla i moje polise osiguranja, zaključuje Karim Derrick.

*(Insurance Post, mart 2023)*

**Harry Curtis: Insurers risk being 'left behind' if they don't share data.**  
– **Osiguravači rizikuju da „ostanu u zaostatku“ ukoliko ne dele podatke.** Osiguravači koji zadržavaju podatke o šteti samo za sebe rizikuju da ostanu u zaostatku, upozorava James Burton, direktor za osiguranje u „LexisNexis Risk Solutions UK & Ireland“-u. Kompanija se priprema za lansiranje baza podataka za osiguranje domaćinstva i motornih vozila, podstičući osiguravače da dele podatke kako bi se

identifikovala potencijalna prevara. Burton naglašava važnost prilagođavanja novim pristupima vođenim podacima u delatnosti, sa naglaskom na sintezi različitih izvora podataka. Takođe primećuje sve veću ulogu stručnjaka za podatke u osiguranju, ističući uticaj propisa koji su uvedeni kako bi se zabranila dvostruka procena i podstakla fer vrednost – što takođe menja način korišćenja podataka. Primetili smo povećanu potražnju za podacima koje već isporučujemo, korišćene samo u različitim delovima životnog ciklusa osiguranja, rekao je. Videli smo da osiguravači koriste set podataka u trenutku ponude, a zatim će isti osiguravač želeći da iskoristi te iste podatke u trenutku obnove ugovora, kako bi bili sigurni da su cene jednake. Tada mogu koristiti te podatke kao dokaz zašto bi trebalo da dođe do promene u premiji ako se određeni faktor promeni ili šta god da je slučaj, dodao je Burton.

„LexisNexis Precision Claims“ za osiguranje domaćinstva trebalo bi da bude lansiran pre kraja godine, i pružiće osiguravačima koji doprinose podacima jasniju sliku o štetama na domaćinstvima za pojedinačne osiguranike i objekte. Verzija za motorna vozila trebalo bi da bude lansirana tokom prvog polugodišta naredne godine. Osiguravači i partnerske brokerske kuće doprinosiće informacijama o svojim zahtevima prema standardnoj specifikaciji, rekao je Barton. On je dodao da je 36% tržišta osiguranja domaćinstava i 44% tržišta osiguranja motornih vozila potpisalo ugovore o deljenju podataka. Baze podataka sadržavaće mnoštvo podataka o štetama, od prvog obaveštenja o gubitku do poravnjanja. Dok „LexisNexis Risk Solutions“ već dugo koristi modele mašinskog učenja i veštačke inteligencije, Burton nove prilike vidi u pogledu nedavnog napretka jezičkih modela poput *ChatGPT*-a i *Google Bard*-a, sugerišući njihove potencijalne primene i kako se mogu uklopiti u eko-sistem osiguranja.

*(Insurance Post, novembar 2023)*

*Prevela i priredila: Tijana V. Đekić, dipl. filolog*

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Mirko Vasiljević (urednik), *Akcionarska društva, berze i akcije*, Beograd, 2006, 30.

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N. Žarković, str. 125.

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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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Primer:

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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Zakon o osiguranju – ZO, *Službeni glasnik RS*, br. 55/04, čl. 38, st. 2.

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Primeri:

nemački Trgovački zakonik iz 1897. godine (*Handelsgesetzbuch*), par. 29.  
britanski Kompanijski zakon iz 2006. godine (*Companies Act*; dalje u f-  
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Primer:

Christos Gortsos, The Supervision of Financial Conglomerates under Euro-  
pean Financial Law (Directive 2002/87/EC), 2010,  
*<http://fic.wharton.upenn.edu/fic/papers/09/0936.pdf>*, pristupljeno: 16. 7.  
2016, str. 2

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The text should be typed in *arial* or *times new roman* font, onto A4 paper size, font size set at 12 points, using 1.5 line spacing. The text should not exceed a total of 45.000 characters, including spaces.

The manuscript should contain: title, name, middle initial and surname of author, academic degree, name and address of the institution from which the work originates, abstract, keywords, the text of the manuscript, acknowledgments (optional), references.

**Title** of the article should be centered, typed in capital letters (versals), clear and not too long.

Headings should be in the following format:

1) First-level heading – centred; numbering in Roman numerals (e.g. I, II, III etc.); only the first letter capitalized, in bold (boldface).

2) Second-level heading – centred; numbering in Arabic numerals with full stop (e.g. 1., 2., 3. etc.); only the first letter capitalized, in bold.

3) Third-level heading – centred; numbering in Arabic numerals (e.g. 1.1., 1.2., 1.3., etc.); only the first letter capitalized, in bold.

4) Fourth-level heading – centred; in italics, Arabic numerals (e.g. 1.1.1, 1.1.2, etc.); only the first letter capitalized, in bold.

Example:

**I Insurance classification**  
**1. Insurance of property and persons**  
**1.1. Differences between insurance of property and insurance of persons**  
**1.1.1. Indemnity principle**

**First and last name(s) of the author(s) and middle initial(s) as well as the academic degree** should be typed in italics, above the title of the paper.

**The affiliation(s)** and e-mail address of the author should be provided in the first footnote.

**Abstract** should be typed under the title. Abstract should not exceed the word limit of 150 and should contain a short review of the content and conclusions of the paper, so that it can be used when indexing the paper in referential periodicals and databases.

**Keywords** are listed in a separate line, at the end of the abstract, in italics. Keywords should be relevant to the topic and content of the paper. The paper should not contain more than ten keywords in the Serbian or English language.

**Photos, drawings and other illustrations** should be of good quality.  
**Please, do not:**

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## **Author Guidelines**

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- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); these typically have a low number of pixels and limited set of colours;
- Supply files that have resolution lower than **300 dpi** (dots per inch);
- Submit graphics that are disproportionately large for the content.

**Acknowledgements** should be included in a separate section, at the end of the article, before the list of references.

**References** (bibliography used in the preparation of the paper) are cited in the language in which they were published.

### **Footnote and bibliographic citations**

#### **1. Books**

a) The books should be cited, as follows:

First and last name of author, book title in italics, edition number in ordinal form, place and year of publication, page number.

Example:

Nebojša Žarković, *Glossary of Insurance Terms*, Novi Sad, 2013, pp. 100

b) When a book has multiple authors, their first and last names are separated with a comma.

Example:

Marjan Čurković, Vladimir Miletić, *Pravo osiguranja Europske ekonomske zajednice*, Croatia osiguranje d. d., Zagreb, 1993.

c) When citing an edited book, after the first and last name of an editor, the word "editor" is typed in parenthesis, in the language in which the book was published.

Example:

Mirko Vasiljević (urednik), *Akcionarska društva, berze i akcije*, Beograd, 2006, 30.

d) Repeated citations from the same author should include only the first initial and a full stop before the last name of the author and the number of the page.

Example:

N. Žarković, pp. 125

e) If two or more references to the same author are cited, the first initial and a full stop should be included before the last name of the author, and then the year of publication in brackets and the page number.

Example:

N. Žarković (2013), pp. 25

#### **2. Articles**

Articles are cited, as follows:

a) First and last name of author, title of article enclosed in quotation marks, name of the journal typed in italics, number and year of issue, page number.

Example:

Jasna Pak, „Pravna zaštita korisnika usluga osiguranja“, *Privreda i pravo u tranziciji*, Palić, 2004, str. 35.

b) When citing the article written by more than one author, their first and last names are separated with a comma.

Example:

Jelena Kočović, Marija Jovović, „Uticaj liberalizacije i privatizacije na razvoj tržišta osiguranja u Srbiji“, *Tokovi osiguranja*, br. 1/2016, str. 5

c) The article published in edited conference proceedings or a book is cited as follows: first and last name of author, title of article enclosed in quotation marks, title of book or proceedings written in italics, word *editor* or *sub-editor*, first and last name of editor typed in parenthesis, edition number in ordinal form, place and year of publication, page number.

Example:

Vladimir Kovčić, „Stečaj akcionarskog društva za osiguranje“, *Pravo osiguranja u tranziciji* (urednici Predrag Šulejić i Jovan Slavnić), Palić, 2003, str. 56.

d) Repeated citations from the same author should include only the first initial followed by a full stop before the last name of the author and the number of the page.

Example:

Jasna Pak, pp. 57

### **3. Regulations**

a) The regulations are cited as follows: full title of regulation, gazette in which the regulation was published typed in italics, gazette number and year of publishing, abbreviations art., par., item and/or par. and regulation number.

Example:

Law on Compulsory Traffic Insurance, *Official Gazette of the Republic of Serbia*, no.51/09, art.15

b) For every subsequent reference to the said Law, when citing the Law for the first time, please specify the abbreviation of such regulation after its full name, and this abbreviation should be used further in the text.

Example:

Insurance Law – IL, *Official Gazette of the Republic of Serbia*, no.55/04, art.38, par.2

c) Article, paragraph and item of a regulation are referred to as abbreviations art., par., item

Example:

art.35, par.5 item 8 or par.8

d) when repeating the reference to a specific regulation, please specify its full title or abbreviation introduced during the first citing, abbreviation art., item or par. and number of regulation.

Examples:

Insurance Law, art.15

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## **Author Guidelines**

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IL, art.15

e) The regulations written in a language other than Serbian should be cited as follows: full title of regulation translated into the Serbian language, year of publishing and/or adoption, full title of regulation in original language, typed in italics, enclosed in brackets, optionally, the abbreviation under which the regulation will be referred to further in the text, abbreviation art., par., item or par.

Examples:

German Commercial Code 1897 (*Handelsgesetzbuch*), par. 29.

British Companies Act 2006 (*Companies Act*; referred in footnotes as: CA), art.53

### **4. Web sources**

a) The Web sources should be cited as follows: first and last name of author and/or the organization from which the paper originates, paper title, optionally, place and year of publication, website in italics, the date when the website was accessed and page number.

Example:

Christos Gortsos, The Supervision of Financial Conglomerates under European Financial Law (Directive 2002/87/EC), 2010,

*<http://fic.wharton.upenn.edu/fic/papers/09/0936.pdf>*, accessed on: 16/7/2016, pp. 2

b) For repeated citations from the Web source, the first initial followed by a full stop before the last name of the author should be included, that is, the name of organization from which the paper originates, the paper title and page number.

Example:

C. Gortsos, The Supervision of Financial Conglomerates under European Financial Law (Directive 2002/87/EC), pp. 12.

**Footnotes** should be placed at the bottom of each page, and the list of used references should appear at the end of the article.

**The rules for citing bibliography at the end of the article** are slightly different in terms of placing the last name of the author first, followed by a comma, and then the first initial of the name followed by a full stop.

Example:

Žarković, N., *Glossary of Insurance Terms*, Novi Sad, 2013, pp. 100

The Editorial Board reserves the right to make any necessary changes in the papers concerning orthography, punctuation, and grammar of the Serbian and / or English language, according to the unique editing standards.

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