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VAŽNOST ODLOŽENOG POREZA NA DOBITAK U OSIGURAVAJUĆIM DRUŠTVIMA: SLUČAJ REPUBLIKE SRBIJE

ORIGINALNI NAUČNI RAD

Apstrakt

Osiguravajuća društva u Republici Srbiji (RS) dužna su da izveštavaju o odloženom porezu na dobitak, u skladu s Međunarodnim računovodstvenim standardom (MRS) 12 – Porezi na dobitak. Ona priznaju odložena poreska sredstva i odložene poreske obaveze u bilansu stanja, odnosno odloženi poreski rashod i odloženi poreski prihod u bilansu uspeha. U ovom radu ispitana je materijalnost odloženog poreza na dobitak u osiguravajućim društvima u RS, kao i njegov uticaj na procenu profitabilnosti i opterećenja porezom na dobitak društava. Istraživanjem je obuhvaćeno šesnaest osiguravajućih društava u periodu od 2017. do 2020. godine. Istraživanje je pokazalo da su efektivne poreske stope u prosečnom osiguravajućem društvu u RS niže u odnosu na propisanu stopu poreza na dobitak. Rezultati istraživanja pokazuju da odloženi porez obično ne predstavlja materijalno značajnu poziciju finansijskih izveštaja osiguravajućih društava. Takođe, odloženi porez na dobitak nije značajna bilansna pozicija prilikom procene profitabilnosti i opterećenja porezom na dobitak osiguravajućih društava.

Ključne reči: porez na dobitak, odloženi porez, MRS 12, materijalnost, profitabilnost, osiguranje.

JEL klasifikacija: G22, H25, M41.

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I. Uvod

Oporezivanje osiguravajućih društava ima određene specifičnosti u odnosu na oporezivanje preduzeća iz realnog sektora. Verovatno najznačajnija specifičnost odnosi se na porez na premije neživotnih osiguranja, koji se u Republici Srbiji (RS) plaća po stopi od 5%. Takođe, usluge osiguranja i reosiguranja u RS oslobođene su poreza na dodatu vrednost. Ipak, poput preduzeća iz realnog sektora, osiguravajuća društva su dužna da podnesu poreski bilans i poresku prijavu za porez na dobitak, nezavisno od toga da li su poslovala s dobitkom ili gubitkom.

Dobitak pre oporezivanja utvrđen u bilansu uspeha obično se razlikuje od oporezivog dobitka utvrđenog u poreskom bilansu. Ta razlika predstavlja posledicu različitih propisa koji se koriste za utvrđivanje dobitka pre oporezivanja i oporezivog dobitka.² Dobitak pre oporezivanja utvrđuje se prema računovodstvenim standardima, dok se oporezivi dobitak utvrđuje prema poreskim zakonima. Privremene razlike između dobitka pre oporezivanja i oporezivog dobitka dovode do pojave odloženog poreza na dobitak.

Odloženi porez na dobitak može biti od izuzetnog značaja u osiguravajućim društvima. Na primer, odloženi porez često je predmet interesovanja revizora, odnosno uzrok modifikovanog revizorskog mišljenja.³ Međutim, odloženi porez na dobitak često se smatra kontroverznim pitanjem,⁴ koje je teško primeniti u praksi. Takođe, i dalje postoje brojni problemi i dileme u vezi s primenom koncepta odloženog poreza.⁵

U poslednjih deset godina u RS beleži se smanjenje broja osiguravajućih društava i povećanje broja društava u stranom vlasništvu. Takođe, finansijski pokazatelji osiguravajuće delatnosti dostigli su zadovoljavajuće vrednosti,⁶ koje su povoljnije u odnosu na brojne države centralne i istočne Evrope.⁷ Ipak, uprkos konsolidaciji sektora osiguranja u RS u poslednjoj deceniji, i dalje postoji značajan prostor za unapređenje njegove efikasnosti.⁸ Neki od načina unapređenja efikasnosti mogu se pronaći u legalnom umanjenju tekućeg rashoda za porez na dobitak ili adekvatnom

² N. Wong, Accounting for Deferred Taxes under NZ IAS 12, *University of Auckland Business Review*, 8(1), 2006, str. 55.

³ S. Vučković-Milutinović, Analysis of Modifications to Auditor's Opinion on Financial Statements of Listed Companies in Serbia, *Ekonomika preduzeća*, 67(3-4), 2019, str. 212.

⁴ N. Wong, str. 55.

⁵ R. Colley, J. Rue, A. Valencia, A. Volkan, Accounting for Deferred Taxes: Time for a Change, *Journal of Business & Economics Research*, 10(3), 2012, str. 149.

⁶ M. Sokić, Analiza CARMEL pokazatelja sektora osiguranja u Republici Srbiji, *Tokovi osiguranja*, 35(2), 2019, str. 7.

⁷ M. Cerović, Rezultati osiguranja u Srbiji u 2016. godini, *Tokovi osiguranja*, 33(3), 2017, str. 72.

⁸ Z. Đurić, M. Jakšić, A. Krstić, DEA Window Analysis of Insurance Sector Efficiency in the Republic of Serbia, *Economic Themes*, 58(3), 2020, str. 291.

upravljanju odloženim rashodom za porez na dobitak.⁹ Stoga je predmet ovog istraživanja značaj odloženog poreza na dobitak u osiguravajućim društvima u RS.

Rad ima dva osnovna cilja. Prvi cilj jeste ispitivanje materijalnosti (značajnosti) odloženog poreza na dobitak u finansijskim izveštajima osiguravajućih društava u RS. Drugi cilj rada jeste ispitivanje uticaja odloženog poreza na dobitak na procenu profitabilnosti i opterećenja porezom na dobitak osiguravajućih društava u RS.

Porez na dobitak predstavlja nedovoljno istraženo područje u osiguravajućim društvima. Nekada se čak porez na dobitak ne uzima u obzir prilikom analize njihove profitabilnosti,¹⁰ već se u analizi koriste rezultati pre oporezivanja. Stoga se doprinos istraživanja ogleda u dopuni rezultata prethodnih istraživanja o ulozi odloženog poreza na dobitak. Dodatno, prema autorovim najboljim saznanjima, ovo je prvo istraživanje o odloženom porezu na dobitak u osiguravajućim društvima u RS.

Izuzev uvoda i zaključka, rad je sačinjen od četiri dela. U prvom su razvijene istraživačke hipoteze na bazi pregleda prethodnih istraživanja. U drugom delu prikazana je analiza konteksta, kroz specifičnosti poreskog okruženja u kojima osiguravajuća društva u RS posluju. Treći deo objašnjava metodologiju istraživanja i istraživački uzorak. U četvrtom delu predstavljeni su rezultati istraživanja i diskusija o rezultatima.

II. Razvoj istraživačkih hipoteza

Iako računovođe u RS obračun odloženog poreza na dobitak percipiraju kao kompleksan,¹¹ algoritam obračuna je relativno jednostavan. Prema Međunarodnom računovodstvenom standardu (MRS) 12 – Porezi na dobitak, odložena poreska sredstva i odložene poreske obaveze utvrđuju se za privremene razlike između knjigovodstvene i poreske vrednosti sredstava i obaveza, u skladu s algoritmom prikazanim na Slici 1.

Osiguravajuće društvo će iskazati odložena poreska sredstva kada je poreska vrednost sredstva (obaveze) veća (manja) od njegove knjigovodstvene vrednosti. Razlika te dve vrednosti predstavlja odbitnu privremenu razliku, koja se množi propisanom stopom poreza na dobitak. S druge strane, odložene poreske obaveze iskazuju se kada je knjigovodstvena vrednost sredstva (obaveze) veća (manja) od njegove poreske vrednosti. Razlika te dve vrednosti predstavlja oporezivu privremenu razliku, koja se, takođe, množi propisanom stopom. Dodatno, odložena poreska

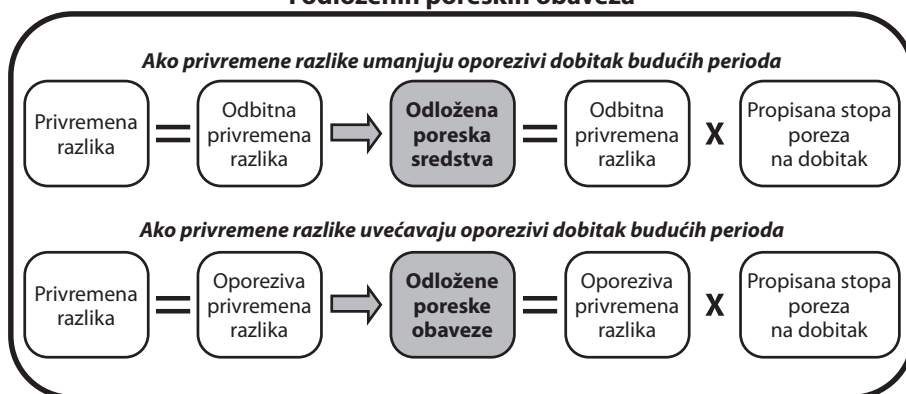
⁹ K. Holland, R. Jackson, Earnings Management and Deferred Tax, *Accounting and Business Research*, 34(2), 2004, str. 101.

¹⁰ R. Zainudin, N. Mahdzan, E. Leong, Firm-Specific Internal Determinants of Profitability Performance: An Exploratory Study of Selected Life Insurance Firms in Asia, *Journal of Asia Business Studies*, 12(4), 2018, str. 533.

¹¹ V. Obradović, M. Čupić, D. Dimitrijević, Application of International Financial Reporting Standards in the Transition Economy of Serbia, *Australian Accounting Review*, 28(1), 2018, str. 48.

sredstva i obaveze obično dovode do pojave odloženog poreskog rashoda i prihoda u bilansu uspeha osiguravajućih društava.

Slika 1. Algoritam utvrđivanja odloženih poreskih sredstava i odloženih poreskih obaveza



Izvor: autor, prema H. Sozibilir, V. Kula, E. Baykut, *A Research on Deferred Taxes: A Case Study on BIST Listed Banks in Turkey*. *European Journal of Business and Management*, 7(2), 2015, str. 2.

U teoriji i praksi razvijeni su brojni kriterijumi za određivanje materijalnosti, pri čemu se najčešće koriste ukupna imovina i ukupni prihodi.¹² S tim u vezi, prag materijalnosti obično se postavlja na nivou od 0,5% do 2% ukupne imovine ili ukupnih prihoda. Često se kao kriterijumi materijalnosti koriste i rezultat pre oporezivanja, neto imovina ili EBITDA. Iako se obično iskazuje u neto iznosu (u visini razlike između odloženih poreskih sredstava i odloženih poreskih obaveza), odloženi porez može biti materijalno značajna pozicija bilansa stanja i bilansa uspeha.¹³ Habanec i Bohusova¹⁴ pokazuju da odloženi porez na dobitak postaje naročito značajan nakon prelaska sa nacionalnih računovodstvenih standarda na Međunarodne standarde finansijskog izveštavanja. Kyriazopoulos i saradnici¹⁵ zaključuju da je odloženi porez

¹² A. Eilifsen, W. Messier, Materiality Guidance of the Major Public Accounting Firms, *Auditing: A Journal of Practice & Theory*, 34(2), 2015, str. 3.

¹³ H. Bohusova, P. Svoboda, L. Semeradova, Deferred Tax for Tax Planning in the Czech Agricultural Companies, *Agricultural Economics*, 65(8), 2019, str. 349.

¹⁴ P. Habanec, H. Bohusova, Comparison of Deferred Tax Materiality Reporting in Accordance with Continental and Anglo-Saxon Reporting System, *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 65(6), 2017, str. 1917.

¹⁵ G. Kyriazopoulos, G. Makriyiannis, M. Logotheti, The Impact of Deferred Taxation on Banking Profitability and Capital Adequacy. Evidence from the Greek Banking System, *International Journal of Applied Economics, Finance and Accounting*, 5(1), 2019, str. 1.

od naročitog značaja u grčkom bankarskom sektoru i da utiče na njihovu poslovnu aktivnost i razvojni potencijal.

Poterba i saradnici¹⁶ zaključuju da se značaj odloženih poreskih sredstava uvećao u mnogim preduzećima, koja su prebrodila negativne efekte ekonomske krize. Ta preduzeća priznaju rastuće iznose odloženih poreskih sredstava po osnovu neiskorišćenih poreskih gubitaka iz kriznog perioda. Takođe, ovi autori nalaze da učešće neto odloženih poreskih sredstava ili obaveza u američkim preduzećima obično ne prelazi 3%.

Porez na dobitak se tradicionalno posmatrao kao egzogena kategorija, na koju menadžment preduzeća ne može uticati. Stoga se prilikom ocene rada menadžmenta često koriste rezultati pre oporezivanja.¹⁷ S razvojem strategija poreskog planiranja i izbegavanja poreza, porez na dobitak zauzima značajno mesto u oceni rada menadžera. Ipak, nekada se prilikom analize performansi koristi isključivo tekući rashod za porez na dobitak, jer odloženi rashod predstavlja bezgotovinsku poziciju (koja ne izaziva odliv u izveštajnom periodu) bilansa uspeha.¹⁸ Ipak, osiguravajuća društva su dužna da obračunaju i tekući i odloženi poreski rashod, pa se mogu javiti značajne razlike u oceni profitabilnosti bazirane samo na tekućem poreskom rashodu i profitabilnosti zasnovane na oba poreska rashoda. S druge strane, Al-Jafari i Al Samman¹⁹ nalaze da porez na dobitak nema značajan uticaj na profitabilnost osiguravajućih društava kada je propisana stopa poreza na dobitak relativno niska.

Vučković-Milutinović i Lukić²⁰ nalaze različite prakse u srpskim kompanijama u smislu odloženog poreza na dobitak. Tako neke kompanije eliminišu odložene poreske obaveze prilikom obračuna zaduženosti. Neke kompanije tretiraju odložene poreske obaveze kao deo sopstvenog kapitala. Takođe, neke kompanije ignorišu odložena poreska sredstva prilikom analize solventnosti, dok ih neke kompanije posmatraju kao deo obrtne imovine prilikom analize likvidnosti.

Odloženi porez na dobitak može značajno uticati na ukupno opterećenje porezom na dobitak, koje se sastoji od tekućeg i odloženog rashoda za porez na dobitak. S tim u vezi, poresko opterećenje najčešće se meri različitim efektivnim poreskim stopama.²¹ Tako, za razliku od računovodstvene efektivne poreske stope,

¹⁶ J. Poterba, N. Rao, J. Seidman, Deferred Tax Positions and Incentives for Corporate Behavior around Corporate Tax Changes, *National Tax Journal*, 64(1), 2011, str. 27.

¹⁷ G. Porter, C. Norton, *Financial Accounting: The Impact on Decision Makers*, 6th edition, Mason, OH: South-Western Cengage Learning, 2009, str. 431.

¹⁸ S. Bolton, Cash Flow Based Business Valuations, *Business Valuation Review*, 10(4), 1991, str. 172.

¹⁹ M. Al-Jafari, H. Al Samman, Determinants of Profitability: Evidence from Industrial Companies Listed on Muscat Securities Market, *Review of European Studies*, 7(11), 2015, str. 303.

²⁰ S. Vučković-Milutinović, R. Lukić, Analysis of Deferred Taxes in the Business Environment in Serbia, *Economia. Seria Management*, 16(1), 2013, str. 25.

²¹ B. Lee, A. Dobijski, S. Minton, Theories and Empirical Proxies for Corporate Tax Avoidance, *Journal of Applied Business and Economics*, 17(3), 2015, str. 21.

tekuća efektivna poreska stopa ne sadrži odloženi poreski rashod. Stoga su između efektivnih poreskih stopa moguće znatne razlike, kako u realnom sektoru,²² tako i u finansijskom sektoru.²³ Na primeru čeških osiguravajućih društava, Bohusova i Vavrova²⁴ nalaze značajan uticaj odloženog poreza na dobitak na efektivnu poresku stopu društava. Fernandez-Rodriguez i saradnici²⁵ prezentuju različite rezultate istraživanja na španskim preduzećima u zavisnosti od efektivne poreske stope koja se koristi.

Racionalno je pretpostaviti da odloženi porez na dobitak dovodi do veće razlike između efektivnih poreskih stopa u kompanijama koje se oslanjaju na privremene razlike između dobitka pre oporezivanja i oporezivog dobitka. Tada je tekući rashod za porez na dobitak manji, ali se javlja odloženi rashod za porez na dobitak, pa postoji razlika između efektivne poreske stope koja sadrži odloženi rashod i efektivne poreske stope koja ne sadrži odloženi rashod. S druge strane, trajne razlike dovode do smanjenja tekućeg poreskog rashoda, ali ne i do povećanja odloženog poreskog rashoda, pa razlika između efektivnih poreskih stopa ne postoji.

Istraživanja odloženog poreza na dobitak u osiguravajućim društvima u RS gotovo da i nema. Ipak, vodeći se nalazima prethodnih istraživanja, u radu je pretpostavljeno da je odloženi porez na dobitak materijalno značajna pozicija, odnosno da ima značajan uticaj na procenu profitabilnosti i opterećenja porezom na dobitak osiguravajućih društava. Stoga su formulisane sledeće istraživačke hipoteze:

- H₁: Odloženi porez na dobitak je materijalno značajna bilansna pozicija u osiguravajućim društvima u Republici Srbiji.
- H₂: Odloženi porez na dobitak ima statistički značajan uticaj na procenu profitabilnosti osiguravajućih društava u Republici Srbiji.
- H₃: Odloženi porez na dobitak ima statistički značajan uticaj na procenu opterećenja porezom na dobitak osiguravajućih društava u Republici Srbiji.

III. Analiza konteksta

Generalno, osiguravajuća društva u RS podležu istoj regulativi u smislu obračuna opterećenja porezom na dobitak kao i preduzeća iz realnog sektora. Postupak oporezivanja njihovog dobitka propisan je Zakonom o porezu na dobit pravnih lica (*Službeni glasnik RS*, 153/2020) i pratećim podzakonskim aktima. Za razliku od nekih

²² I. Salihi, S. Sheikh Obid, H. Annuar, Measures of Corporate Tax Avoidance: Empirical Evidence from an Emerging Economy, *International Journal of Business and Society*, 14(3), 2013, str. 412.

²³ S. Vržina, Alternativni pristupi merenju efektivne stope poreza na dobitak u bankama, *Finansije*, 73(1-6), 2018, str. 45.

²⁴ H. Bohusova, E. Vavrova, The Structure of the Deferred Income Tax and Its Influence on Indicators Describing the Economic Performance of Commercial Insurance Companies, *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 55(3), 2007, str. 143.

²⁵ E. Fernandez-Rodriguez, R. Garcia-Fernandez, A. Martinez-Arias, Influence of Ownership Structure on the Determinants of Effective Tax Rates of Spanish Companies, *Sustainability*, 11(5), 2019, str. 1441.

država u kojima se primenjuje viša poreska stopa na finansijske institucije (na primer Belorusija), na osiguravajuća društva u RS primenjuje se ista propisana stopa poreza na dobitak (15%) kao na preduzeća iz realnog sektora. Osiguravajuća društva dužna su da prate i paragrafe MRS 12 – Porezi na dobitak.

Ipak, specifičnosti osiguravajuće delatnosti čine obračun tekućeg i odloženog poreza na dobitak unekoliko različitim u odnosu na preduzeća iz realnog sektora. Osiguravajuća društva su važni institucionalni investitori, a značajan deo sredstava ulažu u državne hartije od vrednosti.²⁶ Prinosi na takve hartije oslobođeni su poreza na dobitak, što osiguravajućim društvima omogućava umanjeње rashoda za porez na dobitak. Na taj način umanjuje se i efektivna poreska stopa osiguravajućih društava.

U vezi sa odloženim porezom na dobitak, u literaturi se kao najčešći izvor odloženog poreza navodi razlika između knjigovodstvene i poreske vrednosti stalne imovine,²⁷ odnosno razlika između knjigovodstvene i poreske amortizacije. Ipak, stalna imovina ima manji značaj u osiguravajućim društvima u odnosu na preduzeća iz realnog sektora, pa je važno razmotriti i neke druge izvore odloženog poreza u delatnosti osiguranja.

Značajan deo odloženog poreza u finansijskim institucijama potiče od svođenja hartija od vrednosti, koje institucije drže u portfoliju, na njihovu fer vrednost.²⁸ Na primer, povećanje fer vrednosti tih hartija dovodi do povećanja nerealizovanih dobitaka od ulaganja u hartije od vrednosti. Nerealizovani dobitci povećavaju odložene poreske obaveze, koje će se realizovati u momentu otuđenja hartije. Promena odloženog poreza po ovom osnovu nema uticaj na bilans uspeha osiguravajućeg društva, već na izveštaj o ostalom rezultatu društva.

Ipak, promena većine drugih izvora odloženog poreza koji se javljaju u RS ima uticaj na bilans uspeha osiguravajućih društava. Neki od najčešćih takvih izvora jesu amortizacija stalne imovine, dugoročna rezervisanja, neiskorišćeni poreski gubici, neiskorišćeni poreski podsticaji i obezvređenje imovine.²⁹ Ti izvori izazivaju sledeće pozicije u bilansu uspeha osiguravajućih društava:

- odloženi poreski rashod (gubitak od smanjenja odloženih poreskih sredstava i povećanja odloženih poreskih obaveza) i
- odloženi poreski prihod (dobitak od povećanja odloženih poreskih sredstava i smanjenja odloženih poreskih obaveza).

²⁶ M. Sokić, Osiguravajuće kuće kao institucionalni investitori u Republici Srbiji, *Tokovi osiguranja*, 31(4), 2015, str. 49.

²⁷ J. Poterba, N. Rao, J. Seidman, str. 27.

²⁸ S. Vučković-Milutinović, R. Lukić, str. 25.

²⁹ S. Vržina, V. Obradović, J. Bogičević, Financial Reporting on Income Tax in Serbia and Croatia: An Empirical Analysis, *Ekonomika preduzeća*, 68(5-6), 2020, str. 330.

IV. Metodologija istraživanja i razvoj istraživačkog uzorka

Istraživanje u ovom radu zasniva se na ideji Bohusove i saradnika,³⁰ koji su merili materijalnost odloženog poreza, ali i poredili pozicije preduzeća sa odloženim porezom i bez njega. Stoga su u radu korišćeni statistički testovi za poređenje grupa. Cilj testova jeste da ispituju postojanje statistički značajne razlike između dve grupe. Pri tome je moguće koristiti parametarske i neparametarske testove. Primena parametarskih testova zasniva se na aritmetičkim sredinama grupa, uz zahtevano postojanje normalnosti distribucije korišćenih varijabli. S druge strane, primena neparametarskih testova zasniva se na medijanama grupa, ali se postojanje normalnosti distribucije korišćenih varijabli ne zahteva.

Normalnost distribucije ispitana je korišćenjem Žark-Bera testa. U slučaju normalne distribucije, korišćen je test zasnovan na aritmetičkoj sredini (t-test), dok je u slučaju odsustva normalne distribucije korišćen test zasnovan na medijani (Vilkokson/Man-Vitni metod). Statistička obrada podataka izvršena je u ekonometrijskom softveru EViews. Korišćeni su nivoi poverenja od 10%, 5% i 1%.

Materijalnost odloženog poreza na dobitak merena je dvema varijablama – materijalnošću odloženog poreza u bilansu stanja (*MAT1*) i materijalnošću odloženog poreza u bilansu uspeha (*MAT2*). U ovom radu su korišćena dva kriterijuma materijalnosti – ukupna imovina i poslovni (funkcionalni) prihodi društva, uz upotrebu pragova materijalnosti od 1% i 0,5%. Profitabilnost osiguravajućih društava je merena, takođe, dvema varijablama – *ROA1*, koje obuhvata efekte odloženog poreza, i *ROA2*, koje ne obuhvata te efekte. Korišćena su i dva merila opterećenja porezom na dobitak – tekuća efektivna poreska stopa (*ETR1*) i računovodstvena efektivna poreska stopa (*ETR2*). Definicije korišćenih varijabli date su u Tabeli 1.

Tabela 1. Definicije varijabli

| Oznaka | Formula |
|---------------|---|
| <i>MAT1</i> | (Odložena poreska sredstva – Odložene poreske obaveze) : Ukupna imovina |
| <i>MAT2</i> | Gubitak (dobitak) od odloženog poreza : Poslovni prihodi |
| <i>ROA1</i> | (Dobitak pre oporezivanja – Tekući poreski rashod ± Gubitak (dobitak) od odloženog poreza) : Ukupna imovina |
| <i>ROA2</i> | (Dobitak pre oporezivanja – Tekući poreski rashod) : Ukupna imovina |
| <i>ETR1</i> | Tekući poreski rashod : Dobitak pre oporezivanja |
| <i>ETR2</i> | (Tekući poreski rashod ± Gubitak (dobitak) od odloženog poreza) : Dobitak pre oporezivanja |

³⁰ H. Bohusova, P. Svoboda, L. Semeradova, str. 349.

Prva istraživačka hipoteza je testirana poređenjem *MAT1* i *MAT2* sa pragovima materijalnosti od 1% i 0,5%. Druga istraživačka hipoteza testirana je poređenjem *ROA1* i *ROA2*, dok je treća istraživačka hipoteza testirana poređenjem *ETR1* i *ETR2*.

Istraživanjem su obuhvaćena sva osiguravajuća društva u RS, aktivna na kraju 2020. godine. Delatnost osiguranja u RS na kraju 2020. godine obavljalo je šesnaest osiguravajućih društava. S tim u vezi, četiri osiguravajuća društva se bave životnim osiguranjem, šest društava neživotnim osiguranjem, dok se šest društava bavi i životnim i neživotnim osiguranjem. Spisak osiguravajućih društava prikazan je u Tabeli 2.

Tabela 2. Spisak osiguravajućih društava u RS na kraju 2020. godine

| Naziv društva | Bilansna suma (u 000 din) | Naziv društva | Bilansna suma (u 000 din) |
|-------------------|---------------------------|-----------------|---------------------------|
| Generali | 72.701.091 | Uniqa neživotno | 6.939.005 |
| Dunav | 57.254.667 | Milenijum | 6.526.511 |
| Wiener Stadtische | 45.101.871 | Merkur | 5.018.486 |
| Grawe | 35.007.876 | Sava neživotno | 4.227.816 |
| DDOR | 22.480.125 | Globos | 2.493.177 |
| Uniqa životno | 11.114.805 | OTP | 2.256.428 |
| Triglav | 9.778.678 | Sogaz | 1.999.931 |
| AMS | 7.084.415 | Sava životno | 1.457.542 |

Istraživanje se zasniva na podacima iz pojedinačnih finansijskih izveštaja osiguravajućih društava, objavljenih na zvaničnom sajtu Agencije za privredne registre (www.apr.gov.rs). Osiguravajuća društva su dužna da izvrše reviziju svojih finansijskih izveštaja, što povećava pouzdanost pri njihovom korišćenju.³¹ U radu je uzorkovan period od 2017. do 2020. godine, jer su finansijski izveštaji na sajtu Agencije za privredne registre dostupni za taj vremenski raspon. U tom periodu, propisana stopa poreza na dobitak bila je na konstantnom nivou od 15%.

Koristeći četvorogodišnji period za šesnaest osiguravajućih društava, istraživački uzorak obuhvata šezdeset četiri opservacije. Ta veličina uzorka korišćena je prilikom izračunavanja *MAT1*, *MAT2*, *ROA1* i *ROA2*. S druge strane, pedeset devet opservacija korišćeno je prilikom izračunavanja *ETR1* i *ETR2*. Pet opservacija je eliminisano usled gubitka pre oporezivanja, jer efektivne poreske stope nemaju jasno ekonomsko značenje u uslovima negativnog rezultata pre oporezivanja.³²

³¹ B. Jovković, The Analysis of Auditor's Reports of Insurance Companies in the Republic of Serbia, *Teme*, 42(4), 2018, str. 1277.

³² M. Hanlon, S. Heitzman, A Review of Tax Research, *Journal of Accounting and Economics*, 50(2-3), 2010, str. 127.

V. Rezultati istraživanja i diskusija

1. Deskriptivna analiza

U Tabeli 3 predstavljeni su rezultati deskriptivne statistike korišćenih varijabli. Podaci iz tabele ukazuju na to da je materijalnost odloženog poreza na dobitak u prosečnom osiguravajućem društvu u RS niža u odnosu na uobičajene pragove od 1% i 0,5%. Samo četiri opservacije imaju *MAT1* veće od 1%, dok šesnaest opservacija ima *MAT1* veće od 0,5%. Dodatno, tri osiguravajuća društva su imala *MAT1* veće od 0,5% u sve četiri godine. S druge strane, samo dve opservacije imaju *MAT2* veće od 1%, dok tri opservacije imaju *MAT2* veće od 0,5%.

Tabela 3. Deskriptivna statistika

| | <i>MAT1</i> | <i>MAT2</i> | <i>ROA1</i> | <i>ROA2</i> | <i>ETR1</i> | <i>ETR2</i> |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Aritmetička sredina (u %) | 0,351 | 0,113 | 2,514 | 2,506 | 5,546 | 4,194 |
| Minimum (u %) | 0,000 | 0,000 | -12,613 | -12,613 | 0,000 | -77,192 |
| Medijana (u %) | 0,094 | 0,024 | 2,531 | 2,531 | 4,498 | 5,432 |
| Maksimum (u %) | 2,638 | 2,219 | 9,522 | 9,526 | 23,079 | 22,486 |
| Standardna devijacija (u %) | 0,544 | 0,312 | 3,597 | 3,584 | 6,106 | 12,728 |
| Koeficijent varijacije | 1,550 | 2,761 | 1,431 | 1,430 | 1,101 | 3,035 |
| Opservacija | 64 | 64 | 64 | 64 | 59 | 59 |

Iako je velika većina opservacija poslovala s pozitivnim rezultatom pre oporezivanja, značajan deo njih zabeležio je samo niske ili umerene nivoe profitabilnosti. Ipak, javljaju se i opservacije sa nešto višom profitabilnosti. Tako, dvadeset dve opservacije imaju *ROA1* između 0% i 2%, premda četrnaest opservacija ima *ROA1* više od 5%. S druge strane, dvadeset jedna opservacija ima *ROA2* između 0% i 2%, mada četrnaest opservacija ima *ROA2* više od 5%.

Efektivne poreske stope u prosečnom osiguravajućem društvu u RS niže su od propisane stope. Zapravo, samo četiri opservacije imaju *ETR1* veću od 15%, dok čak dvadeset četiri opservacije imaju *ETR1* jednaku 0%. Dodatno, šest osiguravajućih društava ima *ETR1* jednaku 0% u sve četiri godine. S druge strane, samo tri opservacije imaju *ETR2* veću od 15%, dok devetnaest opservacija ima *ETR2* jednaku 0%. Pet opservacija ima negativnu *ETR2*. Takođe, četiri osiguravajuća društva imaju i *ETR1* i *ETR2* jednaku 0% u sve četiri godine.

Tokom istraživanja primećene su neke zanimljive prakse osiguravajućih društava u smislu odloženog poreza na dobitak. Prvo, dva osiguravajuća društva nisu iskazala ni odložena poreska sredstva ni odložene poreske obaveze tokom četiri uzorkovane godine, iako su imala pravo da priznaju odložena poreska sredstva. Takođe,

nisu iskazala ni dinar tekućeg ili odloženog poreskog rashoda. Uprkos ostvarenom dobitku pre oporezivanja, ta društva su imala poreski gubitak u poreskom bilansu, usled činjenice da su prihodi od državnih hartija od vrednosti oslobođeni poreza. S obzirom na to da poreske gubitke očekuju i u budućnosti, odlučila su da ne priznaju odložena poreska sredstva.

Drugo, dva osiguravajuća društva su u sve četiri uzorkovane godine iskazala isti iznos neto odloženih poreskih sredstava. U bilansu uspeha nisu iskazala odloženi porez na dobitak. Ta društva nisu priznala odložena poreska sredstva u maksimalno raspoloživom iznosu, već samo u iznosu u kojem je verovatno da će odložena poreska sredstva biti realizovana na teret budućih oporezivih dobitaka. Interesantno je da se procena tih društava o mogućnosti za realizaciju odloženih poreskih sredstava nije menjala tokom perioda od četiri godine, pa je iznos odloženih poreskih sredstava bio nepromenjen.

Treće, jedno osiguravajuće društvo iskazalo je neto odložena poreska sredstva ili obaveze u sve četiri uzorkovane godine, ali nije iskazalo odloženi porez na dobitak u bilansu uspeha ni u jednoj godini. To društvo je odlučilo da prizna odloženi porez jedino po osnovu procene fer vrednosti hartija od vrednosti raspoloživih za prodaju, pri čemu ovaj izvor odloženog poreza nema uticaja na bilans uspeha društva.

2. Rezultati statističkih testova

Kako bi se utvrdilo koji će statistički testovi (parametarski ili neparametarski) biti korišćeni, ispitana je normalnost distribucije korišćenih varijabli, korišćenjem Žark-Bera testa. Rezultati testa prikazani su u Tabeli 4. S obzirom na to da je za pet od šest korišćenih varijabli verovatnoća jednaka nuli, normalna distribucija ovih varijabli ne može biti pretpostavljena. Stoga je pogodnije koristiti neparametarske statističke testove. Slični rezultati se dobijaju ukoliko se koriste neki drugi testovi normalnosti distribucije. Prema Šapiro-Vilk i Kolmogorov-Smirnov testovima, nijedna korišćena varijabla nema normalnu distribuciju.

Tabela 4. Testiranje normalnosti distribucije korišćenih varijabli

| | <i>MAT1</i> | <i>MAT2</i> | <i>ROA1</i> | <i>ROA2</i> | <i>ETR1</i> | <i>ETR2</i> |
|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Žark-Bera statistika | 165,257 | 2.992,052 | 101,972 | 105,865 | 5,905 | 1.927,466 |
| Verovatnoća | 0,000 | 0,000 | 0,000 | 0,000 | 0,052 | 0,000 |
| Opservacija | 64 | 64 | 64 | 64 | 59 | 59 |

U Tabeli 5 predstavljeni su rezultati statističkih testova, kojima je testirana materijalnost odloženog poreza na dobitak u osiguravajućim društvima u RS. Rezultati pokazuju da postoji statistički značajna razlika na nivou od 1% između *MAT1* i korišćenih pragova materijalnosti. Slični zaključci mogu se primeniti i za varijablu

S. Vržina: Važnost odloženog poreza na dobitak u osiguravajućim društvima: slučaj Republike Srbije

MAT2. Drugim rečima, rezultati pokazuju da su MAT1 i MAT2 statistički znatno niži od korišćenih pragova materijalnosti. Generalno, rezultati ukazuju na to da odloženi porez na dobitak ne predstavlja materijalno značajnu poziciju u finansijskim izveštajima osiguravajućih društava u RS. Stoga se *prva istraživačka hipoteza odbacuje*.

Tabela 5. Rezultati statističkih testova – materijalnost odloženog poreza na dobitak

| Varijabla 1 | Varijabla 2 | Vrednost testa | p-vrednost |
|-------------|-------------|----------------|------------|
| MAT1 | 1% | 9,128145 | ***0,000 |
| MAT1 | 0,5% | 5,214991 | ***0,000 |
| MAT2 | 1% | 9,811516 | ***0,000 |
| MAT2 | 0,5% | 9,484380 | ***0,000 |

Napomena: statistički značajno na nivou 10% (*), 5% (**) i 1% (***).

Razlika između korišćenih merila profitabilnosti ispitana je na osnovu statističkog testa, čiji su rezultati prikazani u Tabeli 6. Rezultati testa ukazuju na to da između ROA1 i ROA2 ne postoji statistički značajna razlika. Takvi rezultati ne iznenađuju – iako ROA1 ima veću aritmetičku sredinu od ROA2, ova merila profitabilnosti imaju jednake medijalne vrednosti. Ovi rezultati ukazuju na to da uključivanje odloženog rashoda za porez na dobitak u obračun profitabilnosti ne dovodi do statistički značajne promene u proceni zarađivačke sposobnosti osiguravajućih društava u RS. Stoga se *druga istraživačka hipoteza odbacuje*.

Tabela 6. Rezultati statističkih testova – razlika između merila profitabilnosti

| Varijabla 1 | Varijabla 2 | Vrednost testa | p-vrednost |
|-------------|-------------|----------------|------------|
| ROA1 | ROA2 | 0,014297 | 0,989 |

Rezultati statističkog testa, kojima se testira razlika između korišćenih efektivnih poreskih stopa prikazana je u Tabeli 7. Iako ETR1 ima višu aritmetičku sredinu od ETR2, a ETR2 višu medijanu od ETR1, razlika između ove dve efektivne poreske stope nije statistički značajna. To znači da uključivanje odloženog rashoda za porez na dobitak u obračun efektivne poreske stope ne dovodi do statistički značajne promene u proceni opterećenja porezom na dobitak osiguravajućih društava u RS. Ti rezultati, takođe, ukazuju na to da izbor veličina koje se koriste u brojiocu efektivnih poreskih stopa nije od presudne važnosti za procenu poreskog opterećenja društava. Stoga se *treća istraživačka hipoteza odbacuje*.

Tabela 7. Rezultati statističkih testova – razlika između efektivnih poreskih stopa

| Varijabla 1 | Varijabla 2 | Vrednost testa | p-vrednost |
|-------------|-------------|----------------|------------|
| ETR1 | ETR2 | 0,096554 | 0,923 |

Više razloga može objasniti nisku materijalnost odloženog poreza na dobitak, odnosno njegov mali uticaj na procenu profitabilnosti i opterećenja porezom na dobitak osiguravajućih društava u RS. Prvo, u svetu postoje brojne države u kojima je propisana stopa poreza na dobitak viša od 30% (neke države za određene delatnosti nameću i stope više od 50%). Stoga se propisana stopa poreza na dobitak u RS od 15% može smatrati relativno niskom. S obzirom na to da se odložena poreska sredstva i obaveze izračunavaju multiplikovanjem privremenih razlika i propisane stope, jasno je da niska stopa rezultuje nižim iznosom odloženog poreza.

Drugo, odložena poreska sredstva i obaveze obično se iskazuju u neto iznosu. MRS 12 propisuje da se odloženi porez na dobitak u bilansu stanja iskazuje u neto iznosu kada kompanija ima pravo da tekuća poreska sredstva i obaveze iskazuje u neto iznosu, i kada se odložena poreska sredstva i obaveze odnose na porez na dobitak koji je nametnula ista poreska vlast. U korišćenom istraživačkom uzorku, samo tri opservacije nisu iskazale neto iznos, pa su iskazale i odložena poreska sredstva i odložene poreske obaveze. Stoga je moguće da bi materijalnost odloženog poreza na dobitak bila znatno viša kada se odložena poreska sredstva i obaveze ne bi iskazivali u neto iznosu.

Treće, moguće je da mali značaj odloženog poreskog rashoda i prihoda potiče od odredaba MRS 12. Taj računovodstveni standard zagovara upotrebu metoda obaveze. Saglasno tom metodu, prednost se daje bilansu stanja, odnosno utvrđivanju odloženih poreskih sredstava i obaveza. S druge strane, odloženi porez u bilansu uspeha može se posmatrati kao rezidual. Drugim rečima, odloženi poreski rashod i prihod predstavlja isključivo posledicu promena odloženih poreskih sredstava i obaveza.

Četvrto, specifičan način priznavanja odloženih poreskih sredstava (i povezanih odloženih poreskih prihoda) može uticati na materijalnost odloženog poreza. Odložena poreska sredstva priznaju se po osnovu odbitnih privremenih razlika, neiskorišćenih poreskih kredita i neiskorišćenih poreskih gubitaka, ali samo u meri u kojoj je verovatno da će postojati oporezivi dobitci za realizaciju tih sredstava.

Peto, RS se može tretirati kao država sa relativno malim razlikama između dobitka pre oporezivanja i oporezivog dobitka. Mnoge evropske države s kontinentalnim pravnim sistemom imaju relativno slične propise za utvrđivanje dobitka pre oporezivanja i oporezivog dobitka. Tako dobitak pre oporezivanja predstavlja polaznu tačku za utvrđivanje oporezivog dobitka. Tada su privremene razlike manje, pa je i iznos odloženih poreskih sredstava i obaveza manji.

3. Provera robustnosti rezultata

U radu je, takođe, ispitana robustnost prezentovanih rezultata. Drugim rečima, ispitano je da li bi se i u kojoj meri rezultati istraživanja promenili na promene određenih pretpostavki istraživanja. Tako je inicijalni istraživački uzorak podeljen u dve grupe. Prva grupa sastoji se od polovine opservacija s najvećim vrednostima ukupne imovine, dok se druga grupa sastoji od polovine opservacija s najmanjim vrednostima ukupne imovine. Na taj način ispitano je da li veličina osiguravajućeg društva utiče na važnost odloženog poreza na dobitak, odnosno da li je važnost odloženog poreza na dobitak drugačija u većim i manjim osiguravajućim društvima.

Veličina preduzeća izabrana je kao kriterijum za ispitivanje robustnosti iz više razloga. Prvo, usled veće diverzifikovanosti, u većim organizacijama je manja verovatnoća pojave gubitaka.³³ To znači da je pojava odloženih poreskih sredstava po osnovu neiskorišćenih poreskih gubitaka manje verovatna u većim osiguravajućim društvima. Suprotno tome, veća osiguravajuća društva mogu iskazati odložena poreska sredstva u većem stepenu, s obzirom na to da mogu očekivati više buduće oporezive dobitke za realizaciju odloženih poreskih sredstava.

Drugo, veličina može biti značajna determinanta profitabilnosti osiguravajućih društava. Obično se ističe da veća osiguravajuća društva u RS imaju višu profitabilnost.³⁴ Treće, veličina preduzeća može uticati na efektivne poreske stope osiguravajućih društava. Prema hipotezi političke moći, veća društva imaju niže efektivne poreske stope, dok prema hipotezi političkih troškova, veća društva imaju više efektivne poreske stope.³⁵

U Tabeli 8 prikazani su rezultati analize robustnosti za procenu materijalnosti odloženog poreza na dobitak. Rezultati pokazuju da odloženi porez nije materijalno značajna pozicija u finansijskim izveštajima ni većih ni manjih osiguravajućih društava. Drugim rečima, veličina društva nije determinanta materijalnosti odloženog poreza na dobitak. Stoga su zaključci o prvoj istraživačkoj hipotezi robustni na podelu istraživačkog uzorka.

³³ J. Zimmerman, Taxes and Firm Size, *Journal of Accounting and Economics*, 5(1), 1983, str. 119.

³⁴ J. Kočović, B. Paunović, M. Jovović, Determinants of Business Performance of Non-Life Insurance Companies in Serbia, *Ekonomika preduzeća*, 62(7-8), 2014, str. 367; M. Pjanić, N. Milenković, B. Kalaš, V. Mirović, Profitability Determinants of Non-Life Insurance Companies in Serbia, *Ekonomika preduzeća*, 66(5-6), 2018, str. 333.

³⁵ A. Kraft, What Really Affects German Firms' Effective Tax Rate? *International Journal of Financial Research*, 5(3), 2014, str. 1.

Tabela 8. Analiza robustnosti rezultata – materijalnost odloženog poreza na dobitak

| Varijabla 1 | Varijabla 2 | Vrednost testa | p-vrednost |
|--|-------------|----------------|------------|
| Panel A. Polovina opservacija s najvećom ukupnom imovinom | | | |
| MAT1 | 1% | 6,883394 | ***0,000 |
| MAT1 | 0,5% | 2,749051 | ***0,006 |
| MAT2 | 1% | 6,971426 | ***0,000 |
| MAT2 | 0,5% | 6,506179 | ***0,000 |
| Panel B. Polovina opservacija s najmanjom ukupnom imovinom | | | |
| MAT1 | 1% | 5,964651 | ***0,000 |
| MAT1 | 0,5% | 4,586537 | ***0,000 |
| MAT2 | 1% | 6,884295 | ***0,000 |
| MAT2 | 0,5% | 6,884295 | ***0,000 |

Napomena: statistički značajno na nivou 10% (*), 5% (**) i 1% (***).

Tabela 9 prikazuje rezultate analize robustnosti za procenu razlike između korišćenih merila profitabilnosti. Rezultati pokazuju da između korišćenih merila profitabilnosti ne postoji statistički značajna razlika ni u većim ni u manjim osiguravajućim društvima. To znači da veličina društva ne utiče na zaključak o uticaju odloženog poreza na dobitak na procenu profitabilnosti. Stoga su zaključci o drugoj istraživačkoj hipotezi robustni na podelu istraživačkog uzorka.

Tabela 9. Analiza robustnosti rezultata – razlika između merila profitabilnosti

| Varijabla 1 | Varijabla 2 | Vrednost testa | p-vrednost |
|--|-------------|----------------|------------|
| Panel A. Polovina opservacija s najvećom ukupnom imovinom | | | |
| ROA1 | ROA2 | 0,087294 | 0,930 |
| Panel B. Polovina opservacija s najmanjom ukupnom imovinom | | | |
| ROA1 | ROA2 | 0,147707 | 0,883 |

U Tabeli 10 prikazani su rezultati analize robustnosti za procenu razlike između korišćenih efektivnih poreskih stopa. Može se zaključiti da između korišćenih efektivnih poreskih stopa ne postoji statistički značajna razlika ni u većim ni u manjim osiguravajućim društvima. Veličina društva ne utiče na zaključak o uticaju odloženog poreza na dobitak na procenu opterećenja porezom na dobitak. Stoga su zaključci o trećoj istraživačkoj hipotezi robustni na podelu istraživačkog uzorka.

Tabela 10. Analiza robustnosti rezultata – razlika između efektivnih poreskih stopa

| Varijabla 1 | Varijabla 2 | Vrednost testa | p-vrednost |
|--|--------------------|-----------------------|-------------------|
| Panel A. Polovina opservacija s najvećom ukupnom imovinom | | | |
| <i>ETR1</i> | <i>ETR2</i> | 0,494974 | 0,621 |
| Panel B. Polovina opservacija s najmanjom ukupnom imovinom | | | |
| <i>ETR1</i> | <i>ETR2</i> | 0,620473 | 0,535 |

VI. Zaključak

Osiguravajuća društva u RS obavezna su da u finansijskim izveštajima iskazuju odloženi porez na dobitak, u skladu sa MRS 12. Stoga je u radu ispitana materijalnost odloženog poreza i njegov uticaj na procenu profitabilnosti i opterećenja porezom na dobitak osiguravajućih društava. Istraživanje je sprovedeno na uzorku od šesnaest osiguravajućih društava za period od 2017. do 2020. godine.

Rezultati istraživanja pokazuju da odloženi porez na dobitak nije materijalno značajna pozicija u finansijskim izveštajima u osiguravajućim društvima u RS. Njegovo učešće u bilansu stanja i bilansu uspeha znatno je niže od uobičajenih pragova materijalnosti. Takvi rezultati su primarno posledica iskazivanja odloženih poreskih sredstava i obaveza u neto iznosu, kao i sličnosti u obračunu dobitka pre oporezivanja i oporezivog dobitka.

Istraživanje je, takođe, pokazalo da odloženi porez na dobitak nema statistički značajan uticaj na procenu profitabilnosti i opterećenja porezom na dobitak osiguravajućih društava. Drugim rečima, ne postoji značajna razlika između merila profitabilnosti, odnosno merila opterećenja porezom na dobitak, koja sadrže odloženi porez i onih koja ne sadrže odloženi porez na dobitak. Takvi rezultati su primarno posledica niske materijalnosti odloženog poreza, ali i činjenice da odloženi porez na dobitak u bilansu uspeha predstavlja samo rezidual obračuna odloženih poreskih sredstava i obaveza iz bilansa stanja.

Prezentovani rezultati istraživanja mogu biti od koristi brojnim interesnim grupama. Prvo, revizorima finansijskih izveštaja može koristiti informacija o materijalnosti odloženog poreza na dobitak, prilikom odabira pozicija koje će biti revidirane. Drugo, menadžerima osiguravajućih društava može koristiti informacija da odloženi porez na dobitak nema značajan uticaj na profitabilnost, prilikom sagledavanja načina za upravljanje performansama društva. Treće, nacionalnim poreskim vlastima može koristiti informacija o opterećenju porezom na dobitak osiguravajućih društava prilikom sagledavanja poreskog opterećenja različitih sektora ekonomije.

Ipak, rezultati istraživanja imaju i određena ograničenja. Istraživanje je zasnovano na metodi uzorkovanja, pa je moguće da bi se rezultati razlikovali kada

bi period uzorkovanja ili broj osiguravajućih društava bio drugačiji. Moguće je i da bi promena metodologije istraživanja dovela do promene rezultata istraživanja. Takođe, istraživanje je sprovedeno na osiguravajućim društvima iz samo jedne države.

Posebno ograničenje istraživanja može se pronaći u činjenici da osiguravajuća društva, u skladu sa MRS 12, iskazuju odložena poreska sredstva i obaveze u neto iznosu. Stoga u istraživanju nisu mogli biti korišćeni zasebni iznosi odloženih poreskih sredstava i obaveza. Takve zasebne iznose samo mali broj društava obelodanjuje u napomenama uz finansijske izveštaje.

Buduća istraživanja mogla bi obuhvatiti duži vremenski raspon u cilju obuhvatanja perioda pre 2013. godine, kada je propisana stopa poreza na dobitak u RS bila 10%. Korisna bi mogla biti i zasebna analiza za životna i neživotna osiguranja. Takođe, istraživanje bi moglo obuhvatiti i ostale države u cilju poređenja rezultata.

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IMPORTANCE OF DEFERRED INCOME TAX IN INSURANCE COMPANIES: CASE OF THE REPUBLIC OF SERBIA

SCIENTIFIC PAPER

Abstract

Insurance companies in the Republic of Serbia (RS) are required to report deferred income tax in accordance with the International Accounting Standards (IAS) 12 – Income Taxes. They recognize deferred tax assets and deferred tax liabilities on the balance sheet or deferred tax expenses and deferred tax income on the income statement. This paper examines the materiality of the deferred income tax in Serbian insurance companies, as well as its impact on assessing profitability and corporate income tax burden. The research conducted from 2017 to 2020 covered 16 insurance companies, and has shown that the effective tax rates in an average Serbian insurance company are lower than the prescribed rate of income tax. The research results have shown that typically, deferred tax does not materially represent a significant item in a statement of financial position of insurance companies. In addition, when assessing profitability and corporate income tax burden of insurance companies, deferred income tax is not a significant item on a balance sheet.

Keywords: *income tax, deferred tax, IAS 12, materiality, profitability, insurance.*

JEL classification: *G22, H25, M41.*

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I. Introduction

Taxation of insurance companies has certain specificities in relation to the taxation of real-sector companies. Perhaps the most significant specificity relates to the tax on non-life insurance premiums payable in the Republic of Serbia (RS) at a rate of 5%. Additionally, insurance and reinsurance services in RS are exempt from value added tax. However, just like real-sector businesses, insurance companies are required to submit a tax balance and file income tax return, regardless of whether the result of a business year is gain or loss.

The earnings before tax on the income statement are usually different from the taxable profit reported in the tax balance. This is because of different regulations which determine earnings before tax and taxable income.² Earnings before tax are determined by the accounting standards, while taxable profit is stipulated in the tax laws. Temporary differences between the earnings before tax and taxable profit lead to the deferred income tax.

Deferred income tax can be extremely important in insurance companies. For example, auditors are often interested in deferred tax which causes modified audit opinion.³ However, deferred income tax is often seen as a controversial issue⁴ that is difficult to apply in practice. In addition, there are still numerous problems and dilemmas as to the application of the deferred tax concept.⁵

The last ten years in RS have seen a decrease in the number of insurance companies and an increase in the number of foreign-owned companies. Additionally, financial indicators of this industry have reached satisfactory values,⁶ which are more favorable than those of numerous Central and Eastern European countries.⁷ Nevertheless, despite the consolidation of the insurance sector in RS over the last decade, there is still significant room for improvement of its efficiency.⁸ Some of the methods used to improve efficiency can be found in the legal approach which seeks to reduce current tax expenses or introduce adequate management of deferred income tax expenditures.⁹

² N. Wong, Accounting for Deferred Taxes under NZ IAS 12, *University of Auckland Business Review*, 8(1), 2006, p. 55.

³ S. Vučković-Milutinović, Analysis of Modifications to Auditor's Opinion on Financial Statements of Listed Companies in Serbia, *Ekonomika preduzeća*, 67(3-4), 2019, p. 212.

⁴ N. Wong, p. 55.

⁵ R. Colley, J. Rue, A. Valencia, A. Volkan, Accounting for Deferred Taxes: Time for a Change, *Journal of Business & Economics Research*, 10(3), 2012, p. 149.

⁶ M. Sokić, Analysis of Insurance Industry CARMEL Indicators in Republic of Serbia, *Insurance Trends*, 35(2), 2019, p. 7.

⁷ M. Cerović, Underwriting Results in Serbia in 2016, *Insurance Trends*, 33(3), 2017, p. 72.

⁸ Z. Đurić, M. Jakšić, A. Krstić, DEA Window Analysis of Insurance Sector Efficiency in the Republic of Serbia, *Economic Themes*, 58(3), 2020, p. 291.

⁹ K. Holland, R. Jackson, Earnings Management and Deferred Tax, *Accounting and Business Research*, 34(2), 2004, p. 101.

Therefore, the subject of this research is the significance of deferred income tax in Serbian insurance companies.

This paper has two main goals. The first goal is to examine the materiality (significance) of the deferred income tax in the financial statements of insurance companies in RS. The second goal is to explore the impact of the deferred income tax on the profitability on the assessment of profitability and corporate income tax burden of insurance companies in RS.

Income tax is an under-researched area in insurance companies. At times, when analyzing their profitability, these companies do not even take into account the income tax,¹⁰ but use the results before tax. Therefore, this research contributes with supplementary results to those of previous researches of the deferred income tax role. Additionally, according to the author's best knowledge, this is the first research on deferred income tax in RS.

With the exception of the introduction and conclusion, this paper is comprised of four parts. In the first part, research hypotheses were developed based on the analyses of previous researches. The second part shows context analysis, through the specifics of the tax environment in which RS insurance companies operate. The third part explains the methodology of the research and the research sample. The fourth part presents the research results and discussion.

II. Development of Research Hypotheses

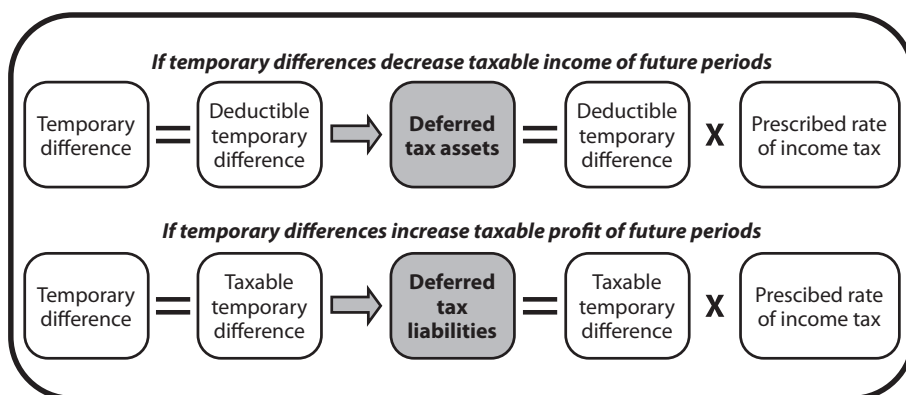
Although accountants in RS perceive the calculation of deferred income tax as complex,¹¹ the calculation algorithm is relatively simple. According to the International Accounting Standard (IAS) 12 – Income Taxes, deferred tax assets and deferred tax liabilities are determined for temporary imbalances between the carrying amount and tax basis of assets and liabilities, according to the algorithm shown in Figure 1.

The insurance company will present deferred tax assets when the tax base of the asset (liability) is greater (lower) than its carrying amount. The difference between the two values is a deductible temporary difference, multiplied by the prescribed rate of income tax. On the other hand, deferred tax liabilities are expressed when the carrying amount of the asset (liability) is greater (lower) than its tax amount. The difference between the two values is a taxable temporary difference, which is also multiplied by the prescribed rate. Additionally, deferred tax assets and liabilities typically result in deferred tax expenses and income in the insurance company's income statement.

¹⁰ R. Zainudin, N. Mahdzan, E. Leong, Firm-Specific Internal Determinants of Profitability Performance: An Exploratory Study of Selected Life Insurance Firms in Asia, *Journal of Asia Business Studies*, 12(4), 2018, p. 533.

¹¹ V. Obradović, M. Čupić, D. Dimitrijević, Application of International Financial Reporting Standards in the Transition Economy of Serbia, *Australian Accounting Review*, 28(1), 2018, p. 48.

Figure 1. Algorithm for determining deferred tax assets and deferred tax liabilities



Source: author, according to H. Sozbilir, V. Kula, E. Baykut, A Research on Deferred Taxes: A Case Study on BIST Listed Banks in Turkey. *European Journal of Business and Management*, 7(2), 2015, p. 2.

In theory and practice, a number of criteria for determining materiality have been developed, where total assets and total revenues are most commonly used.¹² In this regard, the materiality threshold is usually set at a level of 0.5% to 2% of the total assets or total revenue. Materiality criteria often used are also income before tax, net assets, or EBITDA. Although usually expressed in the net amount (the difference between deferred tax assets and deferred tax liabilities), deferred tax may be materially significant item of the balance sheet and income statement.¹³ Habanec and Bohusova¹⁴ show that deferred income tax becomes particularly significant after switching from national accounting standards to International Financial Reporting Standards. Kyriazopoulos et al.¹⁵ conclude that the deferred tax is of particular importance in the Greek banking sector and influences their business activity and development potential.

¹² A. Eilifsen, W. Messier, Materiality Guidance of the Major Public Accounting Firms, *Auditing: A Journal of Practice & Theory*, 34(2), 2015, p. 3.

¹³ H. Bohusova, P. Svoboda, L. Semeradova, Deferred Tax for Tax Planning in the Czech Agricultural Companies, *Agricultural Economics*, 65(8), 2019, p. 349.

¹⁴ P. Habanec, H. Bohusova, Comparison of Deferred Tax Materiality Reporting in Accordance with Continental and Anglo-Saxon Reporting System, *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 65(6), 2017, p. 1917.

¹⁵ G. Kyriazopoulos, G. Makriyiannis, M. Logotheti, The Impact of Deferred Taxation on Banking Profitability and Capital Adequacy. Evidence from the Greek Banking System, *International Journal of Applied Economics, Finance and Accounting*, 5(1), 2019, p. 1.

Poterba et al.¹⁶ conclude that the deferred tax assets have gained in importance in many companies that have weathered the economic crisis and its negative effects. These companies recognize the rising amounts of deferred tax assets based on unused tax losses from the crisis period. In addition, these authors find that the share of net deferred tax assets or liabilities in U.S. businesses typically does not exceed 3%.

Traditionally, income tax was perceived as an exogenous category that corporate management cannot influence. Consequently, earnings before tax are often used when evaluating management's work.¹⁷ With the development of tax planning and tax avoidance strategies, income tax takes a significant place in the assessment of managers' work. However, sometimes when analyzing performance, only current tax expense is used, because deferred expense is a non-cash item (which does not cause outflows in the reporting period) of the income statement.¹⁸ Nevertheless, insurance companies are obliged to calculate both current and deferred tax expenses, so there may be significant differences in the profitability assessment based only on current tax expense and that based on both tax expenses. On the other hand, Al-Jafari and Al Samman¹⁹ find that the income tax has no significant impact on the profitability of insurance companies when the prescribed rate of income tax is relatively low.

Vučković-Milutinović and Lukić²⁰ identified different practices in Serbian companies in terms of deferred income tax. Thus, some companies eliminate deferred tax liabilities when calculating the level of indebtedness. Some companies treat deferred tax liabilities as part of equity. In addition, some companies ignore deferred tax assets when analyzing solvency, while others view them as part of working capital when analyzing liquidity.

Deferred income tax can have a significant impact on the overall income tax burden, which consists of current and deferred income tax expense. In this regard, the tax burden is usually measured by different effective tax rates.²¹ Thus, unlike the effective tax rate in accounting, the current effective tax rate does not contain deferred tax expense. Therefore, significant differences are possible between effective

¹⁶ J. Poterba, N. Rao, J. Seidman, Deferred Tax Positions and Incentives for Corporate Behavior around Corporate Tax Changes, *National Tax Journal*, 64(1), 2011, p. 27.

¹⁷ G. Porter, C. Norton, *Financial Accounting: The Impact on Decision Makers*, 6th edition, Mason, OH: South-Western Cengage Learning, 2009, p. 431.

¹⁸ S. Bolton, Cash Flow Based Business Valuations, *Business Valuation Review*, 10(4), 1991, p. 172.

¹⁹ M. Al-Jafari, H. Al Samman, Determinants of Profitability: Evidence from Industrial Companies Listed on Muscat Securities Market, *Review of European Studies*, 7(11), 2015, p. 303.

²⁰ S. Vučković-Milutinović, R. Lukić, Analysis of Deferred Taxes in the Business Environment in Serbia, *Economia. Seria Management*, 16(1), 2013, p. 25.

²¹ B. Lee, A. Dobiyski, S. Minton, Theories and Empirical Proxies for Corporate Tax Avoidance, *Journal of Applied Business and Economics*, 17(3), 2015, p. 21.

tax rates, both in the real sector,²² and in the financial sector.²³ Taking Czech insurance companies as an example, Bohusova and Vavrova²⁴ find a significant impact of the deferred income tax on the effective corporate tax rate. Fernandez-Rodriguez et al.²⁵ present different results of research conducted on Spanish companies, depending on the effective tax rate used.

One can rationally assume that deferred income tax leads to a greater difference between effective tax rates in companies that rely on temporary differences between earnings before tax and taxable profit. In such case, the current income tax expense is lower, but deferred income tax expense emerges, so there is a difference between an effective tax rate that contains deferred expense and an effective tax rate that does not contain deferred expense. On the other hand, lasting differences lead to a reduction in the current tax expense, but do not cause increase in deferred tax expense and thus, the difference between effective tax rates does not exist.

Research into deferred income tax in RS insurance companies is almost non-existent. Nevertheless, drawing on the findings of previous researches, the author of the paper assumed that deferred income tax is a materially significant item, namely, that it has a significant impact on assessing profitability and the corporate income tax burden on insurance companies. Therefore, the following hypotheses are formulated:

- H₁: Deferred income tax is a materially significant balance sheet item in insurance companies operating in the Republic of Serbia.
- H₂: Deferred income tax has a statistically significant effect on the profitability assessment of insurance companies in the Republic of Serbia.
- H₃: Deferred income tax has a statistically significant effect on the assessment of corporate income tax burden on insurance companies in the Republic of Serbia.

III. Context Analysis

In general, in the calculation of the income tax burden, insurance companies in RS are subject to the same regulations as real-sector businesses. The procedure of taxing their earnings is prescribed by the Law on Corporate Income Tax (*Official*

²² I. Salihi, S. Sheikh Obid, H. Annuar, Measures of Corporate Tax Avoidance: Empirical Evidence from an Emerging Economy, *International Journal of Business and Society*, 14(3), 2013, p. 412.

²³ S. Vržina, Alternativni pristupi merenju efektivne stope poreza na dobitak u bankama, *Finansije*, 73(1-6), 2018, p. 45.

²⁴ H. Bohusova, E. Vavrova, The Structure of the Deferred Income Tax and Its Influence on Indicators Describing the Economic Performance of Commercial Insurance Companies, *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 55(3), 2007, p. 143.

²⁵ E. Fernandez-Rodriguez, R. Garcia-Fernandez, A. Martinez-Arias, Influence of Ownership Structure on the Determinants of Effective Tax Rates of Spanish Companies, *Sustainability*, 11(5), 2019, p. 1441.

Gazette of RS, 153/2020) and accompanying bylaws. Unlike some countries where the higher tax rate is applied to financial institutions (for example Belarus), Serbian insurance companies are subject to the same prescribed rate of income tax (15%) as real sector companies. Insurance companies are obliged to follow the paragraphs IAS 12 – Income Taxes.

Nevertheless, the specifics of the insurance industry make the accounting of the current and deferred income tax somewhat different from that of real-sector companies. Insurance companies are important institutional investors, and a significant portion of the funds are invested in government securities.²⁶ Returns on such securities are exempt from income tax, which allows insurance companies to reduce expenses on profit taxes. This also reduces the effective tax rate of insurance companies.

In relation to deferred income tax, the literature lists the difference between the carrying value and tax basis of fixed assets,²⁷ i.e. the difference between accounting and tax depreciation. Nevertheless, fixed assets have less significance in insurance companies than in real sector companies, so it is important to consider some other sources of deferred tax in the insurance industry.

A significant portion of the deferred tax in financial institutions comes from the translation of securities, which institutions keep in the portfolio, to their fair value.²⁸ For example, the increase in the fair value of these securities leads to an increase in unrealized gain from investment in securities. Unrealized gains increase deferred tax liabilities, which will be realized when the securities are sold. The change in deferred tax on this basis has no impact on the insurance company's income statement, but on the report on the other results of the company.

Nevertheless, change in most other sources of deferred tax that occur in RS has an impact on the balance sheet of insurance companies. Some of the most common sources are depreciation of fixed assets, long-term provisions, unused tax losses, unused tax incentives, and impairment of assets.²⁹ These sources lead to the following items in the income statement of insurance companies:

- deferred tax expense (loss from decrease in deferred tax assets and increase in deferred tax liabilities) and
- deferred tax income (profit from increase in deferred tax assets and decrease in deferred tax liabilities).

²⁶ M. Sokić, Insurance Companies as Institutional Investors in the Republic of Serbia, *Insurance Trends*, 31(4), 2015, p. 49.

²⁷ J. Poterba, N. Rao, J. Seidman, p. 27.

²⁸ S. Vučković-Milutinović, R. Lukić, p. 25.

²⁹ S. Vržina, V. Obradović, J. Bogičević, Financial Reporting on Income Tax in Serbia and Croatia: An Empirical Analysis, *Ekonomika preduzeća*, 68(5-6), 2020, p. 330.

IV. Research Methodology and Development of Research Sample

The research in this paper is based on the idea of Bohusova et al.³⁰, who measured the materiality of the deferred tax, but also compared the company's items with and without deferred tax. Therefore, statistical tests were used to compare groups. The aim of the tests is to examine the existence of a statistically significant difference between the two groups. Additionally, it is possible to use parametric and nonparametric tests. The application of parametric tests is based on the group arithmetic means, with the required normal distribution of used variables. On the other hand, the application of nonparametric tests is based on group median, but distribution normality of used variables is not required.

The normality of distribution was tested using the Jarque-Bera test. In the case of normal distribution, the test is based on arithmetic mean (t-test), while in the absence of normal distribution, a median-based test was used (Wilcoxon/Mann-Whitney method). Statistical processing of data was performed in EViews econometric software. Confidence levels were 10%, 5% and 1%.

The materiality of the deferred income tax was measured by two variables – the materiality of deferred tax on the balance sheet (*MAT1*) and the materiality of deferred tax on income statement (*MAT2*). This paper used two materiality criteria – total assets and operating (functional) income of the company, using materiality thresholds of 1% and 0.5%. The profitability of insurance companies was also measured by two variables – *ROA1*, which includes the effects of deferred tax, and *ROA2*, which does not include these effects. Two measures of income tax burden were also used - current effective tax rate (*ETR1*) and the accounting effective tax rate (*ETR2*). Definitions of used variables are provided in Table 1.

Table 1 Variable definitions

| Mark | Formula |
|-------------|--|
| <i>MAT1</i> | (Deferred tax assets – Deferred tax liabilities) : Total assets |
| <i>MAT2</i> | Loss (profit) from deferred tax : Operating income |
| <i>ROA1</i> | (Profit before tax – Current tax expenditure ± Loss (gain) from deferred tax) : Total assets |
| <i>ROA2</i> | (Profit before tax – Current tax expense : Total assets |
| <i>ETR1</i> | Current tax expense : Profit before tax |
| <i>ETR2</i> | (Current tax expense ± Loss (gain) from deferred tax) : Profit before tax |

³⁰ H. Bohusova, P. Svoboda, L. Semeradova, p. 349.

The first research hypothesis was tested comparing *MAT1* and *MAT2* with materiality thresholds of 1% and 0.5%. The second research hypothesis was tested by comparison of *ROA1* and *ROA2*, while the third research hypothesis was tested comparing *ETR1* and *ETR2*.

The research covered all insurance companies in RS, active at the end of 2020. At the end of 2020, insurance activities in RS were carried on by sixteen insurance companies. In this regard, there were four insurance companies dealing with life insurance, six non-life insurance companies, while six companies carried out both life and non-life insurance. The list of insurance companies is shown in Table 2.

Table 2 List of insurance companies in RS at the end of 2020

| Company name | Balance Sum (in 000 Din) | Company name | Balance Sum (in 000 Din) |
|-------------------|-----------------------------|----------------|-----------------------------|
| Generali | 72,701,091 | Uniqa non-life | 6,939,005 |
| Dunav | 57,254,667 | Milenijum | 6,526,511 |
| Wiener Stadtische | 45,101,871 | Merkur | 5,018,486 |
| Grawe | 35,007,876 | Sava non-life | 4,227,816 |
| DDOR | 22,480,125 | Globos | 2,493,177 |
| Uniqa life | 11,114,805 | OTP | 2,256,428 |
| Triglav | 9,778,678 | Sogaz | 1,999,931 |
| AMS | 7,084,415 | Sava life | 1,457,542 |

The research is based on the data taken from individual financial statements of insurance companies, published on the official website of the Business Registers Agency (www.apr.gov.rs). Insurance companies are obliged to audit their financial statements, which increases reliability in their use.³¹ The paper presents a sampled period from 2017 to 2020, because financial statements on the website of the Business Registers Agency are available for that time span. During that period, the prescribed rate of income tax was at a constant level of 15%.

Using a four-year period for sixteen insurance companies, the research sample included 64 observations. This sample size was used to calculate *MAT1*, *MAT2*, *ROA1* and *ROA2*. On the other hand, fifty-nine observations were used to calculate *ETR1* and *ETR2*. Five observations were eliminated due to loss before tax, because effective tax rates have no clear economic meaning in negative pre-tax result.³²

³¹ B. Jovković, The Analysis of Auditor's Reports of Insurance Companies in the Republic of Serbia, *Teme*, 42(4), 2018, p. 1277.

³² M. Hanlon, S. Heitzman, A Review of Tax Research, *Journal of Accounting and Economics*, 50(2-3), 2010, p. 127.

V. Research Results and Discussion

1. Descriptive Analysis

Table 3 presents the results of descriptive statistics of used variables. The data from the table indicate that the materiality of the deferred income tax in the average Serbian insurance company is lower than the usual thresholds of 1% and 0.5%. Only four observations have *MAT1* greater than 1%, while sixteen observations have *MAT1* greater than 0.5%. In addition, the three insurance companies have *MAT1* greater than 0.5% in all four years. On the other hand, only two observations have *MAT2* greater than 1%, while the three observations have *MAT2* greater than 0.5%.

Table 3. Descriptive statistics

| | <i>MAT1</i> | <i>MAT2</i> | <i>ROA1</i> | <i>ROA2</i> | <i>ETR1</i> | <i>ETR2</i> |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Arithmetic mean (in %) | 0.351 | 0.113 | 2.514 | 2.506 | 5.546 | 4.194 |
| Minimum (in %) | 0.000 | 0.000 | -12.613 | -12.613 | 0.000 | -77.192 |
| Median (in %) | 0.094 | 0.024 | 2.531 | 2.531 | 4.498 | 5.432 |
| Maximum (in %) | 2.638 | 2.219 | 9.522 | 9.526 | 23.079 | 22.486 |
| Standard deviation (in %) | 0.544 | 0.312 | 3.597 | 3.584 | 6.106 | 12.728 |
| Variation coefficient | 1.550 | 2.761 | 1.431 | 1.430 | 1.101 | 3.035 |
| Observations | 64 | 64 | 64 | 64 | 59 | 59 |

Although the vast majority of observations performed with a positive result before tax, a significant proportion of them recorded only low or moderate levels of profitability. However, there are observations with slightly higher profitability. Thus, 22 observations had *ROA1* between 0% and 2%, although fourteen observations had *ROA1* of more than 5%. On the other hand, 21 observations had *ROA2* between 0% and 2%, although fourteen observations had *ROA2* of more than 5%.

Effective tax rates in an average Serbian insurance company are lower than the prescribed rate. In fact, only four observations had *ETR1* higher than 15%, while as many as 24 observations had *ETR1* equal to 0%. In addition, six insurance companies had *ETR1* equal to 0% in all four years. On the other hand, only three observations had an *ETR2* greater than 15%, while 19 observations had *ETR2* equal to 0%. Five observations had a negative *ETR2*. In addition, in all four years, four insurance companies had both *ETR1* and *ETR2* equal to 0%.

In the course of the research, some interesting practices in terms of deferred income tax of insurance companies were identified. Firstly, the two insurance companies failed to show either deferred tax assets or deferred tax liabilities in four years taken as a sample, despite the fact that they were right to recognize deferred tax assets. They also did not state any amount of current or deferred tax expenses.

Despite earnings before tax, these companies had a tax loss on their tax balance, due to the fact that income from government securities was tax-free. With tax losses expected in the future, they decided not to recognize deferred tax assets.

Secondly, in all four sampled years, the two insurance companies disclosed the same net amount of deferred tax assets. In the income statement, they did not show a deferred income tax. These companies did not recognize deferred tax assets in the maximum amount available, but only in the amount in which deferred tax assets are likely to be realized at the expense of future taxable profit. Interestingly, these companies did not change their assessment of the possibility to realize deferred tax assets over a period of four years, so the amount of deferred tax assets remained unchanged.

Thirdly, one insurance company expressed net deferred tax assets or liabilities in all four sampled years, but did not disclose a deferred income tax on the income statement in any year. That company decided to recognize the deferred tax only based on the fair value measurement of the securities available for sale, where this source of deferred tax had no effect on the company's balance sheet.

2. Statistical Test Results

To determine which statistical tests (parametric or nonparametric) would be used, the normality of distribution of used variables was examined, using the Jarque-Berra test. The test results are shown in Table 4. Given that for five out of six variables probability equals zero, normal distribution of these variables cannot be assumed. Therefore, it is more convenient to use nonparametric statistical tests. Similar results will be obtained if other tests for distribution normality are used. According to Shapiro-Wilk and Kolmogorov-Smirnov tests, none of the used variables has normal distribution.

Table 4 Testing for normality distribution of used variables

| | <i>MAT1</i> | <i>MAT2</i> | <i>ROA1</i> | <i>ROA2</i> | <i>ETR1</i> | <i>ETR2</i> |
|-------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Jarque-Berra statistics | 165.257 | 2,992.052 | 101.972 | 105.865 | 5.905 | 1,927.466 |
| Probability | 0.000 | 0.000 | 0.000 | 0.000 | 0.052 | 0.000 |
| Observation | 64 | 64 | 64 | 64 | 59 | 59 |

Table 5 presents the results of statistical tests for materiality of the deferred income tax in the Serbian insurance companies. The results show that there is a statistically significant difference at the level of 1% between *MAT1* and the used materiality thresholds. Similar conclusions can be drawn about *MAT2* variable. In other words, the results show that *MAT1* and *MAT2* are significantly lower than the materiality thresholds used. In general, the results indicate that the deferred income

tax does not represent a materially significant item in the financial statements of insurance companies in RS. Therefore, *the first hypothesis is rejected*.

Table 5 Statistical test results – materiality of deferred income tax

| Variable 1 | Variable 2 | Test Value | p-value |
|------------|------------|------------|----------|
| MAT1 | 1% | 9.128145 | ***0.000 |
| MAT1 | 0.5% | 5.214991 | ***0.000 |
| MAT2 | 1% | 9.811516 | ***0.000 |
| MAT2 | 0.5% | 9.484380 | ***0.000 |

Note: Statistically significant at 10% (*), 5% (**) and 1% (***).

The difference between used profitability measures was analyzed based on the statistical test, the results of which are shown in Table 6. Test results indicate that there is no statistically significant difference between *ROA1* and *ROA2*. Such results are not surprising. Although *ROA1* has a higher arithmetic mean than *ROA2*, these measures of profitability have equal median values. The results indicate that the inclusion of deferred tax expense in the calculation of profitability does not lead to a statistically significant change in the assessment of earning capacity of insurance companies in RS. Therefore, *the second hypothesis is rejected*.

Table 6 Statistical test results – difference between profitability measures

| Variable 1 | Variable 2 | Test Value | p-value |
|------------|------------|------------|---------|
| ROA1 | ROA2 | 0.014297 | 0.989 |

The results of the statistical test for the difference between effective tax rates used are shown in Table 7. Although *ETR1* has a higher arithmetic mean than *ETR2*, whereas *ETR2* has a higher median than *ETR1*, the difference between these two effective tax rates is not statistically significant. This means that the inclusion of deferred expense on income tax in the calculation of the effective tax rate does not lead to a statistically significant change in the assessment of the income tax burden on Serbian insurance companies. These results also indicate that choosing the values used in the effective tax rate numerator is not crucial to assessing the corporate tax burden. Therefore, *the third hypothesis is rejected*.

Table 7 Statistical test results – difference between effective tax rates

| Variable 1 | Variable 2 | Test Value | p-value |
|------------|------------|------------|---------|
| ETR1 | ETR2 | 0.096554 | 0.923 |

A number of reasons can explain low materiality of the deferred income tax, i.e. its small impact on assessing profitability and the income tax burden on the insurance companies in RS. Firstly, there are a number of countries in the world where the rate of income tax is higher than 30% (some countries impose rates on certain industries of more than 50%). Therefore, the prescribed profit tax rate in RS of 15% can be considered relatively low. Given that deferred tax assets and liabilities are calculated by multiplying temporary differences and the prescribed rate, it is clear that a low rate results in a lower amount of deferred tax.

Secondly, deferred tax assets and liabilities are usually expressed in the net amount. IAS 12 stipulates that the deferred income tax on the balance sheet is expressed in the net amount when the company has the right to express the current tax assets and liabilities in the net amount, and when the deferred tax assets and liabilities relate to the profit tax imposed by the same tax authorities. In the research sample used, only three observations did not show a net amount, so they also displayed deferred tax assets and deferred tax liabilities. Therefore, it is possible that the materiality of the deferred income tax would be significantly higher if deferred tax assets and liabilities were not expressed in the net amount.

Thirdly, it is possible that a low significance of deferred tax expense and income comes from the IAS 12 provisions. This accounting standard advocates the use of liability method. According to this method, the advantage is given to the balance sheet, i.e. determining of deferred tax assets and liabilities. On the other hand, deferred income tax can be seen as a residual. In other words, deferred tax expense and income are the sole consequence of changes in deferred tax assets and liabilities.

Fourthly, a specific method of recognizing deferred tax assets (and associated deferred tax revenues) may affect the materiality of deferred tax. Deferred tax assets are recognized on the basis of deductible temporary differences, unused tax credits, and unused tax losses, but only to the extent that taxable earnings are likely to exist for the realization of these funds.

The fifth point is that RS can be treated as a state with relatively small differences between earnings before tax and taxable income. Many European states with continental legal systems have relatively similar regulations for determining earnings before tax and taxable income. Thus, earnings before tax are the starting point for determining taxable income. In such case, the temporary differences are smaller, and thus the amount of deferred tax assets and liabilities is lower.

3. Robustness Assessment

The paper also analyzes the robustness of the presented results. In other words, it examined whether and to what extent the research results would change if certain research assumptions were changed. Thus, the initial research sample was

divided into two groups. The first group consists of half of the observations with the highest values of total assets, while the second group consists of half of the observations with the lowest values of total assets. This enabled to analyze whether the size of the insurance company affects the significance of deferred income tax, or whether the importance of deferred income tax differs between larger and smaller insurance companies.

There are several reasons why the size of the company was selected as a criterion for examining robustness. Firstly, due to greater diversification, larger organizations are less likely to express losses.³³ This means that the emergence of deferred tax assets based on unused tax losses is less likely in larger insurance companies. In contrast, larger insurers may show deferred tax assets to a greater degree, as they can expect higher future taxable earnings for the realization of deferred tax assets.

Secondly, the size can be a significant determinant of the profitability of insurance companies. It is usually pointed out that larger insurance companies in RS have higher profitability.³⁴ Thirdly, the company size may influence the effective tax rates of insurance companies. Under the political power hypothesis, larger companies have lower effective tax rates, whereas under the political cost hypothesis, larger companies have higher effective tax rates.³⁵

Table 8 shows the results of the robustness analysis for the materiality assessment of the deferred income tax. The results show that deferred tax is not materially significant item in the financial statements of either larger or smaller insurance companies. In other words, the company size is not a determinant of the materiality of the deferred income tax. Therefore, the conclusions of the first research hypothesis are robust in connection with dividing the research sample.

Table 8 Analysis of results robustness – materiality of deferred income tax

| Variable 1 | Variable 2 | Test Value | p-value |
|---|------------|------------|----------|
| Panel A. Half of the observations with the largest total assets | | | |
| MAT1 | 1% | 6.883394 | ***0.000 |
| MAT1 | 0.5% | 2.749051 | ***0.006 |
| MAT2 | 1% | 6.971426 | ***0.000 |
| MAT2 | 0.5% | 6.506179 | ***0.000 |

³³ J. Zimmerman, Taxes and Firm Size, *Journal of Accounting and Economics*, 5(1), 1983, p. 119.

³⁴ J. Kočović, B. Paunović, M. Jovović, Determinants of Business Performance of Non-Life Insurance Companies in Serbia, *Ekonomika preduzeća*, 62(7-8), 2014, p. 367; M. Pjanić, N. Milenković, B. Kalaš, V. Mirović, Profitability Determinants of Non-Life Insurance Companies in Serbia, *Ekonomika preduzeća*, 66(5-6), 2018, p. 333.

³⁵ A. Kraft, What Really Affects German Firms' Effective Tax Rate? *International Journal of Financial Research*, 5(3), 2014, p. 1.

**S. Vržina: Importance of Deferred Income Tax in Insurance Companies:
Case of the Republic of Serbia**

| Variable 1 | Variable 2 | Test Value | p-value |
|--|------------|------------|----------|
| Panel B. Half of the observations with the lowest total assets | | | |
| <i>MAT1</i> | 1% | 5.964651 | ***0.000 |
| <i>MAT1</i> | 0.5% | 4.586537 | ***0.000 |
| <i>MAT2</i> | 1% | 6.884295 | ***0.000 |
| <i>MAT2</i> | 0.5% | 6.884295 | ***0.000 |

Note: Statistically significant at 10% (*), 5% (**) and 1% (***).

Table 9 presents the results of the robustness analysis for the assessment of the difference between the used profitability measures. The results show that there is no statistically significant difference between the measures of profitability used in either larger or smaller insurance companies. This means that the size of the company does not influence the conclusion on the effects of deferred profit tax on profitability estimates. Therefore, the conclusions of another research hypothesis are robust in connection with dividing the research sample.

Table 9 Analysis of results robustness – difference between measures of profitability

| Variable 1 | Variable 2 | Test Value | p-value |
|---|-------------|------------|---------|
| Panel A. Half of the observations with the largest total assets | | | |
| <i>ROA1</i> | <i>ROA2</i> | 0.087294 | 0.930 |
| Panel B. Half of the observations with the lowest total assets | | | |
| <i>ROA1</i> | <i>ROA2</i> | 0.147707 | 0.883 |

Table 10 shows the results robustness analysis for the assessment of the difference between effective tax rates used. It can be concluded that there is no statistically significant difference between effective tax rates in larger or smaller insurance companies. The size of the company does not affect the conclusion of the deferred income tax regarding the assessment of the income tax burden. Therefore, the conclusions of the third research hypothesis are robust in dividing the research sample.

Table 10 Analysis of the robustness of results – the difference between effective tax rates

| Variable 1 | Variable 2 | Test Value | p-value |
|---|-------------|------------|---------|
| Panel A. Half of the observations with the largest total assets | | | |
| <i>ETR1</i> | <i>ETR2</i> | 0.494974 | 0.621 |
| Panel B. Half of the observations with the lowest total assets | | | |
| <i>ETR1</i> | <i>ETR2</i> | 0.620473 | 0.535 |

VI. Conclusion

Insurance companies in RS are obliged to present deferred income tax in financial statements, in accordance with IAS 12. Therefore, the paper examined the materiality of the deferred tax and its impact on assessing profitability and corporate income tax burden of insurance companies. The research was conducted on a sample of 16 insurance companies in the period from 2017 to 2020.

The research results show that deferred income tax is not materially significant item in the financial statements of the Serbian insurance companies. Its participation in the balance sheet and income statement is significantly lower than the usual materiality thresholds. Such results are primarily due to the presentation of deferred tax assets and liabilities in the net amount and the similar methods of calculating earnings before tax and taxable profit.

The research also found that deferred income tax has no statistically significant impact on assessing profitability and the corporate income tax burden. In other words, there is no significant difference between the measure of financial performance, i.e. the measure of the corporate income tax burden that contain deferred tax and those that do not contain deferred income tax. Such results are primarily due to the low materiality of deferred tax items, but also the fact that the deferred income tax on the income statement is only a calculation residual of deferred tax assets and balance sheet liabilities.

A number of involved persons may find the presented research results useful. Firstly, the auditors of financial statements may use the information about the deferred income tax materiality when choosing the subject of their attention. Secondly, when considering the methods of managing company performance, the managers of insurance companies may benefit from the information that deferred income tax has no significant effect on profitability. Thirdly, when looking at the tax burden on different economy sectors, national tax authorities can use the information about the corporate income tax burden on insurance companies.

Nevertheless, the research results also have certain limitations. The research is based on a sampling method, so the results may differ in a different sampling period or a different number of insurance companies. It is also possible that the change of the research methodology would lead to a change in the results of the research. Additionally, the research was conducted on insurance companies operating in only one country.

A particular limitation of research can be found in the fact that insurance companies, in accordance with IAS 12, present deferred tax assets and liabilities in the net amount. Therefore, separate amounts of deferred tax assets and liabilities could not be used in the research. Such separate amounts are disclosed in the notes to the financial statements only by a small number of companies.

Future research could include a longer time span to cover the pre-2013 period when the prescribed rate of income tax in RS was 10%. A separate analysis of life and non-life insurance could also be useful. In addition, for the purposes of comparison, the research could also include other countries.

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